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GROUP OF zULUS.

THE
EARTH AND ITS INHABITANTS.
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VOL. IV.
SOUTH AND EAST AFRICA.



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Authorized Edition.

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## THE EARTH AND ITS INHABITANTS.

## SOU'TH AND EAST AFRICA.

## CHAPTER I.

angola.


VER since the Portuguese navigators penetrated beyond thee equator into the southern waters, or at least since the year 1485, when Diego Cam set up the stone at the mouth of the Congo indicating the formal possession of the land south of that estuary, the portion of the African seaboard extending southwards from the Cungo has been regarded as belonging to the crown of Portugal. Since the year 1574, when a small Lusitanian colony was established in the island of Loanda, the relations between Lisbon and Angola have never been interrupted. This first section of the coast was originally occupied by seven hundred men commanded by Paul Diaz, grandson of the pioneer who discovered the Cape of Good Hope; but European households were not properly constituted till the year 1595, when the first Portuguese women arrived in the settlement.

General. Survik.
In many newly discovered regions several generations have often passed after the first appearance of the whites before they have succeeded in acquiring any effective supremacy over the natives. But in this part of the African seaboard the Portuguese have never ceased for over three hundred years in exercising sovereign rights, or at least in maintaining alliances with the surrounding populations. Even in 1641, when the Dutch captured the strongholds on the coast, some Portuguese officials and others remained in the country, upholding the traditional sovereignty of the ancient Muata Potu, "King of Portugal," or rather of the Muene Mpotu, "King of the sea." Nor were they long neglected by the mother country, a squadron despatched from Brazil having soon reconquered the colony.

The centres of Portuguese colonisation were naturally the seaports, from which points European influences gradually spread inland. Notwithstanding many vicissitudes of success and defeat, the ascendancy of the Portuguese, pioneers of a higher culture, penetrated at last beyond the coast ranges and plateaux far to the east of the great dopression traversed by the Congo. This diffusion of Portuguese authority was largely due to the fact that the intertribal communications were much more casily effected on the southern slopes and upland plains than along the wild and rugged gorges through which the great river forced its way from fall to fall to the Atlantic seaboard. Doubtless Stanley's great expedition has suddenly shifted the equilibrium of the continent, and the region of the fluvial basin has now become the chief centre of geographical progress and of the great events that are rapidly bringing about the social and political transformation of the land. But this very circumstance has aroused Portugal from her lethargy, and stimulated her to redoubled efforts in opening up the vast domain which she has inherited, and her exclusive dominion over whici is henceforth guaranteed by international treaties.

The recent expeditions of Capello and Ivens, and of Serpa Pinto, attest the importance which the Portuguese now attach to the systematic exploration of their great colony in south-west Africa. The American missionaries stationed in the Bihé district have also of late years contributed much to the geographical study of Angola. The superficial area of the whole territory as far inland as the left bank of the Kwango, and exclusive of the small province lying to the north of the Congo, has been approximately estimated at 280,000 square miles. The population of the districts that have been roughly surveyed amounts to about four hundred and forty thousand; out including the independent nations and the communities connected with Portugal by the more or less solid relations of vassalagc, the whole population of the region lying between the Atlantic and the Kwaugo can scarcely be estimated at less than two millions. According to Chavanne's calculations, the density of the population in the northern district between Ambriz and the Congo exceeds twelve persons to the square mile, a proportion which would give as many as five millions for the Portuguese possessions, taken in their widest sense. To the whole region has been extended the name of Angola (Ngola), a term originally restricted to the province lying east of Loanda, between the rivers Cuanza and Beago. Some of the kinglets in the interior still bear this name of Ngola.

The province of Angola has often been compared to Brazil, the vast region which faces it on the opposite side of the Atlantic. But the "Afrioan Brazil," which had not yet been detached from the mother country whence it received its first settlers, is far inferior to its potent rival in extent, natural resources, economic importance, and general importance amongst the civilised, or at least organised, lands of the globe. Nevertheless a real analogy is presented by the geographical strusture of Angola and Brazil. In both regions a great river is developed to the north of the plains and elevated plateaux; in both the relief of the land is formed by a series of terraces rising step by step one above the other, neers of a far to the ortuguese were much 5 the wild all to fall suddenly basin has vents that the land. stimulated inherited, ernational
attest the on of their red in the al study of left bank rth of the 1e populafour hun-communialage, the wango can 's calculambriz and ich would leir widest (Ngola), a the rivers is name of ast region n Brazil," t reccived resources, or at least od by the it river is 10 relief of the other,
and separated by intervening ranges, which are disposed parallel with the coastline. Their position under corresponding parallels of latitude gives to both countries analogous climates and similar vegetable products, and at the same

Fig. 1.-Routes of the Chimf Explorers in Angola.
Seale 1: 10,000,000.

'time enables the inhabitants of each to migrate freely from one to the other without suffering much inconvenienor, from the change of climate. If Brazil has been enabled to develop a mixed white, Negro, and Indian population of over
twelve millions, there is nothing to prevent the territory of Angola from also becoming tho home of a numerous people with a strong sentiment of national cohesion, instead of being occupied as at present by a few colonial groups almost lost amid the surrounding hostile populations. Nor should it be forgotten in forecasting its future prospects, that there is at last an end of the slave trade, by which the Brazilian plantations were peopled for nearly three hundred years at the cost of Angola.

## Physical Features.

In the northern part of the territory limited on the north by the Congo, eastwards by the Kwango, and towards the south by the Cuanza, the section of the plateau exceeding 3,000 feet occupies not more than one half of the eastern zone. It consists of gneiss and mica schists, whose surface is disposed in long ridges, which the running waters have scored with deep gorges. The western slope, facing the Atlantic coast, presents on the whole a more gentle incline than the opposite side, where the escarpments fall rapidly towards the Kwango basin. The Cuanza, with its copious affluent, the Lu-Calla, interrupts the parallel series of ridges, which run uniformly north and south, and which are continued in the same direction beyond these watercourses. Thus the elevated mountain ridges are continuous only in the south-eastern section of the plateau, where the Talla Mangongo border range separates the upper course of the Kwango affluents from those of the Cuanza, and gradually merges by gentle undulations in the waterparting between the Kassai and the $\bar{J}:$ mbese.

South of the Cuanza, a series of three parallel steps follows from the sea towards the elevated range which forms the backbone of the land, and which runs at a mean distance of a hundred and twenty miles from the Atlantic. Lofty crests rise above the ridges of this intermediate plateau, which is cut up by the streams into several secondary ridges. Here Mount Lovili, under the twelfth degree of latitude, attains an elevation of 7,800 feet; Mount Elongo, towards the south-west, rises to a height of 7,600 feet, and several other peaks on the neighbouring ranges fail little short of these ultitudes. In the Jumiba, or Andrade-Corvo chain, forming the eastern scarp of the plateau, some of the summits exceed 6,600 feet. Most of the higher ranges are here disposed in ridges dominated at intervals by peaks and rounded crests; some however of these ambas, as they are called, appear to be completely isolated, standing out like pyramids in the middle of a plain. Thus Mount Hambi ( 7,240 feet) consists of an enormous urag rent down the centre, and presenting the appearance of a huge block of metal fissured during the process of cooling. At the castern foot of the Jamba Mountains stretches the Bulum-Bulu steppe, which is overgrown with tall grasses heaving under the wind like the ocean waves.

Taken collectively, these ranges, massive uplands and elevated plains, which are traversed by the trade route between Benguella and Bihé, constitute the culminating part of Angola. Towards the south the platean decreases considerably
in height, the highest points here falling below 6,000 feet. Farther west the summits, rising on a plateau inferior to the eastern terrace, also fail to reach the altitude of Mount Lovili and the neighbouring peaks, although several present an imposing appearance, thanks to their isolated position, and the steep slope of their flanks. Such are the crags which lie some 60 miles to the east of Benguolla, and which, from their peculiar outlines, have received the name of Binga-Yam-Bambi, or "Gazelle Horns." According to Magyar, they exceed 3,000 feet in height, while the neighbouring Olombingo peuk is said tò attain an elevation of over 5,000 feet.

The more westerly summits, standing on the last terrace of the plateau as it falls seawards, vary in altitude from 600 or 700 to 2,000 feet. Developing at their base precipitous cliffs, they present in many places the aspect of veritable mountains. But most of the hills skirting the coast are mere table rocks, rising little more than 300 or 400 feet above the terraces. They are usually flanked by steep slopes of talus formation, but may be surmounted by following the long winding valleys of erosion, which have been excavated at intervals in the thickness of the plateau.

In the southern region of the Angola territory, the uplands of the interior have everywhere been denuded and eroded to great depths, by the affluents of the Cunene and the torrents of the coastlands. Nevertheless the Chella, or Sierra da Neve, that is, "Snowy Range," a superb mountain mass to the east of Mossamedes, has maintained its integrity in isolated grandeur, some of its crests falling little short of 6,300 feet. It owes its' alternative Portuguese name to the white streaks sometimes visible in the more elevated crevasses, after the heavy rains brought by the cold southern winds. These highlands, whence flow an abundance of running waters, appear to present the most favourable prospects for the future colonisation of Angola. The climate approaches, nearer than that of any other of the Portuguese possessions in Africa, to the conditions prevailing in the south of Europe, while the mean altitude of the upland valleys is about the same as that of Angola generally, being approximately estimated at 4,000 feet.

The Angola highlands are composed of gneiss and other crystalline rocks underlying schistose formations of great age. These rocks, forming the outer framework of the land, make their first appearance at a mean distance of from 12 or 15 miles from the coast. Here the sedimentary rocks, and in many places those of the interior, belong to the Secondary and Tertiary periods, consisting of sandstones, conglomerates, limestones, clays and sands generally disposed in perfectly regular stratifications. The cretaceous deposits, which run parallel with the coast, covering the outer slopes of the hills in the Benguella district, abound-in fossils identical with those which occur in the corresponding formations in Portugal.

For long stretches the characteristio geological strata are concealed by laterites, white, yellow, or red, of relatively modern origin, which have been formed by the decomposed surface of the underlying layere. The river basins of the interior have moreover been strewn with alluvial deposits due to the action of ruaning waters.

The limestone cliffs are in many places pierced by deep caverns, where aro found narrow and hitherto unfathomed wells, which have given rise to numerous native legends. Thermal springs occur at various points of the territory; but no volcanic rocks have been found, except in the northern districts, and even here the eruptive forces appear to have been limited to a few outbursts of basaltic lavas. Ladislas Magyar speaks of a volcano, but without stating whether he visited it himself, and there is every reason to believe that he was deceived by false reports, possibly even by the romantic but untrustworthy descriptions of the traveller J. B. Douville.* This active volcano, known as the Mulondo-Zambi, or "Demon Mountain," was reported to lie in the Libollo country some 30 miles to the south of the Cuanza. From the highest crater, overlooking all the surrounding crests, flames and smoke emitting a strong sulphurous odour were said to be ejected at intervals of three or four hours. The natives never venture to approach this burning mountain, which they suppose to be inhabited by the spirits of their ancestors. But all these reported eruptions will probably sooner or later be explained by some meteorological phenomena, like those of the pretended Otumbi volcano in the Gaboon territory.

## River Babins.

Limited eastwards by the course of the Kwango, the Angola region is traversed by numerous streams, which either flow through deep gorges across one or more of the outer terraces of the plateau, or else, like the Cuanza and the Cunene, force their way seawards through the whole breadth of the intervening uplands. In the northern section of the territory, where the annual rainfall is relatively heavier than in the south, every valley has its perennial stream, although these rivers are prevented by the disposition of the rugged surface from uniting in one large fluvial system. A considerable number of the streams however flow, not directly seawards, but either to the east in the direction of the Kwango, or northwards through the Kwilu, Lu-fu and Mposo to the Congo. Those which, like the Lelunda, Mbrish, and Lojé, reach the Atlantio directly, are disposed in parailel valleys in the direction from east to west. But their mouths are nearly all closed to shipping by impassable bars, so that they are accessible only to small flatbottomed craft.

The Mbrish, which escapes from the Zombo higblands to the east of SanSalvador, dovelops a series of cascades, the first of which has a fall of 150 feet, and the whole chain of rapids a total incline of 430 feet. The Dandé and Bengo, however, being navigable above their bars, present certain advantages as highways of commerce in the interior, and their shady banks are lined with plantations.

But tho chief river in Angola, and one of the most copious of the secondary watercourses in the whole of Africa, is the Cuanza, whose valley forms the Atlantic section of the transverse depression which is continued through the Zambese basin south-eastwards to the Indian Ocean. The chief headstreams of the Cuanza have

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their sources beyond the region directly subject to Portuguese rule, intermingling their flood waters with those of the Zambese and of the Ku -Bango on a plateau which has a mean altitude of not less than 5,500 feet. The farthest source of the mainstream is the little Lake Mussombo, some 720 miles from the coast, by the windings of the fluvial valley. From this point the Cuanza describes a vast semicircle, flowing at first towards the north-east and then to the north, after which it sweeps round to the north-west and west, finally trending to the southwest in its last meander seawards. More than balf of its course lies to the cast of the upland terraces and plateaux which form the backbone of A.ngola. By the direction of its upper valley it seems inclined to become a tributary of the Congo, but on reaching the Ba-Songa territory, where it has already become a copious stream, it curves round to the west, and forces its way over a long series of wild gorges, fulls and rapids, through the intervening mountain barriers seawards. The Cambambe cataract, last of the series, 70 feet high, is also known as the "Livingstone falls," although never visited by the illustrious explorer. It is formed by a ledge of schistose rock confined on both sides by nearly vertical walls. During the floods the whole gorge is completely filled with the seething waters, but during the dry season the current is broken by projecting crags into several foaming channels of unequal size. The emerged rocks, damp with the spray of the tumbling waters, are overgrown with the Angolea fluitans, a plant with large semi-transparent stem and covered with small white flowers.

Immediately below the cataracts the Cuanza is accessible to steamers, no obstacle interfering with the navigation all the way to the sea, although in this section of the river, about 120 miles long, there is a total fall of over 300 feet. The rocky gorge is continued for 10 miles beyond the rapids, between high red, white, or bluish cliffs, to which an endless variety of shades and forms is added by the climbing plants, tufted brushwood, and drapery of velvet mosses.

Below the gorge the main stream is joined by the Mucoso, a considerable affluent from the north, and farther on, also on the right bank, by the still more copious Lu-Calla (Lua-Kalla), largest of all its tributaries. Like the Cuanza itself, the Lu-Calla rises to the east of the Angola highlands, and like it forces its way through them in a series of gorges where it plunges in its headlong course from fall to fall. The Lianzundo, one of these falls, is no less than 100 feet in height. The Lu-Calla also describes a vast semicircle, but exactly in the contrary direction to that of the Cuanza, for it takes its rise in the northern part of the Portuguese possessions, not far from the streams which flow on the opposite watershed down to the Congo.

After its junction with the Lu-Calla, the Cuanza is swollen by no further contributions from any direction, but on the contrary discharges its waters to the right and left, into numerous lagoons or lateral reservoirs, which are successively flooded and almost completely emptied with the alternating wet and dry seasons. In the lower reachos the hills continually recede more and more from the fluvial bed, although a few bluffs still rise here and there along the banks of the river. One of these on the left side is the famous Pedro dos Feiticeiros,
or "Fetish Rock," over which the Quissamas formerly hurled the unhappy wretches accused of witcheraft.

The mouth of the Cuanza is obstructed by a dungerous bar, which is usually crossod by the local pilots on a raft, or rather a single plank of herminiera wood about 8 feet long and scarcely 3 feet wide. Kneeling on this spar, they steer their courso with the aid of a single paddle, and thus reach the steamers which are at times riding at anchor over a mile from the coast.

South of the Cuanza as far as the Cunene, none of the streams rising on the outer slopes of the mountains or in the western valleys can acquire any great development, nor are any of them utilised for navigation. They also flow through a region enjoying a less abundant rainfall than Northern Angola, so that many of them are completely exhausted during the dry season. They thus resemble the wadys of North and the nmarambas or intermittent streams of South Africa.

The chief permanent rivers are the Luga, running parallel with the lower Cuanza; the Cuvo (Kevé), which discharges into Old Benguella Bay; the Bailombo, the Catumbella, and the Coporolo. Of all these little coast streams the Catumbella is the best known, owing to the vicinity of the city of Benguella. About 7 miles from the sea it develops the romantic cataract of Upa, where the whole stream is pent up within a rocky gorge scarcely 9 yards wide.

The Cunene, which in Angola yields in length and volume to the Cuanza alone, has recently acquired an exceptional political importance as the line of demarca. tion between the Portuguese possessions and the territory annexed to the German colonial empire. Like the Cuanza, it rises to the east of the central highlands, and flows at first along the inner continental slope jointly with the Ku-Bango, and the eastern affluents of the Zambese; but after escaping from this basin it describes a great bend to the west, piercing the intervening rocky barriers on its south-westerly course to the Atlantic. It develops altogether a total length of no less than 720 miles, the area of its drainage being estimated at about 110,000 square miles. Rising in the Jamba Mountains, over four degrees to the north of the latitude of its estuary, it skirts the southern and south-westeru base of the ceutral uplands, collecting on both banks a large number of affluents during its winding upper and middle course.

At Quiteve, a riverain village some 240 miles from its sources, Capello and Ivens found that even in June, that is, in the dry season, it had a breadth of nearly 500 feet, with a mean depth of over 8 feet. It flows between wooded bauks with great velocity, but unobetructed by cataracts. During the rainy season this beautiful stream assumes the proportions of a mighty watercourse, fully justifying its native name of Cunene, that is, Ku-Nene, or "Great River." At thia period it ovorfows its banks to the right and left, ficoding the surround. ing pluins for several miles. At one point a depression many square miles in extent is transformed to a vast reservoir which receives the ceverflow of the uppor Cunene. After the subsidence of the waters, this depression is strewn with small lakes and stagnant meres; the muddy bottom-lands are overgrown with
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"All reeds (arundo phragmites), while the brushwood on the higher grounds is covered to a height of 3 or 4 feet with the tufts of herbaceous vegetation borne along by the flood waters.

In this extensive plain, alternatoly a lake and a morass, the Cunene is joined by the Caculovar (Kakulo-Balé, or "Old Bulé"), a considerable stream which collects all the waters descending from the Snowy Range (Chella) and from the Huilla cirques. According to the unanimous testimony of travellers and residents, this region of the middle Cunene, notwithstanding its marshy charactor, is by no means insalubrious, a circumstunce perhaps due to the antiseptic action of the mosses covering the surface of the waters, and probably also to the elevation of the land. The height of the plain about the confluence of tho Cunene with the Caculovar was estimated by Capello and Ivens at about 3,500 feet, while Dufour, another explorer, found that the village at the confluence itself stood at an altitude of $\mathbf{3 , 8 0 0}$ feet.

This elevated lacustrine district has other emissaries besides the Cunene. At least three watercourses, designated by the generic name of umaramba, branch off from the left bank of the river through broud openings in the encircling cliffs. They take a southerly or south-easterly course, meandering through the territory of the Ova-Mpos as far as the great saline marsh of Etosha, which is distant 150 miles and siturted at a level 330 feet lower than the main stream. The Cunene thus presents the extremely rare example of an incompleted delia, for in virlue of these lateral channels it ivelongs to the system of watercourses which, like the Ku-Bango, are lost in the depressions of the desert.

Down to the middle of the present century the true course of the Cunene was still unknown, and on Lopez de Lima's map, which embodies the state of geographical knowledge at that period, it is represented as flowing eastwards in the direction of the Indian Ocean. But it is now known to reach the Atlantic after forcing its way through the intercepting western highlands. Report even speaks of a great cataract, followed lower down by a large number of smaller cascades. It seems in fact impossible that great falls or rapids do not exist in this section of the fluvial bed, for there is an incline of considerably more than 3,000 feet in the space of 180 miles between the estuary and the point where the mountains are traversed by the river. Systematic exploration has hitherto been made only in the lower part of the valley. So early as the year 1824 the English vessel, the Espiegle, had landed near the mouth of the Cunene, which was then named the Nourse River; yet the very next year Owen failed to discover the opening, doubtless becanse the bar had meantime been closed, and the river exhausted for a long way above its mouth. The entrance was not rediscovered till the year 1854, when the river was ascended for some 25 miles from the coast. Eren now the Cunene reaches the sea only during the rainy soason, from December to April. At other times the abundant waters rolled down with the inundations of the upper basin are nearly completely evaporated in the vast lacustrine reservoirs of the middle course, nothing remaining for the lower reaches except a puny stream which soon runs out in the sands.

## Climate of Angola.

Stretching north and south a total distance of over 720 miles between the sixth and seventeeuth parallels of northern latitude, and presenting a series of terraces rising to a height of over 6,000 feet, the Angola territory naturally offers a great diversity of climate. But although the meteorological conditions and all the corresponding phenomena are modified with the latitude and relief of the

Fig. 2.-The Cunene and Etosha Lagoon.
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land, the actual extremes of temperature are but slight in the several physical zones. Hence travellers suffer quite as much from the fiery solar rays on the elevated plateaux of the interior as on the low-lying coastlands. The thermometric differences, however, become more pronounced with the alternating seasons of heat and cold, according as we advance farther from the equator and from the seaboard. The local variations of climate due to accidental conditions are often very great and extremely dangerous to strangers. In some of the upland districts
tween the a series of naturally litions and lief of the
it freezes, as in Europe, and even at an altitude of 3,500 foet on the castern slopes of the mountains, Capello and Ivens had to endure great extremes of temperature, from freezing-point at night to $82^{\circ}$ and even $86^{\circ} \mathrm{F}$. during the day.

The most continuous meteorologieal observations have been taken at Loanda, capital of the colony, showing that at this place, although lying not more than 600 miles to the south of the equator, the great summer heats are less intense than at Lisbon. Thus the maximum tomperature in February, the hottest month at Loanda, is greater than that of August, the hottest in Portugal. Travellers leaving Lisbon in summer for Angola aro surprised at the relative coolness of these tropical regions. In fact the mean temperature of Loanda scarcely excceds $73^{\circ}$ F., while the annual divergence between the thermometric extremes for each month is not usually more than twenty degrees. But between the groatest heat and the greatest cold the discrepancy rose in 1879 to nearly thirty-four ${ }^{\circ}$ degrees, the glass falling from $88^{\circ} \mathrm{F}$. in November to $55^{\circ} \mathrm{F}$. in August. On the inland plateaux under the same latitude and at an elevation of 5,300 feet, the discrepancy is twice as great, ranging from freezing-point to $98^{\circ} \mathrm{F}$. At Mossamedes, which of all the coast towns enjoys the most equable climate, the annual temperature oscillates from thirty-six to thirty-eight degrees, and this place presents the most favourable conditions for the acclimatisation of European residents.

The relative coolness of the Angolan climate is due to the direction of the marine breezes, which generally blow from the temperate southern regions. In these latitudes the coast stream setting from the Antarctic zone has sufficient influence to considerably lower the normal temperature of the surrounding waters and atmospherie layers; hence the name of Cabo Frio, or "Cold Cape," given to the headland lying to the south of the Cunene. A neighbouring ereek is also known as the Angra Fria, or "Cold Bay." Even north of the Cunene the coastlands benefit by this cool marine current, although to a less degree, and its influence is known to be felt as far north as the island of Sam-Thomé. Off Loanda its mean velocity is about $1 \frac{1}{8}$ mile per hour, but it is at times completely arrested or even partly reversed by violent gales from the north-west. Generally speaking, the southern breezes prevail greatly over those from the north along this seaboard, where the trade-winds rarely maintain their normal direction from the south-east to the north-west, being deflected by the rarefied air from the hot regions of the interior, and thus transformed to south-westerly and even westerly monsoons. According to Ribeiro, the marine breezes stand to those of the continent in the proportion of rather more than five to two. From the observations regularly taken at Malangé, over 180 miles from the sea, it appears that in this inland district, notwithstanding its great distance from the alternating land and seacoast breezes (terral and viracã̈), a certain rhythm is still maintained between tho easterly and westerly winde. According to Hann, the former preveil expecially in the morning, the latter in the afternoon, the aërial current thus showing a tendency to set from the quarter of the heaveus where the sun is found.

Under the influence of the vapour-charged monsoons there is always a con-
siderable quantity of moisture present in the atmosphere.* From May to September it often almost reaches the point of saturation, and then the horizon is everywhere veiled in the dense fogs of the cacimbo. Yet the rainfall is comparatively slight in the low-lying districts, the vapours being borne by the winds to the slopes of the hills, where frequent downpours occur regularly during the light rainy season from October to January, and the heevy from the beginning of April to the end of May. At Loanda the annual rainfall varies to a remarkable degree, $\dagger$ the average number of wet days being not more than fifteen in some years and four times as many in others. Over 20 inches have sometimes fallen in favourable years, while at other times the quantity has scarcely exceeded 5 or 6 inches.

In the northern districts the first rains are always unhealthy, the air being then charged with the foul exhalations with which the porous soil is saturated, and which are mingled with the decayed vegetation suddenly washed up from below the surface. In the direction from north to south the quantity of the rainfall diminishos progressively along the low-lying coastlands. Copious at SanSalvador, $\ddagger$ slight at Loanda, it ceases nearly altogether at Mossamedes and in the Lower Cunene basin. Hence this southern region lies on the verge of the desert, but is at the same time the most salubrious in Angola, thanks to the great dryness of the atmosphere and the ground, as well as to the relative coolness of the temperature. On the plateaux skirting the south side of the Lower Cunene the Quissama natives are obliged carefully to husband the rainwater in the hollow trunks of the baobabs.

## Flora.

Since the explorations of Welwitsch in the province of Angola, the face of the land is well known in its broad features, and nothing now remains except to study its details. Hence the name of this learned botanist has justly been given to the Wehoitschia mirabilis, the most remarkable plant in this part of the continent. This tree, for it really is a tree, although in appearance more like an eccentric fungus than aught else, grows in the Mossamedes district, ranging northwards only as far as the mouth of the intermittent river Sam-Nicolau, but reaching, south of the Cunene, far into the Damara country. The trunk, which is said to live for a hundred years, and which attains a compass of ten or twelve feet,


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terminates abruptly a few inches above the ground in a level surfnee compured by Welwitsch to a " round table," but fissured and crevnssed in all direetions. From its outer rim brunch off two thick leaves neurly 8 feet long, which resemble two great leather dises, and which are in fact the very first lenves, which have survived since the plant began to sprout, and which have grown with the growth of the tree itself. The edges of these strange leaves are fruyed into numerous sncke-like thongs, which have ull the appearance of so many tentucles of a polype.

In the northern districts of Angola the flora differs in no respects from that of the Lower Congo. Here the characteristic plants of the landscape are everywhere the arborescent euphorbias, the eriodendrons, the bombax, and wide-spread baobab. In some of the valleys well sheltered from the sea breezes and abundantly watered, tropical vegetation displays all its variety of great forest trees, parasitic and climbing plants.

But the exposed plateaux, where the rainwater flows off rapidly and where the surfaco is oovered only with a thin layer of vegetable soil, are overgrown for vast spaces with tall steppe grasses, giving refuge to numerous herds of large game. But these boundless savannahs are exposed to periodical queimadas, or conflagrations, which sweep away all living creatures down to the

Fig. 3.-Veortable 7ones of Angola.
 very insects.

In the direction from north to south the vegetation grows scantier with the continuously decreasing rainfall. At a short distance south of Cape Padrio the primeval forest descends to the water's edge, whereas it gradually recedes in the interior to the south of the Cabeça de Cobra settlement. Still farther south forests are nowhere seen in the neighbourhood of the coast, and beyond Mossamedes the last lingering isolated clumps disappear altogether, although behind the outer terraces the vast wildernesses of the Sertão are still diversified with fine forest growths. In the same direction
from north to south certain characteristic species become gradually replaced by others. Thus the hyphane guinecnsis, so common between the Congo estuary and Ambriz, is not found on the southern coastlands, and in the Mossamedes distriet a complete transition takes place from the flora of the equatorial regions to that of the closed fluvial basins in South Africa. In this southern province the great euphorbias, for instance, are no longer seen, their place being gradually usurped by the various gum-bearing species.

Welwitsch's botanical record for the whole of the Angola territory comprises three thousand two hundred and twenty-seven species, of which one thousand eight hundred and ninety are flowering plants. In this numerous catalogue are included several indigenous forms, such as cactuses, a family formerly supposed to be found only in the New World, but which are here grouped about the crests of the plateau at great distances from the coast, and from all centres of colonisation. A number of the local plants are highly prized by the natives on account of their supposed magical properties, notably the poisonous erythrophlxum guineense, the bark of which (nkissa) is used in judicial trials by ordeal, and the ndui (decamera Jovis tonantis), a shrub whose branches are suspended above the houses as a protection against lightning. In the sandy tracts of the south, the roots of the euphorbias afford nutriment to a remarkable parasitic plant of the genus hydnora, which dwells underground for the greater part of its existence, and then suddenly projects above the surface a solitary stalk, whose extremity expands into a large red flower, with a smell like that of putrid meat. This plant is endowed with many virtues in the eyes of the natives, who employ its sap to give grenter strength to their fishing-lines and nets, and also utilise it especially as a specific against several maladies.

On the other hand, the fruits of very few indigenous plants are gathered for alimentary purposes. Thus, although the Angolan flora comprises no less than thirty-two species of the vine, in but few localities are the grapes either eaten or pressed for making a little wine. The mariambamé, or coffee shrub, however, which grows wild in the forests of the interior, supplied the early planters with the first stock cultivated by them. Welwitsch has also found in the Angolan forests the large Liberian species, which is already replacing the Arabian variety on so many plantations. All other plants, whose roots, leaves, fruits or seeds serve as food, have been introduced in Angola as in other parts of Africa either from 'Asia or from the New World. The mango, one of these exotics, whieh however thrives admirably, is rarely met in some distriets, and especially along the banks of the Cuanza, where its shade is supposed to cause ill-luck.

## Fauna of Angola.

Transformations analogous to those of the flora have also taken place in the Angolan fauna. Just as the indigenous plants disappear before foreign intruders, wild animals withdraw farther and farther from the white man, his dogs and other domestic breeds. Elephants are no longer seen in the neighbourhood of
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the coast, although down to the middle of this century they wore still found along the seaboard. In 1854 the first explorers of the Cunene met them in such large numbers that it was proposed to call this watercourse the "Elephant River." But being now driven from the plains, they have taken refuge in the uplands and in the Chella mountains, where they range over the slopes and highest summits.

Lions also frequently prowled at night about the streets of the coast towns. After the rainy season especially they were very numerous, descending from the steppes and forests of the interior on the track of the antelopes which came to browse on the tender herbage of the lowlands. They often attacked man himself, and some thus acquiring a taste for human flesh, fell upon the shepherd in preference to his flock. They were regarded as animal fetishes, and no native would venture to speak of them without giving them the title of ngana, or "lord." At present these felines have bécome rare, while panthers, and especially hyenas of more than one species, are still numerous. The peixe-mulher, that is, " mermaid," or manatee, appears to have disappeared from all the Angolan rivers, except the upper reaches of the Cuanza, and the hippopotamus has withdrawn into the lateral lagoons of the rivers. But the jacares, or crocodiles, still infest many of the streams, although sharks, so numerous north of the Congo, are never seen on the southern coast.

In the provinces lying south of the Cuanza occur some animals unknown north of that river. But zebras, as well as certain antelopes belonging to the zone of the Orange and Zambese basins, are seen only on the verge of the great southern steppes. It was probably one of these antelopes that the traveller Brochado mistook for a dromedary, an animal that has not yet been introduced inte the country.

The order of birds is represented in Angola hy a great variety of species, and a considerable traffic in songsters is carried on with Lisbon. The natives have great faith in the omens furnished by the flight or the songs of birds, and meeting a quioco (telephonus erythropterus) is always regarded as of favourable augury. The corythrix paulina, a lovely little creature which feeds chiefly on seeds and fruits, is looked on as a potent magician whose cry strikes terror into the stoutest heart. Houses and even whole villages have been deserted because this bird happened to pereh on a neighbouring branch and utter its funereal note. The fowlers who go to capture it in the forests on behalf of the Portuguese dealers, are very careful to avoid all villages on their return with their prize, for fear of being accused by the inhabitants of complicity in witchcraft. In another respect this bird is very remarkable, the bright red colour of its wings being soluble in water and yielding a certain proportion of copper (Monteiro).

Nearly all the forests of the interior are inhabited by the honey-bird (cuculus indicator), which, flitting from tree to tree, leads the honey-seekers to the hive, and then waits patiently perched on a neighbouring branch for its share in the plunder.

Except in some distriots snakes are not common, but some varieties are
extremely dangerous, as, for instance, the cuspedeiro, or "spitter," which when irritated ejects an acrid and poisonous secretion that threatens those with blindness whose ejes it touches. With the exception of ants and mosquitoes, insects are comparatively rare on the Atlantic slope of Angola. Scarcely any are seen during the rainy season, and butterHies make their appearance only for a few weeks, or even days, when the hot weather sets in. But the neighbouring seas are densely stocked, and the water seems at times one living mass, so choked is it with fish, forming moving banks several square miles in extent. The natives eat a small species of shark, as well as the pungo, a singing fish, whose thrilling note, soft as the sound of a flute, is heard rising above the smooth surface. In the rivers and especially in the shallow lagoons flooded during the inundations, they capture the bagro, a species of siluroid six or eight feet long; which has the property of living for hours on dry land.

## Inhabitants of Angola.

The natives of Angola belong for the most part to the group of Bantu populations. But it seems probable that amongst them, as amongst those of the Congo and Ogoway basins, there also survive the descendants of races belonging to an epoch anterior to all civilisation, before Africa had yet received the alimentary plants of Asia and the New World, and when the scattered tribes led a wandering life in the forests, living only on the chase, fishing, roots, and wild berries. These primitive tribos, who are still distinguished from the invaders by their usages and speech, have in Angola been mostly driven southwards to the verge of the desert or uninhabited savannahs.

But the conquerors themselves, although connected by common descent and a common language, represent several successive waves of invasion, each of which in its turn changed the political equilibrium of the land. The last of these irruptions was that of the Jagas, which occurred in the middle of the sixteenth century, when the Portuguese navigators had already made their appearance on the coast. The devastating hordes of these Jagas swept like a torrent over the land, destroying kingdoms and displacing whole communities. They are generally supposed to have been closely related to the Zulus and Kafirs of the southern regions. At present these ethnical shiftings take place more gradually, but the ultimate consequences are even more far-reaching. The Kabinda Negroes, the immigrants from Brazil, and the Portuguese half-castes; do not certainly present themselves as enemies, but their influence is on that very account all the more readily accepted. All these discordant elements are thus gradually merging in a common nationality, and preparing the way for a new era of social culture.

Like those dwelling between the Congo and Shiloango rivers, the various tribes of the northern districts belong to the Ba-Fyot family. They also take the collective name of Congo from the river whose banks they occupy. These BaFyots were the founders of the ancient kingdom of the Congo, which became famous through its alliance with the Portuguese, and through the remarkable
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success of the Roman Catholic missionaries, who converted, or at least baptised, many hundred thousand natives. The kingdom still exists, although much weakened, most of the Ba-Fyot tribes having ceased to yield it obedience. The Mu-Sorongos, kinsmen of thoso dwelling north of the Congo, the Mu-Shicongos, the Ba-Kongos, Bambas, Muyolos, and other Fyot peoples occupying the region south of the Lower Congo far into the Mbrish basin, render little more than a nominal vassalage to the sovereign who resides at San Salvador, while even the Portuguese authority is but slightly enforced in those districts. The few explorers

Fig. 4.-Ancirnt Kingdoy of Congo.
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who have ventured to visit these northern populations have done so at the cost of much risk and great hardships.

The Sonho Negroes in the peninsula formed by the Congo estuary and the coast line, no longer hold any relations with their old master at San-Salvador. The disintegration of the empire in fact began towards the close of the seventeenth century, by the revolt of their kilamba, or chief, the "Count of Sonho" of the Portuguese chronicles. The complete ruin of the state was brought abput by insurrections, the rivalries of the missionaries, the seizure of the trade routes

[^2]by the Cabindas, and especially the slave trade carried on either by the monks themselves or by the Portuguese and foreign dealers. The kingdom is kept together only by the mystio power of tradition, like the "holy Roman Empire" during the Middle Ages.

Although dwelling on the banks of the Congo, in the immediate vicinity of

Fig. 6.-Mu-Soromao Woman.

the factories visited by the whites, the native communities lying west of SanSalvador have only to a very small extent been brought under European influences. The Mu-Sorongos, Mu-Shicongos, Bambas and others, have remained pure fetishists unaffected by any ceremonies borrowed from the Roman Catholic
practices. They never omit, however, to supply thcir dead with boote or shocs in the European fashion, doubtless to lighten their toilsome journey to the unknown world beyond the grave. The Mu-Shicongos, who claim to have sprung from the trees, have scarcely any domestic idols in their huts, but nearly all natural objects are for them "fetishes," and every unexplained phenomenon seems to them an awe-inspiring prodigy, or the work of some potent magician. The world of spirits rules all mundane affairs. Women who have long remained childless, or who have lost a firstling, make solemn vows to devnte their new-born offspring to the service of the fetishes, and from their early childhood these future priests learn from the great fetishists the occult arts, such as how to beat the magic drum, to utter the spells and incantations, to make the proper gestures and contortions required for conjuring the spirits, or causing and dispelling bodily ailnents.

Amongst the Bambas, the rite of circumcision is attended by a long period of trials for initiation into the state of manhood. During this period the young men, formed into temporary republics in the recesses of the forest, dwell entirely upart from the rest of the tribe, absorbed in the study of the magic virtues of the herbs, trees, and auiumbs, and in concocting the various " medicines," which they are required to carefully preserve during their wholc life as a protection against all misfortunes. They cannot return to the world until properly furnished with all these powerful charms. The king of the Bambas, whose ancestors were invested with the office of commander-in-chief by the emperor of Congo, is said to be now the keeper of the great fetish who dwells in a sacred grove inaccessible to all strangers. This mysterious being remains invisible, even to his worshippers themselves, and although he is supposed to be mortal, his priests gather up his remains, and from these the god springs ever into new life.

All the members of the tribe are said to have in the same way to pass through a "temporary death," and it is reported that when the priest shakes his calabash, full of all sorts of charms, the young men are thrown into a cataleptic sleep, falling like dead bodies on the ground. They remain in this state for three days, then returning to the life which they henceforth consecrate to the worship of the fetish by whom they have been resuscitated. Some, however, wake up in a drowsy state, only gradually recovering the memory of their previous existence. But, whatever be the practices of the Bamba magicians, it seems probable that they really possess this power of throwing the young men into a comatose state outwardly resembling death. Those who have not passed through this ceremony of the new birth are universally despised and forbidden to join in the tribal dances.

In the midst of the Mu-Shicongos are scattered some Ma-Vumbu communities, resembling in every respect the other Ma-Vumbus who are met north of the Congo, and who are equally distingaished by their Semitic features. According to the local traditions, the southern Ma-Vumbus, who are all members of influential families, have been settled in this region from time immemorial.

## The Bundas.

South of the tribes constituting the Congo group, and as far as the provinco of Mossamedes, stretehes the linguistic domain of the Bundas (Bundo, Bondé), called also "Angola" like the whole land itself. According to one rather farfetched etymology, the term lBunda is explained to mean "Strikers," or "Conquerors," recalling in fact the successive invasions of the race and its victories over the aboriginal populaions. But the name seems rather to denote "family," "descent," thus implying a consciousness of their common kinship on the part of those speaking the lingua geral or "general language" of Angola. This Bundu speech is one of the most widely diffused in Africa, and one of those which have been longest known to students, without however having yet been thoroughly studied. Towards the ond of the seventeenth century an Angolan grammar was published in Lisbon, and devotional works had already been composed in this language. For over two centuries Europeans have been familiar with Am-Bunda (Hem-Bunda or Kin-Bunda), whose domain, according to Monteiro, begins immediately below the river Dandé, and stretches thence far beyond the frontiers of Angola proper. If not spoken, it is at least undorstood by numerous tribes of the interior, who maintain uninterrupted commercial relations with Bunda caravan people. Thus it was not as "Strikers," but as traders, that the inhabitants of Angola propagated the use of their "lingua franca," from the Atlantio seaboard as far as the Congo, Ku-Bango, and Zambese basins. In the Portuguese possessions it is spoken in two dialects, distinct enough to have been classed as separate languages. These are the Angolan, or Bunda, properly so called, which is current ncrth of the Cuanza, and the southern Bunda, which prevails throughout the whole region comprised between Benguella and the Bihé territory. Portuguese terms have penetrated into both varieties, and in fact into all the inland dialects as far as and beyond the Kassai.

The Bundas (A-Bundo, Bin-Bundo) are thus divided into two main divisions, a northern and a southern. But the latter, so far from forming compact national groups, are in their turn subdivided into a large number of tribes, which have reached very different degrees of civilisation. Some, who have been brought within the influence of Europeans either on the seaboard or on the plantations of the interior, are comparatively cultured, while others dwelling on the plateaux, or in the more remote upland villages, have remained in the savage state. Of all the Bundas, the Ba-Nano or "Highlanders," so named in contradistinction to the Ba-Bworo or "Lowlanders," have best preserved the racial purity and the primitive usages. The term Ba-Nano (Nanno) is, however, extended by some writers in a collective sense to the whole nation.

Referring to the traditions of the Bundas who occupy the hilly region lying south of the Cuanza, Magyar states that these tribes came from the north-east about the middle of the sixteenth century. Thoir ancestors, who were fierce cannibals, were constantly waging war against all the surrounding tribes in order to procure human prey, and when they had no longer any enemies to fall upon
they began to exterminate each other. The whole race was threatoned with extinction by these everlasting butcheries when, according to the legend, there was constituted the secret socicty of empacauseiros, or "buffalo hunters," who pledged themselves no longer to eat any flesh except that '* wild beasts of the forest. The members of this association were distinguishoa by a buffalo tail tied round their head, and rings formed by the entrails of the satne animal coiled round their arms and legs. In course of time the confederates became powerful enough openly to revolt against the cannibals conservative of the old usages. But, being compelled to quit the country, they crossed the Upper Cuanza in the direction of the west, and settled in the territory of the Bailundos and neighbouring districts, where they gradually learnt the art of husbandry and became steadfast allies of the Portuguese. Even during their first "black wars," the carly white settlers were aided by bands of these buffulo hunters at times numbering as many as thirty thousand warriors, armed with bows and arrows. On the other hand, the section of the Bunda nation which had remained in the country east of the Cuanza, after the emigration of the empacaseciros, became too weak to maintain their superiority over the surrounding peoples, by whom they appear to have become gradually absorbed. But although still savages, they no doubt lost much of their former ferocity.

But whatever value is to be attached to these traditions, in which history and legend are largely intermingled, there can be no doubt that buman sacrifices and cannibalistic practices survived in their religious ceremonies at least down to the middle of the present century. According to Ladislas Magyar, who was himself the son-in-law of the king of Bihé, and as such a prominent personage in the dominant tribe of the Bundas, the body of the chief had to be sprinkled with the blood of slaves. Nor could his successor be enthroned until a slave-hunting expedition had been organised, in which the candidate for the chieftaincy was required to capture members of every trade practised in the country. This was done in the belief that the various arts and industries could not possibly flourish under the new administration unless all were represented by special victims at the inaugural ceremonies. Young girls and even pregnant women were thus immolated to secure fecundity during the ensuing reign, while the unborn babes were used in the concoction of elixirs destined to prolong human life. At every fresh succession some renowned warrior was also singled out, in order that the king might acquire courage ky eating his heart. But in order to have the desired effect this hero had to be siricken down in the fuilness of his strength and vigour; henco he was suddenly cut down while joining in the war-dance. Strangers also accidentally crossing the path of funeral processions were immediately dragged along and sacrificed on the grave. Established usage even authorised promiscuous slaughter for a period of seven days between the denth of the king and the accession of his successor, a custom of which the so-called "sons of the elephant," that is, the regular troops of the standing army, took advantage to plunder and massacre with impunity. In ordinary times animals alone were sacrificed, the warrior offering to the fetishmen either a black goat or a black heifer, the bridegroom a white ox.

The Bundas, and especially the Nanns or Highlanders, are generally fine men with proud bearing and frank expression. Amongst them persons are often found with blue eyes, a trait which is not at all appreciated by the natives. In most of the tribes the women are tattooed with designs representing flowers and arabesques. They go baro-headed, whereas the men fold a sort of turban round their hair; or else part it into a multitude of ringlets decked with little clay balls in imitation of coral. Like those of most other African tribes, the Bunda solas, or chicfs, add to their usual dress the skin of a panther or of some other rapacious beast, this spoil of the chase bsing regarded as an emblem of the terror by which royalty should ever be surrounded.

Some of the tribes practise circumcision, a rite unknown in others, or reserved for the chiefs alcue, who submit to the operation before assuming the panther's skin. Tho Bundas are for the most part highly intelligent, under the direction of Europeans rapidly acquiring a knowledge of letters, writing, and music. In a few months they learn to speak Portuguese correctly, and also make excellent artisans. Each community has its blacksmith and armourer, its carpenter, weaver, potter, all of whom assist at the publie gatherings, according to a well establishod order of precedence. But the Bundas distinguish themselver sbove all as traders. All the business affairs of the Portuguese with the interior are transacted by them, and they not unfrequently excel their teachers in commercial ability. The Bundus of the inland plateaux, whom Livingstone speaks of under the collective name of Mambari, accompany the traders' caravans far into the interior of the continent. Owing to their long journeys through the bush country, they are also commonly known as Pombeiros, from the native word pombe, answering to our scrub or brushwood. Some of these riravans at one time comprised as unany as three thousand persons, and were occasionaliy transformed to bands of armed marauders. Many of these inland Bundas were in the habit of sending their children to the coast towns for the purpose of receiving a European education.

The Bunda territory is divided into a number of chieftaincies, some of which comprise a considerable population; but each village constitutes an independent community in the enjoyment of self-government in all matters of purely local interest. The citizens, however, do not take part in the deliberations on a footing of equality, for there are numerous privileged classes, some by hereditary right, others through the royal favour, while over one-half of the whole population are enslaved. The slave element is supplied by captives in war, by distress compelling freemen to sell themselves and families, and by debts which are often paid by the loss of liberty. The expenses of funeral banquets have even at times been liquidated by selling the very children of the deceased. On the other hand, nearly all the slaves marry free women, in order thus to lighten the burden of servitude and to ensure the emancipation of their children, who always take the social position of their mothers. When a slave becomes in this way related to a chief, his life is considered as of equal value to that of a free man. His body, like that of other Bundas, is consulted by the wizards, in order to ascertain whether
fine men are often tives. In owers and ban round clay balls inda sobas, - rapacious by which
reserved panther's e direction asic. In a , excellent carpenter, $g$ to a wall lves above nteriur are $s$ in com. c speaks of us far into a the bush ative word at one time ransformed he habit of a European e of which ndependent surely local tions on a hereditary ole populaby distress ch are often en at times other hand, e burden of ays take the related to a is body, like ain whether
the death has not been caused by tho magic arts of some $n$ slevolent $m$ licine-

Fig. 6.-Inhabitants of Angoin.
Soale 1: 10,000,000.

man; for the unavenged spirits of the dead fail not to return to the earth, and torment the living until justice is done them.

## Tife Ganolelias and Limolios.

Beyond the Upper Cuanza, the peoples dwelling south-east of the Bundus, Huambas, and Quimbundes-confederate tribes of blacksmiths and wax-hunters, seatered amid the depressions of the phateau-are collectively known as Ganguellas, a term which appeurs to huve been suggested by the contempt in which these aborigines aro held. The word is said to moan "silly" or "senseless people," and in proof of their stupidity, it was till recently suid of them that they looked on brandy as a poison, and consequently massacred the first importers of the pernicious lifuor. Under the general designution of Ganguellas are now comprised numerous tribes, whose idioms are connected towards the east with those of the Lobalés, and westward with those of the Nanos. Notwithstanding the great difference in their social condition, all these peoples seem to have a common origin; nor does their reputation for savagery prevent the Ganguellas from being highly intelligent and enterprising traders. According to Bastian, amongst them are to be sought the descendants of the terrible Jagas, who formerly overran the empiro of Congo, and who have been affiliated by othor writers to the Fulahs, the Zulu-Kafirs, and even the Hamitic Gallas.

The Songo people, who occupy the waterparting between the Cuanza and the Kwango to the east of Malange, have been brought more under Portuguese influence than the Ganguellas; yet there are few African lands where trial by the ordeal of the poisoned enp is more common than in their territory. It is employed even in the most frivolous cases, the litigants being, however, then replaced by a number of children, or of dogs, who represent the opposite sides. An attenuated decoction, whioh causes little danger to life, is administered all round, and the first to reject the potion secures the triumph of their party.

The tribes dwelling along the left bank of the Lower Cuanza diverge more from the ordinary Bunda type, and the Bantu dialects spoken by them differ greatly from the current speech of Angola. To this group belong the Libollos, whose territory is limited eastwards by the little river Cango, who bear the reputation of being a mild, peace-loving, and industrious agricultural people. The Liballos are the hereditary foes of their western neighbours, the Quissamas (Kissama), who occupy the peninsular district bounded east and north by the great bend of the Lower Cuanza, west and south-west by the coast. Hitherto the Quissamas have preserved their complete independence, although it would have been easy to reduce their territory, almost entirely encircled as it is by the Portuguese possessions. During a famine, by which the land was wasted, some Bunda traders took advantage of the general distress to barter provisions for a large number of half-famished families. But the next year the Quissamas avenged themselves by capturing several of the Bunda merchants, whom they put to the torture, burning them with red-hot irons in punishment of the indignity offered to the nation. Owing to this occurrence the Bundas would now willingly offer their services to the Portuguese Government for the conquest of the Quissama territory.


Meantime the Quissamas, a small black race of uncleanly habits, hold themselves aloof from all the other natives, although still compelled at times to cross the Cuanza in order to find a market for their products amongst the Portuguese settlers. One of the most precious commodities exported by them are blocks of salt about ten inches long, which are forwarded to the interior and used as currency throughout a great part of the continent. Dealers armed with fetishes, which servie also as safe-conducts, introduce in return into their villages articles of European manufacture, such as glass beads used as ornaments by the women. The hair, encircled by a coronet of vegetable fibre in the form of a nimbus, is decked with false pearls alternating with narrow strips of bark. They also wear a robe prepared from the bast of the baobab, which ladies of rank cover behind with an antelope skin embellished with pendant shell ornaments jingliug at every step. Their approach is thus heralded from a distance by the tinkling noise of the cowries attached to their costume. The Quissamas are altogether a very courteous and ceremonious people.

## Thr South Angolan Tribrs.

South of the Libollos and Quissamas dwell the $\Lambda$ mboellas, a Bantu nation bearing the same name as the numerous tribes of like origin settled more to the south-east on the banks of the Ku-Bango and Upper Zambese. The Seli, or MuSeli, a coast tribe near Novo-Redondo, were till recently still cannibals, who at their religious ceremonies slaughtered a fetish victim whose head and heart were presented to the king. Farther south the Mu-Ndombe savages, first reduced in the year 1847, are a nomad pastoral people of independent but unaggressive character. They are clothed in skins, and smear their bodies with oil or rancid butter blackened with powdered charcoal. Of all the Angolan peoples they alone wear sandals made of ox-hide. The cubatas, or huts, of the villages, searcely high enough for headroom, resemble haycocks, and are of perfectly spherical form. They are furnished with bedsteads, which are mere heaps of clay levelled on top and lubricated with butter.

When the young Mu-Ndombé gets married a banana garden is planted, and if there is no prospect of offspring when the fruit ripens, the wife has the right to claim a divorco. As a rule, the Mu-Ndombés eat nothing but game, abstaining from touching their cattle except at the death of a chief, on which "festive occasion" several hundred heads of oxen are sometimes consumed. At these Gargantuan feasts, which last for ten and even fifteen days, the whole animal is devoured-the half raw flesh, the blood, entrails, skin broiled over the fire, everything except the bones and horns.

Between Benguella and Mossamedes the whole coast region is occupied by the Ba-Kwandos and the Ba-Kwissés, ethnical groups which are usually regarded as belonging to a primitive race in process of extinction. They are a small race with a yellowish black complexion, prominent cheek-bones, flat nose, pouting lips, projecting jaws, large paunch, and weak extremitios. They are shunned as
dangerous savages, although really a timid people, living in the caves and fissures of the mountains, and retreating step by step before the advance of the Europeans and of the other Negro populations. In their eyes the European is almost a divine being, whom they would not dare to resist. Hence, they are ever on their guard against strangers, and creep stealthily down to the coast, where they venture amongst the breakers in quest of fish, and of the flotsam and jetsam of all kinds cast ashore by the waves. This is their only food, for they have no arms or missiles with which to pursue the game in their forests. Amongst them the social state has not developed beyond the family circle, each little group of closely related kinsfolk keeping together and wandering about under the guidance of the elder or patriarch.

Other fugitive peoples, such as the Ba-Kulabés (Cabaé), and the Ba-Koroka, probably of mixed origin, roam the western slopes of the hills, being also utterly powerless to offer the least resistance to the European or native invaders. On the opposite side of the mountains dwell the Ba-Kankalas, a dwarfish tribe with large paunch and yellowish complexion, who would seem, like the Ba-Kwandos and Ba-Kwissés, also to represent the Bushman stock amongst the surrounding Bantu peoples. The descendants of these aborigines have held their ground most successfully in the southern districts of Angola, where they are still concentrated in the largest numbers. But here also the ever-advancing Bantu populations have accuired pnssessind of the land, and the Bunda language has alreary become the prevalent form of speech. On the right or Portuguese side of the Cunene, the chief nation are the Ba-Simbas (Ba-Ximba, Ba-Shimba), the Cimbebas of Duparquet and other ethnologists.

The upper basin of the Caculovar, chief affluent of the Cunene, belongs to the various tribes of the Ba-Nhaneka family, while the banks of the main stream itself are here occupied by the Ba-Nkombis. According to Nogueira, these two nations jointly comprise a population of over a hundred and forty thousand souls, all of Bunda speech and evidently of the same race as the northern Bundas. The local traditions attest that they formerly dwelt in the region about the head--waters of the Cuanza, whence they were expelled by the Ba-Nanos. Their customs, especially of the Ba-Nkombis, in some respects resemble those of the Arabs. Thus they shave the head, leaving only a tuft of hair on the crown; and respectfully remove their shoes before entering a friend's house. The houses themselves resemble the dwars of the Mauritanian Beduins, and the commune is governed in the same way. Most of these tribes are independent, and even those paying a small tribute to some suzerain chief enjoy complete. local self-government. Not even the hamba, or chief, literally the "more than man," can assert his will in all things, for he is surrounded by councillors, with whom all weighty matters have to be discussed, and whose views he has frequently to accept. When a hunter strikes down an elephant he presents the hamba with one of the tusks, but no other taxes are levied, except perhaps the fees exacted from suitors who come to plead before the tribunal of the "father." Although servitude exists, care is taken not to apply the name of slave to those in bondage, who
are commonly designated as "ons," or "cousins." Nor are these altogether empty titles, for on the death of the legitimate heir-that is, the sister's son or uterine brother-the oldest slave succeeds to the estate, to the exclusion of the children themselves, or of the wives, who never inherit.

When questioned by the European missionaries, both Ba-Nhanekas and BaNkombis speak of a supreme god, and relate of the departed that "God has taken them unto himself." But to this deity they render no worship, whom in fact they confound with the sun. As pastors and husbandmen, their homage is chiefly reserved for animals-the ox that faithfully accompanies them from pasturage to pasturage, or even the snake that glides about their dwellings. Every MuNhaneka has his favourite ox, and after death his remains, reduced by a peculiar culinary process to a sort of paste, are placed for burial in the hide of this animal. The great national feast, answering to our harvest home, is symbolised by a spotless white or black bull, who is led in the procession by the muene-hambo, or "chief pastor," and followed by a cow called the " mistress of the house." After the harvest the whole tribe, in company with the sacred oxen, goes in procession to the chief's residence, in order to consult the auguries and make preparations for the work of the new year. During the festival rejoicing must be universal, so that the very dead must cease to be mourned. Even the few crimes that may happen to be committed at this period of mutual good-will are overlooked, all inquiry for the delirquonts heing forhiddon.

Amongst these tribes of the Cunene basin all the youths are circumcised, this being the essential condition on which they are received as taba, that is to say, "equale." The Ba-Suto, or uncircumcised, are held in universal scorn and contempt; and this, like all other painful operations, has to be endured without flinching. M. Nogueira, who residGil eleven years amongst the natives of the Cunene valley, speaks with admiration of their dignified demeanour and of their eivic virtues. Apart from the crimes which, as in all other countries, are inseparable from dynastic conflicts, no attacks are ever made against life or property, although all citizens go armed, and enjoy complete exemption from police control. Such depravity, contentions, outrages, and misery as prevail have been introduced entirely by the Portuguese. As in most other lands where Europeans have entered into direct relations with the natives, their influence is always baneful at first. Instead of improving, they begin by corrupting or even decimating the aborigines, and end at times by exterminating them. Before the conflicting elements can be reconciled, and all participate in the general progress, a period of strife intervenes, during which the weak too often succumb to the strong.

## The Pretos and Europeans.

The civilised blacks of Angola are uniformly designated by the name of Pretos, while to those still keeping aloof from Portuguese influence is applied the synonymous expression Negros, often uttered in a contemptuous way. The Pretos are concentrated chiefly in the seaports and surrounding districts, where they are
brought into direct contact with the Europeans and the immigrant Cabindas, who no less than the whites must be regarded as the true civilisers of the inhabitants of Angola. Amongst the Pretos must also be included the Bunda communitios of the Lower Cuanza, the Ambaquistas, or people of the Ambaca district in the Lu-Calla basin, and lastly the Bihenos, that is the natives of the Bihé plateau, which forms the divide between the waters flowing to the Cuanza, the Cunene, the Ku-Bango, and the Ku-Ndo basins. Amongst those more or less cultured Negroes it is by no means rare to meet well-informed persons, and from this element are derived most of those employed in the international traffe, as well as some of the colonial officials. Many even possess, or at least administer, extensive plantations.

The Protos, however, are essentially a mixed people, presenting every shade of complexion from an almost pure black to a hue light enough to class them as whites. Nevertheless, many of the practices prevailing amongst those dwelling in and about the towns still recall their primitive savagery. Mention is made by Ladislas Magyar of the vakunga, one of these barbarous customs still surviving down to the middle of the present century amongst the Mu-Ndombers settled in tho neighbourhood of Benguella, who, at the same time, hold themsolves as quite distinct from and superior to the savage Mu -Ndombés of the interior. In accordance with this vakunga, or "sale by auction," young girls whose parents ace not rich shough to defray the expenses of the sumpiuous "weading breakfast," are put up to the highest bidder, and in this way both contracting parties escape the reproach of a marriage performed without the customary festivities.

The practice is still universally observed amongst the Quissamas as well as the inland Mu-Ndombés. In the villages of the interior the bride joins in the wedding procession plastered all over with a white clay, emblem of future happiness.

In Angola the white element is represented only by a relatively small number of persons. Not more than about four thousand of the inhahitants are of European origin, and even of these nearly all have come with the intention of one day returning to the mother country. The Portuguese and other whites settled in Angola are either traders and artisans who hope to make rapid fortunes, or else Government officials and soldiers, whose service in this remote colony entitles them to a double rate of promotion. Hence, it is not surprising that the territories comprised between "coast and coast," that is between the Congo and Zambese estuaries, are still for the most part an unknown region. Although indicated on the Portuguese maps as forming a single Lusitanian domain, they have been traversed from ocean to ocean by a very small number of explorers.

Europerns are rarely met who can be regarded as true immigrants, that have. come with the intention of forming permanent homes on African soil. The reason is because for the Portuguese themselves all attempts at acclimatisation within the tropical zone are attended by risk. Doubtless, many cases may be mentioned of whites who have passed half of a long existence in the trading places along the coast, or on the plantations of the interior; but even these seldom display the same energy and enterprise as their fellow-countrymen in

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Europe. To preserve their health it is indispensable to abstain from manual labour in the sun, and all are obliged to move about in the tipoga, a kind of palanquin suspended from elastic palm-stems resting on the shoulders of two native porters. Speaking generally, it may be said that it is quite the exception

Fig. 7.-Routis of Explorers who have oroseed the Continentr.
Scale 1: 35,000,000.

for whites, especially from the north of Europe, to succeed in adapting themselves to the climatic conditions of Portuguese Africa. North of Mossamedes the race never becomes acclimatised; all the settlements hitherto effected have perished miserably, and families can be kept alive only on the condition of returning to their native land. But the emigrants from Portugal or Madeira who have formed
settlements in the Mossamedes district, which already lies 1,000 miles south of the equator, hore enjoy a relatively cool atmosphere, which is, at the sume time, far less humid than that either of Lounda or of Benguella. Hence, instances of successful acclimatisation are here frequent enough, not only in the case of individuals but of family groups. Many natives of Portugal have reared a healthy offspring, with rosy cheeks and vigorous constitution. The race hus here been perpetuated, although hitherto the mortality has normally exceeded the birth-rate; and if few young girls are seen in Mossamedes, it is because they also emigrate, culled away to found new homes in the other coast towns.

The climate, which " eliminates" in the north, may thus be said to "assimilato" in the southern province of Angola; and if white families can here maintain themselves on the seaboard, ther naturally find still less difficulty in doing so on the breezy upland valleys of the interior. An irregular line embracing the whole of the Cunene basin as far as the plateau separating it from the slopes draining to the Cuanza and Kwango rivers, roughly indicates the portion of the Portuguese possessions which has already become to a small extent $\mathfrak{a}$ region of permanent colonisation. North of this parting line the territory can never become a colony in the strict sense of the term, and must always remain a mere political dependeney useful only for its natural resources.

The Portuguese are not the only whites who have begun to seek new homes in the southern parts of Angoia. The immigration from the nortiu has in ruent times been increased by a corresponding movement from the south of Africa. The Boers, descendants of the early Dutch settlers and of a few French Huguenot refugees, have continued as far as Angola the gradual northward advance begun by them some two centuries ago on the extreme southern shores of the continent. Steadily pushing forward from station to station, their farthest outposts have already reached the plateaux watered by the Upper Cunene. Notwithstanding the difficulties attending a first settlement, and despite the conflicts which have temporarily arrested and even driven back the onward movement, there can be no doubt that the Boers will ultimately secure a permanent footing in the Portuguese territory, and thus contribute to the settlement and progress of the country.

Nor is this all, for in the general spread of European ideas, customs, and industries, account must also be taken of the Brazilian immigrants from the New World, who are partly Portuguese by descent, and altogether by language and social institutions. Most of them are certainly of mixed origin, and while they may claim to be Europeans on the father's side, as well as by name and family traditions, they must also be regarded as Afrieans in virtue of their maternal descent. These civilised half-castes thus constitute a natural intermediate element between the pure whites and the Negroes, between the colonists and the natives. Some share in the general civilisation of the country is also taken by the hybrid Hindus from Goa, chiefly priests, traders, and teachers, who are commonly known as "Canarians," because mainly immigrants from the district of Canara, on the west coast of India.

The economic and social conditions of Angola have been completely revolu- tme time, stances of e case of reared a , has here eded the they also
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tely revolu-
tionised during the last few years. For the three centuries following the occupation of the land, the factories along the coast between the Congo and Cunene rivers traded exclusively in slaves. These stations were mere depôts for the wretched captives destined for the Brazilian plantations, and mostly purchased in the interior by the traders of Sam Thomé, descendants of the Jews banished to that island towards the end of the fifteenth century. The African coastlands having thus been depopulated for the benefit of the New World, it is not surprising that Angola has been so greatly distanced in material progress by the vast Brazilian empire. The number of blacks transported from Angola since the beginning of the sixteenth century has been estimated at about one million at least; and to procure this multitude of slaves, the dealers in human flesh probably caused the destruction of three or four times as many in the slavehunting expeditions and the tesrible forced marches to the eoast. No doubt the black cargoes received the apostolic benediction when setting sail, and at the time of Bastian's visit the stone seat was still shown at Loanda from which the bishop stretched forth his hands towards the parting hulks in order to bestuw his episcopal blessing on their living freights. But it may be doubted whether the horrors of the middle passuge were perceptibly abated for all this unctuous mummery. When, however, the traffic was checked, and at last abolished altogether, about the middle of the present century, the broad Angolan uplands had ceuded to be a huning-ground for humar quarry. But slthongh line iand now began to be slowly repeopled, the oid trade in slaves was still continued from plantation to plantation, just as it flourishes at the present time throughout the Negro kingdoms of the interior beyond the Kwango river. The whole system of cultivation, as well as the colonial administration in general, depended on the forced labour of the serfs employed on the large domains ceded by the itate to enterprising speculators.

At last slavery was completely abolished in 1878 throughout the Portuguese possessions, where no native is any longer compelled to till a square yard of land which he cannot call his own. But the tenure of the land itself has not undergone a corresponding change. Small freeholds, which tend so greatly to foster the self-respect and promote the well-being of the peasant, have not been substituted for the extensive domains on which is based the ascendancy of a powerful landed aristocracy. Nevertheless such a radical change as the emancipation of the Negro cannot fail eventually to bring about a corresponding revolution in the prevrlent system of saanual labour. So also the ever-increasing importance of Angola, in the social economy of the African world, must necessarily ere long entitle this region to a larger share of local self-government, and to a fundamental modification of the present system of complete dependence on the crown authorities resident in Lisbon.

## Topography.

Although recognised by solemn international treaties as sole masters of the left bank of the Lower Congo, from Noki to Cape Padrão, the Portuguese possess
no busy trading stations along this extensive section of the river. Nearly all vessels putting in to discharge or ship cargoes in the estuary stop either at Banana, Punta da Lenha, or Boma, all of which ports lie on the right bank, and consequently belong to the Congo Free State. The Portuguese side is thus almost deserted, and the water being shallower, is here less favournble for navigation, while the riverain populations are more hostile to foreigners. The station of Santo-Antonic, although sholtered from the west winds by the promontory of Cape Padrão, is merely a military outpost without any local traffic. Quissama, whose exuberant vegetation is a source of wonder to the traders of Boma, possesses three factories and some plantations, the produce of which is forwarded by a fow light craft.

The most frequented of all the riverain ports in Portuguese territory is Noki (Noqui), the Lukango of the natives, which is situated near the frontier, just below the cataracts. This haven, which is accessible to vessels of one thousand five hundred tons, has acquired some importance since the ivory trade has been transferred to the banks of the Congo, from the port of Ambriz on the seacoast. Noki is also the starting-point of travellers proceeding south-eastwards to San-Salvador, capital of the ancient kingdom of Congo, now tributary to the "King of the sea " residing in Lisbon.

## San-salvador.

Ambassi, the native city known to the Portuguese by the name of SanSalcador, occupies a commanding position worthy of an imperial capital which at one time ruled over all the land from the Gaboon to the Cuanza. It crowns the summit of a plateau of elliptical form, which stretches north and south for a distance of nearly two miles, with an average breadth of over half a mile. Towards the south, the valley of the Lueji, winding its way through a papyrus and grass-grown marshy tract, describes a semicircle round the escarpments of the plateau. On the east and west sides the narrow gorges, nearly 400 feet below the upper terraces, are traversed by rivulets, over which have been thrown suspension bridges of twisted creepers. Copious springs of pure water gush from the sides of the granite rock, which forms the base of this isolated plateau, and which is enclosed on all sides by old limestone formations.

The " great fetish" of San-Salvador, formerly renowned throughout all the Angolan lands, has long lost its prestige, and the religious rites introduced by the Roman Catholio missionaries-Portuguese Dominicans and Italian Capuchin friars -had until recently been completely forgotten. Little survived of those times except a few inherited crucifixes, regarded by tha chiefs as badges of authority, and the standard of the cross blessed by Pope Innocent VIII., and still jealously guarded by the king as an ægis of his faded majesty. In the capital were also still preserved some images of saints, which were carried in procession with great pomp on certain festivals, accompanied by genuflexious and prayers, in which nothing but the merest traces could be detected of the arcient liturgy. Negro

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priests ordained at Lonada had from time to time visited the "congregations" at San-Salvador, in order to keep up a semblaneo of union between these communities and the rest of the Church. The names of those missionaries were inscribed on the trunk of a sacred tree standing in the centre of the town. But for some years a regular mission has again attuched Sun-Sulvador with the Catholic world. Baptist preachers are aloo endeavouring, although with no great success, to make proselytes, especially among the slave children purchased from the surrounding tribes.

Under the influence of all these strangers some of the old superstitious

Fig. 8.-San-Salvador.
Scale 1:250,f00.

practices have disappeared, notably the ordeal of the poisoned cup; but polygamy still prevails, especiully amongst the chiefs and ralers. The order of succession, which the missionaries had formerly endeavoured to make conformable to the Roman law, is not in the direct but the indireet line, from uncle to nephew, as amongst most African tribes. During the interregnum the executive authority is vested in a formidable dignitary bearing the title of Ma-Boma, or "Lord of Terror." The death of a king is accordingly regarded in a twofold sense as a national calamity. It is followed by a period of solemn mourning, during which all merrymaking, the dance and the song, aro hushed in an all-pervading stilness.
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The natives remain confined to theic huts, abstain from ablutions and almost from food, and even cease to till the land. For ceveral months the body is preserved in a house facing the palace, adnrned with a symbolic effigy of the soveroign, to which are religiously offered the usual daily meals. After the limbs have been

first broken and then dried, the remains are covered with a coating of clay and wrapped in strips of cotton and a silk shroud. Everybody contributes his share, until at last the swathed mummy-pack fills the whole width of the mortuary dwelling. When the remains are ultimately borns to the consecrated place of burial, the funeral procession must be made in a straight line, so that all the

## MUSSERA.

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of clay and s his share, a mortuary ed place of bat all the
intervening houses have to be eleared away. Amongst the Mu-Sorongos the king was not officially interred for twolve years after his death, as if his subjects were still reluctant to believe that he had passed away.

Since its return to the sphere of Europenn culture, San. Salvador has already been visited by a large number of travellers. Dom Pedro V., King of Congo, who resides in the old city, has, like his forefathers, again becomo a vassal to the crown of Portugal. French. Portuguose, and Dutch factories huve sprung up in the vicinity of the royal court, and missionaries, held almost in as great respect as the king himself, have made the.capital a centre of religious uctivity for again gathering the surrounding populations into the Catholie fold." According to Chavanne, they were able to boast of two thousand converts in 1885. Nevertheless the metropolis is not very populous, contuining in that year not more than about seven hundred residents, including nine Europeans. But several hundred visitors were temporarily attached to the place by the interests of trade, and porters and packmen were continually plodding to and fro on all the surrounding highways.

In the San-Salvador district, the Lembelo market, at the converging point of several routes, is the ohief mart for caoutchoue within the zone of free trade south of the Congo. Here the brokers and middlemen meet once or twice a month to discuss business matters and exchange their commodities. A large open space shaded with trees in the centre of the market was formerly a place of execution, as the travoller is remiaded ty the tlanched skulls still suspouded from the overhanging branches. Whenever a wretched culprit was beheaded, the members of his fam'ly were said to be compelled to eat a few pieces from his hand.

South of Cape Padräo follow several factories surrounded by orchards and plantations. Such are Mangue Grande, Mangue Pequeno (Great and Little Mangue), and Cabeçn de Cobra ("Snake's Head"), where sesame especially is cultivated, and where may be purchased the finent fetishes in West Africa, all carved by the Musorongo artists.

Moculla and Ambrisette, situated near the mouth of a river flowing from the territory of the Mu-Shicongo people, enjoyed till lately some importance as outposts of the ivory trade. At present Ambrizette largely exports salt from the neighbouring saline marshes. Beyond it the "Pilar," a fine Portuguese pyramid, and hills strewn with granite boulders weatheree' into fantastic forms, which at a distance look like ramparts, towers, pillurs, or cibelisks, announce to the seafarer the approach to Mussera, formerly a prosperous city, whose powerful fetish, the so-called "Mother of Waters," was still powerless to protect the place from the ravages of small-pox and the sleep disease. This latter scourge did not make its appearance in the region south of the Congo till the year 1870, when in a few months it carried off two hundred victims in Mussera alone. The survivors fled in alarm from their homes, and founded a new town in the neighbourhood.

During the cacimbo season, that is from June to August, the Mp~ara fishermen capture large quantities of the pungo, or singing fish, which is cured and forwarded in all directions to the inland plateaux. To reach ; ie fishing grounds they brave the surf seated astride on two canoes coupled together, one foot in

## SOUTH AND E.IST AFRICA.

each. Fion the bituminous sandstones of the Mussera district there ouzes up a kind of asphalt, which the natives say collects in little pools, but which they do not allow the Europeans to visit.

## Amhriz and Loanda.

Ambriz, or rather $M$ llrish, so-named from a neighbouring river, is the only port of call on the whole seaboard between the Congo estuary and Loanda. Although it has been occupied by the Portuguese since the year 180\%, the neighbouring roadstead of Quissembo, as well as the territory stretching thence northwards, was left to the natives, so that foreign traders were able to carry on business without being obliged to pay local dues to the Portuguese authorities. Ambriz, whose various senzalas, or quarters, are scattered over the face of a steep cliff, has no harbour, nor any shipping accommodation beyond a pier, which vessels may approach in culm weather. The open roadstead is sheltered only by a low headland from the south and south-east winds; but this part of the coast is fortunately scarcely ever swept by storms. Ambriz was formerly visited by numerous caravans conveying ivory from the San-Salvador region, and although at present it exports very little of this commodity, its general trade has greatly increased of late years. Although lying beyond the Congo basin, it is situated within the zone of free trade with the whole of the Aagolun territury limited southwards by the river Lojé. Its staple export is coffee, which comes from the plantations in the south-cast, attracted to this port by its exemption from local impost. Ambriz also forwards ground-nuts, caoutchouc, and the baobab bast used in the manufacture of paper, the yearly value of all its exports being estimated at from $£ 160,000$ to $£ 200,000$. The Brazilian jigger (pulrx penetrans), originally introduced with the cargo of the Thomas Mitchell in 1872, has since spread from this place throughout a great part of West Africa.

Ambriz is destitute of good routes towerds the region of inland plateaux, and especially towards Quiballa, in the southern part of the Mu-Shicongo territory, as well as towards Bembé. The latter is a fortified town standing 2,550 feet above sea-level on a plateau separated from a peaked mountain by a deep valley strewn with a number of malaehite boulders, which appear to have been borne thither by the action of water. Formerly the natives sold from two hundred to three hundred tons annually to the Amirriz deulere. Hore recently an English company was ruined in the attempt to work these deposits, nearly all the miners introduced from Cornwall perishing in a few months.

The little fort of São José, or Das Pedras de Encogé, is the chief strategical station of the interior, but is much dreaded by the military convicts sent here to die of fever. It crowns a bluff full of caves, which overlooks the upper Lojé Valley, and guards the frontiers of the kingdom of Congo. The surrounding forests supply a large quantity of coffee, collected from the uncultivated plant. South-east of Ambriz the seaboard us far as the Dandé river is occupied by the Mossul territory, which aboands in gum copal. This region is still very little they do
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kuown, although formerly erected by the Portuguese crown into a "Duehy" in favour of a Negro prince, on whose shoulders were tattooed the arms oir Portugal, an indelible badge of which the bearer was not a little proud. This singular method of investiture was conferred on a Duke of Mossul so recently as the close of the eighteenth century. In the Dande valley, which forms the boundary line between the Ba-Fyot and Bunda populations, reservoirs of petroleum have been discovered, which, however, have hitherto been worked at a loss. For several generations the natives of the district have been so unruly that the European speculators have not yet ventured to establish factories in their midst. The upper Dandé valley is even still held by semi-independent Dembo tribes.

São-Paulo da Assumpcão de Loanda, or brietly Lornda, capital of their Angolun possessions, was the first town founded by the Portuguese on this coast. As it was also the most favourably situated for trading purposes, it naturally acquired a rapid development, and is at present the largest city on the West African seaboard for a distance of 3,000 miles, between Lagos and the Cape. Divided into an upper and a lower quarter, it spreads out in amphitheatrical form along the terraced slopes, terminating south wards in a rocky headland, on which
 stands the fortress of São Miguel. The somewhat open bay is partly sheltered from the ocean winds and surf by a strip of sand forming a continuation of a tongue of land which begins some 20 miles farther south, at the most advanced westerly point of the Angolan coast. This outer shore-line, which runs parallel with the inner seaboard, has been formed by the marine current which sets steadily in the
direction from south to north close to the mainland. Towards the middle, however, it is pierced by a channel, the so-called bar of Corimba, through which light craft gain access to the bay. The northern extremity of this sandy rampart thus forms a long, low-lying island, whose shores are often flooded by the stormy

Fig. 11.-Southern Sptt of Loanda.
Scale 1: 225,000.

waves of the Atlantic. Such is the islet of Loanda, on which the Portuguese founded their first settlement in the year 1576, at a time when they did not yet venture to establish factories on the mainland. The island, on which stood seven libatus, or native villages, was otherwise a place of exceptional importance for its inhabitants, constituting a sort of treasury where they collected the cowries
dle, howgh which rampart ie stormy

(cypreet moneta), used as currency in the surrounding districts. The Loanda cowries were of greater value as specie than those of Brazil, imported from Buhia, but were still far inferior to those of the Maldive Archipelago. The insular tongue of land, shaded with cocoanut groves which supply the materiuls for the manufacture of cordage and wickerwork, has a population of about five thousand, including six hundred fishermen, descended from the ancient Mu-Shi Loanda tribe. Here also the Government has established an arsenal for refitting its fleets.

One year after the foundation of the insular settlement, Paulo Dias de Novaes,

grandson of the navigator who first doubled the Cape of Good Hope, secured a footing on the neighbouring const, where by alliances with native chiefs and successful wars, the Portuguese gradually acquired possession of the surrounding territory. As a chief centre of the slave trade between Africa and Brazil, Loanda became a wealthy and populous city, where from twelve to fifteen vessels might at times te seen awaiting their turn to ship their living cargoes. But after the suppression of this traffio, itself a hindrance to the development of all legitimate trade, Loanda was all but ruined. Its population fell off, its buildings were forsakeu, all business came to an abrupt end; the few remaining inhabitants, cut off
from supplies, ran the risk of perishing from hunger, and whole months passed without a single Portuguese or Brazilian vessel making its appearance in the port.

But although the planters predicted that the entire abolition of the slave trade would complete the ruin of Loanda and the whole territory, their forebodings have not been realised. The population, which numbered about twelve thousand in the middle of the present century, has even increased since then; while the city, which for a time prosented the appearance of having undergone a bombardment, has been eniarged and improved. The débris of churches and convents have been cleared away and replaced by promenades; the narrow streets have been broadened, and the houses, built for the most part of Brazilian timber, proof against the attacks of termites, are well kept, well ventilated, supplied with verandahs, and painted in bright yellow, pink, or light blue colours. Over all the surrounding hills are dotted uunerous musseques, or villas, nestling beneath the shade of the baobab and other forest trees, which here thrive notwithstanding the poverty of the soil.

But Loanda still continues to be an unhealthy place, and even recently the inhabitants were reduced to great straits for want of sufficient water, a well and a few cisterns being wholly inadequate to meet the demand. Quite a flotilla of talaveiras, or barges, had to be daily sent for fresh supplies to the neighbouring river Bengo. At present the pure water of this stream is conveyed to the city by means of a cunal, which is also intended to be utilised for irrigation purposes. A beginning has likewise been made with the line of railway which is to run through the Zenza, or Upper Bengo valley, into the interior, and which must sooner or later be continued to the sfation of Ambaca, an importar ${ }^{2}$ centre of trade with the surrounding Congoese populations. This railway, a first concession for which was made in 1875, is the initial section of the trans-continental line which is intended one day to traverse Portuguese Africa in its entire length from the shores of the Atlantic to those of the Indian Ocean.

More than half of the trade of Angola is centred in the port of Loanda, through which nearly all articles of European manufacture reach the interior. In exchange for these wares the inhabitants have little to effer beyond the produce of the local fisheries; but from the inland districts they receive an abundance of colonial produce, especially coffee and caoutchouc.

The trade of Loanda is fostered by the ocean sieamers which now regularly visit the roadstead; but the port is unfortunately too shallow to enable them to appronch the town. Down to the beginning of the present century the largest vessels were still able to ride at anchor within $a^{\circ}$ few cable-lengths of the shore; but this anchorage has been gradually encroached upon by the silting sands, and the beach has been enlarged at the expense of the bay, so that the naval fleet and Transatlantic packets are now obliged to cast anchor under the shelter of the sendy islund nearly a mile and a half to the north of the city.

Pending the completion of the railway intended to bring Loanda into direct communication with the inland plantations, the best trade route is that offered by the course of the Lower Cuanza. After rounding Cape Palmeirinhas and crossing cleared ed, and tacks of nted in 3 dotted d other tly the well and otilla of bouring city by pses. A through oner or with the bich was intended of the through xchange the local colonial regularly them to te largest he shore; ands, and fleet and er of the
to direct offered by $d$ crossing
the bar at its mouth, the coast steamers are able to ascend this great artery as far as the town of Dondo. One of the first riverain ports on the right bank is Calumbo, which may be regarded as the fluvial port of Loanda, which lies little more than 20 miles to the north-west, and which is connceted by a good carriage road with the Cuanza. It has also been proposed to construct a junction canal, as originally projected by the Dutch, who held possession of Loanda for a few years.

Nearly all the plantations in the rich valley of the Cuanza lie on the right bank, which is the lower and more fertile of the two. Here the vegetation

characteristic of moist tropical lands displays itself in all its splendour and exuberance; but here also the fluvial inundations are the most disastrous, often sweeping away the bouguef, or embankments, together with the crops they were constructed to protect. The rich domain of Bom Jesus, where hundreds of hande are employed in distilling rum from the sugar-cane, has in this way frequently been wasted.

The only station on the left bank of the Lower Cuanza is Muxima (Mushima), crowning the summit of a limestone hill, whence an extensive view is commanded of the territory of the savage Quissama tribes. Above a group of hovels at the
foot of the hill rises a Christian church, which is regarded as a great "fetish" by all the inhabitants of the district, Catholies and pagans alike.

The trading station of Massangano, above the confluenco of the Cuanza and LuCalla, owes its existence to the neighbouring coffee plantations of the Cazengo district. But here the chief centre of traffie is Dando, which lies at the head of the navigation of the Cuanza. It is a modern town, situated on the right bank of the river, in a cirque surrounded by wooded hills, which prevent the free circulation of the air. The consequence is that the place is extremely unhealthy and from the local Portuguese traders has received the title of the "furnace," or "hell" of Angola. Here are manufactured porous earthenware vessels, and the native smiths omploy European iron, allhough the neighbouring hills are very rich in ores of that metal. In the same district were formerly worked some silver

Fig. 14.-Profected Railway to Ambaca.
Scale 1: 3,000,000.

mines, which occur a little farther up near the cataracts of the Cuanza, and not far from the village of Cambanibé. The first attempt was made to secure possession of these mines in the year 1595, when the two hundred men forming the expedition were all massacred except seven, who escaped to report the disaster.

The most productive coffee district in Angola is the basin of the river LuCalla, which flows parallel with the Cuanza some distance above the confluence of both streams. The coffee-plant grows wild in the forests of this region, and in many places rich natural plantations are formed merely by the simple process of clearing the ground round about the trees.' But the great plantations of the Cazengo, of Golungo-Alto, and neighbouring districts, have been created by the Portuguese and Brazilian settlers, originally employing the labour of slaves who have since become free labourers. The first fazendeiro who settled in the Cazengo torritory came from Brazil in 1837. Eight years after beginning operations he
was able to raise eight tons of coffee, and in 1880 as much as two thousand five hundred tons were exported from this district alone.

In the Lu-Calla busin the eotton-plant is ulsu grown; but this industry, whieh promised to acquire a great development during the American war of secession, at present yields poor returns to the planters. The whole country abounds in mineral deposits, although little is worked except the iron ores, which have been famous from time immemorial for the excellence of the articles produced from them by the native metallurgists. The double blast bellows used by them are absolutely identical with those figured on the ancient monuments of Egypt. In the sauds of the Golungo-Alto torrents is also found gold dust; but hitherto in insufficient quantity to yield any profit from the washings.

This region of the Lu-Calla, one of the most picturesque and productive in the whole of Angola, was till recently entirely destitute of regulur highways, so that the portors had to make their way to the const-tewns through the thoruy paths of the forests. A large part of the native traffic even took the direction of Ambriz, attracted thither by the cheap and abundant supply of commodities taken in exchange for the local produce. Pending the construction of the railway by which this produce may be forwarded direct to Loanda, all the foreign trade of the Lu-Calla basin is carried on by means of the steamers plying on the Cuanza. But to reach the riverain ports, the coffee has still to be conveyed by porters across the trackless forests. It is calculated that of the total annual trade of the Cuanza, estimated at over eleven thousand tons, about one-half is contributed by the Lu-Calla district. Hence, allowing a hundred pounds as an average load, the number of carriers, who yearly make the toilsome journey from the inland plantations to the banks of the Cuanza, nust be reckoned at about a hundred and twenty-five thousand. Recently a road 34 miles long has been opened between Dando and Cacullo, capital of the Cazengo district, which lies near the sources of the Lu-Inha, a southern affluent of the Lu-Calla. This highway, which will henceforth dispense with human " beasts of burden," crosses two branches of the Lu-Calla by means of iron viaducts, the most remarkable work of man in the whole of the Angolan territory.

Pamba, which has been chosen as the terminus in the Ambaca district of the future railway from Loanda towards the interior, is situated, not on the Lu-Calla, but five miles west of that river on a schistose and sandstone bluff, at the foot of which winds the Rio Pamba, a small affluent of the main stream. This station, which commonly takes the name of Ambaca, from the district itself, consisted of a single street with three houses and a dozen straw huts in the year 1879, when the engincers had alreudy traced on the maps the detnite course of the railway for 90 miles between Dando and Ambaca. The inhabitants, all clothed in black, presented a wretched funereal appearance, and the few travellers passing through the district asked with astonishment why this hamlet of all others had been chosen as the terminal point of a railway running for 210 miles, from the capital of the Portuguese possessions towards the interior of the continent. But Pamba owes this privilege to its rank as administrative centre of the country, to the
extensive ground-nut and tobacce plantations of the surrounding district, to its position on the main caravan route penetrating far into the kingdom of the Muato Yamvo, and possibly also to its past prestige. Ambaca was in fact formerly a populous and flourishing city, and the chief depôt and headquartors of tho dealers who from that central point explored all the circumjacent lands in search of fresh markets. The Ambaquistas had become renowned throughout the Portuguese dominions for their wealth and enterprising spirit. Hence the needy servants of the crown intrigued and competed eagerly for promotion to a scarcely remunerative post, where they had every opportunity of rapidly making their fortunes. Such was their success that the inhabitants migrated, especially in the direction of Pungo-Ndongo, while trade sought ever fresh outlets. The

Fig. 15.-"Blace Stones" of Pungo Ndongo.
Beale 1: 116,000 .


Ambaquistas have thus become more numerous in the conterminous provinces than in their original home; nor cun the projected railway fail to repeople the country and open up its great natural resources.

In the upper valley of the Iu-Calla there are no large towns. Even Duque de Braganga, or simply Duque, the most advanced Portuguese station towards the north-east of the Angolan territory, is a mere presidio, or military post, much dreaded on account of the neighbouring malarious swamps caused by the overflow of the river, which flows east of the plateau crowned by the fort. Hence, few troops are sent to this station except military convicts, who avenge themselves by levying blackmail on the natives, under the disguise of Government taxes. As at Pamba, the result of this system of administration has been the

## PUNGO-NDONGO

almost complete depopulation of the land. Although naturally very fertile and capable of growing tobacco, cotton, and ground -nuts, as well as European fruite and vegotables, thanks to its altitude of nearly 3,500 feet above the sea, the distriet yields searcely any agricultural produce. A short time before the explorers Capello and Ivens passed this way, a Jingw uribe eneamped in the vicinity of the fort moved off in the direction of tho west, scared away through fear of being deprived of all their cattle.

- Although lacking the agricultural importance for which the Lu-Calla valley is indebted to its extensive coffeo plantations, the basin of the Cuenza mainstream is nevertheless much more frequented as a commercial highway. Dondo, the first riverain port, is followed eastwards by the town of Pungo-Ndongo, the "Fetish of Ndongo," chief depôt of the dealers trading with the inter of the continent, and one of the historical cities of Angola. Here formerly resided the sovereigns from whom the Angolan territory took its name, and here the Portuguese founded a permanent settlement so early as the year 1671. This town, which lies at an altitude of about 4,000 feet above the sea, occupies a remarkable position in a highly picturesque district. In the middle of a vast plain stretching southwards in the direction of the Cuanza, abruptly rises to a height of 500 or 600 feet, and even more, a group of conglomerate, schistose, gneiss, and porphyry crags, presenting the most varied and eccentric outlines. Some have the appearance of obelisks, others of domes, while most of them are disposed in vertical turret-shaped peaks separated by narrow intervening crevasses, which are rendered conspicuous from a distance by the shrubs of dark green foliage with which they are cvergrown. In some of these gorges-a very paradise of botanists, thanks to the endless variety of their plants-the trees are completely matted with parasitie creepers, which stretch from crag to crag in form of a vast canopy above the lower vegetation. In the flowering season this canopy of entangled lianas, itself now veiled by a dense mass of fiery ed blossom, spreads out like a purple lake embedded between sheer rocky wulls. These beautiful rocks of PungoNdongo are commonly known by the name of Pedras Negras, or "Black Stones," a designation, however, which is little deserved for at least a great part of the year. At the end of the dry season they assume rather a greyish hue. But in December, when the crevices of the rocks are flooded by lakelets formed by the rains, the vertical sides exhibit blackish streaks which gradually broaden out downwards, at last completely covering the base of the cliffs as with a coating of black varnish. This coating is composed of myriads of tiny weeds of the seytonema family, which spring up during the rairs but which disappear with the return of the dry season, sealing off and again revealing the natural greyish tint of the rocky surface.

On one of these picturesque eminences stands the fortress, while in an irregular cirque at its foot are grouped the huts of Pungo-Ndongo, environed by orangegroves and gardens, which are watered by rills of limpid water. Here are intermingled the fruit-trees of Europe and the Antilles, above which rise the spreading branches of a mighty baobab, associated with the first traditions of the
place. Beneath the shadow of this tree was held the court of Queen Ginga, one of the great potentates of African traditional history. The rocks have also their local legends, some of them showing the fanciful imprint of human feet, others containing caverus whose galleries are supposed to give access to underground cities.

At Pungo-Ngondo daylight is of shorter duration than in the other towns of Angola. This is due to the rocky heights, whioh delay the rising sun and hasten its setting rays; while the cliffs are often w'apped in fog and mist during the morning hours.

East of the "Black Stones," the commercial outpost of Loanda with the

interior is Malange, a small town situated on a vast grassy plain which, during the rainy season, resembles a boundless field of wheat. Northwards stretch some morasses, which might be easily drained and which are the source of some rivulets flowing to the Cuanza below a series of romantic cascades. Malangé is still a Portuguese station, being occupied by a small garrison; and here also reside some white traders, who have introduced the national currency. But beyond this point all European coins have to be exchanged for bales of cloth and other objects of barter. Here are organised, for their long inland journeys, the quibucas, or caravans of traders, agents, brokers, and porters, which penetrate beyond the Kwango, trading with the surrounding nations and wild tribes as far
ja, one their others ground
as the region of the grent lakes, and bringing back such commodities as ivory, wax, and caoutehouc.

The southern trude route which starts from Benguella, 300 miles south of Loanda, also possesses in the Cuanza basin an outlying station towards the interior. It lies, however, much further south than Malangé, on the uplnind plain where are collected the farthest headstreams of the Cuinza. Belmonte, as this post is called, is not a military station. It was long the residence of the fanous Portuguese traveller, Silva Porto, one of the few explorers who have crossed the continent from ocean to ocean, besides also visiting many hitherto little-known regions of the interior.

The village of Belmonte, as well as the town of Cangomibe, residence of the most powerful local chief, is commonly designated by the name of Bihe (Bié), a term applied to the whole platenu, some 5,000 feet above the sea-level, which forms the waterpartiug for the streans flowing north to the Cuanza and south to the KuBango. According to Cappello and Ivens, the Bihenos, who number altogether about twenty thousand, present no very distinet physical type. Descending from peoples of the most varied origin, brought by wars and slavery to this plateau, and having also introduced all manner of usages acquited during their long wanderings over the continent, they possess few characteristic points beyond their common love of gain and inborn capacity for trade. As many of them have also learned to read and write, a Portuguese dealer must be himself more than usually shrewd to get the better of the Bihé agent in their mutual bargainings. As a rule, the advantage is always on the side of the latter in the international dealings.

The land thus enriched by profitable commeroial pursuits might also become one of the granaries of the continent; for the reddish silicious clayey soil is extremely fertile, ammuring the rainy season vegetation seems, so to say, to spring up with a visible growth. Capello and Ivens, who organised their expedition for the interior near Belmonte, obtained in two months abundant crops from a piece of ground near the camp, on which beans, maize, and other cercals had been carelessly seattered. One of the natives assured them with the utmost seriousness that, during the rainy season, he had one day stuck his freshly-cut staff into the mud in front of his hut, and stood at the door spinning a long yarn to his relations seated round about, and that, before he had finished, he found himself under the shade of a mighty tree, whose existence was totally unknown to him, but which on examination he found to be his staff, that had taken root, shot out branches and leaves, and showed signs of bursting into flower. The vegetation of this region must be marvellously rapid to give rise to such popular "yarns."

Travellers coming from the wildernesses of the interior speak in enthusiastic language of this "earthly paradise," where, after long periods of scarcity and hardships, they suddenly find an abundance of exquisite fruits and vegetables. The rich plateau of Bihé has accordingly been spoken of as a promising field of future colonisation for the hard-pressed Portuguese peasantry. But during the
miny season fevers are here mifortumately scareely less dangerous than on tho lowhuds, und many of the matives also suffer from goitre. American missionaries have recently established themselves in the district; but their principal station lies farther west, in the territory of the Builundos, which Ladislas Magyar calls the "heart of the Bunda country."

The chiof article of exchange introduced by the bihenos into the interior is the fazenda, or bale of cotton, either pluin or striped, of Eaglish manufacture and generully of rather inferior quality. The buneful Hamburg brandy, more or less mixed with drugs and diluted with water, is also a great article of exchunge with nearly all the surrounding tribes. The caravans supply them, moreover, with rifles, powder and shot, and other munitions of war, besides tablets of sult, brass wire, white and red china beads, and glass trinkets, mostly importod through England from Bohomia. Umbrellas and nightcaps are also much sought after in the kingdom of the Muatu Yamvo and eonterminous states. Traders have, lastly, to provide themselves with carpets, rugs, uniforms, embroidered fabrics, und other more costly wares, as presents for the chiefs, whose permission they have thus to purchase in order to transact business with their subjects.

In exchange for these Europeun commodities, the dealers bring back ivory, caoutchouc, wax, honey, palm-oil, and skins of wild animals. The porters, hired either for the whole journey or for a certain distance, are loaded with burdens nover weighing less than a hundred and seldom more than a hundred and thirtyfive pounds, the weight varying according to the season and the difficulties of the routc. The porter also frequently procures the assistance of another native, and at times, turuing trader himself, he is accompanied by one or more women, who curry his provisions and the purchases he makes on setting out. His services are paid either partly or altogether in advanco; but the tribal chief, in whose presence the contract price is stipulated, becomes responsible for the conduct of the porter in case of his making off with the goods or doserting the caravan. On the other hand, the merchant is held to be answerable for all the crimes or offences committed by his retainers in the districts visited by the convoy. The least infringement of the local usages gives rise to interminable "palavers," which are invariably concluded by the imposition of a fine on the stranger.

The traders, journeying from land to land, are for the most part provided with the impemba, or passport, which, however, is not inscribed on paper or parehment, but made non-transferable by being painted on the body. At the starting-place they present themselves to the chief to explain the projectod journey and make the customary offering of a sacrificial animal and a rag dipped in blood. The travellor must carefully preserve this precious talisman, as well as a piece of chalk, with which the chief traces certuin cabalistio signs on his forehead, breust, and arms; and when these signs get effaced he renews them with the chalk, taking great care not in any way to alter their form.

South of the Cuanza the coastlands, occupied by the Quissamas and other still independent natives, have no groups of habitations beyond a few little bartering stations scattered over a space of about 120 miles. The fortalice of Benguella

Velha, or "Old Benguella," which was orected in the fifteenth century on a headland overlooking the north side of the Cuvo estuary, has been abandoned. The town of Noro-Redondo, which replaces it some distance farther south, is a mere cluster of hovels perched on a cliff nearly inaccessible from the sea. At the foot of the esearpment, and of a fortress founded in 1769, flows the little river Gunza, fringed with shady palms, but obstructed at its mouth by a sandy bar. According to Ladislas Magyar deposits of sulphur occur at some diatance inland, but they lie idle, as do also the copper mines of Sumbe-Ambela, near the mouth of the Cuvo.

Quicombo, south of Novo-Redondo, is a group of factories and a re-victualling station for passing ships. Egito or Lucito, midway between Novo-Redondo and Benguella, is merely a military post commanding the entrance of the river of like name. Till recently it was, so to say, pormanently blockaded by the surrounding tribes, so that about every two monthe the little garrison had to close the gates and fire on the assailants.

Benguclla, capital of the central province of the sa:ne narne, although a much smaller place than its northern rival, Loanda, presents none the 1 ins a charming prospect, being pleasantly grouped in amphitheatrical form on the slopes of a steep escarpment. Its low but spacious houses, enclosing large courts a di surrounded by gardens, occupy a considerable space, which is still furthe $i_{2}$ tended by the publie promenades and shady avenues. The citadel of San-Fiuppe, from which the town itself takes its official designation, was erecte: is 1617 on ths headland which projects seawards on the south west side. The rivuiet of Cavaco, which in the dry season is merely a sandy bed, flows to the north of the town some miles beyond the point where the Catumbella reaches the cosst. This river, which during the floods gives access to the quays of a small trading station, is commanded by a fort of the same name.

The hills encircling Benguella are clothed with brushwood, which till recently: was the haunts of wild animals. The inhabitants being too few to protect them. selves from their inroads, artillery had to be employed to scare away the elephants, who were laying waste the neighbouring plantations. The white population consists partly of convicts or criminals banished to this remote station, while the mixed native element represents all the races in zty Portuguese possessions in Africa. Bihenos here jostle natives of Cabinda, Ambaquistas mingle with Kiokos; and when the caravans reach the Catumbella river from the interior, the observer might fancy himself suddenly transported to armo market town in the kingdom of the Muata Yamvo. Several Europecn traders have built their villas along the neighbouring beach, which being exposed to the marine breezes is more bealthy than Benguella.

This seaport, whose annual exchanges average from $£ 200,000$ to $£ 240,0 \rho^{n}$, is. connected with tho Bihé plateau by a trade route or track, which runs easth dis along the valley of the Catumbella. But two other and longer routes make a detour to the south, one by the valley of the Cavaco and the village of Sapa, the other by the basin of the Capororo river. This watercourse, which separates the
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Dombe-Pequeno district on the north from that of Dombe-Grande on the south, serves in its lower course to irrigate extensive sugar-cane plantations used for the manufacture of spirits. . The sands of the fluvial bed, when the waters have been evaporated by the summer heats, are also cultivated, yielding abundant crops of maize and manioc. The flour packed in bushels is forwarded in large quantities to Benguella and to the landing stage on the bay of Cuio, a small marine inlet at the mouth of the Capororo.

Although this river flows on the surface only during the rainy season, its bed is always dangerous to cross near the sea, where occur numerous sinks and pools of deep water, and here and there quagmires concealing an underground current, in which the careless wayfarer runs the risk of being swallowed up. The two districts of Dombe have acquired some importance from their mineral resources, the gneiss formations near the Cuio inlet containing pockets of rich copper ores, as well as lodes of argentiferous lead. The neighbouring hills of gypsum, forming the backbone of the country in the direction of Benguella, also contain enormous masses of pure sulphur. Monteiro noticed an eminence which seemed to be composed entirely of this substance, while from the selenite deposits he was able to extract some excellent plaster, fully equal to that obtained in the Paris basin

The upper course of the Capororo, here known as the Calunga, traverses the rich valley oi Quillengues, where resides a powerful chief. Tbis upper basin, lying at an altitude of from 2,800 to 3,300 feet above the sea, still presents a tropical aspect in its exuberant vegetation, although hords of cattle now graze in the extensive forest clearings. The Ba -Nano wild tribes occupying the northern districts frequently make incursions into the Quillengues Valley in order to raid on these herds. They are said to have the power of iaducing the animals to follow them spontaneously over hill and dale merely by the device of beating to time two pieces of stick; and at intervals repeating certain notes of call. The rugged Serra Vissecua, which has to be crossed in order to descend from Quillengues eastwards down to the Cunene basin, is of very difficult access, but was traversed by the explorers Capello and Ivens at an elevation of 4,800 feet.

South of Benguella and Dombe the first centre of population occurring on the coast is the prosperous modern town of Mossamedes, from which the southernmost province of Angola takes its name. In 1885 the Bay of Angra do Negro, the Little Fish Bay of the English, had already received this appellation in honour of a certain General Mossamedes; but the first Portuguese settlement in the district dates only from the year 1840. The new colony developed more rapidly than the old factorics and establishments on the Angolan coast farther north, and although it does not take, like Benguella, the title of "city," Mossamedes is a larger place, of all the towns in the Portuguese African possessions yielding to Loanda alone in population. In 1884 nearly three hundred and fifty natives of Madeira joined the colony, which has a relatively larger proportion of whites than any other place along this coast. While the European and Brazilian immigrants settle in other places for the most part without their fumilies, they generally come to
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Mossamedes with their wives and children, although even here the mortality is always in excess of the births. The relative prosperity enjoyed by this southern town is in part also due to its privilege of never having been a centre of the slave trade, like Benguella end Loanda. Hitherto it has been chiefly occupied with fishing and agriculturaj pirsuits.

The port of Mossaiaudes is sheltered from all winds and sufficiently deep to allow large vessels to ride at anchor close inshore. But on arriving on this desolate-looking coast, with its duncs, sandy plains, and rocky escarpments encircling a few groups of houses and rows of palms, the visitor asks what such an arid region can supply for an export trade, which in any case scarcely exceeds $£ 60,000$ annually. But if the soil is ungrateful the sea at least is bountiful, teeming with every variety of animal life. The fishermen on the coast capture and cure thousands of large fish which resemble the cod, and from which they extract an abundance of "cod-liver oil" for exportation. And although the land round about Mossamedes is too barren and waterless to be profitably cultivated, the beds of the wadys which wind between the hills are highly productive. Here gardens, banana and orange groves, cotton and sugar-cane plantations, develop a continuous zone of magnificent vegetation, while sugar refineries have already been established by the immigrants from Pernambuco. The cultivated tracts along the Rio Bero and the Rio Giraul, a few miles north of Mossamedes, yield excellent returns to the husbandman, and farther inland the stockbreeders raise large herds of cattle for the markets of the Cape and the Gaboon. As in Kafirland and the Duteh South African republics, the so-called boi-cavallos, or "riding-oxen," are bred by the farmers, so that the southern province of Angola is already to some extent connected by the customs of its inhabitants with the regions of the Cape.

Mossamedes communicates with the eastern slope of the coast range by a natural route partly improved by the labour of man, who has had here and there to remove obstructions and reduce the incline in the more difficult sections. Some of the heights hitherto inaccessible to pack-animals have thus been rendered practicable by a series of cuttings and zigzags climbing the slopes of the hills. The waggons and teams of the Dutch immigrants are now enabled to cross the Chella Mountains and descend into the Mossamedes district.

On the western slope of these highlands the most important station is the fortified post of Capangombé, where are to be had provisions and stores of goods for the barter trade. Along the route water sometimes fails, although reservoirs are usually maintained in the cavities of the granite rocks. The Pedra Grande, one of these natural basins, consists of an isolated block rising in the midst of the plain, and hollowed out with such perfect regularity that it looks like the work of man. A few plantations are scattered amongst the more humid depressions watered by springs or brooks. The pass across the Cliella range, standing at an altitude of about 5,400 feet, forms a pleasant grassy tableland, irrigated by limpid streams, and recently brought under cultivation by the Portuguese coffee and sugar-cano p? anters.

The Cunene basin, which is reached after crossiag the Chella Mountains, contains in its upper parts a few little outposts of the Portuguese dominion. These stations promise one day to acquire a certain importance as rallying points for immigrants, but have hitherto remained obscure hamlets. Even the military post of Caconda, lying on a plain traversed by a western affluent of the Upper Cunene, had till recently been almost abandoned by traders, the caravans of the Ganguella tribes conveying nothing but a little ivory ond wax to this station. The Nanos, Huambos, and other local tribes have withdrawn to a distance in order to avoid the oppressive imposts levied by the chefes who represent the Portuguese authority. Some of the sobas, or native chiefs, whose predecessors had regularly taken the oath of fidelity to the King of Portugal, lately refused to do so any longer, and the vast and fertile plain, which might easily support a population of a million, is said to have not more than eight thousand inhubitants.

Nevertheless it seems impossible that such a favoured land can fail to become a flourishing agricultural and commercial region. At this mean altitude of about 5,400 feet above the sea the temperature is mild, and the country, if not entirely free from fever, as has been asserted, is at least relatively salubrious. Here all the plants of the temperate zone flourish by the side of a sub-tropical vegetation, and coffee would certainly succeed, to judge at least from the oriango, or will species, found growing in the forests.

In its vegetation, its running waters, and genial climate, Caconda ( 5,650 feet) is a land of promise, wh $\%$ h some Transvaal Boers have already visited in order to study its resorrces and found settlements. Several Portuguese, mostly convicts, own a few gardens planted round about a little fort which dates from the seventeenth century. The Portuguese administration is also now engaged in improving the highways leading from Caconda and the Upper Cunene north-westwards in the direction of Benguella.

The station of Huilla, at the eastern foot of the Ckella Mountains, has recently outstripped Caconda, thanks to its greater relative proximity to the sea-coast, and to the arrival of some Dutch settlers from Transvaal. A Catholic mission under French control has also established itself at Huilla, where the priests have founded a college for educating the children of the traders residing on the coast. The dwellings are surrounded by gardens growing European plants, and avenues of the eucalyptus fringe the banks of the torrent which flows to the Caculovar, chief affluent of the Cunene.

On a terrace to the north of Huilla has been founded San-Januario, the principal Boer station, which also takes the name of Humpata from the surrounding district. Here are scattered the neat little cabins with wooden frames, thatched roof, and cowdung floor, built by the Afrikanders on the model of their Transvaal dreellings. During this long trek, or exodus from their southern homes, the Buers had to endure great hardships and privations, as they drove their herds before them, plodding wearily from pasturage to pasturage, sojourning for months togeiher in some more favourad localities in order to recruit their strength, but again exposing themselves to the inclemency of the weather, and
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facing the perils of forced marches across the waterless wilderness. Many perished of exhaustion, and the report even sprcad that all had succumbed. But towards the close of the year 1880 some four or five hundred survivors at last reached the promised land, distant more than 1,200 miles from the mother country. But even here under this favoured climate of Mossamedes the fates still pursued them ; small-pox broke out amongst the new arrivals and decimated their ranks; nearly all the horses, which they had brought with them to the great terror of the natives, died of fatigue; all the flocks of sheep disappeared together with two-thirds of the horned cattle. Despair seized many of the settlers, who embarked for the Cape; others retracing their steps endeavoured to return overland to Transvaal, while others resuming the trek penetrated from stage to stage farther into the Cunene basia and the region of the inland plateaux. But some few held out against fate itself.

At present the plains of Humpata, being carefully cultivated and irrigated by well-constructed canals, yield an ample supply of provisions for the inhabitants. The Boers are also endeavouring to increase their live-stock from the few animals that survived the. trek across the desert. As hunters they pursue the elephant and hippopotamus, utilising the fat in the preparation of soap, and they have also turned to mining in order to smelt the iron ores of the neighbouring rocks and wash the streams for gold dust. Others again have become traders, journeying as far as Walvisch Bay in the Damara country to purchase European wares; and acting as conveyors between Huilla and the port of Mossamedes. Their industrious habits have thus enabled them to acquire a certain degree of comfort, while also ensuring the permanency of their settlement. Since their arrival the trade between both slopes of the coast-range has been more than doubled.

Although very suspicious of their Portuguese neighbours, who speak another language and profess a different belief, they bave nevertheless reconciled themselves to the contact of these "aliens," even protecting them against the incursions of various marauding tribes, to whom is applied the collective designation of "Hottentots." Some marriages have even already been contracted between the Portuguese and the daughters of the Uyaras, as the immigrants from Transvaal are locally called. 'Hitherto nothing has been required of them beyond a purely theoretical recognition of the Portuguese suzerainty, which is represented at Humpata by a single official. Fcr all communal matters they have been permitted to retain complete self-government.

From these first groups various branches have already been detached, which have proceeded to found fresh settlements in various other parts of the country. But the tide of German immigration has not yet penetrated into the Upper Cunene basin, notwithstanding the efforts that had been made to divert it to that region. The peasantry have hitherto rejected the bait held out to them by the traveller Dewitz, who in 1884 acquired possession of a large piece of land for the purpose of founding colonies in the Lucequé district about the confluence of the Catapi and Cunene rivers.

East and south of Huilla the other military and missionary stations, such as

Gambos and IIumbe ( $K^{\prime \prime} u m b i$ ), have hitherto remained mere groups of cabins inhabited by the natives. Along this marshy tract of tho Middle Cunene the white population has so fur been represented only by a fow solitary individuals,

Fig. 17.- Iiger Bay and the Cuneng. Scale 1 : 700,000.
 chiefly fishermen attraeted by the multitude of fish in this part of the stream. The section of the seaboard lying between Mossameder and the Cunene estuary, politieal boundary of Angola, bas ulso remained almost uninhabited. Yet this part of the coast presents the rare advantage of the two excellent havens of Bahia Pinda (Port Alexander) and Bahin dos Tigres (Great Fish Bay), both formed by sand-banks deposited in a line with the coast, and connected by a narrow strip with the mainland. On the lofty headland of Cabo Negro, which commands the northern entrance of Port Alexander, are still visible the remains of a pedrão, or a stone block erected in 1485 by Diego Cam to commemorate his diseoveries. A siusilar memorial pile crowns the summit of Cape SantaMaria, between DombeGrande and Mossamedes.

Despite the fertility of its plateaux and river valleys, Angola still remains one of those African lands in which hunting and fishing continue to have almost as much importance as husbandry. But this could scarcely be otherwise in a region which was formerly depopulated by the slave trade, and where the desolate seaboard consequently presents but fow plantations and cultivated tracts. At the same time the withdrawal of wild animals towards the interior, and 0 excelhere the d tracts. ior, and
the reckless destruction of forests along the coast continually diminish the natural resources of the land, and give a correspondingly greater relative value to the products of human industry. Ivory, whieh next to slaves was formerly the most valuable commodity exported from Angola,* tends to disappear, while the tusks obtained from the more inland regions are forwarded by the Congo route.

In the same way the supply of caoutchouc, which was at one time exported to the yearly value of from $£ 120,000$ to $£ 160,000$, will necessarily fall off when the lianas from which it is extracted shall have disappeared from all the districts near the seaboard. The orchilla mossused in dyeing, which hangs in festoons from the branches of the baobab and other large forest trees, has already become much scarcer than formerly; gum copul, however, which is annually forwarded from the Angolan ports, is still found in abundance on the coastlands, and is supplemented by large quantities of wax brought down from the interior by the natives. The modern industrial artshave, moreover, imparted a special value to numerous natural products of Angola for which hitherto no use could be found. The palms yield their oils, fibre, and fruits ; the aca-

Fig. 18.-Chier Zones of Useful Plants in Angola. Seale 1 : 10.000 .000 .
 cias offer their gums and resins; the euphorbias supply their sap, the so-called almeidina, or starch extract; while from the baobab are obtained the bark and bast, which serve for the manufucture of cordage, paper, and even cloth. And how many vegetable growths are still met in the forests, whọse wood, leaves, gums, or fruits might be utilised for their industrial or medicinal properties! Amongst these plants there are some the timber of which is proof against the attacks of the destructive termite.

[^3]Angola is also rich in mineral resources, chief amongst which are the extensive copper ores.

The chief cultivated plants are those which yield alimentary substances for the local consumption. Manioc, which is grown principally in the northern districts of Angola, is replaced in the southern provinces by maize, millet, and sorgho. The European fruits and vegetables, as well as the Chinese tea plant, have also been introduced, and thrive well at least in the upland valleys. Since the year 1840 potatoes have been grown by the Bihenos in the region forming the great divide between the Cuanza, Kwango, and Cunene basins. The coast towns are generally surrounded by gardens, the umbrageous arimos of Loanda being

Fig. 19.-Coyper-growing Redion of Angoin.
Seale 1 : 1.n00,00a

rivalled by the more productive hortas of Mossamedes. Even the vine has been planted in some districts, and tobacco, cotton, and ground-nuts are also included amongst the products of the country. Mossamedes cultivates the sugar-cane, which serves chiefly for the distillation of spirits. But the staple agrioultural product is certainly the coffee berry. Since the middle of the present century this industry has acquired a rapid development not only in the Cazengo district, but also throughout the basin of the Lu-culla and all its affluents.

Stockbreeding has but slight economic importance on the coastlands. Between the Congo and Cuanza estuaries there are no herds of horned cattle, and the attempts made in many places to raise oxen, horses or mules have resulted in
failure. Even doge lose their scent and perish, and at Bembé cats become puralysed in a few months after their arrival. The meat-markets along the seaboard are supplied muinly from the inland plateaux, although stockbreeding succeeds very well almost everywhere south of the Cuanza. The formidable tsetse fly, which infests such extensive tracts in East Africa, is unknown in Angola, where cattle diseases are also generally less fatal than in the Zambese and Limpopo basins.

A baneful inheritance bequeathed by the institution of slavery is the prevailing system of large landed estates. Nearly all the domains belonging to the planters are of vast extent, comprising many hundreds and even thousands of aeres, and what is worse, the proprietor rarely, and in some districts never, resides with his family on the plantation. In this respect, however, the province of Mossamedes presents a happy contrast to the other parts of Angola. Here the land is owned in much smaller lots, and many planters dwell in the midst of their labourers. The grants made in this agricultural region can never exceed 150 acres, whereus in the central and northern provinces the vast domains are still administered pretty much in the same way as in the days of Negro servitude. In fact on most of these plantations the so-called contratados, or coolies hired by contract, are temporarily attached like serfs to the glebe, working under the direction of Portuguese gangers or task-masters. Slavery no doubt is abolished, but not so the custom of long contract service, so that the natives are even hired and despatched to the plantations of Sao-Thomé for periods of two, four, or even five years.

At the same time, most of the hands employed on the great estates are so indebted to their masters that they can scarcely hope ever to become quite independent. Wages run very low, and the money used in paying the Negroes is of less intrinsic value than that current amongst the whites. The reis fracos, intended for circulation amongst the Negroes, represents only three-fifths in value of the corresponding reis fortes, legal currency. Beyond the plantations slavery still flourishes amongst the native populations in defiance of the law. The slave is of course aware that he might claim his freedom in any Portuguese town; but custom is here stronger than right, and he dare not enforce his claim. Doubtless he is honoured with the title of "son," like the real offspring of his owner; but he is not the "uterine son," but only the "son of barter," or of the "cotton-bale."

Industry in the strict sense of the term is still in its infancy, although there exist in some parts of the country certain factories or workshops where the native hands have learnt to make use of European appliances. Such are the important brickfields near Loanda, besides numerous manufactories of matting in the Cuanza valley, and several distilleries and cigar factories in the coast towns, while Mossamedes even boasts of both a spinning and a weaving mill, founded by an Alsatian. The locomotive also has made its appearance at Loanda on the line of railway now being constructed from the coast to Ambaca. The telegraph system has been developed in the interior as far as the coffee plantations, and small steamers ply on the river Cuanza. Good carriage roads now connect Loanda
with tho two neighbouring rivers, Dondo with the Lu-Culla, Dombe-Grande with Cuio, Catumbella with Benguella, and Mossamedes with the various settlements founded in the southern province. Bat in spite of all these public facilities and improvements, the foreign trade of Angola has not increased as rapidly us might have been expected. Of late years it has oven diminished, at least in appearance, owing to the displucement of large streams of traffic. The public tariffs are so exorbitant that traders naturally scek on outlet for their produce in the free zone of the northern districts. Even those of the Cunene and Humpata profer to send their waggons ncross the swamps and hills to Walvisch Bay, a distance of 540 miles in a straight line, rather than make their purchases in the neighbouring port of Mossamedes.

Over two-thirds of the foreign trade of Angola is carricd on with England, and nearly all the imported textile fabrics are of British manufacture. Tho Portuguese merchants derive but little benefit from this movement, fully fivesixths of the whole trade of the country being diverted from the ports of Lisbon and Oporto. Hence the current remark that the part played by the metropolis on the Angolan seaboard was merely that of coast-guirds in the service of foreign commerco.

Public instruction is more developed in Angola than might be supposed, judging only from the number of schools. Thousands of natives, descendants of those formerly taught by the missionaries, learn to read in their families hundreds of miles from any public educational establishments. The postal service and the relative importance of the press also testify to a higher gencral level of instruction than that of some countries where schools are mord numerous. An observatory has been founded at Loanda.

The Portuguese province of Angola, to which the designation of "kingdom" is also sometimes applied, is in complete dependence on the central government at Lisbon. It is represented neither by elected members nor by special deputies, except to the Lisbon Cortes. Hence the administration is entirely carried on by instructions transmitted from Portugal to the governor-general, who resides at Loanda. This system of political pupilage, which cannot but retard the natural development of the colony, is expluined if not justified by the handful of Europeans scattered over a vast territory, nearly all of whom are moreover either government officials, traders, or exiles, whose chief interests and moral ties are still rooted in the mother country. The only object of the traders and their assistants is to make rapid fortunes, or at least amass sufficient wealith to enable them to spend the rest of their days in comfort at home. The officials and military follow their vocation abroad in the hope of more rapid promotion on their return to Europe, while the degredados, or convicts, have to recover the rights of citizenship by a long residence in the colonies.

During the decade from 1872 to 1881 not more than 3,348 immigrants settled in the country. The natives have on their part preserved their primitive method of government, except in the vicinity of the towns and plantations, where the traditional bonds of the tribe or clan become loosened or broken. As a rule the acilities rapidly tt least public produce ne and Calvisch rchases ngland, Tho ly fiveLisbon tropolis foreign

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ettled in tethod of ere the rule the
blacks still elect their own sobn (chicf), or elso acknowledge him according to the laws of succession in the several tribes, which sometimes runs in the direct line from father to son, but more commonly from brother to brother or else from uncle to sister's son: But by the side of the soba, whose autonomy increases in direct proportion with his distance from the Portuguese military stations, there reside the chefes, or politieal agents, appointed by the governor of Loanda. These chefes claim the right of interfering under various circumstances in the internal affuirs of the tribes, and apply themsolves above all to the increase of taxation, more to their own benetit than to that of the Portuguese treasury. In virtue of speciul decrees they had formerly the power of compelling the natives to work, and thus reducing them to the position of a disguised slavery, by exacting a certain share of unremunerated labour at their hands. They named at pleasure the persons who had to work gratuitously for them in the capacity of carregadores, or porters. But this iniquitous system of corvée was abolished in the year 1856.

The direct administration of Portugal being restricted to a few points on the coast and in the interior, and the local tribes being for the most part of a very docile dieposition, not more than a few hundred Portuguese soldiers are required for garrisons in the military posts or for hostile expeditions. Hence the budget is almost entirely devoted to the civil service, the expenditure being partly covered by the customs. Nevertheless the public revenues are far from sufficing to cover the outlay, especiully during the last few years. Thus its West African possessions have always been a burden to the mother country, as is the case with most colonial dominions which take no part in the local administration.

The territory of Angola is divided into four districts, which are aguin subdivided into concellios often of considerable extent. But some of these circles contain so few civilised inhabitants that it has been found impossible to establish any regular administration in them. A table of the districts and concelhos, with their chief towns, will be found in the Appendix. Of these towns two alone, Loanda and Benguella, rank as cidutles, or "cities," all the rest being "villas"towns, boroughs, or villages.


## CHAPTER II.

## DAMARA AND NAMAQUA LANDS.

## From the Cunene to the Orange River.



HE section of the African seaboard stretching from Angola with considerable uniformity for 900 miles southwards to the Orange river was deolared German territory in the year 1884, when it received the official designation of "South-west Africa." The vast rogion thus peaccably annexed had previously been known as Lüderitzland, from the German trador who acquired it by means of contracts made with the chiofs of the few coast tribes and with those of the inland populations, who had been brought under the influence of the Rhenish missionaries.

Before this epoch, when as by a stroke of the magician's wand the country found itself placed under the protection of the German Empire, Great Britain supposed herself to be the virtual suzerain of the land as far north as Cape Frio, although in actual possession only of a single station on the shores of Walvisch Bay. At the time of the first negotiations opened by the German diplomatists regarding the posts estublished by subjects of the empire, the British minister declared that any settlements made by a forcign power in the region in question would be an encroachment on the rights of Great Brit in. The Cape Government even passed a vote to take formal possession of the territory in litigation, but it was already too late. After an exchange of dispatches, which had begun to assume a threatening tone on the part of Germany, the whole of Lüderitzland, with the exception of the Walvisch Bay enclave, was rccognised as a Germanic possession. The German diplomatists, moreover, concluded a treaty with Portugal, securing for their Government the protectorate of the territory which stretches from Cape Frio northwards to the mouth of the Cunene.

The region of "South-west Africa," which reaches inland as far as the twentieth degree eist longitude, and which is as extensive as the German Empire itself, is the first in chronological order of all the lands which in Africa and Polynesia constitute the vast colonial dominion acquired by the Germans in the course of about four years. But Herr Lüderitz, to whose energy and foresight the mother country was indebted for the acquisition, soon after mysteriously
disappeared somewhere on the south const; and although the annexation has been officially proclaimed, it is still far from being carried out. No military force having been placed at the service of the traders, the eonversion of the natives into German tabjects remains a pure fiction, nor does it prevent marauding bands from lifting the cattle of the Gerinan commissioner at the very door of his residence. Hitherto the Berlin authorities have taken no uetive steps to assert their claims, beyond forwarding a few rifles to the coast for distribution amongst the warriors of the friendly or allied populations. The rulers who command most

Fig. 20.-Chizy Routza of Explorers in Damaraland.

ready submission to their mandates are not the civil functionaries, but the Protestant missionaries of the central and southern distriets. Stationed since the year 1842 amongst the Damaras, they at present possess over twenty establishments between the Cunene and Orange rivers.

Thanks to these missionaries, as well as to the traders, sportsmen, and mining prospectors, who have traversed the whole territory in various directions, the new German colonial possession is already well known, at least in its general features. Even the northern tracts, farthest removed from the contre of South African

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exploration at Cape Town, had been visited by Gulton, Andersson, Baines, Smuts, Grees, Huhn and Rath, Hartley, Coates, Palgrave, and Duparquet; and since the proclamation of the new political régine, a large number of German travellers have beel uttracted to these regions in order to study their geographical conditions, and especially to examine their economic resources.

Special charts have been prepared of the seaports and mineral deposits, the traces have been laid down of future routes and railways, and the work of preliminary exploration has received a deeided impulse from the official annexation.

In its main outlines the relief of the lund forms a southern continuation of the Angolan uplands and lowlands. The ground rises in terraces to the crest of a plateau near the evast, beyond which it again falls eastwards in the direction of an inland fluvial basin. The whole region from the Cunene to the Orange presents the aspect of an elongated protuberance of somewhat regular form, whose axis runs exactly parallel with the coast-line. This long elevated ridge is, however, completcly isolated, and whereas the Angolan tablelands are connected castwards with the waterpartings between the Congo and Zambese basins, those of Damara and Namaqua lands are limited in this direction by profound depressions separating them from the Kalahari Desert and from the Ku-Bango and the upper affluents of the Orange river.

Separated also from the Ohella highlands by the gorges traversed by the Cunene, these rocky heights of Damaraland, commonly designated by the name of Kаоко, at first rise but slightly above the general level of the land. But south of the limestone Otavi hills they gradually rise higher and higher, until several eminences attain elevations of 3,000 feet and upwards, while a veritable highland system. with its dome-shaped summits and table rocks is developed to the northeast and east of Walvisch Bay. Mount Omatako, culminating point of this system, has an altitude of no less than 7,630 feet, and this majestic peak is encircled by numerous other less elevated but still imposing summits.

Farther south the main axis again falls to a height of little over 3,000 feet; in many places the continuous ridge even disappears altogether, or rather becomes broken into groups of isolated hills resting on a common pedestal, which presents the aspect of a shield with its convex side uppermost. Here and there some of the more conspicuous eminences assume the fantastic outlines of towers, pinnacles, and needles. Still farther south the vast region of great Namaqualand is still traversed by a somewhat continuous ridge or unbroken line of elevated hills, and the route which runs from the coast at Angra Pequena eastwards to Bethany crosses the intervening chain at an altitude of 5,300 feet. In all these uplands the prevailing formations are gneiss, micaceous schists, crystalline limestones, with intruding granites, porphyries, and other eruptive rocks. Masses of basalt are ulso said to oceur.

The main axis of the Damara and Namaqua highlands runs parallel with the seaboard at an average distance of about 120 miles inland, but in several places the intervening space between the first escarpments and the coast is much more
considerable. East of Walvisch Bay this intervening space-constitutes the Namieb district, that is, the vlakte or veld of the Dutch, and the plain of the English settlers. It may in some respects be compared to the hamadas of Arabia and North Africa, for although it presents the general appearance of a plain, the travelier crossing the Namieb in the direction from west to east is continually but imperceptibly ascending, until at 60 miles from the Bay he finds himself 2,000 feet above the level of the sea. Seen from the coast the veld masks the profile of the inland mountains, yet as he scales the crests of the dunes the wayfarer fancies he has before him a perfectly level plain with a boundless horizon. The German explorer Stapff thinks that the Namieb is an old marine bed, its aspect being that of an immense shallow basin of a shifting brown and whitish colour. During the dry season, that is, throughout the greater part of the year, the surface is as hard as that of a paved street; but it becomes very difficult to traverse when the rains have softened the upper layer of calcareous or gypseous clay with which the sands are agglutinated in a concrete mass. At this season the cartwheels leave behind them deep ruts which may be traced years afterwards. The rainwater, which lodges in the few depressions scattered over the surface, slowly evaporates, leaving in its place fine gypseous or saline efflorescences, the so-culled salt-pans of the English settlers.

In tho vicinity of the hills the detritus is seen here and there of gneiss, quartz, or schistose rocks, which appear to have been decomposed by weathering, leaving on the ground patches of diverse colours. A few still standing blocks present a smooth surface, that has been polished by the action of the sands driving before the winds.

The lower part of the gently inclined Namieb plain, which descends down to the coast, is covered with sandy dunes, and varies in breadth from a few thousand yards to sixty miles inland. Some of these dunes rise to heights of considerably over 300 feet, and are consequently as elevated as those of the landes skirting the south-eastern shores of the Bay of Biscay. They are disposed in numerous parallel chains separated $k y$ intervening depressions, which are themselves dotted over with hillocks of smaller size. South of Walvisch Bay no less than six of these sandy ridges have to be successively traversed to reach the interior. Their slopes facing the marine breezes are nearly solil, while the opposite side, loing strewn with arenaceous particles brought by the land wind, is of a much looser texture. A few herbaceous and scrubby plants with trailing roots grow on the surface of the dunes, and belp to consolidate them by binding the sand together.

These coast dunes have their origin probably in ancient upheaved sandbanks, whereas those of the interior have been formed on the spot by the disintegration of the gneiss rocks under the action of solar heat. The process of upheaval would appear to be still going on along this section of the seaboard. To a height of 65 or 70 feet above the present sea-level occur saline tracts strewn with shells which resemble those still surviving in the neighbouring waters. At an elevation of nearly 100 feet and at a distance of over half a mile inland there are even found entire skeletons of cetaceans formerly stranded ou the old beach. On the raised
shore stretching north of Walvisch Bay are seen masses of sulphur mingled with sand and gypsum, and here the ground emits an odour of sulphureted hydrogen. To these noxious exhalations may probably be due the sudden destruction of the fish in the bay, which has been recorded on several occasions, and especially in the year 1883. At ebb tide observers have even noticed a kind of craters resembling protuberances on the surface of the exposed beach.

## Climate.

On the physical structure of the land partly depend its climatic conditions. The south and south-west winds, which are the most prevalent on this seaboard, bring very few moisture-bearing clouds, while the opposing north-easterly gules predominating in May, June, and July are even still less humid. Hence not more than an average of five or six rainy days in the year can be relied upon about the shores of Walvisch Bay, and scarcely one or two on the more southerly coast of Angra Pequena. To this and the night dews, at times very copious, is reduced the so-called "rainy season," whose normal period coincides with the beginning of the year, when the sun again moves northwards.

But if the low-lying seaboard thus lies in an almost rainless zone, the marine currents discharge a more liberal supply on the uplands of the interior. As many as seventeen wet days were recorded at Hope-mine in 1886, yielding a total rainfall of nearly two inches. The rains are almost invariably heralded by whirlwinds, by which the sand is raised and borne along in moving columns. To these dust storms the Damaras give a name, which in their language means "Rainbearers." Thanks to this supply of moisture, the inland plateaux are covered with a vast carpet of verdure, while lower down, at least south of the relatively wellwatered district of Kanko, the whole land remains arid, or dotted over with a few patches of thorny scrub, except in the rare oases fed by somo intermittent springs. Here domestic animals perish of hunger and thirst, exotics pine and wither away, and the hardiest 'shrubs are reared with difficulty, the soil being everywhere saturated with salt to a lepth of nearly two feet.

Thanks to the moisture precipitated on the higher summits, the upland valleys are traversed by rivulets, which, however, nowhere unite in e, common watercourse, and which fail to reach the sea except during exceptionally wet seasons. The torrents are in fact mere wadys, which serve as pathe, and in which the wayfarer sinks a few wells in the hope that a little water may collect in the depressions. Their steep banks are fringed with shrubs, which draw the necessary moisture from the saturated sands. But the gradual decay of regetation along the course' of these torrents lealis to the conclusion that the whole country is slowly becoming drier. When any sudden freshet revives the sickly plants along the upland brooks, the fresh sprouts soon wither again, the roots being unable to strike deep enough in search of the vivifying stream. But in several parts of the neighbouring plateaux, the Hereros have bored through the limestone rock down to the underground reservoirs. . In the Otavi hills north of this district one of these


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reservoirs forms a veritable subterranean lake well stocked with fish and maintaining itself always at the same level.

Of all the wadys in this region, the most copious is the Omaruru, where the stream lasts longer and the vegetation is less scattered than along the other watercourses. The Omburo thermal spring rises in the sands of its upper course at the foot of some basalt rocks, and the rivulet flows for several miles as a surface stream. But of all the local fluvial systems, the most wide-branching and by far the longest is the Swakop, or Tsoakhub, whose course has a total length of over 240 miles, exclusive of the lateral branches. Taking its rise to the east of the central Damara highlands, it traverses the plateau through deep rocky gorges, and reaches the coast just north of Walvisch Bay. Lying about midway between the Cunene and the Orange River, this transverse trough divides the whole territory into two nearly equal parts, Damaraland in the north and Great Namaqualand in the south.

The Khosib or Kuisip, which intersects the Namieb plain to a depth of over $600^{-}$feet, also discharges, or rather forme:ly discharged, into Walvisch Bay, through an abrupt bend, which is bordered eastwards by the long sandy peninsula of Pelican Point. During the twelve years preceding 1878 this wady is said to have never once reached the coast. South of these two intermittent streams, the other watercourses are arrested east of the dunes without even forming channels as far as the sea. But the umarambas, or streams of the eastern slope, which flow either to the Ku-Bango or the Orange, or else lose themselves in the distant saline marshes of the desert, form real river systems, if not in the abundance of their waters or the regularity of their discharge, at least in the length of their fluvial beds.

Consisting to a great extent of rocky uplands, hard clays, and moving sands, the southem section of the new German colony can have no agricultural value for its owners. Yet this was the first part to be annexed, and here were founded all their early stations. Sonth' of the Swakop, the whole ground cleared and brought under cultivation by the missionarics probably falls short of ten acres. But in the northoru districts, and especially in the Cunene valley, there stretch vast plains resembling the Portuguese territories of Huilla and Humpata. Lying in, the same river basin and endowed with a similar fertile soil, they also enjoypretty nuch the same climate, except that the atmosphere is somewhat drier and: the rainfall less abundant. Nevertheless there is stili sufficient moisture to stimulate the growth of large trees and even develop considerable forest tracts. Here is still to be seen the gigantic baobab, whiie a fow pulms are met even south of the twentieth degrees of south latitude. The territory of the Ova-Mbos (Ovamboland), with its woodlands, glades, and clearings presents in many places the aspect of a boundless park, and here the natives support themselves mainly by tilling the land and cultivating fruit trees. Here also Furopean peasantry might undoubtedly succeed, although their requirements greatly exceed the modest wants of the natives, and some of the Transvaal Boers have already formed settlements in the district. Some hundreds of these immigrants, the same who 102-AF

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later direeted their steps towards the Portuguese territory of Mossamedes, had founded a colony in the hilly Kaoko region. But hero also, as in IIumpata, they eceupied themselves less with tillage than with raising herds of cattle. Their agricultural operations were confined to what was strictly necded for their annual supply of corn.

Beyond the Cunene district and some exceptionally favoured valleys, stockbreeding appears to be everywhere the loeal industry most rich in future promise. Its broad grassy plateaux make the country essentially a grazing land. All wild animals, except several species of antelopes, a few felidm, jackals, and rodents, have already been exterminated. Even the ostrieh, which is farmed in the British colonies farther south, is heie eagerly hunted, and is no longer met in the neighbourhood of the seaboard. Some crocodiles are still met in the watercourses communieating with the Cunene; snakes, lizards, and locusts, are represented by numerous ipecies, and one of the local serpēnts is the deadly cuspedciro, or "spitter" of the Angolan Portuguese, which attains a length of 25 or 26 feet, and whir?, t.e wizards had formerly acquired the art of charmixig, and introTherng into the houses of the sick.
'tion min te which are now bred on tho upland pasture lands-horses, oxer, slies, and spata-were all originally introduced from Europe. It has often been pr thosea th. . but the valuathe breed of pack oxen already largely employed throughout the southern states and colonies amply suffices for pil the requirements of the transport service, while the difference between the cost of their purchase and keep renders their employment much more economical than would be that of the camel. It is not so much its wealth of live stock that gives importance to this region in the eyes of its new masters. Apart from the satisfaction of having seeured poss rsion of a country which the English of the Cape were hankering after, they place great hopes in the rich mineral resources still lying almost untouched in the highlands running at a short distance from the coast. Rich copper ores especially occur in many places on the plateau and $e v$ mn in the advanced spurs of the mountains, and notwithstanding the diffieulties of traneprrt, mining operations have already begun at oeveral points. South of Angra Pequena silver ores have also been found; bry from the reports lately made by the surveyors, it is to be feared that the firt hopes of the prosnectors may prove to be altogether fallacious. At the same time, as soon as the countty is thaversed by goud roads, there can be no doubt that it will aequire a certisin importance for $i=$ mineral resources, which cannot fail to attract capital and industrious populations.

Meantime it may readily be imagined that settlers have not hitherto been very numerous in a region where both water and arable land are deficient, and where travellers run the risk of perishing from hunger and thirst. In many of the Numaqua districts the explorer may travel for weeks together without meeting a single group of eabins. But the population is naturally somewhat denser in the northern territory, whore the mountain ranges are more elevated, the slopes more grassy, the fluvial beds not quite so destitute of running waters. Here every
valley has its hamlet or, at leust, a few shepherds' huts. According to the rough calculations of Palgrave and Hahn, in the year 1877, the total population was 236,000 , and of this number nearly 220,000 were concentrated in the section of the country lying to the north of Walvisch Bay. But estimated in relation to the superficial area of the whole regicn, the actual density of the population would appear to be rather less than one to the square mile.

In respect of the origin of its inhabitants, the territory annexed by the Germans is essentially a land of transition. All the southern division, no doubt, belongs to the Khoïn-Kboïn, or Hottentot race; but in the region lying north of the highlands pierced by the channel of the Swakop river, the dominant Bantu tribes are everywhere so intermingled with these full-blood or half-caste Hottentots, that it becomes impossible to separate their respective domains by any hard-and-fast line. Roughly speaking, at least three quarters of the whole land may be assigned to the Hottentot tribes, which, nevertheless, constitute at most one-fifth the entire population. Several groups, however, are of mixed origin, while European blood is also represented by the half-caste Bastaards, as well as by the Boers, the Portuguese Pombeiros, the English and German traders, who regularly' or occasionally visit this region.

The Bantu tribes, who occupy the left bank of the Cunene above the gorges through which this river escapes seawards, are generally designated by the collective name of $0 \mathrm{va}-\mathrm{Mbo}$ ( 0 vambo , Ovampo), originally applied to them by their south-western neighbours, the Tereros. But they do not themselves recognise this term, nor have they any generic designation for the nation as a whole. They are ethnically related to the Chibiquas of the Chella Mountains, and to the peoples dwelling beyond the Cunene known as Pa-Simbas (Mu-Ximba), that is, to say, "Borderers," or "Riverain People," and mentioned in old documents as Cimbebas. Heuce the name Cimbebasia, which is still applied to the region watered by the Cunene and even to the whole of Danaraland.

Most of these natives are tall, robust, very intelligent, and industrious. •Their language differs but little from that of the Hereros, and according to Duparquet even shows a marked affinity to that of the Ba-Fyots. Its true position in the Bantu linguistic family must soon be more accurately determined by the grammatical studies of the Finnish and other missionaries settled amongst them.

The Ovambo territory is shared hetween about a dozen tribes, who dwell chiefly along the streams branching off from the Cunene towards Lake Etosha, and who are all separated from each other by intervening border tracts of uninhabited woodlands. Nearly always at war, these peoples, who within their respective communities recognise the rights of property, are cor:stantly raiding on the cattle of their neighbours. The young men, creeping by night stealthily through the intervening forests, try to seize the enemy's hords by surprise. If seen in time they beat-a hasty retreat, and a few days afterwards find themselves called upon to repel similar attacks. To such tactics are limited most of the intertribal conflicts; but real wars of conquest have taken place, and the politicul equilibrium has been frequeutly distributed amongst the Ovambo peoples.

Of all the tribes, estinated by Palgrave at nearly one hundred thousand and by Duparquet as high as one hundred and twenty thousand souls, the most powerful is that inhabiting the Kwanhama (Okwanyama, or "Land of Meat"), a term which would appear to point at cannibalistic practices, which have disappeared from the present inhabitants. But they still eat the flesh of dogs, which to some of their neighbours seems scarcely less revolting. The Kwanhuma district especially is rich in horned cattle, sheep, goats, pigs, and poultry, and the very name Ova-Mbo, or better, Oba-Ambo, is said to mean " comfortable" or "well-to-do people." They constitute, in fact, a true peasant population, carefully cultivating each his own plot and regularly manuring the land. Slaves are numerous in the country, but there are no poor. The Kwanhama territory, which is bordered on the west by the Cunene above its confluence with the Caculovar, stretches eastwards as far as the neighbourhood of the Ku-Bango. It is governed by an absolute king, who is required by custom to submit to a regular fattening process in order to become royally corpulent. He is much dreaded by his subjects, and even in his dealings with the whites this obese monarch betrays a high sense of his personal importance, for he rarely condescends to give a personal audience to the European traders visiting his dominions. His troops are already well equipped with firearms. In this state, as well as in the other Ovambo districts, it is customary for the heir to the crown to be always designated during the lifetime of the reigning sovereign, but the "heir-apparent" is meantime kept in seclusion almost like a prisoner.

Next to Kwanhama the most powerful Ovambo state is Ondonga, or Ndonga, a term which, by some geographers, has been applied to the whole group of Ovambo peoples. This kingdom, which has been visited by Galton and after him by many other travellers, is the southernmost of all these petty states, being situated along the course of one of the streams near Lake Etosha. After suffering much from an incursion of some Hottentot marauders, Ndonga has recovered its prosperity, and thanks to the presence of an English factory and to the Finnish missionary station, this state now exercises the greatest influence in slowly modifying the rude habits of the people. The natives have here already developed a few industries, and amongst them are now found skilful potters, coppersmiths, blacksmiths, and other craftemen.

One of the smaller tribal groups, the southern Omblandus, called also "Tree Men," because they take refuge in the trees against the attacks of the enemy, is distinguished for its republican institutions, eonstituting a free political system of which but few examples are offered by the Negro races. The last king having outraged the people by his despotic and arbitrary government, was crushed by his own subjects beneath the roof of his residence, and the leaders of the revolt declared that they would henceforth obey no more masters. They have kept their word, and, although poor and few in number, they have bitherto succeeded in safeguarding their independence against the ambitious kinglets of the surrounding lunds. The Okafimas, one of the eastern tribes, have also contrived to defend their liberties against, the King of Kwanhama, always at the first signal of attack retreating in a body within the lines of a fortified enclosure.

A few seattered groups of Bushmen, the Ma-Cuancallas of the Portugueso settlers, live in a state of bondage amongst the surrounding Bantu populations. They are employed by the Ovambos as carriers of ivory and iron ores, and are also frequently enlisted as soldiers. The whole region of the plains inhabited by the Ovambos is intersected by excellent roads, which are aceessible to the waggons both of the Europeans and nutives, for these also highly appreciute the advantages of wheeled traffic. When carts were first introduced they fell prostrate on the ground, rubbing their foreheads in the dust raised by the passing wheels.

At the beginning of the year 1884 some fifteen fumilies of Duteh trekkers settled in the Ondonge district near a copious spring, the "Groot-Fontain," which has its source to the east of the Etosha lagoon, founded a petty "republic," named Upingtonia, in honour of a prominent politician in Capo Colony. The new state comprised, at least on the map, a superficial area of no less than 20,000 square miles, divided into allotments of 60,000 acres, and immigrants were invited from all quarters to come and oceupy the land. But the violent death of their leader and the troubles with the natives have obliged this group of Boers to place themselves under the protectorate of Germany.

The Hereros (Oba-Herero, the "cheerful" or "merry people"), who were formerly called the "Lowland" or "Cattle Damaras," are also a Bantu nation, who reach southwards far into the Hottentot domain. According to their own traditions, they exclusively inhabited the highland region of Kaoko down to the middle of the eighteenth century; but towards the year 1775, at a time when water was more abundant in the country than at present, most of their tribes migrated southwards. But a few remained behind in the Kaoko uplunds, where they intermingled with the Bushmen, and like them became impoverished. The Herero language, now well known, thanks to the works of the English and German missionaries, who are settled amongst them and have published grammars and religious treatises, is a pure Bantu idiom. At least this is the case in the districts where the Hereros keep aloof from other races, for in the neighbourhood of the Hottentots hybrid dialects have sprung up in many places, in which the words of both tongues are intermingled, and inflected either with Bantu prefixed or Hottentot suffixed particles.

Since their exodus from the Kaoko country the Hereros have been frequently in confliet with other peoples. They had first of all to fight the "true Damaras," the so-called "Highland Damaras," nearly all of whom they reduced to servitude. Then, after the middle of the present century, they were exposed to the incursions of the Namaqua Hottentots and of the Bastaards, by whom thousands were destroyed or reduced to slavery. Possessing no firearms with which to resist their assailants, who were perfectly equipped and in constant commereial intercourse with the Cape, the Hereros seemed doomed to destruction. Galton, who visited this region in the year 1850, foresaw the day when the Namaquas, with their scornful hatred of the blacks and the characteristic obstinacy of their race, must at last succeed in extirpating their hereditary foes. But the foreboding has not been verified. More numerous and more agile than their adversaries, the

Hereros had, moreever, the good fortune to find a friend in the Swedish traveller Andersson, who in consequenee of a sanguinary collivion found himself involved in the fray. By his aid they at last gained the upper hand, and although a war of reprisuls was protracted over many years, and has even broken out again in quite

Fig. 21.-Herero Land.
Scale $1: 7,000,000$.

recent times, the respective domains of the two hostile races have been scarcely modified since the middle of the present century.

At present the Herero territory stretches west of the Ovambos as far as the coast, and southwards as far as the great central highlands traversed by the Swakop. But the political frontiers are nowhere strictly defined. The land belengs to all alike; Damara and Namaqua may encamp wherever they like, and in the Herero language there is no word either for "frontier" or for "native
land．＂The total number of the＂Cattle Damaras＂is estimated by Pulgrave at cighty－five thousand，and this estimate has been confirmed by the missionaries stationed in their midst．The principal chief，who resides at Otyimbingue，rules over thirty thousand subjects．They are easily counter，not individually but in the mass，by the herds they drive to the pasturage．Each chief knows the number of his cattle，from which he is able to deduce the number of the herdsmen and their families．On an average three hundred persons are reckoned to the werft，or encampment of cattle，with its secondary grazing grounds．

Physically the Hereros rank amongst the finest races in Africa．They are tall and well－made，although in reality not nearly so strong as might be supposed from their magnificent inuscular development．With regular features of almost classical form，they have an open cheerful expression，but ure easily irritated，and then they will often assume a ferccious look．Till recently those who had n＇t been brought under the influence of the missionaries went nearly naked．As becomes a race of pastors，they dress almue clusively in skins and leather ： thin strips，which if placed end to end wo．make a total length of perhaps 350 feet，hanging in thick fringes round their hips．They are also fond of iron， zine，or copper rings，armlets，and necklaces，and like most of the northern Bantus they dispose the hair in tresses or ringlets stiffened with a mixture of fat and red ocbre．The women on their part bedizen themselves with trinkets of all kinds，leather thongs，long hairpins，bracelets，shells，and glass beads， crowning the edifice with a thick leather headdress，to which are added three high ear－like attachments glistening with a coating of clay．

Although salt is usually supposed to be an indispensable condiment，the contrary is proved by the diet of the Hereros，who neither buy nor collect this article from the coast lagoons；nor do their cattle care to resort，as in other places，to the saline＂licking stones．＂Traces of old matriarchal usages still survive amongst them．The wife is nearly free，and may separate at her pleasure． The most solemn oath of a Herero is that＂by the tears of his mother，＂and when the mother died young it was formerly usual to bury her child with her．Except the baptised children，all the Hereros are circumcised，but beyond this rite they have scarcely any religious＇ceremonies except those performed for the purpose of securing the prosperity of their herds．In all these ceremonies cow－dung plays a part，and every speck and shade of colour on the animal＇s coat has in their eyes a hidden meaning．The chief＇s daughter，guardian of the sacred fire，sprinkles the cattle with lustral water，and when moving to a new camping－ground she leads＇the ：way，holding a torch in her hand．Certain large forest－trees are regarded by them as the ancestors of man，and several of these＂mother trees＂ are mentioned by Galton and Andersson，to which the Hereros pay regular homage．

The nation was formerly divided into tribes，or rather castes（eanda），which had probably their origin in the family group，and which were named from the stars，the trees，and natural phenomena．Thus one caste was known as the ＂Ohildren of the Sun，＂another of the＂Rain，＂and so on；but these distinctions are gradually being effaced．

The chiefs, who in other respects enjoy very little personal authority, re held to be owners of all the enttle. According as they grow rich, the number of their subjects iucreases with the increase of their herds, and as thoy become poor their subjects melt away from around them. Thus the wenlth of the chicf constitutes the ouly bond of the tribe, although the Hereros have full consciousness of their common national origin. Hence the politicul divisions aro subject to constant change; but what never change are the centres of population, the life of the tribe evor gravitating round ubout the watering-places of the herds. Like those of the petty Ova-Mbo kings, the domains of the several Herero'rulers are separated one from the other by intervening traets of serub or rocks, neulsal ground never encroached upon by the conterminous tribes except in case of invasion. But these dreaded border-lands form the camping-grounds of Hottentot or Bantu marauders, ever on the watch to carry off stray cattle.

Amongst the Hereros is slso found a cattleless proletariate olass, men unattuched to the fortunes of any rich owner of herds, and who live on the chase, or lead a rouming adventuresome existence. Such are the Ova-Tjimbas, kinsmen of the Ba-Simbas (Cimbébas), who camp for the most part in the north-eastern districts near the Ova-Mbos. On all points connected with the tenure of land, the practices are essentially communistie. The soil is absolutely unalienable, and the expulsion of the Catholic waissionaries in 1879 must be attributed rather to their imprudent propositions rarding the purchase of land, than to the jealousy of their Protestant rivals. The Hereros are in any case well aware, from the oxample of Cape Colony, that wherever the whites gain a footing, the natives soon cease to rule the land. Nevertheless, with ah their precuutions, they cannot escape the fate in store for them. The $\mathrm{Ge}^{\text {s.uis }}$ bug henceforth their "protectors," they will be unable to refuse ackance of the new laws of property, which will be so framed as to plunder thas to the profit of the stranger.

## The Hill Damaras and Namaquas.

The Ova-Zorotus, or "Highland Damaras," are so-named by the Boers to distinguish them from the "Damaras of the Plains." They comprise all those tribes which preserved their independence and took refuge on the summit of the plateaux, espeeially the isolated table mountains surrounded on all sides by steep escarpmonts. According to Galton these Damaras call themselves Hau Damop ("True Dumaras "), or else Hau Khoin, "True Khoin," that is to say, Hottentots. But so far from belonging to this race, Galton regards them as akin to the OvaMbos, whom they still resemble in their physical appearance and social usages, although much deteriorated by misery and slavery. If most of them speak a Hottentot dialect, the fact should perhaps be attributed to their isolation in the midst of rulers of Khoin race. They now belong to other masters, thus fully justifying the designation of Dama, which according to several writers has the meaning of "Vanquished."

Of small size, weak and slender frame, and resembling the Bushmen, want whom

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IMAGE EVALUATION
 TEST TARGET (MT-3)


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in some places they are confounded, they live by cultivating the land, which gives them but poor returns for their labour. Some of their tribes are grouped round the missions; but the majority are enslaved to the stockbreeders, squatting round about the grazing grounds. They are variously estimated at from thirty thousand to forty thousand souls; but on this point differences of opinion necessarily prevail, owing to the fact that many tribes of doubtful origin arq regarded as belonging to other races. The Hill Damaras have the musical faculty developed to an extraordinary degree. They sing in concert with well attuned voice and in perfect harmony.

The Namaquas (NamaKwa), that is, "Nama People," occupy nearly all the southern section of the German Protectorate south of the Tsoakhub and Kuisip rivers. One of their divisions, known as the "Little Namaquas," is even stationed to the south of the Lower Orange, and the territory inhabited by them has become an integral part of Cape Colony. But all alike are thinly scattered over a vast waterless region, and towards the middle of the present century numbered scarcely more than fifty thousand altogether, a feeble
 remnant of the many hundred thousand Namas who are said to have formerly lived in South Africa. According to Palgrave, they are now reduced to about
twenty ihousand, of whom nearly seventeen thousend are Great Namaquas, and the rest Little Namaquas.

The Namus are certainly Hottentots, and were at one time regarded as the purest representatives of that race. Those known as the "Red Nation," that is, the Geikus of the hilly region lying to the south-east of Walvisch Bay, are Khoïn, or Hottentots, in a pre-eminent sense, and claim to have been the first conquerors of this district, where they number about two thousand five hundred. The sucalled Topmaars, that is, " Highest," or "First," who are centred for the most part in the British enclave round about Walvisch Bay, are at present in a very degraded state, being regarded as the most debased of all the Namaquas. Others again, and notably the Oerlams, whose original name of Orang Lami, or "Old Acquaintanee," is said to have been given them by the suilors visiting them from the Cape, are of more or less mixed descent, a strain of European blood having even been detected in them. All are herdsmen and warriors, who during the course of the present century have fought many a desperate battle with the Hereros. Diwelling in semicircular huts made of bark and foliage, they practise only such rudimentary industries as are suitable to their primitive manner of life. They cut up and dress the hides of their cattle, sharpen and mount smallarms, and make wooden bowls for holding milk and spring-water.

Constantly meving about in search of good pasturage, the Great Namaquas are grouped in separate clans, each with its own chief and council of twelve elders. The more illustrious his lineage and the more brilliant his warlike deeds, the greater is the personal authority of the tribal chief. But these kinglets, having become nominal Christians, are gradually losing their influence over their subjects, especially since their territory has been surrounded by the Cape Colonists and the Boors from the east, and since their upland valleys are regularly visited by the wholesale dealers to buy up their live-stock, and by the German miners to " prospect" their country for mineral ores. They are no longer dreaded for the number of their armed warriers, but respected only in proportion to their wealth in eattle.

The race itself seems doomed to extinction, being too feeble to resist the elements of disintegration by which it is surrounded. The Little Namaquas no longer speak Hottentot; the missionaries established among the Great Namaquas no lenger require to learn this language, which since the year 1882 has ceased to be the vehicle of religious instruction. It is no longer necessary to print books of devotion in an idiom which will seon he understood by nobedy, and which has already been replaced by Dutch, one of the channels through which civilisation is being diffused throughout South Afriea. Nama, whieh is one of the purest forms of Hottentet, is thus disappearing like other branches of the same linguistic family, of which nothing now survives, except the names of mountains and rivers, nearly all in more or less corrupt form. The fragments of the Numa tribes scattered over the eastern plains are becoming gradually merged with the despised Bushmen.

## Topography

Hitherto the northorn section of the coast batwoen the Cunene and Walvisch Bay has not possessed a single seaport visited by shipping. The Angra Fria ("Cold Bay"), lying north of the sandy promontory of Cabo Frio ("Cold Point") is merely a little creek offering no kind of shelter against the surf and the prcvailing south-west winds. Some 120 miles farther on the Oglen coral reefs enelose a fine harbour and tranquil sheet of water, where fish disport themsolves in myriads. But the neighbouring coast is uninhabited, and this well-sheltered haven attracts no traffic.

At present the only outlet of the whole region of Damara and Numaqualand is the commodious and spacious inlet of Walvisch Bay, which lies almost exactly midway between the Cunene and Orange estuaries, and which gives access to the two chief fluvial basins of the country, the Tsoakhub and the Kuisip. A channel 24 feet deep gives easy access to large vessels, which can ride at anchor in 26 or 28 feet of water within a few cables of the coast. Here they are completely sheltered except against the north and north-west winds, which seldom blow on this part of the coast. The bay, which owes its name to the numerous sehools of whales formerly abounding in the neighbouring waters, is still visited by these cetaceans, and also teems with other marine animals, vast shoals of fish penetrating with the tides far up the creeks, where they are sometimes left in the shallow lagoons by the receding waters.

At one time a large export trade in ivory and ostrich feathers was carried on at this port, which has long been regularly visited by traders from the Cape to procure live-stock for the southern markets. The Colonial Government had accordingly taken steps at an early date to secure possession of this vital point on the Damara-Namaqua seaboard, so that when they annexed this region the Germans wete obliged to respect the little British enclave, which has a total area of about 700 square miles. But the English, on their part, fearing the local traffic might be diverted by the new arrivals to some other point of the coast, hastened to declare Walvisch Bay a free port for all exports and imports from Europe and the colonies.

The chief inland stations whieh are thus supplied with manufactured goods through Walvisch Bay are: Omaruru, which has been converted into the principal market of the Herero people; Otyimbingue, on the Tsoakhub; Okahanja and Otyikango, or New Barmen, higher up on the same watercourse ; Reboboth, on a tributary of the Kuisip. On the sandhills encircling the bay are camped a few hundred Topuaars, whom the local dealers are forbidden to supply with spirituous drinks.

Were the British Government at any time to obstruct the trade of Walvisch Bay, the Germans have still in the immediate neighbourhood the port of Sanduich Haven (Porto do Ilheo), which might be constituted the centre of their commercial operations in their new dependency. Although less capacious than Walvisch Bay, and also exposed to the danger of silting up, this creek has the advantage of being sheltered from all winds and of possessing a supply of fresh water stored

## SOUTH AND EAST AFRICA.

in the neighbouring riverain sands. A superabundance can be had by simply sinking a few shallow wells in these sands, whereas the nearest springs to Walvisch Bay are 34 miles distant, so that it is found more convenient to supply

this place by sea from the Cape. The little Hottentot hamlet of Anishab gives a little animation to the otherwise dreary shores of Sundwich Haven.

The only important inlet on the coast of Great Namaqualand is Angra Pequena, the acquisition of which by the trader Lüderitz was the first step that induced the Germans to treat with England for the possession of the whole region, some 360,000 square miles in extent, stretching from the Cunene to the Orange River. Despite its name, which in Portuguese means "Little Bay," Angra Pequena is


ANGRA PEQUENA-VIEW TAKEN FROM NAUTILES PONT.

something more than a mere indentation on the const, for it ramifies to the right and left for about 5 miles south of the entrance. It is accessible to the largest vessels, having a depth of from 40 to 50 feet, with excellent anchorage wellsheltered from the surf and from all winds exeept those of the north. Its great defect, like that of Walviseh Bay, is the absence of good water, although an intermittent watercourse, dignified with the name of the "Little Orange River," oceasionally reaches the bay. Hence the place will have to be supplied from the Cape, until its increusing importance justities the sinking of wells and formation of reservoirs on the coast in order to capture all the water oozing from the surrounding dunes. Hitherto Angra Pequena has not answered the anticipations of its owners as a trading station. In fact its only articles of export are some eattle, fish, and mineral ores, so that it is not, perhaps, surprising that the solitary German factory was completely abandoned in the year 1887.

In the neighbourhood are the two valuable guano islands of Iehatoe, lying north-west of the bay within a mile of the coast, and Halifax near the peninsula skirting the west side of the harbour. These, with a few other islets, have long been regarded as dependencies of Cape Colony, and the working of the guano deposits is secured to British traders. Here are captured, in the months of October and November, myriads of penguins, cormorants, and other waterfowl; but the original stores of guano, lying several yards thick on the rocks, had been completely exhausted by the speculators towards the middle of the present century. Since then the trade has been regulated; during the breeding season all trespassers are warned off, and the islands left in the peaceful possession of the birds, after which the gangs of workmen are admitted to collect the manure, which in the year 1884 was shipped to the total value of $£ 20,000$.

In these waters numerous hands are also engaged in the capture of seuls, multitudes of which animals frequent all the surrounding islets and reefs. On the shores of Possession Island, which lies in Elizabeth Bay, to the south of Angra Pequena, the navigator Morell found the carcases of cetaceans in such prodigious quantities that he estimated them at upwards of one million. His theory was that the vast school had been suddenly overtaken and swallowed up by some tremendous whirlwind of sand.

In the interior of Namaqualand the large ei zentres of population consist merely of a few dozen huts, and most of these villages are only temporary settlements. The chief stations are those of the missionaries, such as Nishett's Bath (Warmbad) on a wady flowing to the Orange, and Bethany, in the hilly district stretching eastwards from Angra Pequena. Bethany is regarded as the capital of the whole of the Namaqua territory. In 1884 it boasted of four brick buildings, the mission house, the church, the palace of the tribal chief, and the local dealer's warehouse. An attenpt has recently been made to found an agricultural settlement at a place called Holzenfels, on the north bank of the Orange, elose to the British fronticr. Hopes are entertained that by means of irrigation canals derived from the river these arid wastes may be gradually transformed to smiling oases and productive arable lands.


## CHAPTER III.

## SOUTH AFRICA.

PHYSICAL FEATURES OF THE ORANGE, LIMPOPO, AND OTHER BASINS.

## General Survey.



HE modern ara has been ushered in by three great geographical events-the discovery of the highway to the east by the Austral seas, the arrival of the caravels of Columbus in the New World, and the circumnavigation of the globe by Magellan. Of these epoch-making events in the history of our planet, the first in order of time was that which was accomplished when in 1486 Bartholomew Diaz successfully doubled the stormy headland which thenceforth took the name of the Cape of Good Hope. A.few years later the "good hope" was fully realised when Vasco de Gama reached the East Indies by this route, when the western and eastern seas were merged in a common oceunic basin, and man learnt to compass the earth, which till then had seemed to him a boundless universe.

But the shores that the first Portuguese ships had skirted in order to pass from the Atlantic to the Indian Ocean long remained neglected by geographical explorers. Attracted by the wealth of both Indias, the early navigators scorned to linger on a seaboard which held out no prospects of a rapid fortune by trade or plunder. Over a hundred and fifty years passed away before any Europeans

- landed on this part of the African continent with the intention of remaining and founding agricultural settlements. At the same time it is useless for certain Portuguese writers to express idle regrets that this region was neglected by their forefathers of the heroic age. These were far too few to embrace the whole world, to simultaneously undertake the conquest of the Indian, Malayan, and American Eldorados, and the slow development of the arable lands in South Africa between the Congo and Zambese.

Nevertheless the settlers in these Austral regions were destined to find much more than they could ever hope to obtain from the mines of Golconda and the spices of the Eastern Archipelago. The land which they occupied is a second

Europe, offering a climate differing little from that of the mother country, a soil on whicb they can cultivate the same plants und graze the same herls, and preserve the same ha ${ }^{2}$ its and customs in unother hemisphere many thousands of miles distunt from their native land. No doubt the population of European origin developed very slowly in their new environment; nevertheless the expansion was sufficient to enable them gradually to sprend over the land. Aided by a regular strean of immigration, they steadily eneroached from all directions on the domain of the aboriginal inhabitants, and they now rule supreme throughout the whole of the Austral regions from the Cape to the Limpopo.

As a centre of colonisution and of higher culture, the European colony of the Cape, with its natural dependencies of Natal and the Dutch republics, already exercises an independent influence, apart altogether from the support it derives from its relutions with the metropolis. The Cape is the natural centre for the organisution and equipment of expeditions for the exploration of the whole of South Africa. The capital, almost as much as Europe itself, has given the first impulse to the scientific labours and industrial development of the surrounding regions; jointly with the neighbouring distriets aud all the conterminous maritime zone, it forms, as it were, a detached section of Europe gradually enlarging its borders aud supplanting northwards the primitive African world.

Cape Colony has often been compared to Algeria, which is situate exactly at the other extremity of the continent, and which has also become an outlying portion of Europe in its industries, its social and political life. In many respects the advantage lies with Algeria. Although far less extensive than the complexity of the European States in the Austral hemisphere, it is more thickly peopled, the white element alone being somewhat in excess of the entire South African population of the same stock. It also receives a larger annual contribution of inmigrants from Europe, and although possessing neither gold nor diamonds, it has already developed a larger export trade. All this is easily explained by its vastly superior geographical position. Algeria is essentially a Mediterranean land, lying over against France, Spain and Italy, and a few hours' passage suffices to reach the south European seaboard from any of its ports. Nevertheless, Algeria labours under the disadvantage of being completely isolated and cut off from the rest of the continent by the almost trackless wastes of the Sabara.

The Austral colonies are very differently situated in this respect; for although they are also conterminous with an extensive wilderness, the Kalahari Desert does not obstruct all communications, while the surrounding populations are able to maintain mutual relations both by land and by water.* On the other hand, the Cape of Good Hope projects southwards into a stormy sea, which merges in the

* Comparative areas and popalations of Algeria and the European States in South Africu:-

evorlasting snows and ice of the Anturctic regions. In o-ler to keep up eonstunt und regular intercourse with the civilised world, the colonists have to traverse thousands of miles of the great oceanic highways in the direetion of Great Britain, of India, and Australasia. The nearest continental headland to the Cupe is the

Fig. 24.-Soutil - Wert Ayrican Highlands.

southern extremity of the New World, which is still distant 3,250 milcs. Tasmania, which forms the third terminal point of the continents tapering southwards, lies about 6,000 miles to the east. Consequently, until the South African settlements become consolidated in one vast and populous state, with still more

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isolated mass is clothed with verdure, while its flanks are scored with deep ravines shaded by the sombre pine and wide-branching oak. The semicircular range of hills terminates eastwards in a sharp point known as the Devil's Peak, and westwards in the long sloping ridge of the "Lion," with his back turned towards Capetown and his magni-

Fig. 25.-Cape Agulias. Scale $1: 400,000$.
 ficent head facing seawards. Beyond Table Mountain the hills fall gradually southwards down to the famous head!and of the Cape of Good Hope.

East of the parallel mountain ranges, which run north and south in the vicinity of thrs Atlantic seaboard, the folds and wrinkles of the land, resembling the gatherings reund the hem of a garment, are disposed in the dircetion from west to east nearly parallel with the shores of the Southern Ocean. Nevertheless it is evident from the lie of the land that all these border ranges run somewhat obliquely to the coast, for they all terminate in the sharp promontories, which follow in succession to the east of Cape Agulhas, or the "Needles," terminal point of the African mainland. They formerly extended continuously from west to east, but are now broken into fragments of varying size by numerous torrents, which rising in the interior have forced their way seawards at the weaker points of the old formations.

The deep ravines and transverse gorges thus excavated by the running waters between the parallel coast ranges impart to this region an extremely varied aspect, especially in the neighbourhood of the sea, where the slopes are mostly overgrown with a forest vegetation. Of the mountain barriers thus intersected at various


points by the coast streams the loftiest is the Groote Zwarte Bergen ("Great Black Mountains") which lies farthest inland, and some of whose summits exceed 7,000 feet. Towards its eastern extremity the Cockscomb (Groot Winter-hoek) rises to an altitude of 6,000 fect above the north-west side of Algoa Bay.

North of this outer orographic system of parallel chains crowded together along the seaboard, there is developed at a mean distance of over 120 miles from the coast another much loftier range, which also trends in the normal direction from west to cast, and whose sinuous windings are distinguished by different designations. At its western extremity near the Atlantic Coast Range it takes the name of Koms-berg, which farther on is successively replaced by the Roggeveld and Nieuweveld, where the term celd indicates softer outlines and more rounded contuurs than those of the steeper escarpinents denoted by the berg. Still farther east the main range seems almost to merge in the surrounding upland plains; but it soon rises again to a great height in the Sneeuw-bergen ("Snowy Mountains"), whose loftiest peak, the Compass ( 9,000 feet), is the culminating point in the Cape region properly so called.

Beyond this central nuclens the system bifurcates, the south-eastern branch, which is interrupted by an affluent of the Great Fish River, attaining in the Groot Winter-berg an altitude of 7,800 feet. This branch terminates at the mouth of the Great Kei River, western limit of Kafirland, while the second ramification, forming the divide between the Orange and Great Fish River basins, trends first northwards, then towards the east, where it merges in the lofty range separating Kafirland und Natal from Busutoland. Its eastern extremity, known by the name of the Storm-bergen ("Storm Mountains"), is distinguished in the economic history of the Cape for its extensive carboniferous deposits. The thin and somewhat schistose coalfields of the Storm-bergen occur chiefly on the northern slopes of the range, and stretch far in the direction of the north; but owing to the cost of extraction and difficulty of transport, the mines are little worked except to supply the wants of the surrounding settlements. Old volcanoes with perfectly distinct craters, which seem to have become extinct since the triassic epoch, are still visible in the Storm-bergen Mountains.

The undulating plain dotted over with patches of scrub, which stretches east and west, between the parallel coast ranges and the great northern water-parting of the Roggeveld and Nieuweveld, is known by the name of the Great Karroo, a Hottentot word meaning arid land. Farther north in the direction of the Orange River extend other elevated plains interrupted here and there by small mountrin masses, which consist for the most part of eruptive rocks, such as trapps and dolerites, forming natural colonnades often of a monumental aspect. Theso uplund plains are alou kurroos, turoughout their whole extent presenting everywhere the same geological constitution. They were formerly covered by vast stretches of marshy waters frequented by myriads of vertebrate reptiles, dicynodonts and other varieties, which are unlike any others found on the globe, and which probably became extinct before the close of the triassie period. According to Sir Richard Owen, these huge suurians were herbivorous, and arpear to have leen of amphibious habits.

In the Great Karroo, as well as in the secondary formations of similar character stretching northwards to the Orange River, are scattered numerous depressions where are lodged the rain waters, which after evaporation leave the ground covered with saline efflorescences.

## The Drakenberg

Beyond the Storm-Bergen the main range trends round in the direction of the north-east, describing a great beud concentric with that of the oceanic coastline. Here the Kwathlamba, or Drakenbergen ("Dragon Mountains"), run at a mean distance of about 120 miles from the sea, rising in some of its peaks and summits to an altitude of over 10,000 feet. Although still forming a true waterparting between the Atlantic and Indian Ocean, these highlands present the aspect of a mountain range only on their east side, where they fall through a series of steps precipitously seawards. On the west side facing inland the chain is merely the scarp of a plateau, which is intersected by other parallel ridges.

The intermediate space between the Drakenberg and the Indian Ocean is occupied by three steps or terraces, which, however, present great inequalities in their general relief, and which in several places are obstructed by transverse ridges following the course of the fluvial valleys. The most elevated of these terraces, which stretches along the base of the Drakenberg, has a mean altitude of considerably over 3,000 feet; the central terrace, forming the middle zone of Kafirland and Natal, varies from 2,000 to 2,400 feet, while the outer or coast step, cut by the beds of innumerable torrents into a multitude of fragments, scarcely rises more than 1,000 feet above the winding seaboard.

North of a summit crowned by vertical sandstone formations presenting the aspeet of a ruined fortress, whence its name of the Giant's Castle ( 9,800 feet), the triple system of the Drakenberg gradually fulls to a lower level. Here the greatest elevation is maintained by a parallel chain of heights which traverses the Basuto territory under the name of the Blaw Bergen ("Blue Mountains"), or Muluti, that is, "Peaks," in the language of the natives. Farther north the system resumes the name of the Drakenbergen, and here these highlands, although composed of sandstunes like the "tables" of most other ranges in South Africa, nevertheless terminate in jagged crests. The Drakenberg is connected with the Maluti Mountains by a lateral ridge, whose chief summit, the Champagne Castle, or Cathkin, attains a helght of 10,500 feet. On this connecting link rises a vast plateau-shaped eminence which is covered with pasturage, and which by the Basutos is called the Buta-Buta or Potong, that is, "Antelope Mountain." But it is more commonly known by the name of the "Mountain of Sources," given to it by the Protestant missionaries Arbousset and Daumas, because here have their source the main headstreams of the Orange, besides several other rivers flowing in the opposite direction down to the Indian Ocean. It rises about 1,300 feet above the surrounding uplands, and according to Stow has an absolute altitude of 10,100 feet. Nevertheless it is overtopped by the
chief summits of the lateral ehain of the Maluti highlands, on which the snow remains for the four Austral winter months from May to August. This is the true Apine region of South Africa. Une of its peaks, to which the missionary Jacottet has given the name of Mount Hamilton, has an extreme altitude of 11,600 feet, while the gorge through which the Basutos descend from the upper Orange Vulley to that of its great affluent, the Senkunyané, is searcely 200 feet lower.

Farther on in the direction of the north-east, the range known as the Randberg, that is, the "Border Range," but to which is also extended the name of the Drakenberg, as if still forming part of the southern system, assumes the character of an enormous rocky cliff. On the inner side it fuces the undulating upland

plain forming part of the continental plateau; on the outer it develops a long line of abrupt escarpments skirting the lower plains, which have been greatly denuded and the débris borne seawards by the torrential coast-streams. Although mainly parallel with the shores of the Indian Ocean, this Border Range has been carved by the running waters into. a very irreguiar rocky barrier. Excavated in the shape of a cirque in one place, it projects elsewhere in the form of headlands, one of which is the Kaap (Cape), femous for its rich auriferous deposits. The work of erosion carried on for ages by the rivers has caused the barrier itself gradually to recede westwards, being continually eaten away by the affluents of the Indian Ocean.

Farther north the slope of the plateau falls imperceptibly in the dircetion of
the Limp p ,. In this northern section of the 13 orler leange the last crest which exceeds 7,000 feet is the Mauchberg ( 7,300 ), so numed from the explorer who diseovered tho goldfelds of this rogion. Nevertheless the Zoutpansbergen, or "Suline Mountuins," at the northern extremity of the whole system, still present an imposing aspect, thanks to the precipitous slope of their escarpments down to the valley of the Limpopo. Towards the south-west some disconnected ranges of hills and sentered heights serve to break the monotony of the upland plains, which descend with a gentle incline towards the less elevated depression of the Kuluhari Desert. But these eminences produce little effect, owing to the great relutive altitude of the surrounding plateau. They culminate in the Magaliesbergen, near Pretoria, capital of the South-African Repubiic (Transvaal).

## Geological Formations.

Throughout the whole of Austral Africa, comprising Cape Colony, Kufirland, Natal, the Basuto, Zulu, and Dutch territories, the general geological substratum is constituted by granitic rocks, which underlie all the other formations of this region. By their incessant erosive action the running waters have everywhere exposed the lower granitic foundation and the sedimentary strata deposited on the primitive crystalline rocks. As remarked by Livingstone, the granite backbone is concealed, but it here and there breaks through the skin. The granite is itself traversed in all directions by veins of a very pure white quartz, which are almost everywhere associated with auriferous deposits. But except in some rare districts these deposits are not sufficiently abundant to render mining operations remunerative. Throughout the whole of the coastlands the underlying granite is covered by crystallised limestoncs, while in the interior the granite is overlain chiefly by carboniferous series and Devonian formations with their crown of sandstone rocks.

Some geologists point to heaps of displaced and striated boulders, as clear indications of a former glacial period on the eastern slopes of the Drakenberg. Most observers also accept the view that the seaboard is at present undergoing a process of slow upheaval. From the Cape of Good Hope all the way to the coust of Natal may be seen old tracings of raised beaches still covered with banks of marine shells, oysters, and polyps. Near the south frontier of Natal these elevated banks stand nearly fourteen feet above the present level of the highest spring tides.*

## Rivers-The Orange.

The great watercourso of Austral Africa, and one of the most considcrable in the whole Continent, if not for its volume, at least for the length of its course and the extent of its basin, is the Gariep of the Hottentots, the Groote-rivier ("Great River ") of the Boers. In the year 1770 it received from Gordon, an officer in the Dutch service, the name of Orange, more in honour of the royal

[^4]honse than from the colour of its waters. The Senku, or chief enstern headstrean, is regurded us its true upper course, although exceeded in length by the Vaal. It has its source in un uphand valley on the southern slope of the Cathkin, and flows at first in a sonth-westerly direction between the Maluti and Drakenberghighlands. In this part of its course it rolls down a dark stream, whence its local name of the "Black River." After its junction with the Senkunymé, or Little Senku, it is again swollen by the Malitsungune, which descends from the western uplands, and which nt one point plunges from a vertical height of 600 feet into a tremendous mountain gorge.

After esenping from these romantic Maluti highlands, the Orange mingles its waters with the united stream of the Calodon and the Kornet-spruit, which nearly double its volume, and both of which flow from the grassy Potong uplands through broad beds of sparkling mica sands. Below the confluence, the Orange, which from this point flows mainly in a north-westerly and westerly course, is joined by a few streams or rather wadys from the Cape highlands, the chiof of

Fig. 27. -The Obanar Falla.
Eeale 1 : $270,000$.

which is the Hartebeest, whose upper course rising in the Sneeuw-bergen, is known as the Zak or Zeku. But all these contributions scarcely suffice to repair . the loss caused by evaporation.

The only important affluent of the Middle Orange is the Vaal, or "Gray," onc of whose upper branches, the Namagari, has its source, like the Caledon, on the Potong plateau. But its farthest headstream takes its rise on the uplands which skirt the seaboard of the Indian Ocean to the south of Lourenço Marques. Were the question to be decided by the length of their several courses, of all these affluents the Vaal would have to be regarded as the true mainstream. But its valley to a great extent traverses arid plains or dried-up lacustrine beds belonging to a furmer geviogical epech; hence it sends down very little water, usually reaching the confluence in an almost exhausted state. But like the other rivers of this basin it is subject to sudden freshets, several of which occur between the end of November and the middle of April, and while they last the Vaal is transformed to a formidable watercourse. Both the Orange, Caledon, and Vaal may generally be forded; but during the floods they ean be crossed
only on rafts, except at tho points where modern bridges and viaducts have been constructed.

For about three-quarters of its whole course the Orauge traverses the granitic platenu at a normulaltitule of about 2,600 feet above sea-level. But its ehamel is suldenty lowered by over 400 feet through a series of cascudes and rupids known as the Anghrubies Cataracts or the "Inudred Falls," which oceur a short distance below the Hartebecst confluence. For a space of aboat 16 miles the stream is here obstructed by innumerable reefs, ledges, islets, mad even islunds, some with low und smooth rocky surface, others bristling with sharp crags often affecting the form of towers or pinnacles. During the season of low water the stream rumifios into a labyrinth of torrents, lakes, pools, or silvery threads, ull of which winding from circuit to circuit ultimately converge in the narrow and deep gorge below the fulls. Some of these branches go to swell the volume of the great cascade with which the series terminates, while others develop independent fulls of their own, tumbling over some lateral rocky bed in mimic rivalry with the main body of angry waters. "On every side," remarks G. A. Farini, " fresh cascades sprung out as if by magic from the rocks. In fact, whether at high water or at low water, one of the peculiar charms of the place is the extraordinary number of distinct watorfalls which oxist here. At Niagara there are two gigantic cuturacts falling side by side at one bound into the head of a gorge seven miles in length. Here there is a succession of cascades and falls-probably a hundrod in number-extending along the whole length of a gorge no less than 16 miles long, into which they plunge one after the other, sometimes at a single bound, sometimes in a series of leaps. Juuring the dry weather many of these cataracts are of great volume, but at wet seasons, when they are magnified a hundredfold, their mass must be immense. At Niagaris the gorge is nowhere deeper than 200 feet, here the chasm is half as deep again." *

This explorer counted and named nearly a hundred distinct cascades, from which fact he named the whole series the "Hundred Falls." To the last of the series he gave the name of the "Diamond Falls," having picked up half a dozen diumonds in some sand between the rocks at the foot of the gorge.

Below the Hundred Falls the Orange is joined on its right bank, if not by a running stream, at least by a ramifying wady, which in the extent of its basin exceeds the Vaal itself. Thie is the Hygap, which is formed by the Ub and tho Nosob, or the "Twins," so called because their parallel beds frequently converge in a singlo channel, by the Molopo, the Kuramen, and other fluvial valleys, which occasionally send it a little water. But although the total area of its drainage probably exceeds 180,000 square miles in extent, scarcely any of its numerous affluents are ever flooded for any length of time. When one is full another is dry, and ordinarily nothing is met except stagnant pools or meres, or just a little moisture, so that to obtain a supply of water travellers are often obliged to dig holes in the sandy depressions. In any case, owing to the very slight incline of the surface in the Kalahari Desert, this fluvial system has been

[^5]unable to complete the work of erosion required to form normal river beds. Hence after the heavy rains a lurge quantity of the precipitated water lodges in little reservoirs without any outflow, closed busins which often run dry through evuporation or infiltration before the next downpour. According to the senson

Fig. 28,-The Falla of the Oravoe.

these depressions are consequently either shallow lagoons in which the hunter dare not venture, or almost equally dangerous muddy quagmires, or lastly dry and arid plains. Some with porous beds are clothed with vegetation after the fresh water has evaporated, and these are the veleys of the Dutch explorer.s. Others, with impenetrable argillaceous beds, are more arid in summer than the relatively elevated surrounding plains, and these are known as salt-pans from the white saline efflorescences left on the surface after the rain water has evaporated.

Throughout its lower course the Orange receives no perennial contributions from any direction, the gorges which open in the quartz cliffs to the right and left of its valley being for the most part merely the winding sand-beds of intermittent or altogether dried up affluents. Hence as it approaches the sea it decreases in volume, and although the main stream is over 40 feet deep during the great floods, it may be forded for most of the year at certain points where a transverse passage is presented by the lateral ravines facing each other on both banks. But in the deep rocky gorge by which it pierces the coast range on its seaward course, the Orange is almost inaccessible from either side. At several points the overhanging escarpments of the surrounding plateaux rise several hundred yards above its channel, and the traveller might perish of thirst without finding a single fissure or practicable track leading down to the tantalising stream which he sees flowing at his feet.

The river, barred at every turning by projecting rocky ledges, rushes in abrupt meanderings between the enclosing granite cliffs, and at one point even trends sharply to the south, flowing for some distanco in this direction before it finds an opening in the last barrier obstructing its course to the sea. Above the bar its waters are collected in an extensive lacustrine basin, above which hover countless flocks of aquatic birds. It frequently happens that this basin becomes completely cut off from the sea by an intervening strip of sand. During the fluvial inundations the swift current opens a bread channel to the Atlantic; but even then it is inaccessible to shipping owing to the submarine banks resting on elevated rocky plateaux, where the surf beats incessantly. Hence vessels bound for this part of the coast are obliged to land at the small inlet of Cape Voltas, lying to the south of the Orange estuary. Thus this great river, which has a total course of no less than 1,300 miles, draining an area of over 500,000 square miles, is as useless for navigation as it mostly is for irrigation purposes.

## The Olifant, Breede, Great Fish, and Kei Rivers.

None of the rivers reaching the Atlantic between the Orange and the Cape of Good Hope, or for some distance east of that point, have room to develop a long courso in the narruw space separating the coast ranges from the sea. Nor do any of them send down a great volume of water, notwithstanding the relatively heavy rain-. fall in this region. On the west side the largest is the Olifant, that is "Elephant," River, which flows mainly in a north-westerly direction to the sea above St. Helena Bay. On the southern slope the Breede-rivier ("Broad River") collects the surface waters from the uplands round about Capetown, and reaches the coast east of Cape Agulhas through a channel accessible to vessels of 150 tons. Notwithstanding its comparatively small size the Breede is the only stream in Capo Colony which has a seaport on its banks. Some miles farther east the Southern Ocean is reached by the Groote-rivier ("Great River"), called also the Gaurits, whose ramifying fluvial system resembles the widespread branches of an oak. The Gamtoa, or Gamtoos, which like the Gaurits rises on the plain of the Great Kuroo, and like it also forces the parallel coast ranges through a series of romantio
gorges. is often completely exhausted before reaching the ocean at Saint Francis Bay. Beyond it follow Sunday River, falling into Algoa Bay, and Great Fish River, which after an extremely winding course debouches in the Iudian Ocean, near

Fig. 29.- Gate of the St. John River.
Scale 1: 60,000.

the point where the continental coast-line begins to trend north-eartwards. Here the effects of a different climate already begin to make themselves felt. Although shorter than those on the southern seaboard, these eastern streams roll down a larger volume of water.

The Kei, that is, the "Great," pleonastically called the "Great Kei," which descends from the Storm-bergen and the K wathlamba lighlands, has acquired considerable political importance first as the old limit of the Hottentot domain, and afterwards as for a long time marking the boundary of the British possessions in this direction. Beyond it begins the territory of the Transkei Kafirs (Galecus and others), who were formerly independent of the colonial government. The Kei is a very rapid stream, rushing over magnificent waterfalls and winding through many romantic gorges. But of all the rivers watering the Kafir domain the most picturesque is the St. John, that is, the Um-Zimvulu of the natives. At its mouth it is a broad stream 2,000 feet wide from bank to bank; but the channel gradually narrows and becomes hemmed in between steep wooded escarpments dominated by the vertical cliffs of a terrace, which is itself surmounted by other rocky walls terminating in a flat tabular surface. This section of the stream, where both banks rival each other in size and romantic beauty, has received from the English settlers the name of the "Gate" of the St. John. Notwithstanding its great width the entrance is rendered inaccessible to large vessels by a bar, which, however, is easily crossed with the flood tide by smaller craft. For these the river is navigable from its mouth for about twelve miles to the point where the first rapids obstruct all further approach.

## Thr Rivers of Natal and Zuluiand.

The colony of Natal is intersected by several parallel channels, each flooded by a copious stream with its wild gorges, falls, and rapids. The Um-Zimkulu, UmKomanzi, Um-Lazi, Um-Geni, and other Ums, or "watercourses," follow successively as far as the great Tugela river, whose main brauch risos, like the Vaal and the Caledon, on the Potong uplands, and which flows thence to the Indian Ocean betwern Naral and the Zulu territory. Beyond this point the relief of the seaboard and with it the salient features of the running waters become modified. Their banks are no longer rocky, the hills recede more inland, leaving between them and the sea a broad level zone, over which the rivers wind mainly in a northerly or north-easterly course. For a space of about 180 miles in a bee line the coast maintains the character of a sandy beach covered with dunes and enclosing extensive lagoons and backwaters. The largest of these lagnons, which were. formerly marine inlets, but which are now separated from the sea by narrow strips of sand, is the so-called Lake St. Lucia, a sheet of shallow water nearly 60 miles long with a mean breadth of 12 miles. It occupies the southern part of the low-lying coastlands, which terminate northwards in a number of channels and smaller lagoons communicating with the spacious inlet of Lourenço Marques or Delagoa Bay. This section of the seaboard is clearly limited southwards by the narrow passages giving access to Lake St. Lucia, northwards by the arm of the sea which penetrates into Delagoa Bay.

At its issue the southern basin of St. Lucia is obstructed by a bar infested by voracious sharks, which often greedily swallow the sounding lines and snap at the boathooks of passing craft. In 1875, when these waters were surveyed by the

Nassau, the channel was completely closed by a tongue of sand, and even during the floods the dangerous extrance offers a very precarious refuge to vessels frequenting this coast. Nevertheless such as it is this haven would have been a

voluable acquisition for the Dutch republics, which have hitherto been cut off from all communication with the sea. Hence the eagerness is easily explained with which the Boers of the Transvaal have so far unsuccessfully endeavoured to secure against the opposition of England an outlet at this point of the seaboard.

## Delagoa Bay.

Far more important in every respect is the northern inlet of Delagoa Bay, which, opening northwards, presents good anchorage in over 60 feet of water, easily accessible to the largest vessels through a well-sheltered passage running some distanco inland. Hence the British Government for some time disputed the possession of this valuable harbour of refuge with the Portuguese, who relied on their long-established claims to its exclusive ownership. England asserted her right especially to oceupy the island of Inyak, which furms a northern extension of the peninsula of like name at the entrance of the bay. Nevertheless the President of the French Republic, to whom the question had been referred for arbitration in the year 1875, decided in favour of Portugal, assigning to her the free disposition of all the lands eneireling the bay, which cannot fuil to become the commercial outlet for the produce of all the inland states.

Between the St. Lucia and Delagoa inlets, the form of the sandy eoast as well as that of the lagoons disposed in the same direction, together with the course of all the rivers which here trend northwards, all seems to point at the uction of a marine current steadily setting in the direction from south to rorth along this seaboard. Such a current would be opposed to that flowing southwards from Mozambique, while its action on the sandy coust would be much promoted by the heavy seas rolling in from the Indian Ocean under the influence of the south-east trade-winds. In this way may have been formed the outer coast-line formed by a long succession of sandy tongues, all skirting the east side of the shallow coust liggoons and running parallel with the true eontinental shoreline.

North of Delagoa Bay the altered conditions must give rise to the opposite phenomenon. Here the marine current sets southwards, while the Manissa River, instead of flowing in a straight line seawards, is defleeted along its lower course in a line parallel with the coast itself. It thus flows for a considerable distance towards the south before mingling its waters with those of the bay.

Several other rivers converge towards the same basin. From the south comes the Maputa, which is formed by numerous watereourses which have their rise in the interior of the Zulu and Swazi territories. From the west descend the Tembi ${ }^{\text {. }}$ and Um-Bolozi, raching the estuary in a united stream at the point where is situated the town of Lourenço Marques. Lastly from the north comes the copious current of the already mentioned Manissa. Thanks to the high tides and the natural depth of their channels, all these affluents of the bay are accessible to shipping for some distance inland. The Manissa, that is, the King George River of the English settlers, was ascended for 130 miles from its mouth by Hilliard, who nowhere found it less than $3 f$ feet deep. Hence this watercourse would afford easy access to the auiferous regions of the interior, but for the marshy tracts, which occur at many points along its course, and which render the climate extremely malarious. The Manise! was long supposed to be the lower course of the Limpopo, which rises towards the west of the Transvaal republic. But its

basin, which has now been thoroughly explored, is known to receive all its waters from the castern or maritime slope of the coust ranges.

## The Limpopo.

The Limpopo, or Crocodile, which is the Oira of the old Portuguese maps, and which is known by many other names, such as Inha-Mpura at its mouth, and Moti, Uri, Bembe, Lenape, Lebempé along different parts of its course, is one of the great rivers of Austral Africa, at least for its length and the extent of its basin, if not for the volume of its waters. Its further headstreams have their source on the plateau where the Boers have founded Pretoria, capital of the South African republic, some 320 miles from the Indian Ocean, but at least three times that distance following all the windings of the fluvial valloy. At first it takes a north-westerly direction, as if to fall into the depression, the bed of which is occupied by Lake Ngami and other saline reservoirs. But after piercing the barrior of the Magalies range and forcing its way through several other rocky gorges, it trends round to tie north-east and then to the east, descending the inclined plane of the elevated South African plateau. From this tableland it escapes through a series of deep ravines, overcoming the last granite barrier of the Zoutpansbergen by the superb Tolo Azimé Falls, and at last emerging on the open lowlands through a number of narrow rocky gorges. Here it sweeps round to the south-east and then to the south as far as its junction with its chief tributary, the Olifant ("Elephant") River. Beyond the confluence it is joined by another fluvial valley, a long but mostly waterless wady, which ramifies northwards through the Portuguese territory.

Notwithstanding the number and length of its affluents, the Limpopo is not a copious river. It loses a part of its waters in the swampy tracts skirting both sides of its lower course, and reaches the Indian Ocean through a mouth about 1.000 feet-wide, which is obstructed by sandbanks for a long way off the coast. Nevertheless Captain Chaddock was able to ascend it in a steamer for 100 miles from the estuary. Penetrating through the southern channel, this explorer succeeded in crossing the bar against a current running at the rate of nearly 5 miles an hour. The channel was found to be very narrow, but correspondingly deep, in some places no less than 24 or 26 feet. The river also continued to be generally narrow and deep, flowing through a low-lying level country, to within a few miles of Manjoba's kraal, which was the farthest point reached. Here it became hilly and well wooded, and was reported to retain the same character far inland. The trip was made in April, 1884, with the Maud, which appears to be the first vessel of any sort that had entered and navigated the Limpopo.

## Climate of South Africa.

Iying almost entirely within the south temperate zonc, the basins of the Orange and of the other rivers traversing Cape Colony, Natal, and the Dutch
republics have a climate presenting the same contrasts with the returning soasons as that of West Europe, but in the reverse order, the winter of the Cape answering to the summer of the northern hemisphere. Although the Austral African seaboard corresponds in latitude almost exactly with Mauritania, Cyprus, and Syria, it has a much lower average temperature, which is identical with that of European towns lying some hundred miles farther from the equator. In the general distribution of climates the advantage lies with the northern regions, which receive a larger amount of heat, thanks to the unequal distribution of land and water, which causes the warmer aërial and marine currents to set rather in the direction of the northern than of the southern tropical zone.

Fig. 31.-Aoulitar Bank.
Scale 1: 7,000,000.


Another circumstance tends to cool the extremity of Austral Africa compared with the Mediterranean regions under corresponding latitudes. A large section of its seaboard is turned towards the cold Antarctic Ocean, from which numerous icebergs and much drift ice often float with the marine currents in the direction of the Cape.*,

But these marine currents which skirt the South African coasts are by no means of uniform character, and present on either side of the Cape a most

* Comparative mean temperatures of eorresponding latitudes in the northern and southern hemi-spheres:-Cape Town ( $35^{\circ} 56^{\circ}$ S. lat.), $61^{\circ} \mathrm{F}$.; Beyrut ( $33^{\circ} 53^{\prime} \mathrm{N} . \operatorname{lat}$. ), $69^{\circ} \mathrm{F}$.; Durban ( $29^{\circ} 50^{\circ} \mathrm{S}$ lat.), $68^{\circ} \mathrm{F}$.; Cairo ( $30^{\circ} \mathrm{N}$. lat.), $71^{\circ} \mathrm{F}$. Equal temperatures nuder different latitudes in both hemispheres:Cape Town ( $35^{\circ} 56^{\prime}$ S. lat.), $61^{\circ}$ F. ; Cunstuntinuple ( $41^{\circ}$ N. lat.), $00^{\circ} 3^{\prime}$ F. ; Durban ( $20^{\circ} 50^{\circ}$ S. hat.), $68^{\circ}$ F.; Tunis ( $30^{\circ} 48^{\prime}$ N. lat.), $67^{\circ} 9^{\prime} \mathrm{F}$.
remarkable contrast in their respective temperatures. The Antarctic polar current setting from the south passes west of Cupetown, and after entering the Atlantic, continues to skirt the west coast beyond the Congo und Ogoway estuarics. On the opposite side the Mozambique current, coming from the Indian Ocean, flows by the shores of Natal and Kafirland, penetrates into the southern inlets of Cape Colony, and at last rounds the extreme continental hoadlands, whence its local name of the Agulhas Current. 1 summer, when the cold Antarctic stream is directed by the regular south winds more swiftly towards the north, its temperature is found to be from $50^{\circ}$ to $52^{\circ} \mathrm{F}$. But in False Bay, immediately east of the Cape, the water brought by the current from the Indian Ocean is often as high as $66^{\circ}$, rising in the neighbourhood of Cape Agulhas even to $78^{\circ}$ or $80^{\circ} \mathrm{F}$. In consequence of this great contrast in the character of the neighbouring marine waters, Capetown and Simon's Town, although separated only by a narrow intervening promontory, have different climates. The latter lies nearer to the South Polo, but nevertheless enjoys a warmer atmosphere by at ieast three degrees.

The regular winds which prevail on the South African seaboard succeed each other in such a way as to diminish the contrasts between the seasons. Hence the average yearly variations from winter to summer are far less intense in Capo Colony than in the regions possessing a corresponding climate in the northern hemisphere. The cold south-east trade winds prevail chiefly in summer, thereby tempering its excessive heats. The returning breezes-that is to say, the northwesterly aërial currents-set in, on the contrary, during the winter months, when the whole system of trade winds has been attracted northwards in the wake of the sun. All these normal currents, however, are frequently deflected towards the tablelands of the interior by the continental centres of heat. Thus on the eastern seaboard the trade wind veers at times quite round to the west, whereas in the north it sets southwards and in the Atlantic takes an easterly direction. In the hot season, when the winds blow from the north after traversing the desert inland plateaux, the atmosphere seems like the blast of a fiery furnace, and at such times the heat is most oppressive, especially in the upland regions farthest removed from the moderating influence of the surrounding cceanic waters. In general as we advance from the coast towards the interior, the elimate acquires a more continental or extreme character, becoming not only colder in winter, which might be explained by the greater altitude of the land, but also much warmer in summer.

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Simon's Town | South Latitude. $34^{\circ} 12^{\prime}$ | Al'Itude. 50 feet | Mean Temperature. $63^{\circ} \mathrm{F}$ | Mean Extremes. <br> $92^{\circ}$ and $43^{\circ}$ |
| Capetown | $33^{\circ} 56^{\prime}$ | 40 | $62^{\circ}$ | $91^{\circ}$, $39^{\circ} 8$ |
| Port Elizabeth | 33' $57{ }^{\prime}$ | 240 | $62^{\circ} 8$ | $95^{\circ}$ " $42^{\circ} \cdot 8$ |
| Graham's Town | $33^{\circ} 20^{\circ}$ | 1,800 ", | $82^{\circ} \cdot 4$ | $102^{\circ}$, $34^{\circ}$ |
| Graf Reinet | $32^{\circ} 16^{\prime}$ | 2,550 | $64^{\circ} \cdot 4$ | $102^{\circ} \cdot{ }^{\circ},{ }^{33^{\circ}}$ |
| Bloemfontein | $28^{\circ} 56^{\prime}$ | 4,550 | $61^{\circ} 8$ | $93^{\circ} \cdot 6,{ }^{4} 1^{\circ}$ |
| Du Toit's Pan | $28^{\circ} 45^{\prime}$ | 4,000 | $86^{\circ} \cdot 6$ | $104^{\circ}$, $40^{\circ} 5$ |
| Pretoria | $25^{\circ} 45^{\circ}$ | 4,300 ", | $66^{\circ} 8$ | $95^{\circ} \cdot 4,{ }^{\text {, }} 32^{\circ} \cdot 5$ |
| Port Durban | $29^{\circ} 50^{\circ}$ | 250 " | $67^{\circ}$ |  |
| Pieter Maritzbury | $29^{\circ} 30^{\prime}$ | 2,100 ", | $62^{\circ} \mathrm{7}$ | $95^{\circ}$, $32^{\circ} \cdot 4$ |

Except at some points of the const, such as Simon's Town and Pieter Maritzburg, the atmosphere is less humid than in West Europe, being extremely dry, especially on the plateaux. Table Mountain frequently presents in summer a romarkable phenomenon, which is due to the greater drynoss of the lower aërial strata. The south-east winds, which strike against the huge sandstone block, rise above its south-enstern slopes, and the moisture becoming condensed in the cold atmosphere of the summit, spread out in a denso whitish eloud over the plateau. This "tableeloth," as it is locally ealled, does not terminate abruptly at the brink of the precipice, but rolls over down towards the city spread out at its foot. Magnificent caseades of sun-lit mist descend some two or three hundred yards, thoating like folds of delieate drapery on the breeze, and gradually dissolving in the lower atmospherie regions. Here all the moisture brought by the trade winds becomes absorbed, and execpt on the cloud-capped summit of the mountuin, the wholo country remains buthed in sunshine under the bright azure sky. In winter, when the north-west

Fig. 32.-Isothermats of South Aprion.

winds prevail, the phenomenon is reversed, and then the billowy mists roll down from the plateau on the opposite side towards Simon's Town.

The rainfall is very unequally distributed on the seaboard and in the interior of South Africa; but on the whole the actual quantity of moisture precipitated is relatively slight, and certainly far less than that of West Europe. Copious rains occur only in a small number of privileged localities, such as the slopes of Table Mountain, where the relief of the land compels the elouds to diseharge their contents more freely. Hence in these southern latitudes the year is not divided, as in the equatorial zone, into two well-marked seasons, one rainy, the other completely dry. On the contrary, showers occur everywhere, even on the inland plateaux, tinroughout the wholo year, although usnally distributed with a certain regularity from month to month. On the Atlantic side moisture is brought by the returning winds, and consequently abounds mostly in winter from May to August, and especially in the month of July. On the rest of the seaboard between False Bay and

Zululand the humidity is due mainly to the senth ast wids, and us these provail in summer, here the rainfall is heaviest between the month \& December and February. Most of the moisture being supplied) the Iudia (cean, the inland plateunx, the Karroo, and the Dutch republics also receive theil artimest av rains in the sume season, during the prevalonce of the easterly trade witrds. ${ }^{\text {o }}$

On the Natal const the fierce gales are occasionally accompanied b "marine rains," which are almost entirely confined to the neighbourhood the sea, whereas the ordiuary rains are for the most part torrential downpours, oecturing on the slopes of the mountains. The regions which receive the least quantity of moisture are the plain of the Great Karroo, the basin of the Lower Orange, and the Kalahari Desert. Here the rains are irregular, but when they do fall they burst like a sudden deluge over the plains. In this Dorst-veld, or "Thirsty land," vast stretches are covered with sands, which are disposed in dunes rolling away beyond the horizon like the ocean waves, and often clothed in vegetation. Springs are rare, in some districts occurring ouly at long intervals of fifty or sixty miles; but the Bushmen understand how best to utilize tho moist bottom lands in order to procure sufficient water for themselves and their cuttle. They bore holes to $a$ depth of about threo feet and let down a reed with a sponge attached to its lower end, and in this way are able to suck up enough to fill their calabashes. The wants are thus supplied of the animuls, which in the Kalahari are accustomed through necessity to drink little, and which are watored by the Beehuana herdsmen only every two or three days. The gouts pass months together without queuching their thirst, and certain species of South African antelopes are said never to seek the springs. $\dagger$

The remark has often been made that Austral Africa is passing through a process of desiceation. Mosi travellers are of accord in stating that the territory of the Bechuazas and neighbouring tribes between the Orange and Lake Ngami has already lost its regular streams, and that tillage has consequently had to withdraw more and more towards the mountains. $\ddagger$ Nor can there be any doubt that during the present geological epoch the quantity of moisture has gradually diminished throughout the region of South Africa, as abundantly attested by the ancient lakes transformed to salines, by the river-beds changed to dry barren ravines. "The land is dead! He on high has killed the land!" frequently exclai the Bechuanas.

At the same time the observations made in these regions by the resident

- Distribution of rainfall in South Africa :-

$\dagger$ Mackenzie, Ten Years North of the Orange River.
$\ddagger$ Livingstone, Last Journal; Anderson, Lake Ngami; Chapman, Tracels; James Fox Wilson, Journal of the Royal Geographical Society, 1865.

miesionaries and by passing travellers are not sufficiently acciarate, nor do they cover enough ground to decide the question whether during the present century there hus been really a falling off in the supply of moisture in South Africa, or whether the distribution of the rainfull has merely become more irregular, wo that long periods of drought and of rains alternate with more or less regular recurrence. The latter would seem to be the more probuble viow of the ense. The destruction of the forests which hus taken place in all the districts where colonists have settled, us well as the c athgrations which have been kindled by the cattle grazers, must have had the result of rendering the running waters much more irregulur in their flow, and even changing many of them into more sprui/s, or wadys. The tranquil

Fig. 33.-Ralnfall of Souti Aprioa.
Scale $1: 22,500,000$.

streams winding along well-defined channels have been lurgely replaced by the "wild waters" rushing suddenly in impetuous freshets down to the plains, and as suddenly leaving the fluvial beds again dry or swampy. The ground, s,wept of its grassy carpet and hardened by the sun, no longer absorbs the rain waters, which pass rapidly away without being of much avail for irrigation purposes. But during the half-century since regular observations have been taken at the Cape and at a few other meteorological stations in Austral Africa, no facts have been recorded at all pointing to any actual diminution of the rainfall, at least throughout the coastlands. On the contrary, many farmsieads formerly suffered from an insufficient supply on the upland plateaux, where at present, thanks to a careful
husbanding of the resourees, whole towns find ut all times a superabundant quantity of good water.

Cape Colony und the conterminous lunds are one of the most salubrious regions on the globe, not only for the natives, but ulso for immigrants from Europe. Hence neelimatisution is effected without any difficulty, and often even with beneficial results. Even in the inland districts, where the summer heats are at times uhmost oppresive, Europeans are able to work between sunrise and sunst as in their mative land. Fpidemics seldom prevail, nor huve they ever been an virulent us in Europe or many parts of the United States. The Cupe has s.ever yet been visited either ly cholera or yellow fever ; affections of the chest are also very rare, and the most ordinury complaints appear to be rheumatism and neuralgia.

Before the opening of the Suez Canal, most of the functionuries und officers returning from India broke their journoy at the Cape, where they spent some time to recover their health; now, however, the easy and much shorter nverland route enables then to proceed straight to England. The fow invalids who at present seek in the climate of Austral Africa a remedy, or at least a temporary reliof, from thoir muludies, come directly from Great Britain, und take up their residence chiefly in Capetown, Graham's Tows, and Bloemfontein. But while the pure atmosphere of these regions is efficacious for some ailments, its virtue is even more couspicnously felt by the whole race, which here acquires greater vigour and physical beauty. Both in the British colonics and the Duteh republics, European families thrive well, so that even without any fresh stream of immigration, the white population would increase by the natural excess of births over the death-rato. The vital statistics show that in not a few rural districts the birth-rate is three times higher than the mortality, a proportion unknown in the most favoured European lands.

## Flora of South Africa.

The flora which has been developed under the favourable climatic conditions of Austral Africa, is one of the richest in the world. It would almost seem as if all the vegetable forms adapted for the temperate zone, right round the southern bemisphere, had been concentrated and crowded together by the continuous tapering of the African continent towards its southern extremity.

According to Armitage, the region of the Cape comprises at least about twelve thousand species, that is to say, two or three times more than all the combined vegetable zones of Europe. On a single mountain in the neighbourhood of Paarl, to the north-east of Capetown, Drège counted in spring no less than seven hundred flowering vascular plants, so distributed over the slopes that each vertical space of about 1,000 feet constituted a perfectly distinct vegetable area.

The typical species present a marked gencral resemblance to those of Australia; but although the latter continent is five times more extensive, penetrating northwards far into the torrid zone, its whole floral world is scarcely more di ersified than that of the relatively contracted region of South Africa. Of
the immenss vaciety of forms here concentrated, the endemic genera altogether peculiar to the floral domain of the Cape number very nearly four hundred and fifty.

The botanical region which begins with the plains of Clanwilliam and Olifant on the Atlantic seaboard, and which embraces the extreme south-west continental coast ranges, constitutes an area of a very limited extent. distinguished, liko the Mediterranean region, by its thickets of shrubs and lesser growths. Nearly everywhere it presents numerous woody plants from four to eight feet high, with a dull green or bluish foliage. These are the so-called boschjes or boschjesvelds of the Dutch settlers, the bush country of the English, inhabited chiefly by scattered wild tribes thence known as Bushmen. Although during the early period of colonisation these thick-set tracts presented great obstacles to free intercommunication, the immigrants always found it possible to clear the route for their long teams of oxen, whereas they would have been unable to traverso true forests except on foot or on horseback.

Large forest vegetation is rare in the Cape region, where it is confined chiefly to the southern slopes of highlands which skirt the seaboard between Mossel and St. Francis Bays. Most indigenous trees seek shelter in the gorges, and even here rarely exceed twenty-eight or thirty feet in height. Sub-tropical forms are here still represented on the shores of the Southern Ocean by a dwarf date, some cycadew and aloes. On the Cedar Mountains, in the south-western part of the country, there formerly flourished some species of so-called "cedars" with a girth of over thirty feet at the base.* One of the most characteristic forms in the Cape zone is the silver tree (Leucadendron argenteum), which owes its name to the silvery metallio lustre of its stem, boughs, and foliage. These plants, with their finely chased ramifying branches, when glittering in the bright sunshine, look almost like the work of some skilful silversmith, like those jewelled trees placed by the great Moghuls in their imperiul gardens.

The heaths, of which over four hundred species are found in the South African bush, predominate amongst the woody plants. With the rhenoster, or rhino-ceros-wood (Elytropappus rhinocerotis), a plant from one to two feet high and in appearance somewhat resembling the heather, they form the most characteristic feature in the local flora. During the flowering season the mountains clothed with heath often present, from base to summit, one uniform mass of pink bloom. Plants of the iris, geraniam, and pelargonium groups are also very common in the Cape region; whereas the rubiaceæ, an order represented in other parts of the world by such a large number of species, constitute in Austral Africa less than a hundredth part of the indigenous flora.

The beds of the rivers and watercourses are ofien choked with reeds and flags (Acorus palm;ios or prionium), plants with deep roots and close-packed stems, whose tufted terminal foliage spreads out on the surface so as completely to conceal the water, even to travellers fording the stream. Thus sheltered from the solar rays,

[^6]the current loses little by evaporation, and often holds out till the middle of summer. The water is also frequently dammed up and thus retained in its bed for several weeks and even months together by the thousand little barriers formed by the dense masses of sedge growing at certain points along the banks of the stream. The discharge is thus regulated by the aquatic vegetation so effectually that these river valleys are entirely free from the sudden freshets, which in a few hours often convert the wild mountain torreuts of Abyssinia into liquid avalanches.

Although flourishing in a temperate climate corresponding to that of West Europe, the flora of the Cape presents a remarkable contrast to the analogous forms of the northern hemisphere. Its period of repose coincides, not with the cold but with the hot season, so that the expression "to hibernate" is here quite inapplicable. The deciduous plants lose their foliage in the dry period extending from March to May, but when rain begins to fall the temperature is still sufficiently high, even during the cold season, for the vegetation to revive, put forth its leaves and blossom.

Even the plants introduced from other countrics have acquired the same habits. According to M. Bolus, they comprise altogether about one hundred and sixty species, and are mostly of European origin, but also include some from America and India. These exotics are seldom met at any great distance from the highways and European settlements. In the interior they are scarcely ever seen, and on the whole they cannot be said to have hitherto exercised any marked influence on the South African vegetable world. The indigenous species have so far successfully resisted the foreign intruders, and, if left to themselves, would probably in course of time recover all their lost ground.

Two plants alone of the northern latitudes have found in Austral Africa a perfectly congenial climate and suitable soil. These are the Barbary fig, which is spreading over the less fertile tracts, and the Pinus pinea, which is gradually encroaching on many rocky slopes. The species introduced into the Cape from Europe are nearly all ornamental plants; they are reckoned by the hundred, and they form the pride of the conservatcries adapted for the cultivation of specimens belonging to the temperate zones of the earth. Many of the towns in the southwestern districts are already encircled by fine avenues of oak-trees. At the end of the last and beginning of the present century the indigenous species were held most in favour, and fashion had enthroned them the queens of every garden. As early as the middle of the seventeenth century, that is, before the country was colonised, passing seafarers had alreudy brought specimens ftom the Cupe of Good Hope to the Dutch florists.

In the direction of Algoa Bay the character of the regetation becomes gradually modified along the seaboard districts. Here the varieties peeuliar to the Cape disappear and become replaced by those belonging to the East African coastlands. Only a few ferns still straggle on, and the geraniums almost cease to be represented, for here begins the maritime zone of the Indian Ocean, where the climate is at once warmer and more humid than on the shores of the Atlantic. A few tropical

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groups, such as that of the cyperacere, are seen as far inland as the slopes of the hills in the basins of the Great Kei and Great Fish Rivers, and the country becomes more and more verdant as we follow the coastline in the north east direction towards Kafirland and Natal. The trees increase in size and the spread of their branches, while most of them assume a greater wealth of foliage and more brilliant blossom. In Natal no season of the year is destitute of plants in flower. The thickets of leafy trees are here and there interspersed with two species of palm, the Phouis reclinata, and anothtr whose roots ure as polished as vegetuble ivory. Here also the superb Zamia cycadifoliu raises its gracefully curved fronds resembling the plumage of an ostrich. Althuugh still lying far to the south of the tropical line, the flora of this region is no longer that of the temperate zone.

Beyond the coast ranges, where begin the arid plateaux rurely watered by the life-giving rains, the aspect of the vegetable world suddenly changes. Here we enter the botanic region of the Karroos, which is sharply limited towards the south and south-east, but less clearly defined on the west and north-west in the direction of the Namaqua plateau, and on the north towards the deserts traversed by the Orange River. The zone of the Karroos is destitute of trees, and even of shrubs, with the exception of the dornboom or "thorn-tree" of the Dutch settlers, a species of acacia (Acacia horrida) which fringes the banks of the wadys. Neither the heaths nor many other families eharacteristic of the Cape flora have penetrated into the Karroos, where leguminous plants are also extromely rare. But the Barbary fig, after overrunning the pluius of the Cape, is now encroaching on the northern upland plateaux, notwithstanding the efforts to extirpate it round about the furmsteads.

This arid region abounds especially in thorny species, to all of which might well be applicd the term "wait-a-bit," given to one variety of acacia (Acacia detenens), because the unguarded wayfarer often finds himself suddenly arrested by its sharp spines. About one-third of the whole flora comprises such plants belonging to the Cape region as have succeeded in adapting themselves to the dry elimate of the Karroo by means of their succulent roots, stems, and foliage. The plains and the heights dominating them are usually of a uniform grey colour, but after the rains Nature suddenly assumes a festive garb. The stunted plants burst into blossom in all directions, and the ground becomes draped in an endlessly diversified mantle of yellow, blue, and purple bloom. But this bright array is of short duration, and the vegetation soon resumes its sombre ashy aspect. Here are numerous monocotyledonous species, which never blossom for years together, lacking the favouruble conditions of light, moisture, and heat needed to stimulate their forescence.

North of the highlands which border the Karroo, and whieh are remarkably rich in compound species, stretches the zone of steppes and deserts, to which is generally applied the term Kulahari, although it really begins south of the Orange River below the region so named. In its more fertile districts, the Kalahari presents the aspect of a savannah of tall grasses growing in isolated tufts and interspersed with a few stunted shrubs. In the northern districts it is occupied by open forests
hyona, jackal, and wild dog still linger amid the haunts of men, prowling about the farmsteads and shcepfolds of the less settled districts. The squatters apply the general name of "wolf" to all these predatory beasts. 'The domestic wateh-dogs are said to be fully conscious of their blood relationship with the wild species, avoiaing or fearing to attack them even when urged and encouraged to the combat. A few leopards, although continually stalked by the hunters, still have their lairs here and there in the dense thickets of the ravines. Thoy are found even in the neighbourhood of Capetown, and are the most dreaded of all rapacious bcasts in Austral Africa, being feared even more than the lion.

This feline was formerly so numerous in the vicinity of the Cape, that, according to the statements of the old chroniclers, the early Dutch settlers constantly expected them to combine for a night attack on the fort itself. Now they have disappeared altogether from the settled districts, but they are still met by explorers on the upland plains of the Bushman country south of the Orange River. But here the lion is no longer a "king of the wilderness," striking terror into the hearts of men and animals by his voice of thunder. Having become more timid and more wary, he seeks rather to fall unawares on his victims than to alarm them by his mighty roar. Sportsmen are unanimous in asserting that, in the neighbourhood of the highways and human habitations, the lion has beeome a mute animal.

While this beast of prey has withdrawn to the verge of the desert, the elephant and buffalo, who have left in the geographical names of the colony so many proofs of their former range, have found a last refuge on the coastlands in the dense Knysna woodlands skirting Plottenburg Bay, and in a few thickets near the Sneeuw-bergen. In these retreats they are protected by the game laws. In the island of Ceylon, where the elephant tinds an abundance of food and water, a very small number only are provided with tusks; but in Austral Africa all possess these organs, which they employ to clear away the dry sands of the river beds down to the underground reservoirs, and to slice from the stems of acacias and other trees strips of bark which they slowly masticate.*

South of the Orange River not a single member is now to be found of the rhinoceros family, of which there formerly existed, and possibly still survive, as many as four distinct species in Austral Africa. The hippopotamus has succeeded. better in escaping from the attacks of man, and some of these amphibians are still met in the waters of the Lower Orange, as well as in the rivers of Kafirland and Zululand, here in association with the crocodile. Down to the middle of the present century a few still frequented the Great Fish River.

The giraffe, the zebra, quagga, buffalo, gnu, and most of the twenty-seven species of antelopes which formerly inhabited the now settled districts of Austral Africa, have retired farther north to the regions of the Kalahari Desert, to Namaqualand and Transvaal. The graceful kama (dorcas), most beautiful of all antelopes, the kudu (dtrepsiccros), the black antelope, and most of their congeners,

[^7]bave all retreated beyond the Orange. But the ostrich is still found in the wild state in a few remote districts of the colony and in the Kalahari. According to Anderson, there exist two distinct species of this bird in South Africu, both differing from the Mauritanian variety.

Amongst the other characteristic birds of the Cape region speeially noteworthy are the republican or philhetaros, whose colonies build enormous nests protected sy a sort of roof, and the secretary (Serpentarius reptilioorus), which seizes snakes and kills them with blows of the wing, or else bears them aloft and breaks their vertebre by dropping them from great heights on the hard ground. It is forbidden to kill or hunt this useful bird.

The reptile world is represented by numerous species, amongst which are several venomous serpents and snakes, such as the cobra, the gartor snake, and the much dreaded puff-adder, which fortunately for the wayfarer is of somewhat sluggish moition. The inlets along the seaboard are also infested by several species of electric fishes, and by others rendered dangerous by their venomous darts or poisonous flesh.

## Inhabitants of South Aprica.

More than half of the native inhabitants of Austral Africa, south of the Cunene and Zambese rivers, belong to the widespread Bantu family. It may be said in a general way that a line drawn from Algoa Bay in the extreme south northwards to the latitude of Lake Ngami will form the western limit of the Bantu peoples, separating them from the Bushmen and Hottentot domain stretching thence to the Atlantic. The eastern slopes of the mountains, the valleys of the Upper Orange, the colony of Natal, and the whole of the Limpopo basin, form part of this vast ethnical region of the Bantus, that is "Men" in a pre-eminent sense, a region which further comprises the whole of the south torrid zone, and even extends beyond the equator as far as the Kameroon highlands. Like the vegetable species of the equatorial regions, which have gradually invaded the seaboard, attracted, so to say, by the warm marine currents carrying their seeds from shore to shore; like the northern animals, which have spread along the coast of the Indian Ocean to the southern extremity of the continent; the victorious Bantu tribes, also from the north, have in the same way carried their conquering arms from river hasin to river basin, at last reaching the shores of the Southern Ocean, whieh stretches away to the everlasting snows and ice of the Antarctic waters.
: The Bantus of the British and Dutch possessions are roughly designated by the general name of Kafirs, extended to them by the Portuguese at the time of the discovery. But the word itself is of Arabic origin, meaning "unbeliever," and is in this sense freely applied by the followers of the Prophet to all heathen or non-Mohammedan populations, and especially to such as have formally rejected the teachings of the Koran. Hence there are Kafirs in Asia-the Siah-Posh of Kafiristan-as well as in Africa. But in the latter continent this generic tern has
gradually acquired a more restricted sense, being now mainly limited to the Bantus of Austral Africa, and more pariicularly to the various native tribes occupying the region between Cupe Colony and Natal. These tribes are themselves closely related to those settled farther north in the Tugela basin and thence to the confines of the Portuguese possessions, who, since the beginning of the present century, have been better known by the collective name of /ulus.

West of the Zulu-Kafirs dwell tho kindred Basutos (Ba-Suto), on the hilly plateau where rise the Orange and Caledon Rivers. Still farther west and beyond the Vaal stretches the territory of the Bechuanas (Be-Chuana), while the Ba-Kalahari nomads roam over the forests, steppes, and sandy wastes of the wilderness from which they have taken their name. Other less extensive tribal groups, but which also require to be studied apart, inhabit the various states or provinces of the eastern territory. All these peoples differ considerably in their customs, political systems, and degrees of culture; but all are connected by their various idioms belonging to the common Bantu linguistic stock, so hurmonious and in structure so strictly logical and consistent, that young and old alike speak it with unerring accuracy.

## The Bushmen.

The western section of Cape Colony, as far east as Algoa Bay, belonged originally to the San race, the few fragmentary surviving remnants of which are known to Europeans by the collective name of Bosjesmannen or Bushmer (in the Boer patois, Boesmans). But the word has acquired rather the meaning of inferior beings, half human in form, but of bestial nature; and it is notewcrthy that in the Basuto language the word Bashiman has the sense of " uncircumcised, vile, or abject." " It is applied in a general way not only to the Bushmen proper, but also to all vagabond peoples, fugitives or marauders, whether of San, Hottentot, or even Kafir origin.

The true Sans, who however have no common ethnical designation, nor even any consciousness of their racial unity, are a people of small and even dwarfish stature, but with a relatively, light yellowish brown complexion, at least in the southern parts of their domain. They bear a general resemblance to all the other "pygmies" of Central Africa, such as the Akkas, Ba-Twas, A-Kwas, and A-Bongos, dispersed in scattered or broken tribes amongst the surrounding Negro and Bantu populations as far north as the Nile basin. According to many anthropologists, these fragmentary groups are the lineal descendants of the first inhabitants of the continent, who have been gradually exterminated, or driven to the forests, deserts, and mountain gorges by later intruders, the ancestors of the present dominant populations. It is, however, to be noted that these primitive dwarfish peoples, often collectively grouped as Ncgrillos, or Negritos, present far greater physical differences among themselves than is commonly supposed. Thus


Professor Flower has shown that the Akkas have an anutemical constitution diverging greatly from that of the Bushmen, with whom they are usuully grouped as belonging to a common physical type.*

Anyhow, the invading races recognise the claims of the Sans to priority in point of time. On the rare occusions that they condescend to join with them in the chase, they always yield to them a larger share of the cuptured game than that awarded to their own chiefs, paying this act of homage to the original owners of the land. The Bushmen have even been regarded as the survivors of some race altogether anterior to the present human inhabitants of the earth. But however this be, most authors who huve spoken of the Sans have certainly allowed their judgment to be somewhat warped by racial and social prcjudiecs, describing these persecuted children of the soil as beings far more removed from ordinary humanity than is really the case. Some of their most deadly enemies, such as the Dutch Boers, have even gone the length of denying them the possession of articulate speech.

The measurements taken by some anthropologists are not yet sufficiently numerous to enable us to determine the average stature of the Bushmen. In any case, the individuals examined have nearly all come from the south-western districts, that is to say, the region where the foreign settlers are most numerous, and where these aborigines consequently lead the most wretched existence, often treated as wild beasts and stalked or hounded down like lawful game. The question therefore arises, whether in this region their manner of life, exposure to the inclemency of the weather, lack of sufficient nutriment, and oppression may not have had the effect of somewhat reducing the normal stature of the Sans. In the Kalahari Desert, on the borders of the Bechuana territory, near Lake Ngami and surrounding saline basins, in the Zambese valley; lastly, on the plateaux of the Namaquas and Hereros, where many Bushman tribes, here called Ba-Rous, live in the same social conditions as those of other races, observers have not noticed such a great disparity in stature as farther south. In some districts these Ba -Roas are even taller as well as superior in strength and activity to the neighbouring peoples. The finest men seen anywhere in South Africa by the missionary Mackenzie were the Ma-Denassanas, who live east of Lake Ngami. These natives, however, who are described as Bushmen in their features, language, manners, and customs, would seem according to Holub really to be Bechuanas crossed with Negroes from beyond the Zambese.

But however this be, the stunted growth of the southern Bushmen may still to some extent be explained by the life of hardships and misery which they have voluntarily accepted in order to remain freemen. Those who were able to combine a relative degree of comfort with personal independence, as well as those who were fain to become serfs in the Kafir or Hottentot communities, enjoyed a fair share of nourishment, and their descendants have consequently preserved the normal preportions. The Namaquas are regarded by Galton as degraded Bush-

[^8]men; yet they are the tallest of all the nations classed as Hottentots. At the sams time the southern Bushmen, some wretched representatives of whom are still met south of the Orange River, s.re certainly one of the smallest people in the whole world. The greatest mean height, as deduced from six measuroments taken by Fritsch, is slightly over 4 font 9 inehes; whilo Burchell and Lichstenstein found the average scarcely moro than 4 feet 1 inch. Thus, even accepting the niore favourable results, those Suns would still be from 2 to 3 inches shorter than the Lapps.

Their yellowish complexion, especially in the southern regions farthest removed from the equator, has been compared to that of Europeuns suffering from jaundice, or of Mongolians in a healthy state.* In many other respects the Bushmen resemble these Asiatics of the Central plateaux. Like them they aro distinguished by the small size of their bright eyes, by the breadth and prominence of their cheekbones, the form of mouth and chin, the whiteness and regularity of their theth, the extreme delicacy of their joints. The depression between the frontal bone and root of the nose is always broad and deep, so that the genoral profile presents rather a concave than a convex contour. The forehoad, instead of retreating as with the Mongolians, bulges out; while the skull, covered with little tufts like " grains of pepper," is very long or narrow, with index No. $73 \cdot 03$. In this respect the Bushman resembles the true Negro, whose head is also long, and differs from the Mongolian and the Akka, whose heads are normally round. The cranial capacity is relatively low, although the general expression is far from indicating any lack of intelligence. On the contrary, the physiognomy implies a ${ }^{\wedge}$ markable degree of sagacity; and assuredly the Sans need to be constantly on the alert in order to contend successfully with the hardships, the elements, and the encmies by which they are beset in their inhosF: table environment.

One of the distinctive characters of the southern Bushmen, conspicuous even in the young, is the multiplicity of wrinkles covering the whole person. The skin of the face and of the body, fitting too loosely, as it were, to their lean figures, becomes marked with a thousand furrows, but also rapidly distends under the influence of a more generous diet than falls normally to their lot. Like the Hottentots, the Bushmen, and especially the women, also show a decided tendency, even from their tender years, towards steatopygia.

The Bushman speech does not form an independent linguistic group, as has been supposed, but is connected with that of the Hottentots. Both evidently belong to a common stock, although differing greatly in their structure and syntax. The nominal roots are identical, and both express all relational ideas by means of agglutinated suffixes. The Bushman dictionary left unfinished by Bleek was to contain no less than eleven thousand words. This great wealth of diction, taken in connection with the common origis of the San and Hottentot languages, scems to confinm the view held by many anthropologists, that the

[^9]Bushmen represcut a debased or degencrate pooplo belonging to the same stock as their neighbours, and are not an independent race, much less a distinct branch of mankind.

Like the Hotentots and the south-eastern Kafirs, the Bushmen have in their phonetic system a group of peculiar consonants, the so-culled "elicks," which are all but unpronouncenble by Europenns, but which are also found in a somewhat molified form in some other lunguages. Certain San tribes are said to have as many as eight of these sounds; but all seem reducible to four fumdamental clicks: the clental, resembling the smack of a nurso's kiss; the pelatal, like the tap of a woolpeckor on the stem of a tree; the cerebral, analogous to the pop of a cork drawn from a bottle; the luteral, which, according to M. Hahn, resombles nothing so. uuch as the quack of a duck. At the sume time these clicks would seem to be almost inherent in the soil, for they aro found not only in the Bushman and Hottentot languages, but also in all those of tho southern Kafirs, excopt the Se-Tlapi (language of the Ba-Tlapis) and tho So-Rolong (language of the Ba Rolongs). They have even invaded the local Dutch dialoct, the Boers adding these eccentric sounds to certain words of their patois. In the alphabets introduced by the missionaries, the various clicks are represented by points of exclamation, crosses, and such like orthogranhic devices. Like tho IndoChinese, the Bushman and Hottentot are toned languages, the words acquiring different meanings according to the more or less elcvated tono with which they are uttered.

Owing to their nomad and fugitive existence, the Suns have developed scarcely any local industries. In the districts where they have not yet acquired a knowledge of firearms, their weapons still are the bow and arrow tipped with poisoned iron points, or even sharpened stones, glass, and chipped fints. They wear little clothing, even the rich restricting themselves to the kaross or sheepskin. But all are fond of decorating the head and body with bone neeklaces, arrows, and ostrich plumes, to which the Kalahari tribes add little bits of wood inserted in the cartilago of the nostrils. Very few have learnt to build huts, most of the tribes dwelling in caves or the dens of wild beasts, passing the night round the smouldering embers of a fire, and sheltering themselves from the wind by mats suspended on stakes.

But their life of hardships and adventures has developed in these aborigines a surprising degree of sagacity, was those who are captured in their youth and brought up in the domestic state readily learn everything they are taught. They become skilful fishers, and as shepherds are most highly valued. But the inpulse is at times irresistible to forsake the abodes of civilised men, where they had at least sufficient nutriment, and again resume their savage independence, their nomad ways, and life of endless hardships. But, however wretched their existence, they still possess a greater flow of spirits and vitality than their neighbours, expending it in the dance, songs, and extempore recitals. They are also artists, and on the rocky walls of their caves have in many places been discovered life-like representations in red ochre, and even nolychrome pictures of
animals, hunting scenes, and combats with the hated Boers. Thus a certain ideal element has been developed in the lives of theso lowly aborigines, whom the surrounding peoples-Katirs, Hottentots, Dutch, and English—thought themselves till recently fully justified in hunting down like wild beasts. Their oral troasures of fubles, tales, aud myths, never fail by their wealth and variety 10 excite the wonder of all explorers in this interesting field of inquiry.

Although distributed in seattered groups, without national cohesion of any sort, the Bushmon manifest much symputhy for each other, cheerfully co-operating together on all opportuno occasions. After hunting in common, the division of the prey is unattendod by any wrangling, although no tribal chicf presides over the distribution. In fact, there is neither tribe nor chief in the strict sense of these terms, the Bushmen possessing no politicul or social organisation of any kind; and although the family group is not regularly constituted, the sentiments of natural affection are none the less highly developed. Formerly a man provided himself with a temporary mate by the simple devico of capturing the child, whose mother never failed to come and share the lot of her offspring.

To judge from the fate of those belonging to the colony south of the Orange River, the Bushmen would seem to be destined soon to disappear; for in this region they have been bunted like wild bensta, and most of those who have escaped extermination bave taken refuge in the northern solitudes. . Sparrmann relates how the squatters lay in ambush, attracting them by the bait of an animal's carcass loft in the bush, and sparing neither man, woman, nor child, except perhaps such as might serve to increase the number of their slaves. Whenever they caught sight of a Bushman, they fired at once, following up the chase with their horses and dogs, pursuing him like any ordinary quarry. The very courage of the Sans often proved fatal to them, for there is scarcely an instance recorded of their forsaking their wounded and dead, preferring in all cases to remain and be killed by their side.

North of the Orange River, on the frontiers of the Dutch republics and of Bechumnaland, the Bushmen were hunted down in the same way; but in the Kalahari Desert, and farther north in the direction of the Zambese, several San communitios have maintained their independence, and these do not appear to be diminishing in number. In the Herero and Namaqua territories there are from four thousund to five thousand of these aborigines, and in the whole of Austral Africa probably about fifty thousand altogether.

## The Mottentots.

The Hottentots, who, on the arrival of the Europeans, occupied nearly all the western part of the region now known as Cape Colony, are here still numerous, constituting, without the half-castes, about one-seventh of the whole population. Their popular name, appears to be merely a term of contempt, meaning "stammerers," or, as we should say, " jabberers," imposed on them by the early Dutch and Frisian settlers, no doubt in consequence of their strange and unin-
telligible jargon. In the current language of the colony, this mperlation has been further reduced to the final syllable, "Tots." They have themselves no general name for the whole race ; but the term Khoin ("Men "), which oceurs in several of the tribal denominations, has been extended to all of them collectively, and the Hottentots now commonly call themselves, or are called by scientifie writers, Khol-khoin, that is, " Men of men," or " men " in a pre-eminent seuse.

Although much taller than the southern Bushmen, and difforing from them in their relatively higher degree of sociul culture, the Hottentots still resemble them in many respects. They have the same dirty yellowish complexion and the same elongated shape of the head, while tho women show the same, or rather a

Fig. 34.-South-Afacan Hotrentot Tribes in the Middle of the Eiguteenti Centuby.
Soate 1: 15,000,000.

more decided, tendency towards steatopygia, or the accumulation of fat in the lower parts of the body. Till recently they used the same bows and the same poisoned arrows in the chase and tribal warfare. They have even the same musical instruments, delight in smearing the body with the same colours and decorating it with the same ornaments. Lastly, the language still current amongst those who have not already laid it aside for English or Dutch is undoubtedly derived from the same stock as that of the Bushmen. It is, however, much richer, more pliant, and less encumbered with harsh sounds and uncouth forms of expression. It possesses three fully inflected numbers and grammaticul genders, and by agglutinating its monosyllabic roots is even able to express abstract conceptions, as well as many delicate shades of sentiment and thought. In the Bantu tongues words are strung together in the sentence chiefly by means of prefixed pronominal elements, whereas in Hottentot the same formative particles are invariably attached to the end of the roots, so that this is essentially a "suffixed-pronominal" language. It is divided into a considerable number of dialects, which are all

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closely related, notwithstanding the wide area over which are seattered the various branches of this ethnical family. Those spoken by the Namaquas appear to be most free from foreign influences.

In the districts where the Hottentots have become assimilated in speech and social usages to the European proletariate classes, they dwell in the so-called as, or hamlet, which the Dutch colonists call kraal from the Portuguese carral, that is, a fold, pen, or cattle enclosure. These kraals are mere collections of spherical or semicircular huts, which from a distance present the appearance of huge mushrooms clustering in circular groups on the grassy plain. They are constructed compactly enough to keep out the rain, but serve no purpose except as a shelter against the weather. Their occupants cannot even stand upright in them, the ordinary elevation of the roof not exceeding four feet four inches.

The Hottentot costume consists mainly of a leathern apron, somewhat larger and more ornamental for the women than for the men, and a sheepskin cloak worn with the woolly side in or out according to the season. Amongst the rich this kaross, as it is called, is embellished round the neek and shoulders with embroidery and fur trimmings. The ordinary diet consists for the most part of milk and butter, meat being eaten only on special oceasions. But when they decide on a feast of this sort they gorge themselves to repletion, and then to aid digestion roll on the ground and go through a process of "massage." On their hunting or foraging expeditions they provide themselves with wallets filled with meat, first dried and then powdered. They are passionately fond of tobacco or hemp (daki/a), the smoke of which is swallowed. But it sometimes happens that either to punish themselves for some fault or to render the fates propitious to their supplications, they condemn themselves to abstain from these narcotics for a certain period. The flesh of the hare, pig, and fowl is regarded by them as unclean.

Till recently very little time or attention was paid by the Huttentots to the supernatural world, hence observers free from all prejudice on this subject could frankly assert that these aborigines had no religion at all. Nevertheless, they are endowed with an extremely excitable nervous temperament, thanks to which the Wesleyan missionaries have often succeeded in throwing them into a frenzy of roligious excitement. According to Bleek, the still unconverted pagan Hottentots recognise at least two supreme or higher beings, one of whom is perhaps a personification of the moon, for he dies and revives periodically. Charms, amulets, and fetishes, although rare, nevertheless do exist, and are associated for the most part with the worship of the dead.

The Hottentots attribute to their ancestry great power for good or for evil, invoking them on all serious occasions. The term Tsu-Goab, adopted by the missionaries as the nearest equivalent of the Christian "God," is probably the name of some hero of the olden time handed down by tradition. Burials are performed with much solemnity, and cairns, or heaps of stones, are raised above the tomb of the dead, who is usually deposited either in a cave or by preference in a porcupine's lair. Thanks to these lofty cairns and to the prepared stone implements used by the Hottentots, explorers have been able to follow their migrations
or their sojourn in various parts of the eastern provinces, which are at present occupied by Bantu immigrants from the north.

Each Hottentot tribe has its chief, at least beyond the limits of the British possessions and Dutch republics. At the same time these chiefs enjoy very little power, and all weighty matters are dibated in a general council of the whole community. In these discussions even the young men take part, and their voice often decides the pont at issue. But in the European settlement all political

Fig. 35.-Hotientots, Kafiks, and Be-Chuanas.

organisation of the Hottentots has been completely abolished, and in the territory of Cape Colony the last native chief was deposed in 1810 by the British adminis tration and replaced by a European magistrate. But even before that event all the aborigines subject to the direct action of the whites were no better than slaves. They were subject to compulsory registration and forcibly employed either in the wars waged against their own kindred, or in constructing roads, bridges, and other public works. Respect for their rights as freemen was not officially pro-
claimed by the British Government till the year $1^{\text {c }} 28$, and even this act of tardy justice was as a stumbling-block to a large section of the colonists, including all the Boers, who regarded the emancipation of the despised Hottentots as an infringement of their own hereditary privileges, and a step fraught with danger to the colony. Many even preferred to quit the country rather than continue to dwell by the side of their former serfs now officially declared their equals.

But during their one hundred and fifty years' contact with the whites previous to this proclamation how many Hottentot tribes had alrcady been exterminated, more even by the gun than by small-pox! What has become of the Koranas, who had their camping grounds on the shores of Table Bay when the first European colonists settled in the country, and of the Gri-kwas (Griquas), who encamped farther north near St. Helena Bay? Many other tribal groups, such as the Gauri, San, Atta, Haïssé, Sussi, Dama, Dûn, and Shirigri, have also disappeared, leaving no memory behind them except the names given by them to their rivers and mountains. And their murderers meantime assumed the rôle of agents of destiny, almost as instruments of the Divine Will, declaring that these inferior races were foredoomed to destruction, leaving their inheritance to "the chosen people!" Even now the opinion prevails that, under a wise dispensation of Providence, the Khoï-khoïns are rapidly diminishing in numbers. But the wish is here "father to the thought," for the assumption is amply refuted by the official. returns. Doubtless the aborigines seem to decrease, but only through the effect of an optical illusion caused by the fact of the relatively far more rapid growth of the white element. It should also be remembered that the change of social habits gradually weans the natives from their rude ways, drawing them within the circle of more refining influence, assimilaing them in garb and speech to their European masters, to whose sentiments, religious views, and usages they daily more adapt themselves.

Moreover, a large number of these aborigines, still refractory to the everspreading English culture, have withdrawn northwards, thus retracing the steps of their forefathers when they descended seawards from the inland regions, borne along, says the national legend, "in a great pannier." In Namaqualand, and as far north as the Herero territory, these Oerlams, or Hottentots from Cape Colony, huve often gained the political predominance. They have even followed in the wake of the stream of Boer immigration to the neighbourhood of Humpata beyond the Cunene.

At present organised tribal groups, such as those of the Haw-Khoins and Namaquas, Griquas, and Koranas, are found only in the region north of the Orange River. Those residing in the settled European districts, althongh henceforth intermingled with the general population, are nevertheless still classed apart in the census returns. In 1798 the four districts of the Cape, Stellenbosch, Swellendan, and Graaf-Reinet, which at that time constituted the whole of the colony, had only 13,000 Hottentots in a total population of 32,000 . But in 1865 this element had increased to 81,600 in the territory of Cape Colony, and ten years later it numbered no less than 98,560 . Doubtless most of these, although reckoned as true

Huttentots, are really of mixed descent ; but to them may also be added the 86,540 recognised half-castes returned by the same census.

Those settled in the eastern districis are for the most part Godaquas (Gonn$k w a$ ), that is to say, "Borderers," the issue of crossings with the Kafirs. The Griquas (Gri-kwa), who since the beginning of the present century have dwelt north of the Orange, are most commonly designated by the name of " Bastaards," a name, however, which they themselves accept with pride as testifying to their relationship with the whites. They are said on the whole to resemble their Hottentot mothers far more than their European fathers. Since the beginning of the century such alliances between Boers and natives have been legally forbidden, their tendeney being gradually to absorb the white in the yellow element.

In no African region bave the Christian missionaries been more zealous and more successful than in Cape Colony. So early as the year 1736 the Moravian Brethren were already at work in the midst of the Hotentots, and since then some fifteen other religious soeieties have sent their representatives by the hundred to evangelise the same people, as well as their Bushman und Bechuana neighbours. At present nearly $200,(100$ natives in Cape Colony, and about 350,000 in the whole of Austral Africa south of the Zambese, profess the Christian religion.* The preponderance of the European element will certainly have the result of increasing the intermingling of the races, and of causing a continuully inereasing number of half-breeds to be classed with the whites. Thus Cape Colony contrasts favourably with the British Australasian possessions, or at least with Tasmania, where the English settlers solved the native question by the simple process of extermination. In Austral Africa the aborigines, either more numerous or more energetic, have been better able to defend themselves. The white intruders also, arriving at intervals in small groups, and belonging to various nations, differing in origin, speech, and usages, have not been always in a position to apply themselves methodically, like those of Tasmania, to make a clean sweep of the original owners of the land. During the two hundred and fifty years of their political supremacy they have gradually succeeded in accommodating themselves to the altered conditions so far as to tolerate the existence of the original masters of the land, even to a certain extent blending with them in a new nationality, in which are mingled the white elements of Europe with the yellow of Africa.

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## CHAPTER IV.

## CAPE COLONY AND I'TS DEPENDENCIES.

The Cape, Griqualand West, Bechuanaland, Basutoland, Kafiriand.


APE COLONY extends officially over an area more than double as large as that which it comprised in 1870. But within its narrower limits, as defined before that period, it constitutes a well-marked physical region, with perfectly distinct geographical and historical outlines. Occupying the entire southern extremity of the continent, the territory has for its natural limits the ocean and the course of the Orange River on three sides, while towards the east it is separated from the Kafir domain by the little river Tees, an affluent of the Orange, and by the valleys of the Indwe and Great Kei, which flow to the Indian Orean. Its superficial area is about exactly the same as that of France, but notwithstanding the somewhat rapid annual increase of the population, it is still forty times less than that of the sume region.

Over one hundred and fifty years ensued after the discovery of the Cape of Good Hope before any Europeans succeeded in obtaining a permanent focting in the country. A few marines landed from time to time, but soon left again. In 1620 the English even took formal possession in the name of King James I., but never followed up this act by any practical rteps. Robben Island, in Table Bay, which has since been nearly always a place of banishment or a convict station, was also occusionally occupied by l3ritish or Portuguese immigrants, cither free settlers or exiles.

But the pioneers of colonisation at the southern extremity of the continent did not present themselves till 16 i2. Van Riebeck, the first governor sent by the " Dutch East India Company," landed in that year with his family and about a hundred soldiers at the foot of Table Mountain, where he immediately began to build a fort. The first humble dwellings were grouped on the site whore now rise the buildings of Cape Town, and their occupants began forthwith to cultivate a few fields and garden plots. Despite the great difficulties attending this first attempt the Company succeeded in its main object, which was to facilitate the re-victualling of Dutch vessels plying between Holland and the East Indies. The military station


THE CAPE.


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was gradually transformed to a colonial settlement, und so eurly as 1654 some orphans were sent out from Amsterdum in order to form the nuclens of a peasunt population. Soldiers and sailors left the service in order to till the lund as free " burghers," on the condition of selling their produce directly to the Compuny, and abstaining from all trading relations with the Hottentots. Their numbers gradually increased, and the rising city fuund itself in due course encireled by numerous hamlets and farmsteads.

In some places the land was purchased, becanse the squatters felt themselves still too weak to take it without allowing compensation. But once stroug enough, they simply dispossessed the Hottentots, or even seized both land and people, compelling the latter to work as slaves. The natives, however, hitherto accustomed only to tend their herds, and unucquainted with husbandry, could afford little help to the Dutch farmers in cultivating their cornfields, vincyards, and orange-groves. Hence they began to be replaced so early as 1658, when a fit shipment of Negro slaves wus consigned to the Cape, und the number of these imported slaves soon exceeded that of the frcemen on the plantations. The consequence of this state of things was the same in Austrul Africa as in the tropical regions. Large domains were constituted at the expense of the small freeholders, the whites learnt to look upon labour as dishonouralle, the imunigration of free Europeans took place very slowly, and the progress of the Colony was frequently arrested through the lack of private enterprise and industry. The importation of the blucks, however. gradually fell off during the course of the eighteenth century, and at the abolition of slavery in 1831 there were not more than 36,000 altogether to be emancipated. These Negro freedmen have since then become entirely absorbed in the mass of the half-caste population.

In 1680, that is to say twenty-cight years after the arrival of the first permanent settlers, the European colony comprised six hundred souls, with the officials and the soldiers recruited in F. anders, Denmark, and other parts of North Europe. But these pioneers were soon joined by a fresh ethnical element. Some of the French Protestants, in seekine new homes after the Revocution of the Edict of Nantes, together with a few Waldenses from the Piedmontese Alpine valleys, appiied to the Dutch East India Comprany, which sent them to its new possessions at the Cape. Including women and children they numbered abont three hundred, and in 1687 and 1688 reached the colony, where lands were assigned to them in the upland valieys round about the rising city. Others followed, and being for the most part brave, energetic persons, who had faced exile and all manner of hardships for conscience' sake, these French Huguenots took a large share in the development of the Colony, and to them especially is due the successful introduction of vine-growing in South Africa.

The local annals record the names of ninety-five French families, some of which have disappeared, whilst others have assumed Dutch forms. Thousands and thousands of Boers are still proud to claim Huguenot descent, and the map of South Africa, from the seaboard to the Limpopo valley, is covered with topographical names perpetnating their migrations northwards. The Boers of French
origin have increased at a relatively more rapid rate than the others, becauso they arrived with their fanilies, whereas most of the Dateh, being officials and soldiers, wero ummarried, and formed allinnces with the native women. From them are for the most part deseended the half-castes still known as Bastaards. Nevertheless the Freneh immigrants were not sufficiontly numerous to preserve their mother-tongue in the family circle, when, after $17 \% 4$, its public use in the churches and schools was forbidden by order of the Company. La Caille, who visited the colony in 1751, met only very few Frenchmen still speaking the language of their fathers, and in 1780 Levaillant found one only who still remembered it.

Juring the course of the eighteenth century the colony gradually spread eastwarls beyond the mountains. This movement took place in spite $0^{\circ}$ the Company itself, which desired the Cape settlement to remain nothing but a port of call and a provisioning station, and in opposition to the governors, who, joulous of their prerogatives, wished all the colonists to remuin directly subject to their control, and enslaved to the irksome rules of a severo administration and absurd routine. Edicts were frequently issued forbidding the squatters to quit the lands that had been assigned to them and penetrate farther inland, " under pain of capital punishment, and uven death, with confiscation of their property." But such decrees could not be enforced in the absence of garrisons, forts, or clearly defined frontiers towards the Hottentot territory ; hence the Boers continued their trehken-that is their onward movement from station to station-with their families, slaves, and hords. This advance, which is even still continued away to the north beyond the Cunene river, had already become irresistible, and the Cape Government was soon compelled, in spite of itself, to pruclaim the annexation of extensive territories. In 1745 the official frontior of the colony was the Gamtoos River, but in 1786 its limits were already extended to the Great Fish River. It had thus absorbed the IIottentot domain and reached the Kafir country, where the Boers, themselves more numerous and better equipped for war, also came into collision with more compact and more formidable hostile bands.

But the British Government was already planning the conquest of Cape Colony, that central station on the ocean highway which had become indispensable to secure for the East India Company the permanent possession of the Indian peninsula. In 1780 an English fleet sailed for the Cape of Good Hope, in order to surprise the fort and capture its garrison. But it was itself surprised by a French squadron commanded by Suffren, who, after defeating the English near the Cape Verd archipelago, landed two thousand French troops at Simon's Bay to reinforco their Dutch allies. But although foiled in this attempt, they took advantage of the next opportunity in 1795, when the French revolutionists having seized Holland the Boers settled in the interior of the colony proclaimed their independence. An English fleet thereupon again sailed for the Cape, in order to restore order in the name of the Prince of Orange and occupy the colony in the name of the King of England. This was the beginning of a new political administration in Austral Africa, which still persists. Apart from a brief interruption of three ycars, caused by the peace of Amiens, Cape Colony has since then never
ceased to form part of the British Empire, slowly but stearlily incrensing from year to year in population asd prosperity.

When the country passed under tho sway of England, it contuined ubout twenty-five thousand Laropeans, who held absolute control over nearly twenty thousand Hottentot serfs and thirty thousand Negro slaves. All the colonists, whether of Dutch or French descent, regarded themselves as collectively forming a single nutionality, thanks to the universal adoption of the Dutch languge us the common medium of intercourse. Immigrunts of English speech were very few ut first, and for some yeurs almost the only British residents in the country were the officials and military. Nevertheless the English governors were alrendy contemplating the denutionulisation of the Boers, and so curly as 1809 an official proclamation recommended the study of the English language although Dutch was still mainly used in the courts of justice.

The descendants of the old colonists still continued to regard themselves as the real masters of the land, and consequently paid little or no attention to the decrees issued from time to time by the colonial governors. In 1815 they even broke into open revolt, which, however, was quelled with remorseless severity. No serious attempts were made to promote British immigration till the year 1820, when subventions began to be voted for this purpose by the Imperial Parliament. Nearly ninety thousund persons had already ugreed to accept allotments of the lande successively annexed during the frontier wars with the Kufirs. Out of this large number of applicants the emigration agents mude choice of over four thousand colonists, and these were transported by the Government, at the public expense, to Port Elizabeth, in Algoa Bay, with the intention of settling them in the interior, round about Graham's Town. Notwithstanding the inexperience of most of the new arrivals in agricultural matters, and the blunders of all kinds inseparable from such $u$ large undertaking, the project succeeded, thanks especially to the excellency of the climate and the fertility of the soil. The English settlement increased rapidly, and spread far beyond the limits to which it had been originully restricted.

By the side of a Dutch Africa in the west there was thus developed an English in the east, which, thanks to the support of the Home Government, soon becume almost as powerful as its rivul, and which it was often proposed to constitute a special and privileged division. Henceforth the two languages divided the territory between them, and the colonial administrators naturally strove to secure the preponderance for their own kindred. The Dutch rulers had interdicted tbs official use of French; the English in their turn prohibited, or at least discountenanced, the use of Dutch. In 1825 English became the official language of the administration, and in 1827 that of the courts of justice. But luter, after the constitution of the Colonial Parliament, the inhabitants of Duteh speech recovered the legal rights and status of their tongue, and since that time their deputies make use of this idiom in the discussion of public affairs in the Assembly.

Nor is this all. The military successes of the Transvaal Boers have given a certain political ascendency to those of Cape Colony itself. IIence the Afrikan-
ders, that is to say, the Eiuropean natives of Duteh origin, who in Soath Africa number probahly about two-thirds of this element, are even calculating on the recovery of their former political aseendency, all the more that the Boer women appear on the whole to be more prolifie than their English sisters." Although at present constituting distinct and independent political systems, the Dutch Afrikanders, nearly all related by ties of blood, from Table Bay to the Limpopo, form a large family group possessing a strong sense of national cohesion. It was the sympathy of their friends and kindred in Cape Colony, more, perhaps, than the valour of their soldiers or the pusillanimity of the Gladstonian Administration, that secured for the Trunsvaal Boers the recovery of their political independence.

This same solidarity of sentiment between the northern and southern Afrikanders will cortainly secure full recognition of their just claims to consideration, when the time comes for giving effect to the scheme now being matured for the fusion of all the British and Dutch States in one South African Dominion, under the sovereignty of the Queen of England. But notwithstanding the increasing political influence of the Afrikander, the somowhat rude local Duteh dialect, although far more widely spread amongst the aborigines, is yearly losing mueh of its relative influence in the intellectual development of the inhabitants of Cape Culony. This point has been made more and more ovident, since the iniddle of the century, by the constantly increasing disparity between tho poriodical publications of the two rival languages. In the year 1875 the English publications were already six times more numerous than those addressed to the Dutch reading public. The inevitable result must be, that the Afrikanders will at first become bilingual, and then gradually cease to speak or cultivate the language of their forefathers, no longer of any use for the intellectual progress of the people. Liffect will thus be given to the universal tendency of dominant races to absorb fragmentary or discordant elements, which here, as elsewhere, must ultimately become merged in a single British nationality, one in speech, social usages, free institutions, and intellectual culture.

The emigration of the Boers towards the northern republies, coinciding with the immigration of frosh colonists from Great Britain, already increased for a time the ascendency of the British element in the territory of the Cape. The great trek, or exodus, of the Boers towards the regions stretching north of the Orange River began about the year 1834, that is, when slavery was officially abolished in the English posses-ions. Deprived of the labour of their black slavea, compensation for whom was allowed at not more than two-fifths of their market value, the Dutch peasantry direeted their steps towards the norihern solitudes, where they hoped to rulo, without let or hindrance, over their "live stock" of men and beasts. Many thousands settled in the Gamtoos and Great Fish River basins, voluntarily forsook extensive tracts of pasture and arable lands, which after their departure were occupied by English settlers.

But towards the eastern frontier these settlers had themselves to contend with

[^11]thoir Katir neighbours, whose domain they were grudunlly oneromehing upon. On both sides predatory expeditions and eattlo-lifting ruids were incessint; but. towards the close of $18: 34$, the yenr of the great trek, these troubles broke out into a genornl war. The English were not prepared for the organined uttaek of a whole nation. In the course of a few weeks ill the enstern border lands were overrun, the farmsteads given to the flumes, the lierds eaptured to the numbor of about two hundred and fifty thousand, and all the squatters either driven west or overtaken and massacred. Governor d'Urban thereupon summoned all available

Fig. 36.-Abobioiner and Coloniats.
Scale 1:18,000,000.

forces, and fell with irresistible fury on the invaders. A terrible retribution overtook them, and a new strip of tery ory was annexed to the colony. Nevertheless the natives had on many occasions been treated with such flagrant injustice that the British Minister, yielding to the pressure of public opinion, refused to sanction the repressive and other vecasures adopted by the Colonial Government. With a candour rare in the hi to:y of Cabinet administration, he even declared that the Kafirs had ample justification for their conduct during the war, that they were in their perfec! right in endeavouring to resist the encroachments of their neighbours, and in procuring by force the reparation they were unable to obtain by other means, and that the conquered, not the conquerors, ele in the right in the first instance.

The territory taken from the Kufirs was accordingly restored to them, but only for a time. The policy of encroachneut, incursions, cattle-lifting, seizure of pasturages and arable lands, was resumed in the debatable border country, and in 1846 the war broke out again owing to some sanguinary deeds connected with the theft of an axe. This "war of the axe," as it was called, began badly for the colonists; but after two years of campaigns, battles, and massacres, the native tribes were compelled to sue for mercy, which brought about a fresh rectification of the frontier. The British territory was enlarged by the annexation of the district, some 120 miles broad, which lies between the Great Fish River and the Kei. Nevertheless, the eastern part of this new acquisition, to the west of the

Fig. 37.-Sucoessive British Annexations in South Africa.


Keiskamma, was provisionally left in the hands of the natives under the suzerainty of the British Government. But the truce lasted only two years. In 1850 the military stations established along the frontier were attacked by the Kafirs, in consequence of an outrage committed at a native burial by the English soldiers. These were at first compelled to evacuate the contested territory, and it tonk two years more of fierce warfare before the claims of England could be enforced. But henceforth all further resistance on the part of the natives became impossible.

Then occurred one of the most extraordinary events recorded in the annals of any nation. Feeling themselves powerless to prevail by natural means over the invaders of their country, the Kafiss, seized by a sort of collective folly, fancied
they might succeed by the aid of the supernatural. The arms of the living being impotent, they thought they could rely on those of the dead. Mhlakaza, a native prophet, traversed the land, announcing to his Ama-Khosa fellow-tribesmen that the time was drawing near when all their departed warriors, all the renowned heroes of their legendary history, would rise from the grave, and that they themselves would on that grand occasion be transfigured, and again become young, beautiful, strong, and invincible. But in order to prepare for victory they were required to give a proof of their unshaken faith by sacrificing all they possessed except their arms. They had to slaughter their cattle, burn their granaries, let their fields lie fallow, and strip themselves of everything, awaiting the hour of the signal to rise. Then the slaughtered berds would suldenly reappear, but finer and more numerous than ever, and the pluins would be covered by magnificent crops.

Most of the Ama-Khosas had implicit faith in the words of the prophet. They slew their cattle and fired their stores of corn, while at the same time preparing vast pens and barns for their future treasures. Thousands of these deluded victims, twenty-five thousand according to some writers, fifty thousand, or one third of the Ama-Khosa nation, according to others, actually perished of inanition while awaiting the promised day of redemption. But that day never came, and then despair took possersion of the survivors. Their bravest warriors became crest-fallen mendicants, and their love of freedom, their very manhood, was broken for ever. Soon the depopulated land invited fresh occupants, and the Cape Government introduced over two thousand German immigrants into the vacant territory, which was now definitely annexed to Cape Colony as far as the river Kei. From this time the progress of conquest has never been seriously arrested; only the annexations, which no longer presented any difficulty, were henceforth peacefully effected by administrative measures. A simple Order in Council sufficed to effect vast political changes.

## Topooraphy of Cape Colony

Cape Town, capital of the Colony and of all South Africa, is the oldest city founded by Europeens south of Benguella. But without having yet become a very large place, it has long outstripped in size and importance the towns previously founded by the Portuguese on the West African seaboard. Seen from the water Cape Town presents an imposing appearance, thanks to the superb amphitheatre of hills encircling it, and espeeially to the striking aspect of Table Mountain, which forms such a conspicuous feature in the surrounding landscape.

West of the city the promontory of the Lion Mountain projeets far seawards, sheltering the iJadstead from the heavy swell rolling in from the Southern Ocean. Here are constructed the pier, the quays, and other harbour works, and here lies the spacious basin whick affords ample accommodation for the shipping. The city, disposed in regular squares by broad thoroughfares, slopes gently towards the roots of
the mountain, while the first heights are dotted over with plcasant villas and detached residences. Eastwards, in the midst of an extensive pluin which was formerly a morass on which the first settlers erected their little stronghold, now stand the low buildings of the "Castle," property of the English Government and symbol of British supremacy in Austral Africa. Still farther east the bay is skirted by a suburban district which stretches as far as the broad estuary of the tortuous Salt

Fig. 38.-Cape Town.
Eosle 1: 185.000


River. The city is everywhere encircled by fine gardens and parks, which penetrate into the glens of the mountain. In 1887 a beginning was made with a system of defensive works, which are intended to convert the stronghold of-Cape Town into a second Gibraltar.

In the hands of its English masters Cape Town has preserved but few reminiscences of the Dutch epoch. The chief thoroughfare is no longer supple-

mented by a canal lined with trees, like the avenues of Amsterdam. Nevertheless the features, speech, and family names of about one-half of the European inhabitants betray their Duteh origin. Intermingled with the white population are peoples of every shude, blacks descended from old Negro slaves, Hottentots, Kafirs, Malays, presenting every transition from dark brown and black to brick red and yellow, besides greyish Bastaurds and bronze or swarthy half-caste immigrants from St. Helena. Amongst the Malays, descendants of the servile class formerly introduced by the Dutch from the Eastern Archipelago, some still wear the turbau and long flowing garments. Thus are distinguished the Haji, or Mecca pilgrims, who look with scorn on the multitude of "infidels," regarding all alike of whatever race as mere " Kafirs."

Constituting the chief centre for the diffiusion of civilisation throughout Austral Africa, Cape Town is endowed with several literary and scientific institutions, including a museum, a valuable library with a complete collection of works relating to the colony, besides many rare books and manuseripts, and a botanic garden nearly fifteen acres in extent, where may be seen speeimens of all the native flora and thousands of exotics. Owing to its position near the southern extremity of the Africau continent, Cape Town is one of the most important stations on the surface of the globe for geodetic studies. So early as 1685 the French astronomers erected on this spot a temporary post for the observation of the southern censtellations. In 1751 La Caille here carried out his memorable researches for the measurement of a degree of the meridian and for determining the lunar parallax. These studies were resumed by the English astronomers in 1772, at the time of Cook's second expedition. At the Cape Observatory, Maclear and Herschell drew up the catalogue of the stars of the Antarctic heavens, and at present the preliminary steps are being taken for the triangulation of the coastlands on the plateaux of the Karroos and beyond the Orange in Bechuanaland and thence to the Zambese. It is the intention of the eminent astronomer, Mr. Gill, thus gradually to secure the measurement of the mesidian of Africa from the shores of the Seuthern Ocean to the port of Alexandria on the Mediterrancan. The present Observatory, already so rich in scientific memories, is situated at Moubray, three miles to the east of the capital.

Although connected by a railway with the eastern districts of the colony and the Dutch republice, and enjoying the advantage over the other seaports of lying nearest to Europe, Cape Town is not the chief centre of the foreign trade of South Africa. In this respect it is fur surpassed by Port Elizabeth, the flourishing emporium on Algoa Bay, which at the middle of the present century was still a mere group of hovels, lut which is conveniently situated in the neighbourhood of the most productive agricultural districts, and at the seaward terminus of the shortest routes leading to the diamond and gold fields of the interior. Nevertheless, Cape Town, thanks to its comparatively large population, to its position as political capital, and to the advantages of its harbour, has maintained a high place amongst the African seaports. Here are shipped large quantities of wool, as well as the choicest South African wincs, grown on the eastern slopes of Table Mountain.

Amid the surrounding valleys are scattered numerous suburban residences and rural hamlets chiefly occupied by the wealthy traders and officials, who seldom visit the capital except for business purposes. In summer nearly the whole of the white population with their domestic servants betake themselves to the wateringplaces and the slopes of the hills, and at this season the traffic on the suburban railways reminds the traveller of the movement in the neighbourhood of the great European cities. North of Cape Town lies the village of Sea-point with its villas fringing the surf-beaten beach. Eastwards the capital is continued by a succession of hamlets encircling the Devil's Peak and stretching away for nearly twenty miles in the direction of the Ralk Bay seaside resort.

In the charming valley which connects the two bays, and which is flanked on the west by the superb rocky walls of Table Mountain, lies the picturesque little village of Wijnberg, a delightful group of residences nestling in the shade of oaks and pine groves. In the neighbourhood but more to the south is the estate of Constantia, which has given its name to the most esteemed vintage in South Africa. Towards the south are seen the irregular outlines of False Bay, one of whose western inlets, Simon's Bay, reflects in its clear waters the settlement of Simon's Town, a naval station with warchouses and fortified arsenal, which the British Government has maintained on the shores of the Southern Ocean. Simon's Town occupies one of the finest sites in Austral Africa on the sickle-shaped headland, at the southern extremity of which stands the lighthouse of the Cape of Good Hope.

A few other groups of habitations belonging to the district of Cape Town are scattered amid the glens on the Atlantic slope of the hills which bound the eastern horizon of Table Bay. Stellenbosch, which is connected by rail with the capital, is next to the capital itself the oldest settlement in the colony. In the vicinity, and especially in the amphitheatre of hills still known as the Fransche Hoek, or "French Quarter," most of the Huguenot refugees established themselves towards the close of the seventeenth century, and this "Athens" of South Africa has always been a centre of intellectual progress. Paarl, a village which straggles for a distance of seven miles along the highway at the foot of the Draken-steen hills, also dates from the early days of colonisation. The gardens, orange-groves, and woodlands encircling this "Pearl," as it is called, from a bloc": of granite surmounting a rocky pedestal like a gem on a diadem, render it a charming retreat during the summer months. The surrounding country forms the most extensive wine-growing district in Cape Colony.

Farther north lies the picturesque little town of Wellington, beyond which the railway penetrating inland describes a great bend round to the east, passing through a depression in the Atlantic coast range into the valley of the Breede River, which flows to the Southern Ocean. Paari and Wellington lie in the upper basin of the Great Berg, which, after collecting numerous affluents from the fertile districts of Tulbagh and the "Twenty-four Rivers," reaches the Atlantic at St. Helena Bay. South of the promontory which forms the southern limit of this storm-tossed gulf, lies the bay or landlocked inlet of Saldanha, so called from a Portuguese admiral whose name was formerly applied to Table Bay. It was in the neighbourhood of
this basin that Vasco de Gama was wounded by the Iottentots in 1497, and Francisco d'Almeida massacred with all his followers in 1508 . The bay, which is of easy access, is very deep, and is broken into several secondary basins, sheltored by intervening granite headlands, and presenting excellent anchorage to shipping.


Yet this admirable haven, which the Dutch had made their chief naval station and the centre of the postal communications between the United Provinces and their East Indian possessions, has now been almost abandoned. Little is seen on its deserted shores beyond a few isolated farmsteads and fishing stations. In the 106-ar
vicinity there is not a single village, and Malmesbury, the nearest town, lies over 30 miles to the south-east, in a fertile wheat-growing inland district. The superior attractions of the capital have withdrawn all traffic from Saldanba Bay.

North of the valley of the Great Berg, the mostly burren and arid plains stretching northwards to Little Namaqualand are very thinly peopled. Even the capitals of districts, Piquetlerg, Clannilliam, the "furnace" of the Cape, and Calvinia, are mere villages, whero the stock-breeders of the surrounding pasturages come to renew their supply of provisions. Calvinia, standing over 3,000 feet above the sea, in an upland valley between the Hantam and Boggeveld ranges, is still connected by a good highway with the civilised regions of the Cape. But farther north stretch the vast solitudes of Bushmanland, whose only inhabitants are a few groups of Suns scattered round the lagoons. The district of Little Numaqualand, which occupies the north-west corner of Cape Colony, between the Atlantic and the course of the Lower Orange, would also be left to the aboriginal populations but for the great abundance of copper ores in the hilly districts. In the neighbourhood of the Vogel-Klip ("Bird-Cliff"), the culminating point of these highlanils ( 3,400 feet), an English company owning a territory 135,000 acres in extent has been working the "inexhaustible" mines of Ookiep since the year 1863. This source alone has yielded an annual supply of from ten to twenty thousand tons of ores containing about three tenths of pure copper, more fusible than that of Chili. The great pit, already sunk te a depth of over 500 feet, has reached formations still more productive than those of the surface. The mines are worked by several hundred natives, Hottentots and Hereros, under the direction of English engineers from Cornwall and Germans from Thuringia. Although lying 3,200 feet above the sea, Ookiep is connected with the coast by a horse or mule railway 90 miles long. The little haven of Port Nolluth, where the ore is shipped, was formerly much frequented by American whalers.

East of the Cape and of False Bay the territory stretching south of the coast range towards Cape Agulhas, southern extremity of the continent, is a region of pasture-lunds containing only two unimportant little towns, Caledon and Bredasdorp. But the basin of the Breede River is more thickly peopled, thanks to the greater abundance of its rainfull. Worcester, cupital of the Upper Valley, whose headstreams have their source to the north of the coast range, lies on the main line connecting Cape Town with Kimberley, and here the railway begins to ascend in order to reach the inland plateaux. Penetrating through a lateral valley traversed by the river Hex ("Witch River "), it rises by a series of curves to the crest of the terraces which skirt the plains of Worcester. Here it attains an elevation of 2,000 feet, and reaches its highest point ( 3,600 feet) 74 miles to the north-west of Worcester. A copious thermal spring rises in the vicinity of this place, and lower down the Breede flows successively by the towns of Robertson and Suellendam, the latter one of the oldest settlements in the colony, having been founded so early as the middle of the eighteenth century. Avenues of oaks radiate in various directions from the town towards the klonfs or wild gorges which penetrate into the heart of the mountains. I he village of Port Bcaufort,
situated on the left bank of the Breede, above the bar, is visited by a few small coasting vessels. But of all the havens officially opened to the foreign trade of the colony, Port Beaufort is the lenst frequented.

The extensive basin of the Gaurits, which follows to the east of the Breede Valley, contains several of the secondary towns of Cape Colony. Beaufort West, the chief station on the railway between the Cape and the banks of the Orange River, stands at an altitude of 2,960 feet above sea-level, and its gardens are watered by the farthest headstreams of the Gaurits, flowing from the southern slopes of the Nionwe-veld. The village of $P$ rince $A l b e r t$, in the arid region of the Great Karroo, lios also on one of the upper affluents of the Gaurits. Farther

Fig. 40.-Mouti of the Breede-Port Beauyort.

south, and on tributaries of the same river, lie the towns of Lady/smith and Oudtshoorn, both at the southern foot of the Zwarte-bergen, or "Black Mountains." Oudtshoorn is noted for its tebicco, which grows on some of the best soil in the colony, a soil still unexhausted after a hundred years of uninterrupted tillage. North of this place, in an upland lateral valley, are situated the caves of Cango, stalactite grottoes that have not yet been entirely explored, although surveyed for a distance of over 2,000 yards from the entranee.

There are neither towns nor even large villages on the lower Gaurits, which in this part of its course winds between narrow rocky gorges. Riversdale, lying in the midst of the rich grazing-grounds of the Grasveld, is situated some 30
miles to the west of the main stream, in a valley whose waters flow directly to the sea. Aliucal South, the maritime port of this pastoral region, stands on the west side of Mossel Bay, at the root of the rocky headland of Capo St. Blaise, by which it is sheltered from the fierce southern winds. Aliwal South does a considerable import and export trade, ranking fourth in this respect amongst the colonial seaports.

Farther east along the seaboard follow several little towns, all lying at the foot of the coast runge, which Trollope compares to the Western Pyrenees, and which, according to this writer, presents the fincest sites in the whole of Austral Africa. Here the pleasant little town of George is embowered in verdure ; Melville is mirrored in the auriferous waters of the Knysna, which flows from the forest-elad Uteniqua Hills, und reaches the sea through a deep estuary accessible to large vessels; Humanadorp occupies a picturesque position in an amphitheatre of thickly wooded heights. Uniondale and Willowmore, the two chief places in the distriet, are both situated in romantie valleys on the northern or inland side of the coast ranges. Farther north, in the arid zene of the Karroe, but still on the slope draining to the Southern Ocean, the two administrative centres are Aberdeten and Murraysburg.

The basin of the Sunday River, although one of the leust extersive, is one of the best cultivated and most productive in the colony. It owes its prosperity to its position in the relatively moist zone facing towards the Indian Ocean, and to the two trade routes traversing it, one in the direction of the Orange River and the Dutch republics, the other towards the territory of the Kafirs. Here GraffReinet, a Dutch settlement, over a hundred years old, is laid out like a chessboard about the headwaters of the river, which here ramifies into several branches flowing through the surrounding fields and gardons. To the contrast presented by this smiling valley with the arid plateaux $t$, the west, Graaf-Reinet is indebted for its title of " Gem of the Desert."

As indicated by their names, Jansenville and Uitenhage, which follow to the south along the road to Port Elizabeth, were founded by the Dutch. But Uitenhage has completely acquired the aspect of an English settlement since the year 1820, when it received a large number of British colonists. Of late years it has become a favourite place of residence for traders and dealers who have retired from business, and on festive occasions it is visited by a large number of pleasureseekers, who delight in the shady walks by its running waters. But Uitenhage is also an industrial centre. In the numerous little mills seattered amid the surrounding glens, busy hands, nearly all Kafirs, are employed in cleansing by machinery the enormous quantities of wool brought from the extensive sheep farms in the eastern parts of the colony.

Port Elizabeth, which lies 20 miles to the south-east of Citenhage, on the west side of Algoa Bay, although dating only from the year 1820, has already beeome the most animated seaport in the whole of South Africa. Within a single generation it outstripped Cape Town in commereial importance, notwithstauding the disadvantages of its open roadstead compared with the more favourable position
of Tuble Buy. Fow sailing vessels, however, venture to visit its port, and nearly ull its trade is carried on by steumers, mmy of which sail diroetly for Bugland without even calling at Cape Town. It is still inferior in population to the capital, but bousts of possessing finer buildings, of being better administered and more ubunduntly provided with the resources of modern civilisation. In the colony it is pre-eminently the English city, and on the least occasion its inhabitants make

it a point of honour to display their loyalty for the mother country in the most enthusiastic manner.

Port Elizabeth covers a considerable space on a gently sloping hill, at the foot of which its muin thoroughfare runs for nearly 3 miles parallel with the beach. Its growing suburbs stretch along the roads leading inland, while beyond the upper town a bare plateau is covered by the tents of the "location," or native
quarter, inbabited chiefly by Kufirs, temporary immigrunts who seek employment unongst the shipping and on the harbour works. Till reeently suffering from a dearth of water, Port Elizabeth was unable to muintain any garden blots alout its villas. But an nqueduct about 30 miles long now brings ، $1 \cdots$, hats stpply, thanks to which a rich carpet of verdure already clothes the are, "he botanic garden has assumed a magnificent aspeet, and unbrag wain parklands contrast by their bright foliage with the patches of parched herbage vis ible wherever the irrigating waters aro unavailable.

The trude of Port Elizabeth, which in recent yeurs has suffered much from reckless speculution, consists for the most part in wool and ostrich plumes, forwarded in exchange for English manufactured goods of all kinds. The roadstead of Algoa Buy is sheltered in the neighbourhood of the town by the extremity of the headland which still bears the Portuguese name of Cape Recife. But during the summer months, from October to April, when the southern and southeastern winds normally prevail, the surf beats furiously on the beach, endangering the vessels riding at anchor in the roadstead. The breakwater, little over 300 yurds long, affords shelter only to the smaller craft of light draught. A few islets and reefs are seattered over the bay; Santa-Cruz, one of these islands, over which hover clouds of aquatic birds, was visited by Bartholomew Diaz during his memorable voyage of discovery round the southern extremity of the continent. On this spot, the first ever touched by a European foot on the shores of the Southern Ocean, he erected the pillar of Sum Gregorio, to indicate that he had occupied it on behalf of the King of Portugal. Santa-Cruz is also known by the name of Fountain Rock, from two springs welling up on the surface.

Port Elizabeth eommunicates with the interior by means of two railways, one runuing to Graaf-Reinet, the other a far more important line, which branches off in one direction towards the regions beyond the Orange River, in another towards Graham's Torn and Kafirland. Although smaller and of less commercial importance than Port Elizabeth, Graham's Town takes precedence as the chief political centre onst of Cape Town. It is the capital and residence of the principal administrative, judicial, and religious authorities of the eastern districts, and Graham's Town was already indicated as the future metropolis of the confederate states in the year 1878, when the question was first seriously mooted of consolidating the power of the mother country by uniting the British colonies and Dutch republics in a single dominion. But this ambitious town has the disadvantage of lying at some distance from the coast, and even from any large river. It stands 1740 feet above the sea in a cirque surrounded by bare escarpments; but the general lack of large vegetation has been relieved by planting trees along all the avenues of the city. . It is a clean, well-built, cheerful place, and thanks to the moderate summer heats and generally equable climate of the distriet, is distinguished for its sulubrity even amongst the colonial towns, most of which are so highly favoured in this respect. Hence many invalids settle here in the hope of recovering their health, or at least prolonging their days.

Founled in 1812, Graham's Town continued to be an obscure provincial town

till the epoeh of the great English immigration in 1820, when it became the chief centre of the operations in the Kafir wars, often serving as a place of refuge for the colonists settled on the castern frontier. Now it is no longer threatened by hostile natives, its barracks have been abandoned by the military and adapted to the purposes of the civil administration, and the Kafirs of the neighbourhood have become peaceful labourers or industrious artisans. The white population of the town and surrounding distriet, of whom the great majority are of British descent. were formerly occupied chiefly with sheep-farming But the region known as the Zuur-veld only produces a sour grass which is badly suited for sheep, and these have consequently in many distriets been repluced by ostriches. Here ostrichfarming and the preparation of the feathers for the Europcan market have succeeded better than in any other place where this industry has been established.

Hitherto dependent on Port Elizabeth for its foreign trade, Graham's Town has recently endeavoured to secure an outlet for itself. At the mouth of the little river Kowie, the nearest point on the coast, extensive works have been undertaken to get rid of the bar and establish convenient landing-stages and depôts. Vessels drawing from 8 to 9 feet of water can already enter the estuary and discharge their cargoes at the quays of Port Alfred, the new harbour, which is connected witb Graham's Town by a railway running through the agricultural town of Bathurst. The neighbouring beach is much frequented in summer as a favourite watering-place. The promontory visible to the west, and bounding the east side of Algoa Bay, bears the name of Point Padrone, doubtless because here the Portuguese formerly raised a padrão, or memorial stone, as on so many other headlands along this seaboard. Near Cape Padrone lies the modern village of Alexandria.

The basin of the Great Fish River, which winds to the east of the Graham's Town heights, has its farther sourees on the southern slope of the main northern range, near the southernmost point reached by the Orange River, and is divided into several eleetoral districts. Middleburg, on an upper affluent of the rivor, lies already on the incline by which the Port-Elizabeth railway ereeps up the escarpment in order to cross the range into the Orange basin through the Bosworth Pass, which stands at a height of 5,200 feet, greater than that of many an Alpine railway. Cradock, on the main stream itself, and Tarka-stad, on one of its triiutaries, are important centres of the colonial wool trade. In the neighbouring district still survive in the wild state a few groups of quaggas, which are now protected by the game laws.

Somerset and Bedford are also agricultural centres, while Fort Beaufort has preserved something of its original military aspeet. As an advaneed outpost towards the Kafir country, it bravely withstood the repeated assaults of the hostile natives in 1851. The district which stretches northwards along the southern slope of the Flandsberg and now called Stockenstrom, was formerly known as the Kat River Colony, which before the war of 1851 had been exelusively reserved for the Hotlentots. But the land being fertile and well watercd by the Kat River, the whites soon found the usual pretexts for occupying it, and the
little town of Seymour has already been founded by the English settlers in the centre of the old Hottentot Reserve. Farther south Lovedale, centre of schools and missions, and Alice, east of Fort Beaufort, lie both in the valley of the Keiskamma. Furt Peldie, an old military station nearer to the coast, has become the chief centre of population in the "neutral zone," which was formerly limited on one side by the Great Fish River, on the other by the Keiskumma.

Farther east the border lands still more recently contested by the Kafirs and the English squatters are now pacified, and have also their white settlements. The capital of this conquered territory is King William's Toun, more commonly designated by the simple name of King. Of late years it has become a great trading centre, and the chief depôt for the traffic between the British colonists and the Kafirs. Nearly all the farmsteads dotted along the banks of the river in this district are inhabited by Germans, descendants of the Anglo-Germanic Legion which was disbanded after the Crimean war. Hence such names as Berlin, Potsdam, Braunschucig, Prankfurt, given to the recent settlements in this part of the country.

Like Graham's Town, King has also sought for an independent outlet for its trade, and it is now eonnected by a railway with East London, one of the most dangerous seaports on this coast. Jetties, quays, and breakwaters have been constructed, and extensive works carried out to deepen and shelter the estuary; but all in vain, and the harbour often remains inaccessible for days together. The Buffalo River, which reaches the sea at this point, has occasionally swept away the bar during some sudden freshet, and then vessels drawing 20 feet of water could enter the port, but now the bar is fixed, and has seldom a depth of more than 8 or 9 feet at the flow. In South Africa the remark has become proverbial that East London is one of those ports which are highly in favour with owners who want to lose their ships, crew and all, in order to recover the insurance on the freight from the underwriters. Yet in spite of everything, East London is the second port in the colony for the shipment of wool, of which nearly eightcen million pounds were forwarded in 1886.

Like the large towns in the western district, King William's Town is connected with the Orange ba-in by a railway, which surmounts the Storm-berg at a pass nearly 5,700 feet high. The line passes through Stutterheim, Catheart, and Queenstown, in the well-watered distriet which formerly belonged to the Tambuki Kafirs. It then turns the pyramidal mass of the Hang-Klip and crosses the main range at an altitude 800 feet higher than the Puy de Dôme in the south of France. On the opposite slope this line traverses the coalficlds of Mo.teno, which supplies the whole railway system of the colony with fuel. Beyond the Molteno district the route passes through Burghers on the inland plateau, reaching the Orange River at the station of Alival North, which carries on a considerable trade with the Orange Free State, whose territory begins on the opposite side of the river. A bridge 860 ieet long conneets Aliwal North with a suburb on the right bank of the river. Thore can be little doubt that this important line will soon be continued northwards through the Orange republio to Transvaal, as early in the
year 1888 the conference of the Cape Colony, Natal, and Orange Free State delegates at Cape Town unanimously agreed to a report recommending the establishment of a South African Customs Union, and the extension of the coloninl railway system through the Free State to the Vaal River, the extension to be undertaken by the Frce State Government.

East of Aliwal North the region comprised between the course of the Orange, the Tolle River, and the crest of the Drakensberg, is still included in the territory of Cape Colony. In this Alpine district the two chief centres of population are the villages of Herschel, on the left bank of the Orange, and Barkly, situated in an upland valley near the river Kraal, which falls into the Orange a short distance above Aliwal North.

Towards the west, the zone of the colonial territory belonging to the basin of the Orange gradually broadens out with the northern trend of that river. But towns and even villages are rare on these arid upland plains formerly inhabited by myriads of large mammals, and now mostly converted into vast grazinggrounds. Colrsburg, now connected by rail with Port Elizabeth, is the chief depôt for goods intended for the Orange Free State: An "international" bridge crosses the Orange about 20 miles to the north-east of this place. Two other bridges follow towards the north-west, between the colonial territory and that of its late acquisition, Griqualand West. One of these belongs to the railway which runs from the Cape in the direction of the Diamond Fields; the other, at Hopetovon, lower down, is the most remarkable structure of this sort hitherto erected in Cape Colony; it has a total length of no less than 1,400 feet. Hopetown, which is distant over 600 miles from the Atlantic, is the last riverain town on the Orange, which from this point to its mouth traverses an almost uninhabited region. Nothing occurs along its banks except a few isolated farmsteads, some Hottentot kraals and missionary staticns, the German "colony" of Stolzerfels, and some Bushman camping-grounds. At the base of the hills far inland are a few market villages, such as Hanover, Richmond, Victoria West, Fraserburg, and Carnarion, whence the stock-breeders of the surrounding districts draw their supplies.

## Material Resources of Cape Colony.-Agriculturb.

The population of Cape Colony is rapidiy increasing by the natural excess of births over the mortality. Families are very numerous, and cases are mentioned of patriarchs whose family circle comprises over two hundred living deseendants.* Nevertheless the actual number of inhabitants is still very slight compared with the vast extent of still unoccupied lands suitable for colonisation. South Africa, at least throughout all the coastlands below the Tugela basin, enjoys an excellent climate, presenting no obstacles to field operations, and every farmer makes it a point of honour to make his holding yield simultaneously "corn and wine, meat and wool." Land is not yet very dear, except in the neighbourhood of the towns

[^12]and in certain well-watered districts, where "fancy prices" prevail. On an average the market value of good lands ranges from ten to thirty shillings an acre, :hile for the same money over half a square mile may be had in poor and arid districts.

Already the greater part of the colonial arable lands have found purchasers. Nevertheless there still exist vast unclaimed wooded tracts and other lands of which the Crown has taken possession, and which after being officially surveyed are put up for sale. The buyer is required to pay yearly the twentiets part of the purchuse moncy, unless he prefers to redeem the charge by a single payment. In the eastern districts old grazing grounds of the Kufirs, and other extensive domains confiscated from the enemy, have been parcelled out into lots for the most part of small size, varying from 320 to about 500 acres. These lots are sold only to such purchusers as are not already owners of estates exceeding 500 acres. An attenpt has in this way been made to introduce a system of small holdings, and in this region the land is really divided into a relatively large number of estates. Here English, German, Hottentot, and Kafir squatters live side by side as peuceful tillers of the land, whereas farther west, and especially in the pastoral districts, the system of large landed properties prevails almost everywhere. The purchasers have secured on an average about four times as much as had been ceded to them by the Government, and even in the vicinity of the Cape domains of 2,500 acres and upwards are by no means rare. Thus South Africa, like the mother country, has already developed a territorial aristocracy.

Although cereals give a very fair return on the outlay in capital and labour, the colony is still obliged to import corn and flour to the yearly amount of from $£ 280,000$ to $£ 600,000$. Wheat is crown chiefly in the neighbourhood of the eastern and western capitals, Cape Town and Graham's Town, and in the northeastern districts near Kafirland and the Orange Free State. Maize and millet are the prevailing crops in the eastern parts bordering on he Kafir territor ${ }_{j}$; but here, us well as in the rest of the colony, an íc alimentary plants of the European temperate zone thrive well. Tobacco-growers appear to meet with most success in the valley of the Olifant River, an eastern effiuent of the Gaurits, where the annual crop is ubout $3,500,000$ pounds of leaf, entirely consumed in South Afriea itself.

The vine was one of the first European plants introduced by the early settlers into the Cape district. The Huguenot refugees, bringing the plant with them, from the first devoted themselves seriously to viticulture, and the districts where they settled are still the most noted in the colony for the quality of their vintages. The climate of the extreme south-west corner of the continent is admirably suited for the cultivation of the vine, probably more so than any other region in the whole world. To the spring rains, which stimulate the vegetation gencrally, succeed the summer heats, which, thanks to the normal humidity of the atmosphere, bring the grapes to maturity without at the same time drying them. Hence the annual production of the Cape vineyards is relatively higher than that of any other country in the world. The difference is in fact so great that it might
appear altogether incredible to most wine-growers. Thus while the yield varies in other places from about three hundred and ten to nine hundred gallons per heciare,* it reaches two thousand in the coast district of the Cape, and rises to the prodigious average of no less than three thousand eight hundred gallons in the inland districts of Worcester and Oudtshoorn. $\dagger$

Yet, despite this marvellons yield, only a very small part of the western district suitable for wine-growing has hitherto been devoted to viticulture. Although this industry is yearly increasing, the actual extent of land planted with the vine was still under 25,000 acres in the year 1886. At the same time very little intelligence is displayed in saving the harvest and preparing the vintage, so that most of the wines, badly pressed and "fortified" with brandies, have an unpleasant flavour in the opinion of connoisseurs. The reputation of the Cape wines, which stood very high during the first half of the present century, has since greatly fallen off, and efforts are now being made by some growers to bring them again into favour. The South African vineyards have also had to suffer from oidium, and in the year 1886 phylloxera made its appearance in some vineyards in the vicinity of the capital.

## Stock-breeding.-Ostrich-farming.

The number of inhabitants of the colony occupied with stock-breeding and the associated industries is estimated at about one-third of the whole population. The breed of horses, sprung from ancestors imported from the Argentine States, and afterwards improved by crossings with English and Arab blood, possesses the rare combination of strength, mettle, and endurance. Breeders have already their "genealogical trees" of famous racers, and the colony at present possesses about four hundred thousand more or less valuable horses. The horned cattle are at least thrice as numerous. They descend partly from the long-horned animals owned by the Dutch at the arrival of the first immigrants; but this stock has long since been modified by crossings with varieties introduced from England and Holland. Hundreds of thousands of oxen are employed exclusively for the transport of goods and passengers in the colonial districts and conterminous regions which are not yet traversed by lines of railway. Hence farmers devote themselves specially to the breeding of cattle as pack animals and mounts, an iadustry unknown in any other part of the world. But on the other hand, milch cows are far from numerous, und such branches of dairy farming as the collection and distribution of millk, and butter-making, are carried on only in the neighbourhood of the large towns. Whole herds have frequently been swept away by epidemics.

At present the chief resource of the colony is its numerous flocks of sheep. On their first arrival in the country the Dutch here found the fat-tailed breed

[^13]with rough fleece or hair, which is spread over the greater part of the African continent. The animals of this variety owned by the Europen and native furmers of the colony are still estimated at about a million, and their numbers have even recently inereased. Their flesh is eo highly esteemed that they continue to be largely bred, chiefly for the shambles.

The first Luropean sheep yielding a fine wool were not introduced till the year 1790, and in 1830 the wool exported from the Cape amounted to no more than some thirty-three thousand pounds. The weaving of wool was still unknown in the country, und even now it would be difficult to find amongst the old Boer fumilies a single womun able to handle a distaff or knit a pair of stockings. Wool-growing acquired no importance till about the middle of the century; but from that time forth it develnped rapidly, and this industry reuched its highwater level in the year 1872. After that time it again notably declined, owing to the prolonged droughts, and probubly also because the wools of the Orange Free State, formerly exported by Cape Colony and reckoned amongst the produce of that wiginn, are now forwarded through Natal.

Excluding the fat-tailed species, there are altogether alout nine millions of wow yielding animuls in the colony. Thanks to their flecee, the Cape sheep have inch the ehief agents in distributing the regetable speeies. Wherever they pet.in ate they bring with them the seeds from the regions traversel by them. Thanty parts of the country lying north of the Orange River the aspect of the veratetion bas undergone a complete change since the introduction of sheepfarming. Since the middle of the century the Cape stock-breeders have also here acclima ised the Angora goat, and the mohair which is now exported from South Afriea is said to surpass that of Asia Minor itself in fineness and softness of texture, without, however, equalling it in lustre. In the grassy enclosures of the colony there now also graze thousands of tame antelopes of several species, but chiefly the variety known as boute-boks.

Previous to the year 1864, the ostrich had been regarded by the Cape Colonists only as game, and this animal was so eagerly hunted that the time was foreseen when it would have completely disappeared from South Africa. But two farmers in different parts, of the country were alr sady turning their attention to the domestication of the ostrich, with the view of substituting systematic breeding for the chase. The result was that in 1875 the agricultural census of the colony included sighty of these tamed birds, which yielded for exportation one hundred and twenty-five pounds of feathrrs, less beautiful, however, than those of the Mauritanian kird living in the wild stato. Domestication appears to have gradually changed the character of this ansial, which is naturally at onee so timid and so irascible, and the young broods may now be tended without any great risk. But the industry remained somewhat in abeyance until the introduction of artificial incubators. Since then the number of domestic birds has rapidly inereased, numbering in 1882 about one hundred and fifty thousand, which yielded for the export trade two hundred and fifty-five thousand pounds of plumes, valued altogether at no less than $£ 1,100,000$. The emallest newly-hatched chick reudily
fetched $£ 10$, and before the year 1883 the stock of healthy, full grown birds with fine plumage was valued at hundreds of thousands of pounds.

But since that time ostrich-farming has become a more precarious occupation. Disease has greatly diminished the prospects of breeders; the expenditure has gone on increasing in undue proportion to the profits; and worse still, fashion, ever fickle, hus reduced by one-half the market value of ostrich feathers. These beautiful personal ornaments are no longer so highlv esteemed since industry has rendered them more common. Nevertheless Cape Colony has hitherto preserved the virtual monopoly of the trade, the repeated attempts made to domesticate the ostrich in Algeria, Tripolitana, Australia, the Argentine States, and California, having had but little success. In order to prevent the exportation of the Cape breed, the administration has imposed a prohibitive export tax of $£ 100$ on every adult bird and $£ 5$ on every egg.

## Irrigation Works.-Trade.

Both for the purposes of stock-breeding and for agricultural operations generally, the Cape Colonists need an abundant supply of water. But perennial streams and copious springs are unfortunately everywhere somewhat rare. Hence a chief care of the farmers must necessarily be how best to husband the rain water and prevent its running waste. The fertilising fluid is now drawn off from most of the rivers, and distributed by irrigation canals along the riverain tracts. Elsewhere, the natural reservoirs are directly tapped by hand and chain-pumps, and suchlike molern hydraulic appliances. But in the districts destitute of springs or permanent streams, the underground supplies have to be reached by sinking deep wells in the mountain gorges, along the dried-up wadys, and whereever subterranean streams may still be flowing. The grazers of the arid Karroo country have acquired great skill in detecting, by the character of the vegetation, the spots were such reservoirs have been formed below the surface.

Most of the landowners whose estates present a certain incline and other facilities, have taken advantage of the natural lie of the land to capture and store the rain water in large depressions formed by artificial dams and embankments. Some of these lucustrine basins are some miles in circumference, and after the wet season often contain as much as thirty-five million cubic feet, or about two hundred and twenty million gallons of the precious fluid. Thanks to these extensive works, many tracts in the Karroos have already undergone a great change. Large trees, orchards, and tall succulent herbage now flourish in districts where formerly nothing was to be seen but bare arid lands relieved here and there with patches of thorny scrub. But these oases in the wilderness are occasionally exposed to the ravages of the all-devouring locusts, clouds of which at intervals of fifteen or twenty years alight on the verdant slopes and bottom-lands, in a few hours consuming every blade of grass.

Till recently the English and Dutch settlers confined themselves to farm operations and the export of the raw materials to Europe, the few local industries
being limited to the production of the most ordinary objects of daily use. But such is no longer the case. The colony is learning to dispense with the manufactured wares of Great Britain, and has even begun to impose prohibitory charges on theso imports for the purpose of fostering the rising industries of South $\mathbf{A}$ frica. The Cape now boasts of its distilleries, its breweries, its flour-mills, tanneries, sawing and soap works, and even factories for manufacturing furniture, carriages, and machinery. Its artisans are already trying their hands at wool-spinning and cloth-weaving, and have begun to supply England with tinned meats and all

Fig. 42.-Souti African Lines of Steay Navioation and Cableg.
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kinds of jams and preserves, the preparation of which had hitherto been the secret of the Dutch housewives.

The Cape is also developing a mining industry, and amongst the immigrants who come to seek their fortune in the colony are many Cornish miners, driven from the mother country by the gradual exhaustion of the English mineral ores. At present the ehief colonial mining operations are centred about the rich copper deposits of Little Namaqualand and the coalfields of the Storm-berg highlands. Guano is also methodically worked in the islands along the west coast, and salt in the upheaved inlets of the seaboard and in the depressions of the Karroos and of the Orange basin. The Cape salt, excellent for pickling and curing, is used in some fishing-grounds which cure for the local consumption and even for the English market.

The colonial trade, which normally increases from decade to decade at a more rapid rate than the pepulation itself, has nevertheless temporarily decreased since the exportation of wool and ostrich feathers has been checked by long droughts, reckless speculation, changes of fashion, and competition. But notwithstanding this fulling off, the movement of the foreign exchanges is still relutively equal to that of France, that is, allowing for the immense differonce betwoen the popula. tions of the two countries. Nearly the whole of the foreign trade of the Cape is carried on with England, and this is specially true of the exports, while more than one-third of the rest is taken by the other British colonies. Direct commerce of France with South Africa can scarcely be said to exist.

Nearly the whole of the carrying trade of the colony is in the hands of the English, the seaborne traffic being almost exclusively carried on by vessels flying the British flag. Although somewhat thrust aside and removed from the great highway between Western Europe and the East Indies by the opening of the Suez Caual, the Cape is now visited by a greater number of ships than at the time when the Mediterranean was still separated from the Red Sea. The improvement in mechanical appliances now enables the ocean steamers plying between England and Austrulia to replenish their coal bunkers at Cape Town without putting into the inner harbour. The annual amount of British trade carried on in is way by vessels doubling the Cape without landing at the capital, is estimated at not less than $£ 50,000,000$. Cape Town is also now connected with the telegraphic systems of Europe and the New World by means of a cable which touches at nearly all the chief seaports along the west coast of Africa. Another cable, which was the first to be laid down, connects the colony with Zanzibar, Aden, India, China, and Australasia.

## Highwaye of Communication.

In the interior of the country the network of communications is being rapidly developed. A great change has been effected since the days when the Boers moved about from district to district and carried out their great northward migrations under almost incredible difficulties. In the total absence of properly constructed roads they had to drive their cumbrous waggons over rough and irregular tracks, across sandy or stony wastes, muddy depressions, and thorny scrub. These huge vehicles were constructed of a hard elastic wood, grinding and groaning at every jolt. They had to be made disproportionately wide to keep thein from toppling over as they suddenly plunged into the wayside ruts, and they were divided like movable houses into various compartments for the provisions, the household utensils, the merchandise, and sleeping arrangements. A stout awning covered the whole, sheltering the inmates of these ambulatory dwellings from rain, wind, and dust. Usually several families migrated in concert, to afford each other mutual aid during rough weather, or in case of attack from the aborigines or from wild beasts. As many as eight or ten thus followed in a long line, winding over the track and each drawn by a team of several pairs of oxen
with heads bent by the heavy yoke, but muzzle free of erul or reins. The driver urged them with his voice, nided by an occasional touct of his formidable whip, generally several yards long. A youth nearly always ran in front of the first puir, guiding them to the right or left, and at the passage of rivers even swimming before them, encournging thom in every way and preventing them from stopping in mid-streum and thus exposing the whole span to being swept away by the swift current.

To surmount the steop inclines the ordinary teams were often insufficient, although the waggon-load might not exceed one ton. In such occasions the number of draft unimals had to be perhaps doubled under the leading waggon, ten or even twelve pairs being yoked to got it over the difficult pass, and then brought back to pick up the rest of the convoy awaiting their turn along the line of march. At times the vehicles had even to be unloaded, taken to pieces, und transported with the whole freight piecemeal over the rocky heights. Frequently tho animals broke down altogether through sheer exhaustion, and then the caravan had to outspan in the wilderness while messengers were sent to bring up fresh teams. Yet in spite of all the dangers and hardships of such journeys, they were always remembered with a feeling akin to delight, and cheerfully resumed at the shortest notice. In the evenings the waggons were disposed in a circle round the cump, great fires were kindled to scare away the rapacious beasts, whose eyes were at times seen glaring in the bush, and music and the dance were kept up till late at night to indemnify the trekkers for the toil and perils of the day.

At present such tedious journeys are no longer made in Cape Colony, where vehicles of the old waggon type are used chiefly for the transport of goods in the more remote districts. A network of great carriage roads intersects the territory in all directions, surmounting the loftiest ranges by well-graded inclines. Sections of road-work, such as those of Montague Pass and Southey's Pass, in the southwestern division, and of the Catberg, between the Orange River and Graham's Town, ore the glory of Cape Colony, and are shown to strangers with a pardonable feeling of pride.

The lines of railway starting from the coast at Cape Town, Port Elizabeth, Port Alfred, and East London, penetrate far into the interior, surmounting the successive mountain barriers at altitudes of several hundred, and even some thonsand feet, in order to reach the Orange basin. With the exception of a few secondary lines, the whole colonial railway system belongs to the local Government, as do also the telegraph lines. The receipts derived from these works of public utility constitute no inconsiderable part of the public revenue.

## Administration.-Public Instruction.

Throughout the first half of the present century Cape Colony was simply a dependency of the Crown. The governors exercised their functions in the name of the sovereign, at first alone, and later with the aid of an executive council and a legislative council, nominated direetly by the British Government. The colonial
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parliament dates only from the year 1853, and the appointment of the Governor and Vice-Governor is still reserved by the Crown, which also retains the power of veto. In virtue of the constitution, which is modelled for the most part on that of Great Britain, the legislature comprises two chambers, the Lower, or House of Assembly, and the Upper, or Legislative Council. The first consists of seventy-six members, elected for a period of five years, and indemnified for their services by a grant of twenty shillings a duy during the session. The Legislative Couneil comprises only twenty-two members, who take the distinctive title of "Honourable," and who are elected for seven years, the qualification being the possession of $£ 2,000$ immovable property, or movable property worth $£ 4,000$. Members of both chambers are elected by the same voters, who must be British subjects, white

Fig. 43.-Administrative Divisions of Cape Colony and Nelahbourina Territories. Bcale 1 : 17,500,000.


The divisionsl fgures oorrespond to thome Inseyted in the District Tables of each State. For lack of space the districts of the Diviaion of the Cape are not indicated.
or black, owners of house property of the value of at least $£ 50$, or in receipt of a salary of $£ 50$, or wages of $£ 25$ with board and lodging. But by a recent decree of the Colonial Government, blacks who are joint proprietors with other natives have been disfranchised.

By all these provisions a very small number of whites, and the immense majority of the aborigines, are excluded from the exercise of the electoral right. But as a rule these electors show little eagerness to vote, seldom attending the polling booths except under the pressure of parties anxious to secure the return of their candidates. The Assembly elects its own president and officers, while the Legislative Council is presided over ex-officio by the Chief Justice, himself appointed by the central Government. The general administretion is entrusted to the Governor,
107--Ar
aided by a ministry of five members: the Colonial Secretary, the Attorney-General, who is also Premier, the Treasurer-General, the Commissioner of Crown Lands and Public Works, and the Sccretary for Nutive Affairs. These ministers, who are chosen by the Governor, constitute the Cabinet, responsible to the Chambers.

The administration of justice still depends on the British Government, by whom are appointed the field-cornets (rell kornet), or district magistrates, and justices of the peace. The highest tribunal in the colony is the Supreme Court, which comprises a chief justice and eight puisne judges. The judges of this court hold sessions in Cape Town, and circuit courts in the western districts. The judges appointed to the eastern district courts hold sessions in Grahum's Town, and circuit courts in the eastern districts, and the judges assigned to the High Courts hold sessions in Kimberley. Under certain conditions, appeal may be made from the Supreme Court itself to the Queen in Council. The Roman-Dutch law constitutes the chief legal code, modified by colonial statute law.

The British Government also to some extent controls the military forces, although maintaining only a very small number of men at Cape Town and Simon's Town. The colonial army, paid out of the local revenues, comprises the Cape Mounted Riflemen, eight hundred officers and men, besides a body of about four thousand volunteers of all arms. By a law passed in 1878, every able-bodied 'man in the colony between the ages of eighteen and fifty is subject to military service beyond as well as within the colonial frontiers. Thus is constituted a nominal reserve of over one hundred and twenty thousand men.

Till recently the Church was still united to the State, although all denominations did not enjoy a share of the public revenues. Since 1875 the principle of separation has been adopted, and the several congregations have now to support their own ministers, salaries being allowed only to those members of the clergy who were appointed before the vote abolishing the State Churches had force of law. The ecclesiastical budget thus decreases from year to year by the process of natural extinction. In $1888^{\circ}$ it had already been reduced to $£ 8,600$. The largest white communities are the Dutch Reformed and the Episcopalians, which before the late changes were the privileged State churches. But the Wesleyans are far more active and successful in evangelising the natives, and most of the Hottentots and Kufirs in the colony accordingly belong to that denomination. The Malays have remained Mohammedans, and have even made some proselytes. They have mosques both at Cape Town and Port Elizabeth.

While the charges on the State revenue for religious worship are gradually diminishing, those for public instruction are on the increase, although the compulsory system has not yet been introduced. No doubt the scholastic establishments depend chiefly on the municipalities, and are, for the most part, supported by voluntary contributioñs. Nevertheiess the Government promotes the spread of education by means of scholarships for poor but promising students, by supplying books, maps and instruments, and by granting salaries or stipends to the professors. The primary schools are divided into three groups, according to the nationality of the pupils. Thus the racial prejudices which prevail in the

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religious world, distributing the faithful in separate congregations according to their complexions, have been extended also to the educational system, and legislation has taken care to keep the children of the dominant races entirely aloof from those of the Malays and Hottentots.

The public schools in the towns and villages attended by European children are administered by local commissioners; those intended for half-castes in the urban and industrial districts are placed under the superintendence of the religious communities; lastly, the schools opened for the use of the aborigines bave remained in charge of the missionary societies, by whom they were originally founded. These are, for the most part, technical institutions, where are taught especially such crafts as carpentry, cartwright's work, joinery, bookbinding, and printing. For these establishments a large number of teachers are drawn from the native population itself.

The colony also possesses high schools or colleges which prepare young men for the liberal professions. These are under the control of the University, which was incorporated in 1873, and which is an examining body empowered to grant degrees, without any machinery for imparting instruction. There are altogether five colleges aided by Government grants under the Higher Education Act, each with full staff of professors and lecturers in classics, mathematics, and the physical sciences. But despite all the facilities offered for public instruction, the proportion of attendance is far below the average amongst the civilised peoples of Europe, the rate being scarcely more than one in thirty of the population.

The Colonial Government has already its public debt, which about equals six years of revenue. The latter is derived for the most part from customs, excise, itamps, and legacy dues. The rest is made up from the profits on the railways post-office, telegraph service, tolls, and rent or sale of public lands and mines.

The colony is divided for administrative purposes into seven provinces with sixty-six fiscal divisions and sixty-nine judicial districts, which will be found tabulated in the Appendix.

## Griqualand West.

The province, which was d̈efinitely annexēd to Cape Colony in 1877, and which became an integral part of the same political system in 1880 , would probably have been still left to its aboriginal populations and to the squatters of Boer or mixed descent, had not the discovery of the diamond fields made it a valuable acquisition for the Colonial Government. In 1871 , that is one year after the report of the wonderful finds had been spread abroad, the Cape authorities invited the chief of the Griquas, a Bushman named Waterboer, to accept the British suzerainty, and then hastened to comply with the wish which he was stated to have expressed on the subject. The conduct of the Colonial Government in connection with this affair was certainly somewhat high-handed, although it could scarcely be expected that much regard could be paid to the fact that the miners attracted to the district had already set up the independent republic of Adamanta. The Orange Free State also put in a claim for the possession of this territory; but the right of the
strongest competitor prevailed, and in $187 \%$ the Boers of the Free State consented to surrender their claim to the contested district for a sum of $£ 90,000$.

A conventional line drawn across the plateau from the right bank of the Orange to the left bank of the Vaal, heneeforth detaches from the Free State and assigns to Cape Colony the triangular space comprised between the two rivers above their confluence. With a view to rounding off its frontiers, to this diamantiferous region has also bsen added a portion of the hilly tableland whieh stretches north of the Orange in the direction of the Kalahari Desert and of the new British Protectorate of Bechuanaland. Within its present limits the province of Griqualand West thus covers a superficial ares of nearly eighteen thousand square

miles, with a population of about sixty thousand, or in the proportion of three persons to the square mile.

Griqualand West enjoys an excellent climate, notwithstanding the fever prevalent amongst the mining classes, which must be attributed to the unhealthy nature of the operations in which they are engaged. As in the southern regions, the European population finds here a perfectly congenial home, and increases in the normal way by excess of births over the death rate. The country stands at a mean altitude of about 3,600 feet above sea-level, and while the general tilt of the land is from east to west, as shown by the course of the Orange, the highest eleva-
nsented
fever preunhealthy ern regions, increases in stands at a al tilt of the ghest eleva-
tions occur in the western parts of the prevince. Hero several crests exceed 4,600 feet, and the camping-ground of Daniel's Kuil lies at an altitude of 5,370 feet; even along the banks of the Orange the country falls nowhere below 3,000 feet.

The chains ef hills or ridges rising above the plateau are disposed for the most part in the direction from north-east to south-west, parallel with the course of the Vaal. They are usually of gently rounded form, the prevailing greyish tints giving them a somewhat monotonous aspect. In the depressions of the plateau between the two main streams are scattered numerous salt-pans, nearly all of circular form, which, during the rainy season, are large and deep enough for the light craft used in wild-duck shooting, but which at other times are either quite dry or even replaced by a suline efflorescence. Another feature of the landscape are the elusters of mimosas scattered over the grazing-grounds.

The Griquas (Gri-kwa), from whom the province takes its name, are generally spoken of by the Dutch Boers under the designation of " Bastaards." The great majority are, in fact, half-caste descendants of the white settlers and Hottentots of various tribes, who came from the regions south of the Orange about the beginning of the present century. In this extremely mixed population are met every variety of type, from the stunted Bushman and yellow Hottentot to the tall Kafir and fair European. But they are on the whole an active, vigorous race, daring and persevering, superior to the ordinary aborigines in strength and stature, and in all things distinguished "either by their virtues or their vices." * Amongst these African half-castes, as amongst the "Bois-Brûlés" of North America, are found the most enterprising traders, the most intelligent pioneers, the most daring hunters, but also the most dangerous and desperate criminals in the colony. In 1839 they valiantly defended their territory against the Mantati (Basutos), who were threatening to eross the Orange and overrun the whole country. The Mantati were driven towards the north, where they in their turn became famous conquerors under the name of Makololo.

Even the pure white population of Griqualand West, consisting for the most part of miners of every nation-Englishmen from Cornwall and Lancashire, Germans from the Hartz, Piedmontese, Americans from California, Australiansare distinguished above all the other European inhabitants of South Africa for their energy, independence, and enterprising spirit. More than once they have been in conflict with the Government, compelling it to withdraw unpopular measures.

## The Diamond Fields.

For a long time the squatters along the banks of the Orange were in the habit of picking up certain lustrous stones, the true value of which was, however, unknown till 1867. In that year two dealers shared between them the price of the first "Cape diamond," which had been taken from a young Busbman. Two years later a Griqua fcund another magnificent stone of 83 carats, which received the name of the "Star of South Africa," and which was sold for $£ 11,200 . \dagger$ There

- Gustav Fritseh, Drei Jahre in Sud-Afrika.
+ This beautiful gem, now known as the "Dualey," wat afterwards purchused by the Eari of Dudiey, and reduced, by the process of cutting, to a little over forty-six carats.
was an immediate rush to the district of Hopetown, where the first finds had been made, but where, strange to say, no deposits have yet been discovered. Then the sands of tho Orange were carefully examined as far as the confluence of the Vaal, the banks of which river were also explored. At last the great diamantiferous deposits were reached in a district 96 miles above the confluence, which was at one time probably studded with lacustrine basins. Now began the great rush, adventurers of all kinds flocking towards the new Eldorado, which was at that time almost uninhabited. Soldiers, sailors, doserters, farın-labourers, blacks, whites, mere striplings, arrived in crowds, every ship from Europe bringing a fresh con-

Fig. 45.-River Digeinas in the Vaal Basin.
Soale $1: 55,000$.

tingent of eager fortune-hunters. Miners, traders, and speculators hastened to cross the mountains andedesert plains of the Karroo in the direction of the new diamond fields. The more fortunate possessors of waggons and carts of any description were able to get over the rough ground in a few days, while the pedestrians plodded along night and day, guiding their steps by the indications obtained from the local squatters and Hottentot grazers. But many failed to reach the goal. Hundreds of wayfarers, worn out by hunger, thirst, disease, and hardships of all sorts, or perhaps losing their way in the wilderness, perished in the attempt to traverse a route over 600 miles long, and their bodies were devoured by rapacious
beasts and birds. On the camping grounds the mortality was even greater. Here the bad diet, the lack of comfort, overwork, excessive drink, preduced the epidemie of typhus known as the " miner's fover," which rapidly filled the cemeteries of every rising settlement.

Puiel, on the left bank of the Vaal, where the sands were first successfully washed for diamonds, has ceased to be one of the chief centres of attraction for speculators. The deposits have been impoverished, and reckless competition having ceased, the Government has been able to increase the size of the claims offered to purchasers. Here two or three hundred European and native miners still work on their isolated plots, independent, however, of any great monopolising companies. The town of Barkly, formerly Klip-drift, on the opposite side of the Vaal over against Puiel, is a busy market-place for all the diggers engaged in the mining districts for the spaco of 60 miles along the course of the stream. The annual yield of these river-diggings in the Vaal basin at present exceeds $£ 40,000$, and during the period from 1870 to 1886 the total product of the diamantiferous sands of this river exceeded $£ 2,000,000$. The diamonds of this district are distinguished above all others for their purity and lustre. They are generally found in association with other stones, such as garnets, agates, quartz, and chalcedony.

About the end of the year 1870 it was suddenly reported that diamond "placers" had been discovered on the plateau some 24 miles to the south-east of Pniel, far from the fluvial alluvia. A new rush was at once made towards this "land of promise;" the Dutch farmers were fain to sell their lands, and, as if by enchantment, there sprang up huudreds of tents and cabins, humble beginnings of the city which in South Africa now ranks in order of importance next to Cape Town and Port Elizabeth. Geological research has shown that in this region of the plateau the ground, uniformly covered with a layer of red sand overlying a bed of calcareous tufa, conceals in its bosom extensive augite porphyry formations, which are pierced to a depth of over 1,000 feet by still unexplored "pipes" or natural shafts. These pipes, which are faced with a wall of basalt, are surposed to be nothing more than ancient craters. The earth now filling them is precisely the diamantiferous formatic , which has been forced to the surface by the pressure of the subterranean gases, a: id which towards the surface has become yellow and friable, while remaining blue and compact in the lower depths impenetrable to atmospheric influences. There also occurs a good deal of fire-damp, especiully in the neighbourbood of the rocky walls, where the explosive gases are dangerous enough to require the construction of underground galleries to protect the miners. The basalts are overlain by carboniferous schists, und the question has been raised by geologists whether these schists may not have supplied the carbon required for the formation of the diamonds.

Within a space of about 11 miles in circumference there exist four of these underground crater-like openings, all full of the earth in which the diamonds are distributed in a certain order known to experienced miners. These four diamantiferous pipes are Bultfontein, De Berr, Du Toit's Pan, and Kimberley, the last of which, lying close to the town of like name, is the richest diamond-bearing
ground not only in South Africa but in the whole world. It has been suggested by the geologist Moulle, that the pans have the sune origin as the four diamantiferous craters; but they have not yet been examined to a sufficient depth to determine the point whether they also contain eruptive matter yielding erystuls.

Fig. 46.-Section of the Great Kimberley Mine phom Nohth to South.
Scale $1: \mathbf{6 , 0 0 0}$.


Saul's Kuil, one of these saline meres, is described by Chapman as of perfectly regular form and filled with a conglomerate in which sparkle countless agates.

During the early period of the mining explorations the productive district was laid out like a chessboard in uniform claims, separated from each other by clearing paths. Some five hundred pits swarming with ten thousand busy diggers gave to the mine somewhat the aspect of an ants' nest. But the workers on both sides attacked the intervening spaces to get at their precious contents; the conse-

quence was that they gave way at many points, and had to be replaced by bridges.
Fig. 47.-Kimberify: Appyarance or the Mine in 1880.


But the ground still continuing to subside and fall in, often without any warning,
it was at last resolved to clear out the whole of the interior, which was sinking day by day, in the form of a crater. In order to clear out the earth the plan was adopted of erecting a fiamework or wooden scaffolding round about the walls of the chasm, which had alreudy reached a depth of over 2,000 feet. This contrivance was disposed in several stages or landings, communicating with each claim by means of an endless band made of leather, steel, or iron wire. Capstuns, driven at first by hand labour and later by steam, raised the workmen and the buckets of earth from the bottom of the pit to the sorting platform. No other similar field of human industry presented a strunger spectacle than this vast cavity encircled by an intricate network of bright wires poising trucks of men and refuse in midair, and echoing with the constant din of human cries and grinding machinery.

But the appearance of the works soon underwent a fresh change. The bottom of the pits has to a large extent been filled in by the continual landslips within the enclosure, sweeping with them the heaps of refuse and disintegrated rock. During the heavy rains the abyss has also been frequently flooded, so that the outlay on the works often nearly balanced the profits. It was also found necessary to modity the plan of operations by sinking shafts through the crumbling rock in order to reach the blue earth under the heaps of refuse covering it, and by driving underground galleries into the heart of the diamantiferous mass. Thus, from being an open quarry, Kimberley has been gradually converted into a mine in the strict sense of the term. The year 1881, the most successful of all, yielded to the commerce of the world crystals to the value of $£ 4,160,000$. But since then the indusiry has somewhat decreased in importance, chiefly in consequence of the reduced market price of the gems, due to their greater abundance. The declared value of the diamonds exported in 1886 was $£ 3,504,000$, and the total value down to the end of the year 1887 has been estimated at nearly $£ 50,000,000$, represented by seven tons of diamonds, a far greater quantity than has been yielded by Brazil during the last hundred and fifty years. The proportion of diamonds to the actual amount of ground excavated and sorted is not more than one to eight millions.

The most rigorous measures have been taken to prevent the theft of the precious stones, and in consequence of these regulations the prisons of Kimberley have often been filled to overflowing. Strikes also have occurred, and as in the mining districts of Europe have occasionally had to be sternly repressed. But here as elsewhere the system of large estates has at last provailed. At first no one was allowed to hold more than two claims; then anonymous societies bought up the allotments, and since 1887 a "syndicate," with its headquarters in London and Paris, and disposing of a capital of $£ 15,000,000$, has become the owner of the two most valuable mines at Kimberley and De Beer. The whole mining population thus consists exclusively of officials and labourers. When the mines were first opened the aborigines were excluded from the purchase of claims; now these claims are accessible only to millionaires.

The capital of the mining district, lying close to the mouth of the deepest diamantiferous pit, has already acquired the dimensions of a large town. It is
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 wn. It isconnected with Cape Town by a railway 620 milos long, and as the chief centre of trade between the colony and the Dutch republies of the Orange and Transvaal, it is steadily reeovering from the losses caused by the depreciated value of its diamonds. Thanks to the water brought at great cost from the Vaal to the formerly arid plateau, the streets and squares of Kimberley have been planted with shady trees, and vast heaps of refuse have been transformed to pleasant gardens. Its original tin houses, brought piecemeal from England, have already been for the most part replaced by more substantial structures ; its thoroughfares are illumined with electric light, and like its neighbour, Beaconsfield, which has sprung up near the Du Toit's Pan mine, Kimberley already surpasses many old

Fig. 48.-Aprabatis for batbing the Diamantifekous Earth.


European towns in mechenical appliances, industria! rosourcos, well stokecd warehouses, and handsome buildings. The population, mostly of a fluctuating character, rose from thirteen thousand in 1875 to nearly double that number in 1886.

West of the Vaal the largest place is Griqua Turon, which may be said to give its name to the province. It was itself named from the Griquas, by whom it was founded in the year 1802, at the time of the great exodus of these Dutch and Hottentot half-castes. Formerly capital of the province, it has now sunk to the rank of chief town of Upper Hay, one of the four districts or electoral and administrative divisions of Griqualand West.

## Bechuanaland.

The region of broad plains diversified by wooded granite eminences, which stretches north and north-west of Griqualand West as far as the Kalahari wilderness, now also forms part of the British South African possessions. The Dutch settlers in the Transvaal republic had long been encroaching on the domain of their Bechuana neighbours, and had even here founded the two petty states of Stellaland and Goshon,* with the ulterior purpose of incorporating them in the Trunsvaal. The suzerain power was accordingly compelled to interfere in defence

Fig. 49.-Chief Routes of Explorere North of tere South African Colonfrs. Scale 1 : $18,000,000$.

of the rights of the natives, who were glad to accept the British protectorate in order to obtain permanent relief from the incessant raids of the boer filibusters on their eastern borders.

The region thus definitely annexed to the colonial dominion comprises that portion only of Bechuanaland which is bounded on the south by the Orange, on the west by the almost permanently dry bed of the Hygap, and northwards by

* Properly Stille-land ("Still" or Peaceful Land) and Goosen.
the valley of the Molopo affluent of the same river. A treaty concluded with Germany secures to Great Britain the eventual possession of the whole region limited on the west by the twentieth degree of east longitude, and on the north by the twenty-second degree of south latitude. This territory constitutes a "protectorate," within which is officially included the narrow strip of land stretching eastwards between the course of the Limpopo and the twenty-second degree parallel, as far as the frontier of the Portuguese possessions. But towards the north this conventional line has already been encroached upon, for by a special convention the Bechuana kingdom of Khama, lying still farther north, has also been placed under the protection of the British Government. Certain semiofficial documents even already speak of the Zambese as the real or natural northern limit of the British domain in Austral Africa.

Meanwhile the uncertainty of the conventional frontiers prevents the geographers from accurately estimating the actual extent of the protectorate. But the region comprised within the official limits traced along the meridian and parallel of latitude has a superficial area of probably about 185,000 square miles. The population of this territory, which is already well known from numerous exploring expeditions, can scarcely exceed half a million, and is placed by some writers as low as 475,000 or 480,000 . Of this number as many as 160,000 are concentrated in the section of Bechuanaland lying south of the Molopo tributary of the Hygap.

## The Bechuanas.

The Bechuana people are a branch of the great Bantu family, who according to the national traditions arrived in Austral Africa later than the other Kafir tribes. Till recently they were even still migrating, though not voluntarily. In order to escape from the Boers of the Orange and Transvaal, many tribal groups had been compelled to move westwards, and before the intervention of the English the native tribes were being harassed all along the line by the Boers of the conterminous districts.

At present the western Bechuanas are separated from the Basutos and other kindred peoples by the territory of the two Dutch republice. Like the Griquas, the Bechuanas have thus been broken into two great divisions, henceforth cut off from all direct intercourse with one another. But notwithstanding this dismemberment, they have the full consciousnees of their common origin, and throughout the vabit region beiween the Grange and the Zambese they everywhere recognise their kinship, even grouping their various tribes in the order of national preeminence. According to ananimous agreement, the senior branch of the family are the Ba -Harutse (Barotse), who dwell west of the Limpopo headstreams, on the north-west frontier of the South African republic. M. Arbousset believes that the term Be-Chuana, now universally adopted as the collective ethnical name, is due to a misunderstanding on the part of some travellers, whose inquiries about the various peoples of the country were met by the remark ba chuana, that is, "they resemble each other," meaning they are all alike, all of one stock. They have themselves no common national or racial designation in any of their dialects.

The Bechuanas are one of the finest members of the southern Bantu family. All are tall, robust, well-built, and distinguished by their graceful carriage, which may be partly due to the fact that in certain tribes the feeble or sickly offspring are got rid of. Albinos and the deaf and dumb are thrown to the panthers; those born blind are strangled, and when the mother dies her infant is, in some tribes, buried alive in the same grave, because he has been deprived of his natural nurse. Circumcision is universally practised, although there is no fixed age for performing the rite. Sometimes it is deferred till adolescence; yet children born before the father has been circumcised would be ipso facto declared incapable of inkeriting any of the paternal estate. Usually the operation is undergone between the eighth and fourteenth year, and is accompanied by scourging, and occasionally even by tortures, in virtue of which the victims are regarded as equals of the men of the tribe, worthy to carry the shield and hurl the assegai. Girls also are initiated into womanhood and taught their duties as future wives by a long probationship passed in seclusion under the direction of elderly matrons. During this period they are subjected to several severe trials of endurance, the lust of which is a hot iron bar to be held for a few seconds without uttering a cry. After this proof they are declared women; they are smeared all over with grease, their hair is saturated with a mixture of butter and ochre; they are clothed and decked like brides while awuiting to be purehased by their future lord.

Circumoision is in no sense a religious ceremony, being merely the symbol of entrance into the state of manhood, with all its attendant privileges and responsibilities. Those missionaries. who first penetrated into this reginn assure us that they sought in vain for the least indication of a belief in the supernatural world amongst the Bechuana peoples. The natives had neither gods nor idols; they never gathered together for prayer or any kind of public worship; they neither appealed in supplication to good or evil spirits, nor even betrayed any fear of the souls of the dead. At the same time certain practices seem to be altogether inexplicable except on the supposition that they have been inspired by the desire to conjure the forces of the unknown world and render the unseen powers propitious to their votaries. Thus when a tree is struck by lightring cattle are slaughtered, and similar sacrifices are made for the purpose of healing the sick or obtaining rain from above. The dead are borne to the grave through a breach made in the wall of the cabin, and care is taken to lay them in a crouched attitude with the face turned due north, that is, in the direction whence came their forefathers. Then the bystanders cast into the grave an acacia branch, portions of ant-hills, and tufts of herbage, emblems of the hunter's life in the woodlands. On the sepulchral mound are also placed the arms of the departed, together with the seeds of alimentary plants. But of late years the fear of unwittingly supplying the compounders of maleficent charmis with the needful skulls has induced many of the tribes to bury their dead in the cabin itself, under the feet of the living.

After each ceremony all those present wash their hands and feet in a large water-trough, all the time shouting Pula ! pula! (Rain! rain!). The wizards also frequently make a show of attracting the clouds and causing them to discharge
family. , which ffspring ; those a tribes, 1 nurse. forming fore the heriting eighth even by $a$ of the ted into p passed they are iron bar they are aturated es while rmbol of esponsius that al world 1s; they neither ir of the together he desire rers proattle are e sick or a breach lattitude aeir foreportions oodlands. ther with upplying many of g. n a large e wizards discharge
beneficial showers. If favoured by luck they at once acquire a great reputation, but should their predictions be belied by unkindly fate they run the risk of their lives. These "rain-makers" even practise a real religious cult, for they pretend to conjure the spells of Mo-Rimo, a maleticent being who dwells in a cleft of the rock. With the view of keeping themselves in touch with the supposed religious traditions of the people, the missionaries have adopted this very term Mo-Rimo, meaning "the Dweller on High," to designato the God of tho Christians.

The fear or awe of the unknown is also betrayed amongst the Bechuanas in connection with certain objects which they are forbidden to touch, and certain food wbieh is tabooed by custom. Like most of the North American redskins, each Bechuana tribal group venerates a national token, such as a crocodile, a monkey, some wild beast or fish, and celebrates dances in its honour. The Ba-Kalahari people take good care never to hunt old lions, especially if these have acquired a taste for human flesh. Hence it would be regarded as criminal to offer any resistance to the king of beasts even should he burst into a kraal, in which case he may at the most be scared away with shouts. Cattle also are held in a sort of reverence, as well as tho thorny branches of the wait-a-bit (Acacia detenens), which is used for making the village enclosures.

Each tribe is governed by a king or chief, whose power passes to the eldest son. But the Bechuana tribal chief is far from enjoying absolute authority. Custom is powerful and scrupulously respected, while the secondary chiefs, and occasionally all the free men of the community, may, on weighty occasions, constitute themselves a picho, or parliument, for the purpose of discussing public interests, advising the king, approving or ceusuring his conduct, according as it may be pronounced conformable with or opposed to established precedent. The picho, however, took no cognisunce of crimes, and before the partial introduction of the British administrutive system, such offences as theft, murder, or adultery were not regarded as occurrences of tribal or general interest. They were rather the personal concern of the injured party, who balanced theft by theft, murder and adultery by murder, unless his wrath was appeased by a compensation in cattle.

But since the missionaries have obtained à footing in all the principal Bechuana villages, the habits and customs of the natives have undergone great changes, at least outwardly. European dress now prevails amongst all the border tribes, and the Ba-Tlapi have even learnt the tailor's art, cutting out coats and trousers from the skins of wild beasts. Almost every village has its school, its chapel, and modern hnuses in the English style, encircled by the round huts with conic roofs still occupied by the poorer classes. In all the tribes some persons are met who are conversant with Dutch. Sunday has become a day of rest even for those natives who do not pretend to have yet accepted the Christian teachings, while in the absence of the missionary the convertod chief reads the service and intones the psulms in the public assemblies. Being endowed with a quick intelligence, and especially prone to imitate his betters, the Mo-Chuana strives hard to assimilate himself to the European, and at times succeeds wonderiuily. During this contaci of the black and white elements, which has already lasted over two genorations,
and which began with pillage and murder, the weaker race has gradually adapted itself to the forms of civilisation introduced by the invaders of their domain.

Tho Bechuanas are a very courteous people, and invariably address each other in polite language. Although they are by nature on the whole of a penceful temperament, wars were formerly very frequent, caused nearly always by cattlelifting. "Our fathers lost their lives in capturing you, and we also shall perish in guarding you." So sang till lately the young Ba-Mangwato warriors to their herds; but of late years most of the Bechuana tribes have discontinued their warlike expeditions. Formerly nomad pastors and hunters, they are now rapidly bccoming peaceful tillers of the land. Every man, every youth, even every girl, has his or her separate plot of ground, and the child thus learns from its tenderest years to cultivate the soil.

Down to the beginning of the present century the Bechuanas were still addicted to certain cannibal practices, apparently of a religious character. The braves who had slain an enemy brought back a portion of the body, and then gathered together to celebrate their victory under the presidency of a magician. Crouching round a blazing fire, they broiled the flesh under the embers and devoured it in common, in order thus to superadd to their own the courage of the foe. Then, in order to show their contempt of pain, each in turn presented their bare leg to the priest, who with a stroke of the assegai made a long slit from the hip to the knee. Although the wound was deep enough to leave a permanent scar, the warriors had nevertheless to join in the tribal dunce, which was kept up till the " small hours."

Southernmost of all the Bechuana tribes are the Ba-Tlaro, settled on the north-west frontier of Griqualand West, where, however, they have to a large extent become merged with the better-known Ba-Tlapi," or "Fish People." These Ba-Tlapi, whose national token is a fish, and who carefully abstain from touching this sacred animal, occupy a hilly district north of Griqualand West, bordering on the Vaal, and were also amongst the rival claimants for the coveted diamantiferous region now annexed to Cape Colony. They are one of the most numerous brauches of the Bechuana race, numbering with the Ba-Tlaro about thirty thousand souls. Thanks to their frequent relations with the English and Dutch settlers, they are also the most civilised of all the tribes, and the light complexion of the children in many of their villages betrays an increasing intimacy with their European neighbours. They are generally of a very cheerful disposition, and formerly possessed a large treasure of national songs, which has now mostly perished, being replaced by religious hymns.

## Topography of Bechuanaland.

The Ba-Tlapi gardens, wherever sufficient water is available, yield in abundance all the European fruits and vegetables, and the plough has already been inticduced very generally. Some of the native towno and villages are well

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 ady been are wellknown as stations and market-places on the great highway leading from the Orange to the Zambese. Those occupied by the chiefs are usually very populous, all the inhabitants being concentrated at such points with a view to defence. In 1801 Truter and Somerville estimated at fifteen thousand the population of Lataku (Litaku), the town founded by the allied Ba-Tlapi and Ba-Rolong nations on the margin of the Takun spring. Aftor the separation of the two tribes, Kuruman, the new capital of the Ba-Tlapi, rapidly became a real town with nearly six hundred houses and five thousand inhabitants.

The other royal residences which succeeded Kuruman were, or still are, places of considerable size. Such are Taung, at the issue of a wady on the right bank of the Katong (Hart's River) ; Mamis", lying some sixty miles farther up on the left bank of the same river; and Likatlong, whose cabins are also grouped on the banks of the Katong, not far from its confluence with the Vaal, and in the present province of Griqualand West. But in this region the centres of population are easily displaced, and every new king makes it a point of honour to found and give his name to one of these ephemeral residences. All that is needed for their construction is a good supply of acacia wood stakes, clay, and herbage or foliage for thatching. The diamond fields that were discovered in 1887 in the district near Vrijburg, former capital of Stellaland, cannot fuil to attrast immigrants and cause new towns to spring up.

The principal religious centre of the country is Kuruman, which lies in the midst of gardens and verdure at the east foot of a sandstone hill, whence an extensive view is commanded of the surrounding plateau. Here the missionaries have acquired possession of many broad acres of arable land, which they lease only to monogamous natives. The river Kuruman, on which stands the town of like name, has its source among the hills a few miles to the south-east. From a cave at the foot of an isolated bluff the water flows in such a copious stream as to be navigable for small boats. Through stalactito galleries cloce to the chief opening the visitor may penetrate over slippery stones far into the interior of the rocky cavity, which is supposed to be inhabited by a sacred serpent, tutelar spirit of the stream. Were he to be slain, the perennial spring would at once dry up. At the beginning of the century lions were still so numerous and daring in this region that many of the natives slept in narrow huts erected on piles amid the branches of the trees. Moffat speaks of a large tree in the neighbourhood of Lataku which contained no less than seventeen of such aërial dwellings.

The Ba-Rolong nation, fermerly allies of the Ba.Tlapi, but now divided into several independent tribes, occupy the northern section of the specially protected territory, that is to say, the district comprised between the mostly dry beds of the Molopo and the affluents of the Kuruman. Büt the chief villages, Mafehing, residence of the British Commissioner, Shuba, Pietsani, and Morokuoané are grouped about the head waters of the Molopo, where the gorges yield a sufficient supply for the irrigation of their fields. The Ba•Rolongs number altogether eighteen thousand full-blood Bechuanas, hecides many half-eastes reekoned apart. The tract lying between their domain and that of the Ba-Tlapi has afforded a refuge 108-A
to the remains of a tribe of Korana Hottentots erossed with Bechuanas of different clans, and numbering altogether about five thousand souls. Within tuis Bechuana domain have also been established several petty republican communities of Bastaards driven north by the pressure of the English immigrants into Griqualand West.

The Ba-Harutsé (Ba-Hurutsé, Barotse), who still occupy the region of the Upper Limpopo basin about the frontiers of Transvaal and the British Protectorate, aro also a decrepit people, much reduced since the time when they were regardea as the most powerful branch of the Bechuana race. Even recently the sons of the surrounding kinglets appeared as envoys in their midst in order to learn the national history or traditions, to study the ancestral usuges, and conform themselves to the received standard of polite society. All the neighbouring communities were even expected to send the first-fruits of their crops in homage to the Ba -Harutse chief. The branch of the nation which has settled in the Marico district within the Transvaal frontier may also lay claim to pre-eminence for their progress in agriculture; in 1882 they already possessed over two hundred European ploughs.

One of the Harutse tribes has withdrawn to the region north of the Protectorate, taking refuge in the marshy plains stretching east of Lake Ngami, where they occupy retreats safe from the encroachments of the most daring invaders of the land. The Ba-Katla, whose totem, or national emblem, is a monkey, and whose capital is the little town of Gameolopa, situated on a wooded plateau, watered by an affluent of the Limpopo; the Ba-Wanketsi, who are grouped to the number of six thousand or seven thousand round about the town of Khanyé; lastly, the Ba-Kwena or "Crocodile People," who dwell a little farther north, but still within the Upper Limpopo basin, have all alike been greatly reduced and compelled frequently to ehange their settlements by the incessant raids and encroachments of the neighbouring Transvaal Boers. The town of Kolobeng, where Livingstone had founded his mission before he turned to geographical exploration, is now in ruins. Liteyani was also abandoned in 1864 ; not, however, because of the attacks of any aggressive neighbours, but owing to the adjacent forest of gigantic aloes, whose pulpy leaves falling and rotting on the ground, rendered the whole district malarions during the rainy season. Liteyani was succeeded first by the town of Moricakhomo, and then by the present capital; Lepelole (Molopole), which lies in the same region at the foot of a long ridge of rocky and wooded hills.

This district, about which, so to say, gravitate the royal residenees of the Ba -Kwena nation, is the most renowned in the legendary history of the Bechuana race. Near Lopelo!o stands a grotto into whieh Livingstone was the first who dared to venture, and not far from the same spot is the Giant's Kettle, hollowed out of the live rock. From this place, says the national myth, came all the animals of the world. The same chasm also gave birth to the Bechuana race, and carved in the rocks is still shown the trace of the first step taken by the first man as he emerged from the bowels of the earth.*

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 Bechuana efirst who e, hollowed me all the la race, and $1 e$ first man

The Ba-Mangwato nation, who occupy the northern division of the British Protectorate to the west of the Limpopo, as well as the marshy plains stretching thence northwards in the direction of the Zambese, have in recent times entered on a period of political expansion, and constitute at present one of the powerful native States in Austral Africa. Formerly the Bu-Mangwatos formed only a single national group with the Ba-Kwena and Ba-Wanketsi tribes; but they soparated themselves from that connection at a comparatively recent time, although not clearly fixed by tradition, and adopted an antelope as the tribal totem. Since

Fig. 50.-Shobiona. Scale 1:165,000.

then they have themselves been split into two political groups, the Ba-Mangwatos proper and the Ba-Toanas, who dwell on the plains to the north of Lake Ngami, the common originul home of both branches. A multitude of fugitives belonging to various tribes driven westwards by the terrible $\mathbf{M a}$-Tebele conquerors, came to seek a refuge amongst the Ba -Mangwatos, with whom they gradually became assimilated, all merging in a common nationality.

Shoshong, the Mangwato capital, is at present the largest town in South Africa beyond the British settlements. According to Holub and Mackenzie, it has had
at timos as many as thirty thousand inhabitants, exclusive of numerous villages usually grouped in a circle like the eittle enclosures, all really constituting part of the same urban population. But this gross aggregate hus been considerably reduced by wars of succession, and had fullen in $\mathbf{1 8 8 0}$ to little over six thousand. Since then, however, the population has again increased, thanks to the cessation of intornecine strife. Lying 3,400 fuot ubove sea-lovel in a vast plain, not, like most other Bechuma capitals, on a steep escarpment, Shoshong stretches along . both sides of a mostly dry rivulet, which is dominated on the north by a granite ridge some 12 milos long. Southwards a basalt ominence is disposed parallel with

Fig. 61.-Trade Routras in Bxchuaraland.
Boals 1: 80,000,000.

this granite mass, the intermediate spase between the two heights being occupied by well-cultivated gardens and hamlets.

The Ba-Mangwatos have long been subject to the iufluence of the English missionaries, and have now for the most part adopted the Christian faith. Throughout their territory the sale of alcoholic drinks and the brewing of beer are forbidden under severe penalties-a fine of $£ 100$ for the foreign dealer, whether English or Boer, and banishment for the natives convicted of this offence.

At Shoshong converge the two main commercial highways which traverse Bechuanaland, one running north in the direction of the Zambese, the other northwest towards Lake Ngami. Southwards both merge in a common route which skirts the west frontier of the Dutch republics, but, except at one point, keeping well within the British Protectorate. At present the total annual foreign trade of Bechuanaland is estimated at $£ 100,000$. Yet at the beginning of the present

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h traverse ther northoute which nt, keeping reign trade the present
century the inhabitunts of thie region were still eut off from all intereourse with the outer worid, and hul never even heard of the surrounding murine waters. When they heard travellers speak of the great ocean they gave it the nume of Metsebula, that is, "Water that goes a-grazing," beeanse the tides penetrate fur inland, and then afier a few hours retire from the seaboard.

The Bu-Chwapeng, one of the reduced tribes ocenpying the highlond region to the north-east of Shoshong, have beeome famous for their skill as iron-workers. They mine the ores themselves in the surrounding deposits, and fabrieate all kinds of imploments employed throughout all the surrounding districts. They are also nequainted with the trees that yield the best fuel for smelting the ores, and reserve the iron that adheres longest to the chareoal for the manufacture of their hardest and sharpest axes. Henee they had arrived at a knowledge of steel before the arrival of the Europeans in the country.

East of Shoshong, and not far from the banks of the Limpopo, dwell the BuSilika people, who have hitherto resisted all attempts at subjugation. They owe their political independenco partly to their central stronghold perched on a bluff of difficult access, and partly also, if not mainly, to the impassable zone traced round this eitadel by the tsetse fly. Their own herds are kept in upland valleys beyond the reach of this destructive pest; but it is impossible for invaders to cross the intervening district with their cattle; nor could they successfully carry off the Ba-Silika htrds; which would all perish while being driven aeross the infested zone.

The Bechuanas are seattered in very thin groups throughout the western purts of the Proteetorate, where springs ure rure, and where for the greater part of the year the rivers are indicated only by stretches of dry sand. The fen communities residing in this arid region take the collective name of Ba -Kalahari, from the surrounding wilderness, but are also known by the designation of Ba.Lala, or "The Poor." In many districts they have intermingled with the Bushman aborigines; but some of their tribes have kept aloof, preserving the racial purity as well as the pastoral and agricultural usages of their forefathers. Most of them, however, are unable to breed any animals except goats, which they water almost drop by drop at the dribbling springs. They obstinately cultivate their little garden plots, though the thirsty soil may yield them nuthing but pumpkins and melons. The lions prowling about their kraals are often welcome guests, thanks to the halfgnawed careases which they leave to the hunters.

The full-blood Ba-Kalahari tribes, although poor, are looked on as freemen. But, compared with the other Bechuanas, they vccupy a subordinate position of vassalage, while those erossed with the Bushmen, and known as Ma.Sarwa, or "Bad People," are considered as no better than slaves. The products of the chase and their very harvests belong by right to the Bechnana tribes adjoining their camping-grounds. They are required to present themselves two or three times a year at the villages of their masters, but are never allowed to enter the kraals during the day. They must remain at some distance from the settlement, patiently awaiting the order of the chief permitting them to approach. Nevertheless, these
"Bad People" are in general more devoted to their women than most of the Bechuanas; they also show great kindness to their dogs, faithful companions in the chase, who in the other communities are for the most part treated with brutality.

On the subject of slavery in Bechuanaland some questions were asked in the British House of Conmons in 1888, in reply to which Baron de Worms remarked on the part of the Governmont that the $\mathrm{B}_{\mathrm{d}}$-Kalahari people had hitherto stood in an ill-defined relation of dependence and servitude towards the Bechuanas proper. According to native custom, these persons can and do hold property of their own, while their servitude towards the Bechuanas takes the form partly of actual labour rendered, and partly of tribute paid in kind. They themselves stand in a somewhat similar position of superiority as regards the still more degraded Bushman aborigines. For the guidance of the local authoritics, the Secretary of State has now laid down the following principles: 1. Within the newly formed British Protectorate all these people are in the eye of the law already freemen. 2. The magisterial courts will henceforth, as a matter of course, refuse to recognise or enforce any claims arising out of the supposed relations of master and slave, and will punish as an infringement of personal rights any attempts to exercise forcibly the claims of a master over a supposed slave. 3. The local administrator will inform all chiefs and headmen as to the state of the law, and warn them against exercising or enforcing rights incompatible with it. Bechuanaland is thus assimilated in this respect to the rest of the British South African possessions; and while the tribal rights and privileges of the chiefs are so far curtailed, all the inhabitants of the land are placed upon a footing of absolute equality before the law.

Farini describes at considerable length certain remains of ancient structures, which he speaks of having discovered in the Kalahari desert. Such buildings, if they existed, would seem to attest the former presence in this region of a people at a far higher stage of civilisation than that of its present Bechuana inhabitants. But of such a peop? there survives neither record nor tradition, while many statements made by this traveller hàve since been shown to be far from trustworthy.

## Basutoland-Head Waters of the Orange.

Before the irruption of the Dutch Boers into the regions lying north of the Orange, the western and eastern Bechuana peoples dwelt side by side, occupying conterminous camping-grounds. But the narrow end of the wedge once inserted, the two main sections of this ethnical group became gradually riven asunder. The European squatters creeping up the banks of the Orange and Caledon, and then reaching the waterparting between the Orange and Vaal, encroached inch by inch on the pasture-lands, driving the original occupiers of the soil to the right and left. While the western Bechuanas crossed the Vaal, the eastern tribes of the same raee, grouped under the collective name of Basutos (Ba-Suto, or "Paunched"), were compelled slowly to retreat towards the upland Muluti and Drakenberg valleys.
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After founding the Orange Free State, which territory belonged originally to the Basutos, the Boers, if left to themselves, would certainly have sooner or later dispossessed the natives of their last highland retreat, for the frontier wars had never been interrupted except for brief intervals of time. But meanwhile the

Fig 62.-Babutomasd.
Seale 1 : 2,000,000.


English made their appearance, at first to secure the independence of the Basutos, and then to prevent the further encroachments of the Boers by extending the British protectorate to the whole region. But troubles arose between the natives and their new masters, and the edict calling upon the mountaineers to disarm was followed by a general rising, in which the British troops were more than once
repulsed. The pacification of the country was at last effected, at a cost to the Imperial exchequer of over $£ 4,000,000$.

Basutoland, which is cloarly marked off towards the south-east, east, and northeast by the main crest of the South African orographic system, und on the west by the course of the Caledon River, is now annexed to the colonial territory, but is separately administered by a Resident appointed by the British Government. The whole region has an area of a little over 10,000 square miles, with a somewhat dense population, at least compared with most other South African lands. The census returns of 1881 gave a total population of over 128,000, which in 1887 had already risen to ubout 190,000 , or nearly twenty to the square mile. Amongst the inhabitants are some thousand Barolong refugees from the Orange Free State, and about five hundred white settlers, missionaries and officials.

Of all branches of the Bechuana family the Basutos have been the most carefully studied. Since the year 1833, Frinch and other Protestant missionuries have been labouring in their midst, studying the national usages and contributing to modify them. Completely hemmed in as they are by the territories already occupied by European settlers-Cape Colony, Transvaal, Natal-the Basutos have been fain to adapt themselves to a new environment, and this they have done with a remarkable degree of intelligence. In most other lands contact with the whites has been followed by the impoverishment, decay, and even extinction of the inferior races. But here the Basutos have successfully passed through the critical period of assimilation. While increasing their store of knowledge and acquiring habits of industry, they retain the full vitality of the race, and are rapidly inoreasing in numbers. Half a century ago their domain was almost uninhabited; now it is one of the most flourishing countries in Africa.

The civilisation of the Basutos is not merely an outward veneer, nor does it consist exclusively in the substitution of woollen and cotton garments imported from England for the native kaross of undressed skins, or in the building of little brick and stone houses instead of hovels made of mud and foliage. Thanks to the schools, to the support of which the nation devotes most of its income, the average standard of education is already higher than amongst many European populations, and at the pablic examinations the Basutos often take higher places than the competitors of European descent. Thousands speak English and Dutch ; they read Se-Chuana books and periodicals, and although nearly all Christians (about one-sixth of the whole nation have been educated under missionaries), they are not satisfied with slavishly accepting and repeating what they are told. Some amongst them have learnt to think for themselves, to discuss religious and social problems, and follow their own personal views.

The various tribes have moreover discontinued their internecine strife, and war has ceased to be a permanent institution. The nomad pastors, plundered of their herds, are no longer reduced to cannibalism, which formerly prevailed everywhere, and the natives now regard with as much horror as do the whites the now abandoned "caves of the man-eaters." A sentiment of national coherence hus replaced the petty village feuds, and thanks to this spirit of solidarity, com-
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bined with the valour displayed on many a hard-fought battlefield, the Basutos have succeeded to a large extent in safeguarding their political autonomy under the supreme British authority. Formerly they contracted marringes within close degrees of kindred, a practice which seemed an abomination to the Kafirs of the seaboard, who are not only exogamous, but even abstain from taking wives in foreign fannilies bearing tho same name as their own.

The Basutos possess at present far more numerous herds than they did fifty years ago, when rapacious beasts still infested the neighbourhood of every camping. ground. They still regard the care of horned cattle and of their new acquisition, the horse, as the occupation most worthy of frcemen. "For some years of their youth the sons of the chiefs are obliged to lead the lives of simple herdsmen, and the chiefs themselves at times leave their royal residences to tend the herds and lead them to fresh pastures. In the villages the central space near the khotla, or chief's residence, is always rcserved for the cattle.

But to this national industry, chief source of their prosperity, the Basutos add an intelligent system of agriculture. Already several thousands of ploughs have been introduced into their upland valleys; nor do they now confine their attention, as formerly, to the cultivation of sorgho, their favourite cereal. They also raise crops of several other varieties, as well as of most European fruits, the superfluous produce of their farms now contributing towards the regular support of the inhabitants of Cape Colony. Every village is surrounded by orchards, and such is the natural fertility of the well-watered soil that this region has become one of the granaries of South Africa. The land itself is still held in common by the whole community, so that its cultivation has not yet divided the nation into a privileged wealthy and indigent proletariate class. The actual tiller alone has any right to the results of his labour, and should he cease to cultivate his allotment and remove elsewhere, he is compelled to restore it to the tribal chief, by whom it is assigned in the name of the commune to another holder.

In favourable ycars the value of the agricultural producc exported to Cape Colony and the Diamond Fields has exceeded $£ 200,000$. Like the natives of Savoy and Auvergne, the Basutos also send every year to the surrounding regions a number of young emigrants who, sooner or later, return with a modest fortune to the paternal home. They have seldom any difficulty in finding employment, such is their long-standing reputation for honesty and perseverance. But when the wages agreed upon are withheld, they are apt to indemnify themselves by carrying off the cattle of their employers. Hence arise frequent difficulties with the Orange Free State, where most of the Basuto emigranta seek work.

Some good roads already penetrate far intgethe upland valleys; the slopes of the mountains are being yearly brought more and more under cultivation, and thus is being gradually created a public fund for keeping the highways in repair and supporting the local schools. There are numerous deposits of platinum in the surrounding highlands; but although the country abounds in mineral resources, scarcely any of the mines have yet been worked.

Thaba Bussigo (Thaba Bossiu), that is, the "Mountain of Night," the chief
town in Basutoland, stands at an elevation of over 5,000 feet at the foot of a table-shaped bluff on the east side of a stream flowing to the Caledon. From the summit of this rock the famous King Moshesh, or the "Shaver," so called because he had succeeded in "shaving off" the heads of all his rivals, long defied the attacks of the Zulus by rolling down huge boulders on his assailants. Ultimately he managed to conciliate these fugitives from their own land by sending them cattle and offering them his friendship.

Most of the other towns in Basutoland, such as Leribé, Berca, and Bethesda, have at different times been the residence of tribal chiefs or missionary stations. Maseru, which lics in the Thaba Bossigo district, not far from the left bank of the Caledon, is the residence of the British Commissioner.

The Basuto chiefs have ceased to be anything more than the subordinates of the European magistrates. Against their sentences appeal may be made to the English tribunal, which decides definitely. Nevertheless a picho, or general assembly of all the tribes, still meets annually for the discussion of affairs of common interest. The marriage laws have been modified, and polygamists are permitted to register the stipulated payment of cattle only for the purchase of their first wife, all subsequent matrimonial contracts being null and void before the law. As amongst the Kafirs on the castern slope of the mountains, the hut tax is fixed at ten shillings. The use of alcoholic drinks is officially interdicted, but a brisk contraband trade is carried on between Basutoland and the Orange Free State. Even before the present administration the great ehiefs were forbidden to drink beer. In their position as judges they are expected always to keep a perfectly clear head, and the rule has now been usefully extended to all their subjects.

## Kafirland.

Since the year 1885 the eastern slope of the main coast range comprised between the rivers Kei and Um-Fumodna has, like Basutoland, been entirely annexed to Cape Colony. But British immigrants and dealers still penetrate very cautiously into the country, and in certain districts are for the present even forbidden to settle at all. The supreme colonial authority is represented by magistrates residing with the tribal chiefs, and these magistrates at the same time take care that the lands reserved to the Kafirs are not encroached on by European squatters. Nevertheless the ceaseless work of onward pressure, which began with the landing of the Dutch at the foot of Table Mountain, still continues in virtue of a sort of natural law, owing to which the two colonies of the Cape and Natal constantly tend to join hands across the intervening Kafir territory and thus form a continuous zone of European settlements from the Orange estuary to Delagoa Bay.

This racial tendency is all the more active that Kafirland presents special attractions to immigrants, being at once the most salubrious, fertile, and picturesque region in the whole of Austral Africa. In 1877, twenty years after the failure of a first attempt at colonisation, the British settlers were invited to
oot of a rom the because fied the timately ig them Bethesida, stations. $k$ of the inates of 0 to the general ffairs of nists are chase of fore the hut tax cted, but age Free idden to p a persubjects.
omprised entirely rate very ent even onted by ame time Euiopean gan with in virtue nd Natal hus form Delugoa s special and piesars after nvited to
accept concessions of land in the Transkei district, between the Kei and Kogha rivers. Recently, also, a Eurnpean society has acquired one of the finest tracts in this region, the territory traversed by the lower St. John River (Um-Zimvubu), which is sooner or later destined to become the chief outlet for the inland districts

between the Cape and Natal. Since 1887 this territory is directly administered by the British authorities.

The future possession of the whole land is thus being gradually prepared by these little isolated settlements. But although the Kafirs are no longer the political niasters of a region wrested by their forefathers from savage tribes who still used stone arms and implements," they nevertheless still constitute nearly

[^16]the whole population. Thanks to the Pax Britannica now prevailing among all the tribes, the annual rate of increase is considerable. Accurate statistics are still wanting, but most resident Europeans are unanimous in asserting that the steady growth of the population caused by the natural excess of births over the mortality is altogether phenomenal. Hence of all South African regions Katirland is already the most densely peopled in proportion to its extent. In 1877 the varions estimates ranged from four hundred thousand to five hundred thousand, and at present the number of inhabitants considerably exceeds half a million in an area of not more than sixteen thousand square miles, or about thirty-two to the square mile. Exclusive of Pondoland, the census of 1885 gave a population of 333,000 . Should this rate of increase be maintained, it may be asked whether the natives may not again gradually acquire the upper hand, as they have already done in Central America and in parts of South America.

In the widespread family of Bantu peoples the Kafirs take a foremost position for physical beauty, strength, courage, and intelligence. In many ethnological works representing the various types of mankind, the European whites are figured by the statues of gods and goddesses, borrowed from the classic period of the plastic arts. But while the noble "Caucasian," son of Prometheus, thus presonts himself undor the ideal form portrayed by the great artists of antiquity, the members of other races, black, yellow, or red, are shown in these collections handsome or ugly, young or old, healthy or infirm, just as they happen to pass before the objectglass of the photographer, and occasionally even as figured by the pencil of the caricaturist. But such a method of procedure is unfair to the so-called "inferior races." At any rate, it is certain that were the artist to reproduce at haphazard a given number of Europeans and of Katirs, he would find, not amongst the former but amongst the latter, the largest number of individuals approaching the standard of perfect beauty, both as regards regularity of features and symmetrical proportions.

The superiority claimed by the white race is true only when the comparison is restricted to pioked specimens. In this case the cultured race is undoubtedly the finer of the two, and here the same difference is observed between the fair and the dark human types as between the wild beast and the animal improved by the stockbrceder. The noblest specimens of the Kafir race would appear to be precisely those dwelling in the neighbourhood of the Europeans und under their influence; for, as Gustav Fritsch well remurks, "Civilisation alone can complete the human ideal." The Kafir features have never the same delicacy as is found in those of the finest Europeans. They are decidedly coarse in comparison, and the lips especially are nearly always too thick and tumid. But the Kafirs, as well as the Hottentots, are usually endowed with far greater keenness of vision, and Daltonism is an affection unknown among the natives of Africa. Te valour of the Kafirs, and especially their power of dogged resietance, the Engiish have had ample occasion to admire and respect during the long warfare carried on between the two races. A memorable instance was certainly the heroic endurance displayed by the AmaKosa people during the terrible year of voluntary famine, to which they fell victims in tens of thousands
ong all re still steady prtality and is various and ut an area square 33,000. natives lone in osition logieal figured plastic himself bers of or ugly, objectof the inferior azard a mer but dard of ortions. rison is dly the and the a stock recisely luence human those of כs espehe Hotnism is irs, and ecasion o races. e Amaey fell


KAFIR MAN AND WOMAN.


All Europeans who have tuken part in the education of the children amongst the numerous Kufir tribes, bear witness to the keen vivacity of their intelligenee. Their mental vigour would almost seem to be too intense, to juige at lenst from the great number of idiots found anongst thom. The eustoms of the Kafirs, which appear to have originally resembled those of the allied Bechuana people, have ulready been profoundly modified $\delta$ contact with their Europeun neighbours. Formerly those Kafirs who had aequired some religious notions through their intercourse with the surrounding peoples, applied to the supreme being the name of Thiko, from the Hottentot Uti-ko, the "Evil-doer," or better, the "Mischiefmaker."

## The Fingos.

The Fingos (Ama-Fingu, or "Wanderers," "Vagabonds"), who formerly dwelt much farther to the north in the Tugela River valley, whence they were expelled by the Zulu conqueror, Chaka, have retuined little of their Katir nutionality beyond the name. After their expulsion they had fullen into the hands of the Ama-Kosas, who had gradually reduced them to the position of slaves, at the same time distorting their name so as to give it the meaning of "Dogs." Hence sprang a deadly hatred between the two nations, calling for the ultimate intervention of the English to put a stop to the intolerable oppression of the Ama-Kosas. Accepting the offer of lands made to them by the colonial Government, the Fingos emigrated in a body and settled on the banksof the Great Fish River. Hero they again becume freemen, and on payment of the hut tax of ten shillings, acquired the ownership of the land cultivated by themselves. They, moreover, became the steadfast allies of the English against their former masters, and it was largely through their co-operation that the Ama-Kosas were at last compelled to acknowledge themselves vanquished. East of the Kei River they surrendered vast tracts, which, by a sort of Nemesis, were assigned for the most part to the very "Dogs," whom they had long treated with such dire cruelty.

At present the Fingo Kafirs have become largely intermingled with the settlers of European origin, and this mixed people-number altogether about a hundred thousand souls, settled partly in the colony properly so called, and partly in the Transkei district. They now wear the same clothes as the whites, guide the plough after the fashion of the English and German peasants, send their children to schools supported by their own voluntary contributions, edit newspapers, translate European poetry, and even compose musical tunes for their national songs. Nearly all call themselves Christians, and constitute the proletariate class in the castern districts of the South African colony.

The two chief centres of population in the Fingo territory within Kafrland properly so called, and east of the Kei, are Namaqua and Butterucorth, both of whioh places are situated on eastern affluents of that river.

## Tife Ama-Konas and Galekas.

The Ama-Kosas (Khosa, Xosa) were till recently the masters and oppressors of the Fingus, to whom they were at last compelled to surrender the western districts of the Transkei and the valleys stretching thence to the Great Fish River. Of all the Kafir nations the Ama-Kosas have suffered most from their protracted wars with the Europeans. Lying in the immediate vicinity of the English settlers, they were the first to attack and the first to feel the superiority of the white race. But still mindful of their pust glories, they nevertheless continued to regard themselves as the noblest branch of the Kafir family, and the surrounding tribes readily recognised their claim to the foremost position. In any case they differ little from their neighbours, except in their tribal groupings and political truditions. Even their national speech can scarcely be distinguished from the other dialects current in the whole region of the seubourd as far north as Delugoa Bay. Nor has their tribal name any special ethnicul value, for the Ama-Kosas, like most other Kufir groups, are numed after some chief fumous in the national records.

Of the Ana-Kosus the chief historical divisions ure the Galekas and the Gaikas, who also take their names from illustrious shieis, reputed founders of these tribes. But the Gaikus have almust disapparred as a distinct group. Removed in the year 1851 tr the west of the river Zei, to a territory which has long been settled by British colonists, they have been dispersed amongst the furmsteads and outskirts of the towns, as day labourers and donestic servants, and thus gradually become merged with the rest of the population. The Gaika tribe is in fact completely broken, and has lost all sense of its national unity.

But the Galekas still dwell in a bourpact body on their own tribal domain. This district comprises nearly kulf of the whole territory comprised between the rivers Kei and Rashee. Here they constituted in 1875 a united population of nearly seventy thousand souls. They are thus by far the most numerous branch of the Ama-Kosa Kafirs, who number altogether not much more than a hundred thousand.

Most of the Galekas have preserved their ancient habits and customs. The young man still purchases his bride with so many head of cattle, and the number of his wives stands in direct proportion to his means. But it is not the women, as amongat the Bechuanas, but the men, who in Kafirland milk the cows. No woman would even be tolerated within the sacred enclosure reserved for the cattle, her mere presence being regarded as a profanation. Here the wife is held in contempt and treated as a slave. She is forbidden to pronounce the name of any male member of the household ; nor dare she even utter sounds or syllables occurring in such names, and is thus compelled to invent a new vocabulary differing from that of the men. Ill-favoured children are killed, while the well-formed are pricked in various parts of the body, a little protecting amulet being inserted under the skin, after which both infant and mother are rubbed over with red ochre.

The chiefs are great personages, placed above the laws by which other mortals are governed. They have the right to confiscate their subjects' property, and the privilege is even extended to their sons, who stcal and plunder without let or
hindrance. In fact, the cory mon fialk are spected to feel honoured and lattered by the whims and fancies of 1 eir master: I'ill recently chiefs alonto ere nonoured
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mortals and the t let or with sepulture, the borlies of their subje a being $t^{\prime}$-own into + e bush. Nor was it ulways thought necessary to await their death no they sre drageged from their huts through a breach purposely made in $t$ enclosur But in the case of great chiefs tho funerul rites lasted for weeks top aer. Friends kept vigils about the grave to protect it from the aërial spirits and the inclemeney of the weather. At times these vigils lasted a whole year, and those keeping watch then became sacred in the eyes of their follow-countrymen. Cows were driven within the preciacts of the tomb, and being thereby sanctified, were henceforth regarded as protecting genii, that could neither be eaten nor sold. These precincts were also regarded as places of refuge, like the medixval sanctuaries, at tho threshold of which the avenging arm of justice was arrested.

At first sight it might be supposed that little public spirit could exist amongst a people who thus surrounded the person of their chief with such marks of superstitious homage. Neverthcless, the Ama-Kosas are well able, when called upon, to defend their traditional civil rights against their very chiefs. "They havo on all occasions given signal proof of a highly developed national sentiment as well as a strong spirit of fellow-feeling in the family relations. Those called upon to pay a fine in cattle which they are unable to discharge may always rely on their kinsmen to come to their aid.

## Tembuland.

Tembuland, that is, the territory occupied by the Tembu nation, aevelops a semicircle to the north and east of the districts held by the Fingos and Galekas. Beginning at the Kwathlamba Mountains, and comprising several upland valleys draining to the Kei River, it stretches south-eastwards through a portion of the fluvial zone which is bounded by the Bashee and Um-Tata rivers. The Tembus, or Aba-Tembus, who are more generally known by the name of Tambookies, are a powerful people numbering altogether a hundred thousand. Although frequently compelled by the vicissitudes of war to shift their camping-grounds with their herds and families, they have suffered comparatively little from the changes brought about by the gradual encroachments of the whites, and now accept with resignation, if not with gratitude, the jurisdiction of tho British magistrates.

Tembuland is intersected by accessible roads and even by telegraph lines, and mining operations have already been commenced in the coalficids discovered in these highlands. A town in the strict sense of the word has even been founded in the district. Umtata, as it is called, stands on the east bank of the river of like name, above the magnificent falls, which are exceeded in romantic beauty by few others in this region. The neighbouring Bomvana people, who dwell, to the number of twenty thousund, in the maritime district comprised between the Bashee and the Umtata rivers, have hitherto had but little contact with the British colonists, and not much is known about their territory.

## Poniol,and.

Pondoland, or country of the Pondo people, comprises over half of the senboard of Kafirland between the Umtata and the Uintafuna on the Natal frontier. Thunks to their remoteness from Cape Coleny, this branch of the Kafir family has hitherto succeeded in keoping possession of its fertile riverain valleys. The Pondos, numbering altogether about two hundred thousand, are passing gradually

and without violent political or social disturbances from the position of absolute independence to that of a mild vassalage. They are divided into several tribal groups, such as the Ama-Kongwe, Ama-Kongwela, Ama-Kobala, Ama-Kwera, Ama-Nyati, Ama-Bala, Ama-Yali and others, each with its own chief and separate government, and connected together by no national or federal bond. All, however, recognise the suzerainty of Great Britain, which was lately for some time represented by the widow of a missionary, whom they commonly consulted on important affairs.

The surface of the country is already dotted over with several little centres of population, which are destined gradually to become linglish towns. At the mouth of the St. John River, in Pondoland, has also been founded the seaport which cannot fuil to become the chief emporium of the whole seabonrd between Last London and Durban. Palmerton is mn importunt missionary station, which is gradunlly acquiring the aspect of a town, and promises one day to become a populous place.

## Griqualand East.

The north-west section of Kafirland, which is scparated fiom Busutoland by the Drakenberg Range, and bounded on the north-east by the colony of Natal, on the south by Pondoland and Tombuland, is officially designated by the name of Griqualand East. It is now, however, inhabited mainly by tribes of different origin from the Griquas; amongst them are several Kafir groups, including the Pondomisi, the Ama-Bakas, the Ama-Xesibés, and even a few Fingos. The Griquas, who gave their name to the district, number nt present not more than two or three thousand out of a total population of about seventy thousand. They formerly dwelt with the other Griquas, or Bastaards, on the platenux wntered by the Upper Orange ; but after long migrations in various directions, they separated from the rest of the nation, and under a chief bearing the Dutch name of Adam Kok, settled in tho year 1862 on the eastern slope of the Drakenberg Mountains. Here they gradually acquired possession, under the British suzerainty, of the territory which was hitherto known as "No Man's Land," but which might with more propriety have been called "Everybody's Land," such was the multitude of immigrants from all the surrounding tribes that here found a refuge.

Griqualund East is crossed by the main highway between the Cape and Natal, which after skirting the frontier of Pondoland passes by the capital, the Dutch town of Kokstad, which is situated on a headstream of the St. John over 5,000 feet above sea-level. Matatiel, another large village, lies in the mountainous western district at the converging point of several tracks leading to the crest of the waterparting between the Orange basin and the coast streams. Several Basuto families, crowded out of their own territory, have crossed the divide with their herds and settled in the upland valleys on the eastern slope of the main range.
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## CHAPTER V.

## NATAL AND ZULULAND.



IIE "Cape", owes its name to Bartholomew Diaz; Natal to the still more illustrious navigator, Vasco -de Gama, who first sighted a verdant headland breaking the monotony of this seaboa:d on Christmas Day ("Natal"), 1497. But more than three centuries elapsed before this station on the ocean highway between Europe and India was permanently occupied. Portuguese skippers visited the coast from time to time to revictual their ships; then the Dutch, who succeeded the Portuguese as masters in the southern waters, attempted on several occasions to secure a footing at Port Natal. But all such essays proved abortive, nor was it till 1824-that is, nearly three hundred and thirty years after its discovery-that some twenty English settlers from the Cape established the first centre of European colonisation on the spot where now stands the city of Durban. At that time the surrounding district had been almost depopulated by the ravages of Chaka, the terrible king of the Zulus. The native tribes had either been exterminated or compelled to migrate southwards, and all the land between the sea and the mountains had been transformed to a "howling wilderness." At present the colonial territory, with a superficial area of over 20,000 square miles, has a steadily increasing population, which in 1888 was estimated at nearly half a million.

Although the country was first settled by colonists of British descent, there was a time when the Dutch Boers threatened to acquire the numerical superiority in Natal as well as on the opposite slope of the Drakenberg range. They might even have permanently secured the political supremacy in this region but for their military reverses, followed by the active intervention of the British authorities. The great exodus of the Boers from Cape Colony towards the unknown lands of the interior was partly deflerted in this direction, and in the year 1834 the first pioneers already began to make their appearance on the passes leading over the coast range. By dint of patience and energy they at last succeeded in reaching the opposite slope, and by the end of 1837 nearly a thousand waggons, with their long teams of cattle, had crossed the Drakenberg divide and occupied the river valleys draining to the Indian Ocean.
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But Dingaan, king of the Zulus, who had at first encouraged the new arrivals 1 take possession of the territory depopulated by his brother Chaka, became alarmed at this continually incroasing stream of foreign immigration. Under the pretext of a public feast to celebrate the cession of some lands to the Boers, he invited them to his kraal and caused them all to be treacherously massacred. Thus began a terrible' war, which was carried on by both parties with relentless cruelty. In the first serious engagement on the banks of a southern affluent of the 'Tugela, the Boers were routed with a loss of seven hundred men, women, and children. The name of Weenen, or "Weeping," still marks the spot where this butchery took place. Nevertheless the survivors, entrenched withiu the enclosure formed by their waggons, and keeping up a deadly fire from this vantage ground, succeeded at last in repulsing the savage hordes surrounding the encampment.

Firearms here got the better of the assegai, and the whites soon resumed the offensive. They even crossed the Tugela and invaded Zululand itself. In 1840 they had alrcady gaincd the uppor hand. and having dethroned Dingaan, necured a steadfast ally in his brother and successor, Panda. These events were followed by the establishment of the free republic of Natalia, a name by which this region is still known to the Boers of Transvaal. To the capital of the new state they gave the name of Pieter Maritzburg, in which are commemorated the two chief pioneers of the great trek : Picter Retief and Gevrit Maritz.

But the government of Cape Colony refused to recognise the new state, and hastened to despatch some troops in order to take possession of the country in the name of Great Britain. This somewhat high-handed measure has given rise to much angry discussion, and the supreme authority has been severely censured by carping tongues for having pursued a career of ambitious conquest under the cloak of humanitarian sentiments. The English, it was said, took possession of "Natalia" professedly through philanthropic motives, in order to protect the Dutch from the Zulus and the Zulus from the Dutch, whereas the latter neither demanded nor needed protection.* But the prior rights of the English settlers at Durban had to be considered, and it was notorious that wherever they established themselves in an independent position, the Dutch trekkers were introducing the institution of domestic slavery, which had been abolished by the Imperial Government throughout the South African colonies.

In any case, after having successfully resisted the invaders in a first engage. ment, the Boers were compelled to yield to numbers, and gradually withdrew to the upland valleys. Some remained behind, and in course of time became merged in the British population. But most of the Dutch immigrants, enraged at seeing a country wrested from them which they had conquered at the price of so much blood, again set out on their wanderings in quest of a permanent home, and after retracing their steps across the Drakenberg Range, joined their fellow-countrymen, who had already reached the Transvaal. At present, except in a few central districts and in the extreme north-west corner of the colony, no trace remains of the Dutch in Natal beyond a few geographical names. English is everywhere

[^17]the exclusive language of the settlers, of the courts of justice and the schools, and serves as the medium of intercourse with the natives.

## The Natives of Natal.

These aborigines have never ceased to be attracted to the colony of Natal, which after the wars of extermination offered so many unoccupied tracts with

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\text { Fig. } 55 .-N_{A T A L .}
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Scale 1 : 2,800,000.

plentiful pasturage for their herds. At the first arrival of the English in 1824 they numbered scurcely more than three thousand; by the year 1848 they had increased to no less than a hundred thousand, and since then they have augmented at least fourfold, not only by the natural excess of births over the mortality, but also by constant immigration down to the present time. The estimates, however,
for the Kafir population are made in a somewhat summary way, the European method not having yet been introduced amongst the tribes for obtaining accurate returns of births and deaths. Marriages alone are registered, while the huts are numbered for the purposes of local taxation.

The aborigines now settled in Natal belong to a great number of distinet tribes. But the line of migration has on the whole followed that of conquest in the direction from north to south; hence the great bulk of the immigrauts who have thus become British subjects naturally belong to the Zulu, or northern branch of the Katir family. They are still grouped in separate clans, unconnected, however, by any political ties, and the administration has taken the wise precaution of breaking them up into an endless number of distinct communities. In 1886 there were reckoned in the whole of Natal no less than a hundred and seventythree tribal chiefs, and of this number nearly one-half had been directly appointed by the Government without any hereditary title whatsoever. Such chiefs thus gradually become mere local officials responsible for the preservation of peace, while they are themselves under the immediate control of English administrators, who tolerate the observance of the tribal customs so long as these are not of a nature calculated to cause any manifest injustice and provided they are not at variance with the estubished principles of natural equity. Thanks to these judicious administrative measures, no war between the black and white elements has reddened the soil of Natal since the death of the Zulu chief, Dingaan. Notwithstanding the great personal influence of the famous Anglican Bishop Colenso, the Weslevan Metherists seem on the whole to have had most success in this field of missionary labour. Of the hundred and sixty Christian stations now existing in Natal as many as fifty-eight have been founded by these Nonconformists.

## Immigration.-Coolie Labour.

Direct immigration from Europe acquired but little importance before the middle of the century. About this time a group of British farmers, mostly from Yorkshire, settled in the colony of Natal. Some German peasants also arrived and took possession of concessions of land-in the neighbourhood of the port. The white population was afterwards increased by a number of Norwegian settlers as well as by some Creoles from Mauritius and Reunion. But despite the advantages offered by the climate to all except those of a nervous temperament or with a predisposition to apoplexy, the spontaneous annuul immigration has never exceeded a few hundred persons; a counter-movement has even set in from Natal to Australia and New Zealand.

This relative neglect of Natal by British colnnists has been attributed to $a$ great variety of causes. The system of large landed estates prevails in the colony, the consequence being that the owners do not themselves work or always even reside on their properties. They employed coolies and pative hands, so that the whites who give themselves to manual labour become degraded in the eyes of the aborigines. Immigrants are also paturally discouraged by the great and increasing
numerisal preponderance of the Zulu-Kafirs. But this decided disparity between the white and coloured elements has alarmed the great English landowners themselves; hence societies have been established for the purpose of introducing into the colony European artisans, workmen, and domestic servants, to whom a free pussage is offered on the condition of their entering into engagements of greater or less duration. In the period between 1878 and 1884 the emigrant vessels landed as many as 4,526 of these invited guests, or a yearly average of 646 persons, who have certainly contributed gradually to dovelop a healthy middle class between the great landowners and the natives. The men being more numerous than the women, the latter have no difficulty in finding partners in life, so that there are no old maids in Natal as in England. The European population thus also regularly increases by the normal excess of births over deaths. Between the years 1880 ard 1884 the increase from this source and direct immigration was at the rate of $2,47 \cdot 2$ a year, but since then assisted emigration has been stopped. The Europoan population has increased by nearly 50 per cent. since 1859, and in 1888 numbered altogether considerably over forty thousand.

To cultivate their extensive domains the English proprietors in Natal have had recourse chiefly to imported labour, Hindu coolies mainly from the Bengal and Madras presidencies. At first they tried to utilise the Kafir element, and in many places are still obliged to fall back occasionally on the aborigines. But there is little love lost on either side, and on the termination of their engagement, usually for one or two years, the Kafirs quit the farms and return to their respective tribes. At times thay aven contrive to get recalled hy their chiefs hefore the stipulated term of service has expirct The Kafir works in any case grudgingly for a master. He has, as a rule, his own hut, his own field of maize, and perhaps a few head of cattle; hence when asked by Europeans to take service for a salary, he is apt indignantly to decline, and even to turn the tables by asking the white to accept employment under him.

Thus the Natal planters are naturally driven to cast about for less independent hirelings. They have tried Hottentots and members of tribes more to the north; but find the mild IIindu more suitable for their purpose. The colonial Government advances the funds required to recruit these Asiatics, who are supplied to the various plantations according to the demand. The period of contract is usually for ten ycars, and in return for his daily labour of from eight to ten hours the coolie receives wages at the rate of about twelve shillings a month, besides his food, lodging, and an outfit. Those who complete the full term of their engagement can claim a free passage back to their homes, unless they prefer to offer their services according to the current prices in the labour market. Most of them remain in the colony and marry one of their fellow-countrywomen, for the importers of coolies are bound to introduce both sexes, in the proportion of forty women to a hundred men. Some become gardencrs or owners of small holdings in the neighbourhood of the towns; others turn to trade and open shops, usually in the haberdashery or provision lines, and, thanke to their extreme frugality, have become formidable competitors with the European dealers, who loudly com-
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Including with the Europeans and Hindus all other strangers, such us Malays, Chineso, and half-castes, the foreigners of all kinds now represent about one-six th of the whole population of Natal. Nearly all have special occupations according to their several nationalities. Thus immigrauts from St. Helena are generally coachmen and drivers, the Germans farmers or clerks, the Dutch stock-breeders, the Norwegians fishers, and so oll.

## Agricultural and Mineral Resources.-Communications.

The colonial Govurnment still possesses a vast extent of unsold lands suitable either for tillage or grazing. Of a total extent of over $12,000,000$ acres, including, however, rocky ground and waste spaces of all sorts, $2,770,000$ acres were still undisposed of in 1885, and most of this land was situated in the southern part of the colony near Pondoland. The ground actually cultivated by Europeans does not exceed 90,000 acres, which is scarcely more than the bundredth part of the domains owned by them. The so-called locations, or reserves, secured absolutely to the Kafirs represent a total area of $2,000,000$ acres. The extent of the allotments offered for sale or on lease has varied according to the oscillations of the colonial policy. The first Dutch settlers had appropriated to themselves lots of 6,000 acres and upward , so that about two thousand prcprietors would have sufficed to swallow up the whole territory. Since that epoch the average size of the allotments has been considerably less, although many have still exceeded 1,000 , or even 2,000 and 3,000 acres. But, in the neighbourhood of towns there is a general tendency towards the creation of small holdings.'

The staple agricultural product of Natal is the "mealie," or maize. This cereal yields in superabundance all that is required by the Kafirs, the Hindus, and their domestic animals, leaving sufficient fur a considerable export trade. All other European cereals are also cultivated, and every town and hamlet is surrounded by a zone of gardens or orchards, which have replaced the old forest vegetation nearly entirely destroyed by the axe or fire. Even the dense mangrove thickets on the coastlands hare been alrnost civerywhere consumed, their incorruptible wood being highly appreciated for all kinds of joiners' work.

Thanks to its sub-tropical elimate, Natal also produces plants unknown in the European temperate zone. But since the year 1872 the extensive coffee plantations have suffered so much from the ravages of disease that this industry has been almost abandoned. Attempta have here and there been made to replace it by tea; but in 1885 the plantations did not exceed 400 acres altogether, yielding for exportation little over $35,000 \mathrm{lbs}$. of this article. Attention has also been paid to the cultivation of hemp, Phormium tenax, and other fibrous plants. On the plantations of the seaboard the chief cultivated plant is the sugar-cane, which was introduced in 1851. In 1884 these plantations covered a total extent of 29,000 acres, and produced a crop of 18,771 tons, over a third of which was exported
"over-berg," that is, to the Boer republics beyond the mountains. Enough remained to distil $2,200,000$ gallons of rum on these plantations, which are the favourite resort of a harmless species of python that never attacks mau, but proys on such noxious vermin as rats and field mice.

Tho breeding of horned eattle, which was the only industry in Natal during the first years of the Boer occupation, has diminished in relative importance since 1855, when a destructive plague swept away 96 per cent. of all the animals attacked. But the herds have been restored by the practice of inoculation, by the introduction of fresh stock, and an improved sanitary system. In 1884 the live stock cumprised over 575,000 head of cattle, an enormous proportion, inasmuch as it far exceeded the number of inhabitants. There were also over 43,000 horses and 522,000 sheep belonging to colonists and natives. But the Natal pasture-lands are at times visited by millions of sheep belonging to the Boer grazers of the Orange Free State and Transvaal, who move from place to place with the seasons. In summer they drive their flocks to the upland valleys of the western slopes; in winter they cross the dividing range and descend to the warmer camping grounds of Natal. The wool yielded by their flocks is also forwarded through the port of the British colony. The stock-breeders have introduced the Angora goat; but they have paid little attention to ostrich farming, being doubtless deterred by the partial failure of their neighbours in Cape Colony.

Natal contains some deposits of copper, gold, and graphite, but not in sufficient abundance to render mining operations remunerative. The chief mineral resources of the country are iron and coal, which occur in the northern districts, especially on both slopes of the Biggarsberg Range. Here the chief centre of population has received the n"me of Newcastle, as if it were destined one day to rival the great centre of the coalfields in the north of England. The carboniferous district exceeds 1,400 square miles in extent, and some of the seams are over ten feet thick. Including the horizontal strata alone that lie near the surface and that have hitherto been surveyed on the British slope of the Drakenberg, the engineer North has estimated the quantity of good coal here stored up for future use at over two billion tons. Till recently this vast accumulation of excellent fuel lay almost untouched except by the few native blacksmiths of the district. But since the railway has penetrated from Durban into the Upper Tugela Valley, it is also used for the locomotives. Coal mining cannot fail to become an important local industry with the development of the railway system, and the establishment of sugar refineries, smelting furnaces, and factories in the colony.

The Natal railways, all of which belong to the Government, had a total length . of over 200 miles in the yeur 1887. But only one important line had been completed, that running from Port Natal through Pieter Maritzburg north-westwards to its present terminus at Ladysmith, and which is intended ultimately to cross the Drakenberg and effect a junction with the railway system of the Duteh republics. These works are at the same time earried out with the utmost economy consistent with safety. The steepest gradients exceed one inch in forty; the sharpest curves have a radius of little over 300 feet, and all the engineering operations have been are the at proys during ce since animals tion, by 884 the on, inasr 43,000 e Natal he Boer to place s of the to the $s$ is also ors have farming, Colony. sufficient esources specially ation has he great district ten feet and that engineer re use at fuel lay But since t is also ant local ament of al length een oomestwards cross the epublics. onsistent st curves ave been

port natal and dtrban-view taken from the bluff.

plannod for a single narrow line. The main line successively crosses all the transverse ridges of the eastern slope. Near the village of Westown it attains an elevation of nearly 5,500 feet, but will have to climb about 300 feet higher in order to reach the crest of the Drakenberg and penetrate into the Orange Free State.

The carriage roads, which complete the network of communications in the colong, are also planned with great skill and daring. Many of them skirt the deep ravines and ascend the precipitous flunks of the main range in order to reach

Fig. 66.-The Blufy of Natal.
Scale $1: 240,000$.

the level of the inland plateaux. Most of the main highways converge on Port Natal, where is centred all the foreign trade of the colony.

## Topography of Natal.

The southern district between the Um-Tavuna and Um-Zimkulu rivers is one of the most thinly peopled in Natal, ${ }^{\circ}$ i here the white squatters are still scattered in small and isolated groups amid the surrounding Zulu and Pondo populations. In this district has recently $t$ en founded the Norwegian agricultural settlement
of Marburg. It lies within six miles of the little port of Shepstone, which is formed by the estuary of the Um-Zimkulu, but which is often almost inaccessible to shipping. Other so-called "ports," carefully avoided, however, by skippers, follow northwards along this exposed seaboard, which runs in nearly a straight line from the Kafirland frontier to the capital. Such are Port Marding at the mouth of the Um-Zambi, and Port Scott in the Um-Pambynioni cstuary. But the only part of tho whole coast which is sufficiently indented to offer a large basin to shipping is the inlet of Port Natal, sighted by Vasco de Gama in the year 149i. At this point a ridge of rocks with an average height of 200 feet, running parullel with the original coastline and afterwards connected by upheaval with the mainland,

Fig. 57.-Port Natal and Durban.
Ecale 1: 00,000.

terminates at its northern extremity in a bluff or steep headland completely sheltering from the winds and surf a spacious inlet, which is all that remains of the ancient channel between the ridge and the true shore line. At the entrance of this inlet the action of the waves has gradually developed a spit of sand which has its root on the northern shore, whence it projects in a south-easterly direction towards the bluff. Thus is left to shipping only a narrow passage, the sill of which changes in position and depth with the tides and storms. Formerly the depth varied at low water from six or seven to sixteen feet, and vessels drawing over ten fect seldom ventured to cross the bar. But a breakwater running from the spit of sand towards the north-east has had the result of increasing the scour

## DURBAN.

 ne from h of the part of pping is At this llel with ainland, ns of the rance of hich has direction e sill of erly the drawing ing from the scourof the ehb tides, thus lowering the sill by about two feet, while at the same time rendering it more capable of resisting the action of the atmosphere and marine currents.

The city built on the shores of Port Natal was founded in the year 1846, in a thicket at that time still frequented by elephants. This place, which received the name of Durben ( $l$ ' Urban) in honour of a governor of the Cape, consists in reality of two distinet towns connected by a railway. These are Port Natal, the marine quartei, with its piers, docks, and stores grouped near the entrance of the inlet, and Durbun, the city proper, with its broad streets lined with shady trees, its magnificent sub-tropical gardens, bananas, bamboos, und banians, covering the gentle slope of a hill on the north side of the buy. This wooded hill, which swoeps round to the west, is dotted over with pleasant country seats and villas, whence a fine panoramic view is commanded of the bay with its islets and encircling shores. Here reside most of the wealthy merchants, who have their offices in the city. On the west side of the estuary is the little hamlet of Congella, memorable as the spot where the first Boer immigrants formed their camping-ground.

Durban, although not the capital, is the largest town in the colony, and is remarkable for the cosmopolitan character of its population, inctuding considerable numbers of Zulu Kafirs, Hindus, Arahs, Chinese, English and other Europeans. The island of Salisbury in the bay is inhabited by over two hundred Hindus, who are almost exclusively engaged in the capture and curing of fish for the market of Durban. Olher Iiiadus occupied with gardening supply the city and neighbourhood with fruits and vegetables. Durbun suffered from the lack of fresh water before the recent construction of an aqueduct, which now brings from a distance of eight miles a superabundant daily supply of no less than 250,000 gallons of good water.

Thanks to its port and its railways, which run southwards in the direction of Isipingo and the sugar plantations, northward to the town of Verulam, also lying in e. sugar-growing district, and north-westwards to Pieter Maritzburg, Durban has become the great centre of trade for the whole of Natal. It also attracts a large share of the traffic with the Dutch republics, although these states possess alternative outlets for their produce at Port Elizabeth and Cape Town, and are also developing their railway system in the direction of L^urenço Marques, with the view of securing that Portuguese harbour as a convenient seaport on the Indian Ocean. When the Orange Free State and the Transvaal enjoy the advantuge of this direct route through Portuguese territory there can be no doubt that the trade of Durban will be considerably reduced. At present its exchanges far exceed in value those of all the rest of the colony, although the business of Port Natal has already been somewhat injured since the time of the great speculations caused by the diamond and gold fevers. But notwithstanding these temporary checks its general foreign trade has increased enormously from decade to decade, its average value having risen from a little over $£ 110,000$ between 1846 and 1855 to about $£ 2,520,000$ between 1876 and 1886.

Both for exports and imports Great Britain is by far the best customer of

Natal ; next to the mother country comes Australia, from which it receives considerable supplies of farinaceous substances. But, strange to say, notwithstanding its close proximity, Cape Colony maintains less trading relations with Natal than India, the United States, and even Brazil. The local retail business with the Hindus and natives is almost entirely monopolised by the Arab and other Asiatic dealers resident in Durban.

On the road from Durban to Pieter Maritzburg the only place laying claim to the sitle of a town is Pinetoren, centre of the German population in Natal. A neighbouring missionary station bears the comprehensive name of Neu-Deutschland ("New Germany "), and an agricultural establishment has been founded in the vicinity by some Trappist monks, mostly Germans by birth.

Pieter Maritzlurg, or more briefly Maritsburg, capital of Natal, is pleasantlsituated at an altitude of over 2,000 feet above the sea, on a fertile plain which is watered by a southern affluent of the Um-Geni, and which is completely encircled by gently sloping hills. Maritzburg is one of the most delightful cities in the whole of Africa, and the rich vegetation of its gardens and surrounding woodlands resembles that of the European temperate zone rather than that of tropical lands. Although less populous than Durban, it has a far more numerous proportion of Government officials and employés. Here also is situated the military camp occupied by the principal division of troops stationed in the colony. Holding a central position in the country close to the seat of Government, this little army can easily be moved in the direction of any point where danger may threaten. The agricultural colony of Wilgefontein, established in the neighbourhood of Maritzburg, has turned its attention with great success to the cultivation of spring fruits and vegotables, which here yield excellent returns.

On the opposite side of the Zwaartkop Range north of this district flows the Um-Geni, a river famous for its magnificent cascades. One of these, near the little town of Howick, tumbles in a single foaming mass over a basalt ledge from a height which has been variously estimated at from 280 to 320 feet. Lower down the stream ramifies into several branches, and here numerous picturesque little falls, separated by intervening reefs and clumps of trees, are disposed in a long line following the rocky bed of the main channel.

Lidgettoven, north of Maritzburg, is situated, like the capital and Howick, in the same valley of the Um-Geni. "Dutch" Grrytorn, as it is called, lies in the Upper Um-Voti basin; but all tiee other centres of population belong to the region watered by the Tugela, the chief river in Natal. Estcourt and Weenen ("Wecping") follow in succession along the left bank of the Bushman affluent; Colenso has been founded on the main stream; Ladysmith on its tributary the Klip; Neiccastle ( 4,100 feet) at the northern extremity of the colony, on a small affluent of the Buffalo, or Upper Tugela. North of Newcastle, at the point where the territory of Natal impinges on the Orange Free State and Transvaal, rises the steep Majuba (Ama-Juba) Hill, memorable for the victory gained by the Boers in 1881 over the British troops entrenched on the summit. On these uplands the crests, peaks, tables, or domes of the mountain ranges rise but little above rolling
surfaces of the elevated inland plateau. Here the villages lie sheltered from the keen winds in the depressions of the grassy soil.

Besides Durban and Maritzburg only three other places in Natal-Verulam, : Ladysmith, and Newcastle-were of sufficient importance in 1886 to constitute thenselves municipal towns.

## Administration.-Finance.

Natal has not yet risen to the dignity of an autonomous colony enjoying selfgovernment, naming its own ministers and providing for its own defence. It is etill a " crown colony," directly dependent on the British Gsvernment, although already possessing a certain degree of independence. The Governor of Natal is appointed by the Queen, as is also the Executive Council, which consists of the Chief Justice, the senior officer in command of the troops, the Colonial Secretary, the Treasurer, the Attorney-General, the Secretary for Native Affairs, the Colonial Engineer, and two members nominated by the Governor from among the deputies elected to the Legislative Council. Till recently half the members of the Legislative Council were also nominated by the Crown; but under the Act which received the royal assent in 1883, this body now consists of thirty members, seven only of whom are appointed by the Crown, and all the others elected by the counties and boroughs, the qualification of electors being the possession of inmovable property to the value of $£ 50$, or renting such property of the annual value of $£ 10$, or residence of three years in the colony with an income of $£ 96$ per annum, inclusive of allowances. Nobody is officially excluded from the franchise on the ground of his colour, his origin, or his religion. But the bulk of the aborigines and Asiatics are practically disfranchised by a sweeping clause, to the effect that none shall be inscribed on the list of voters who may belong to any class placed by special legislation under the jurisdiotion of special courts or subject to special laws and tribunals. By this arrangement the elections are at present almost entirely controlled by the white vote, and Natal is prevented from reverting to the state of anarchy which prevailed in this region before the introduction of the European system of government.

The central authority appoints the judges of the Supreme Court, the resident magistrates, and the "field-cornets," who maintain order in the various districts. It also names the administrators and employés, and even selects the greater part of the professors and teachers, the public instruction depending to a great extent on the colonial budget. Durban and Maritzburg have each its high school, whenco students holding scholarships may pass on to the English universities. The large towns are provided with primary schools supported by the colonial funds. A large number of private schools, especially those belonging to the missions, also receive Government aid, either in money or land. Edendale, near, Maritzburg, is the chief centre of the educational zeal displayed by the Wesleyan missionaries. The examinations in the various schools are conducted by special examiners. But notwithstanding all this machinery the proportion of native children who learn to
read is very small. On the other hand, not more than two hundred white children, or about one-twentieth of those at an age to receive instruction, are illiterate.

The serious question of colonial defence is the reason why Natal still continues under the direct control of the Home Government. The colonists do not feel themselves yet strong enough to defend themselves. They are surrounded by populations whose smouldering hostility might easily be rekindled. On the southwest frontier dwell the Pondos, on the west the Basutos, on the north-west the loers, on the north-east the Zulus; while within their borders they might have at any moment to face a rising of the natives far outnumbering all the rest of the population together. In the presence of so many dangers they are fain still to look to the mother country for help. The colony is at present protected by a small British army of over a thousand men, which is divided into three corps, stationed at Maritzburg, Estcourt, and Greytown. These troops serve at the same time as a model for the formation of an effective body of colonial forces, comprising a squadron of two hundred and eighty mounted police and a regiment of volunteers over a thousand strong. In every town companies of rifles have also been formed, which the Government encourages by the distribution of prizes, while, on the other hand, strictly forbidding the sale of arms and ammunition to the natives. Since the year 1856 it has also been made penal to sell or give them alcoholie dr:nks, under a penalty of fine or imprisonment. Unfortunately this humane law is often violated, especially hy the Hindu dealers.

The colonial budget, derived chiefly from customs and the native hut tax usually shows a relatively heavy deficit, which has to be covered by loaus. Th. consequence is that in 1888 the public debt approached $£ 4,000,000$. The European colonists themselves pay no direct taxes, while the postal and telegraph services and State railways cost the Government much more than they contribute to the revenue. The annual grant formerly set aside for assisted emigrants has under these circumstances had to be discontinued. On the other hand, the bill for the extension of the railway system to the two neighbouring Duteh republics, and the raising of a loan of $£ 1,500,000$ for that purpose, were passed through committee in the Natal legislature in March, 1888.

For administrative purpoess Natal is divided into eight counties and twelve divisions, which with their white population and ehief towns will be found tabulated in the Appendix.

## Zululand.

On repeated occasions the British and Dutch authorities have concluded treaties with the native chiefs of Zululand, guaranteeing to them the possession of the territory comprised between the Natal frontier, the border range, and the Portuguese possessions. But, as in other parts of Austral Africa, official conventions were powerless to prevent a ehronic state of hostility between the Europeans and the aborigines, manifested either by occasional incursions of armed bands or by simple plunder of land and live stock, but also at times breaking out into open warfare. The Zulu domain was thus inch by inch encroached upon, especially by
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tinues t feel led by southest the ave at of the till to d by a corps, at the forces, giment s have prizes, tion to e them ly this ut tax Th tropean services to the under for the and the ittee in twelve d tabuially by
the Boers descending from the inland plateaux and seizing one camping-ground after another. $\Lambda$ " New Republic" was thus constituted, with the obvious intention of soon forming it into a maritime province of Transvaal. But this open violation of their conventions with the suzerain power compelled the interference of Great Britain, which by extending its protectorate over the southern part of Zululend arrested the aggressive advance of the Transvaal Boers, who were instinctively seeking an independent outlet for their trade on the nearest seaboard to their domain.

Owing to this action of the stronger power all the coastlands from the mouth of the Tugela to the river Maputa, which flows to Delagoa Bay, belong henceforth to England. But the upland valleys of the border ranges draining to the Indian Ocean have become an integral part of the South African Republic. The superficial area of the now partitioned land, where predominate the three nations of the Zulus, Swazis, and Tongas, is estimated at 20,000 square miles, with a total population of about two hundred thousand souls. The fragment attached to the Transvaul under the nume of the "New Republic" comprises a space of nearly 3,000 square miles, while British Zululand, henceforth placed under the administration of the Governor of Natal, has an area of 8,500 square miles.

The Zulus (Ama-Zulus) are far less numerous in the land where they were till recently masters than in the colony of Natal, where they are kept under strict control, but where they have every opportunity of gaining a livelihood by manual labour. In the territory limited southwards by the Tugela they are at present estimated at scarcely more than a hundred thousand. But the land has been for generations wasted by sanguinary wars of succession, followed by foreign invasions by which whole provinces were depopulated. In 1879 occurred the final struggle in which the Zulus ventured to make a stand against the English. Despite their inferior discipline and defective armaments they were victorious in some engagements, notably at Isandhlwana, a spot. lying near the left bank of the Buffalo (Upper Tugela), to the east of its confluence with the Blood River. Here is situated the ford of Rorke's Drift, the possession of which was frequently disputed as one of the most important strategic points in the whole territory. The English after seizing it had occupied the castern terraces of the Buffalo valley, were surprised by an overwhelming force of Zulus, and one wing of the invading army annihilated. This event was soon after followed by the death of Prince Napolenn, only son of the dethroned and lately deceased Emperor Napoleon III., who had volunteered to serve with the British forces, but whe was cut off with a small party in the bush. But the first reverses were soon repaired and the Zulu army was completely routed on the banks of the Um-Volosi river, close to the very spot where, according to immemorial tradition, was born the family of Zulu, founder of the nation. After reducing the country, the English divided it amongst thirteen protected chiefs, a foolish arrangement which brought about a series of intertribal wars, followed by hopeless anarchy. Then came the encroachments of the Transvaal Boers, leading to the establishment of the British Protectorate, which has at length brought a period of repose to this distracted land, the
scene of almost uninterrupted wars and massacres since the rise of the Zulu military power early in the present century.

## The Zulus.

The Ama-Zulus, or "People of Zulu," that is of the "Heavenly," do not present a physical type distinct from that of the other Kafir nations in the south-east corner of the continent. They are in fact not a separate race, but an amalgam of all the surrounding tribes that were successively "eaten up" when the original Zulu group began its career of conquest under Chaka, about the beginning of the century. The communities thus devoured by the "Great Lion" were never completely exterminated, the women and children being usually reserved for the conquering nation, while the young men were enrolled in the victorious army. The primitive tribes were doomed to disappear all the more rapidly in the multitude of the conquered that Chaka had forbidden his warriors to marry. The veterans alone were permitted to take wives, the number being proportioned to that of the enemy slain by them in battle. To stifle the growth of the human affections that might have enervated or incapacitated them for their work of ruthless destruction, Chaka ordered all new-born babes to be slaughtered. In order to set an example, he himself celebrated no marriages according to the ancient usages, and caused all his children to be put to death at their birth. As a jealous monarch he looked upon every son born to him as a possible future rival, and preferred to cut him off betimes.

This atrocious ruler, drilling the whole nation like a perfect engine of war, had sacrificed all other interests of the State to the insatiable thirst of conquest. The capital was nothing but a military camp, while similar camps were distributed throughout the whole land. In the villages grouped round the kraals of the warriors, the women and slaves stored provisions for the army, which was fed exclusively on a meat diet, milk, the food of the peaceful, being interdicted. The Zulus, formidable especially for their manner of attack, had abandoned the dart, which is hurled at a distance, retaining only the assegai or hand-spear, with which to strike at close quarters. Nor were thair irregular hordes any longer flung in disorder ag..nst the enemy, but the well-trained troops were so disposed as gradually to envelope the opposing forces, attacking first on one flank then on another, and thus step by step driving them in on the central body, by which they were then overwhelmed. After the victory all attention was turned to the capture of the cattle, which had been driven to a distance from the battlefield, and it was characteristic of the thoroughness of the system that the very herds were trained to sudden retreat in disciplined order.

But such a purely military organisation necessarily tended to involve the whole nation in ruin. Founded by the sword, the Zulu empire perished by the sword. After breaking like angry waves against the outspanned waggons encircling the Boer encampments, the Zulu bands could no longer hope to exterminate the white intruders, and so turned in fierce internecine warfare one against the other. And

## AMATONGALAND.

 outh-east amalgam $\theta$ original ng of the ever com1 for the jus army. multitude Э veterans rat of the tions that struction, example, caused ull he looked ut him offe of war, conquest. listributed als of the $h$ was fed ted. The 1 the dart, with which or flung in as gradun another; they werc capture of and it was trained to 3 the whole the sword. ircling the o the white her. And
now these warlike tribes live only on the proud memory of their past heroic deeds and conquests, perhaps dimly conscious that these very glorics, after bringing about the destruction of their military power, reuder the pcople themselves less capable than others of turning to peaceful ways, and thus successfully continuing the struggle for existence. Constituted of so many discordant elements. the Zulu nation was distinguished from the other branches of the Kafir race mainly by its warlike institutions and the military ardour engendered by hereditary training. But being the descendants of picked men, they are generally a handsome people, tall, vigorous, active, of dignified carriage, and skilful at all bodily exercises. They possess such natural grace that all costumes alike become them.

At the same time they are fully conseious, if not a little proud, of their physical advantages, which they endeavour to heighten by the elegant fold of their flowing toga, by adorning arms, legs, and breast with rings and pearls, and decking the head with plumes and flowers. The married men are fond of disposing the hair in the form of a coronet, stiffening it with gum and a mixture of clay and ochre. Of a kindly cheerful disposition, they seem to harbour no rancorous feeling against thoir white conquerors; but on the other hand, they nover forget or forgive a personal wrong.

Formerly the characteristic fetishes were the assegai and warrior's shield. Travellers of the past generation describe with a sort of awe the military dances and processions; when the fierce Zulu men of war, adorned with the horns and tails of oxen, defiled before their king, the while singing the tidings from the battlefield, the "news of the assegai." But the obligation to dwell in peace , under the threat of still more potent fetishes, the gun and rifle of the white man, will doubtless tend to modify their superstitions and soften their tribal usages. Although still for the most part refractory to the glad tidings of the gospel, they will gradually cease to recognise the souls of their forefathers in the familiar snakes gliding about amid their dwellings. Like their kinsmen in Natal, the Zulus of the region beyond the Tugela are already exchanging the sword for the plough, while the hitherto neglected industrial arts have begun to make some progress in their village com nunities. The blacksmith's trade, however, was always held in honour, and the native metallurgists were long acquainted with the process of making a more durable iron than that imported by the English, while their jewellers had learnt to work the copper obtained by them from the Portuguese of Lourenço Marques.

## - Amatongaland and Swaziland.

North of Zululand proper stretches the narrow domain of the peaceful Amatonga (Ama-To ${ }^{\prime}$ ga) nation, whose name recalls their former subjection to the Zulu conquerors. Being farther removed from the Natal frontier, and dwelling in seclusion along the shores of Lake St. Lucia and the coast lagoons, these agricultural tribes had hitherto kept more aloof from European influences. They were also protected from intrusion by the malarious climate of the low-lying coastlands inhabited by them. Nevertheless the ubiquitous German trader, Lüderitz, after 110-ar
acquiring the Angra Pequena district for his countrymen, also attempted to occupy the maritime territory encireling the St. Lucia lagoon. But Portugal had long asserted her rights over the whole of this region between the lagoon and Delagoa Bay, and especially over the

Fig. 58.-St. Lucta Lagoon and Backwaters. Scale $1: 2,510,000$.
 basin of the Muputa River from its mouth in the bay as far as the Lubombo Hills. It was accordingly announced in March, 1888, that the Queen of Amatongaland had formally recognised the sovereignty of Portugal over the part of her ierritory comprised within the southern boundaries assigned to Portugal by the MacMahon award.

The Amaswazi (AmaSwazi) territory lying more inland beyond the Lubombo range is even more seriously menaced than the Amatonga domain, for it forms an intervening zone between the Transvaal plateau and INelagoa Bay, and is also known to abound in mineral wealth. The Boer grazers often penetrate into this district, where they claim certain rights of pasturage, and usually come armed in order to vindicate those pretensions against all comers. On the other hand, the English of Cape Colony and Natal demanded in 1887 the appointment of a British agent to reside with the King of the Swazi people, and to afford military aid against the Boer intruders from the inland plateaux. English missionaries were already stationed in the country so early as 1822 ; and although they were massacred they were followed hy other preachers of the gospel, who founded more permaneat stations in Swaziland. had long 1 Delagoa over the liver from as far as It was acin March, of Amally recogy of Por$t$ of her vithin the assigned MacMahon
(Amaing more Lubombo 3 seriously Amatonga $s$ an interween the Id I)elagoa knowll to al wealth. ften penerict, where rights of ially come , vindicate against all ther hand, pe Colony ed in 1887 $f$ a British a the King ole, and to against the 1 the inland missionhough they vho founded

The Amaswazi people, who are estimated at about eighty thousand souls, take their name from a local chief, who acquired the political ascendancy in the year 1843. They had previously been known as the Ba-Rapuza people, from another chief renowned for his warlike exploits at an earlier period. The distinguishing mark of all the Swazi tribes is an incision in the cartilage of the ear. Their present ruler has become one of the wealthiest persons in South Africa since the formation of numerous companies to work the gold-mines in his territory. His share in euch speculation has been fixed at an annual sum of not less than $£ 300$.

At present there is searcely any resident Furopean population in any part of Zululand. The whites are even provisionally forbidden to acquire land or establish plantations in this region, where the only settlers are the missionaries, a few grazers and gold-hunters, besides two or three dealers in the neighbourhood of the coast. Nor are there any European buildings, beyond some military posts at the strategieal points, and a small number of schools and chapels, centres of civilization round which will doubtless one day spring up regular towns and villages.

The natural centre of the country is the district about the confluence of the two Um-Volosi rivers. 'IFere was formeily situated Unodicengo, the royal kraal, or capital of the Zulu kingdom. This place was succeeded by Ulundi, a town of over a thousand huts disposed in the form of a fortified circular enclosure some miles in circumference, within which the herds were safely penned. Ulundi was destroyed in its turn, and nothing now marks the site of this historic place except an obscure hamlet. All the other centres of population in Zululand, as well as in Swaziland, are also constructed on the model of a large cattle pen.

Although these regions cannot be said to be yet completely pacified, there can be no doubt that both Natal and Zululand are henceforth safe from the danger of any sudden organised rising on the part of the natives. The Zulu military system founded by Chaka was utterly destroyed by the overthrow and removal of Cetywayo from the scene, while the Zulu nation itself was, so to say, resolved into its original tribal fragments. The chief obstacle to a systematic colonisation of the country having thus disappeared, one may well feel astonished that, from the immense stream of British migration, such a small current is annually deflected towards the still sparsely peopled lands of Austral Africa, which are, nevertheless, spacious and fertile enough to afford support to many millions of human beings. Doubtless this phenomenon must to a great extent be attributed to the national instinct of the emigrants themselves. When they quit their English homes they naturally desire to settle in another England, resembling their native land as closely as possible in its language, social usages, and ethnical if not political cohesion. Hence the preference they show for the United States, Australia, New Zealand over Austral Africa, where they would be thrown into contact with Dutch Boers, Hottentots, Kafirs, black and yellow peoples of every race. Although political rulers of the land, they feel dissatisfied at forming such a small minority of the entire population.


CHAPTER VI.
THE DUTCH REPUBLICS AND PORTUGUESE POSSESSIONS SOUTHI OF THE LIMPOPO: ORANGE FREE STATE AND TRANSVAAL, DELAGOA BAY.

## I.-The Orange Free State.



F the two South African Boer States, that which takes its name from the Orange River is the smaller in extent and population. It is conterminous along two-thirds of its froutier on British territory, being bounded on the west by Griqualand West, on the south by Cape Colony proper, and on the east by Basutoland and Natal. The northern boundary line is traced by the River Vaal separating it from the sister republic of Transvaal. Before the discovery of the Diamond Fields the large oval-shaped enclave assigned to the Orange Free State was clearly detined on all sides by natural frontiers, the lofty Drakenberg range separating it from Natal between the sources of the Vaal and Caledon ; the course of the latter stream, with some offshoots from the main range, form the limits towards Basutoland; the southern boundary follows the meandering course of the Orange, while that of the Vaal was chosen to indicate the north-west and west frontiers. But the peninsular space comprised between these two rivers above the confluence has now been detached from the Free State, and, with its diamantiferous deposits, restored to Cape Colony.

Viewed as a whole this region presents the aspect of a somewhat uniform grassy plateau at a mean altitude of from 4,300 to 4,600 feet above the sea, with a slight incline from north-east to south-west, and presenting little arable or fertile land, except in the eastern parts near the foot of the hills. The superficial area is estimated at about 42,000 square miles, or one-fifth of France. But the country is very thinly peopled, having a joint European and native population of not more than one hundred and fifty thousand, mostly distributed in small village groups or isolated farmsteads.

The beginning of the Dutch occupation dates only from the year 1837, when the first trekkers, leaving Cape Colony with their families, herds, and effects, crossed the Orange River, and ventured to seek new homes among the nomad populations of the unknown region stretching northwards to the Vaal. The convoy of pioneers was followed by others, until a new State was gradually con-
stituted between the two rivers. But the fugitives from British jurisdiction were still followod by the Euglish authorities, and in 1848 the British sovereignty was officinlly proclaimed in the country lying north of the Orange. The Boers resisted, and, as in Natal, had at first the advantage of their assailants. But being incapable of prolonging the struggle with the Finglish forees and their Grigin allies, they wer sompellod either to submit or seek fresh settlements elsewhore. Some, refusing to accept the British supremacy with the condition of abolishing siavery and treating the natives as freemen, continued the exodus in the direction of the north, crossed tho Vual, and founded the new republic of Transvaal. Others remuined in the country, where they became the dominant white element.

But by extending their authority over this now coloniul domain, the Englisb; at the same time accepted the unfortunate inheritance of the wars that had alreudy broken out with the Basutos and o1. r natives. The consequence was a heavy and increusing annual charge on the Imperial Government, which caused dissatisfaction at home and a strong feeling of opposition to the policy of annexation. Thus it happened that the supreme power offered to restore their political autonomy to the Dutch Boers of the sovereignty, on the simple condition of a formal promise not to reintroduce slavery. The Boers gladly accepted this condition, and in 1854 the Orange Free State was reconstituted. Since that time the republic has prospored to a remarkable degree, the population alone having increased fivefold during the last thirty years.

## Tife Boers of the Free State.

The Boers, who enjoy political dominion in the Orange Free State, are the descendants of zealous Calvinists, and most of them still profess the religion of their fathers. But other Christiun denominations, such as the Anglican, Wesleyan, and Roman Catholic, are all represented, chiefly by the British settlers in the country, and a few native converts. Possessing for two centuries no book except the Bibie, the South African Dutch communities, Afrikanders as they call themselves, are fond of comparing their lot with that of the "chosen people." Going forth, like the Jows, in search of a "promised land," they never for a moment doubted that the native populations were specially created for their benefit. They looked on them as mere "Canuanites, Amorites, and Jebusites," doomed beforehand to slavery or death. With the exception of the single Ba -Rolong tribe, which, through their hatred of the Basutos, had become the ullies of the Dutch, all the Baniu and Hottentot peoples dwelling within the territoly of the republic have been either exterminated or expelled by these South African "Purituns." They turned the land into a solitude, breaking all political organisation of the natives, destroying all ties of a common national feeling, and tolerating them only in the capacity of " apprentices," another name for slaves. Doubtless the blacks are at present even more numerous than the whites within the limits of the State, but they are for the most part Kafirs, Bechuanas, Hottentots, St. Helena halfcastes, and other recent immigrants, badly paid and badly treated. They are for-
bidden by law either to vote, to bear arms, or to nequire the ownership of a mquare yard of land; nor will custom even allow them to dwell in the vieinity of the whites.

Accustomed if not ulways to till the land, at least to superintend field operutions, the Boers-that is, "peasants"-as a rule fully justify this designation by their solid, square-set figures and henvy, awkward gait. They lack neither strength nor courage, but can make no clain to physical beanty or grace. They divplay no senso of tuste or elegance in their diress or their household surroundings. On the other hand, they are richly endowed with the solid qualities of most rural populations-thrift, method, and pere "erance, besides a vigorous vitality, shown in their large families and the great excess of births over deathy. Henco their numerical preponderance over the other whites would appear to be secured for some time to come, at least unless the equilibrium of the population bo completely ehanged by unforescen events. But if the English are still in a great minority, they are none the less the representatives of a decidedly superior culture, mad their speech already rivals the official language as the current medium of intercourse, and still more of general instruction. Most of the teachers being English or Scotch, their language naturally prevails in the schoolroon. It is also acquiring the supremacy in all the towns, where the immigrants-traders and mechanics-come chiefly from Port Elizabetb and other parts of the British colonies. Thus the transition from the rude Dutch dialect to the world-wide linglish tongue is being slowly but surely effected through the thousand subtle changes daily taking place in the very beart of the social system.

The wealth of the Orange Free State is derived mainly from its pastures, the extent of land under tillage being estimated at littlo more than 125,000 acres. The whole territory is parcelled out in great domuins, treated chofly as grazinggrounds, and at present supporting as many as five million sheep. Over ninetenths of the wool exported by the English dealers through Durban comes from the Free State, where stock-breeders have also turned their attention to ostrichfarming. Agriculture, also, has acquired a real importance in recent times, especially in the eastern districts watered by the ramifying streams of the Caledon and its numerous affluents. In the central and western parts, where water is scarce, the landowners aro at great pains to capture und husband it in every. possible way. Not a drop is wasted, and the farmsteads dotted over the monotonous sheepwalks are now usually encircled by a rich zone of pleasant gardens and orchards, interspersed with clumps of trees.

At the time when the diamond fever was attracting thousands of fortune-hunters to the arid plains of Griqualand West, the supplies of provisions were drawn chiefly from the agricultural districts of the Orange Free State and Basutoland. The Free State itself possesses some diamantiferous clays, which, like those of Kimberley, are found in pits or crater-like formations, apparendy of igneous origin. But these industrial resources can scarcely be turned to much account until this territory, as is now proposed, is brought within the network of the South African railway systems. The junction that is to be effected between the numerous
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lines in Cupe Colony and those being pushed forward in Transvaal and the upland valleys of Natal can be realised only by earrying out the projected intermediate links in the Free State. The gap to be bridged over in order to connect Kimberley in Griqualand West with Ladysmith in Natal is about 300 miles long, while a lino double that length will be required to effect the junction between Kimberley and the Lourenço Marques line.

## Topography of the Orange Fiee State.

The only town worthy of the name in the Orange Free State is the cupital, Bloemfontein, which is stuated in the middle of a treeless plain at an altitude of 4,500 feet above sea-level. It stands nearly midway between Kimberloy and the Basuto frontier, on a mostly waterless stream, whose valley inclines to the Modder and Vaal. From a little eminence on the east side, which was formerly fortified, Bleemfontein presents a pleasant prospect, with its regular streets lined by black and white houses. Near the European quarter are grouped tho humble dwellings of Wray-Hook, a suburban village, where all the natives are bound to pass the night. Bloemfontein, seat of a high school and centre of the political and commercial life of the republic, presents other advantages to strangers. It is an extremely healthy place, highly recommended by South African physicians as a sanatorium, especially to consumptive patients. A number of invalids from the Cape, and even from Europe, form a part of the population, which still falls considerably under three thousand.

East of Bloemfontein lies the Ba -Rolong district, till recently an independent little native State, forming an enclave in the Orange Republic, just as the lattor is itself completely encircled by the other South African States. About fifteen thousand of the Ba-Rolong nation dwelt peacefully in this little territory, over six thousaud being grouped within the enclosures of the capital, Thaba Nshu, so called from the hill whose crest and slopes it covered. But in 1884 a decree of the Bloemfontein Volksraad (Assembly) put an end to the autonomy of the petty Ba-Rolong Republic. Since then hundreds of the natives, indignant at the breach of faith committed by the Boers, have quitted their homes and sought refuges amongst their eastern neighbours and former enemies, the people of Basutolond. Before this event Thaba Nshu was the largest centre of population in all the non-British lands comprised between the Vual and the Orange.

The provincial chief towns in the Free State, although for the most part little more than rural villages, possess some importance as market-places, well stocked with provisions of all kinds to supply the needs of the flourishing farmsteads round about. Ladybrand, lying to the north-east of Thaba Nshu, has the distinction of being the central point of the most fertile province in the republic, a province violently wrested from the Basutos. Smithfield, on the Lower Caledon, and Rouxville, near the Orange, almost opposite the British town of Aliwal North, are also busy agricultural centres. Bethulie, founded by the French missionaries, close to the Orange and Caledon confluence, has become one of the chief stations on the route
between Cupe Colony and the Free State, ihanks to the bridgo that has been constructed on the main stream at this point. Phili/polis is another convenient station for travellers proceeling northwards by the Port Elizubeth railway, whose prosent inland terminus is Colesberg, on the opposite side of the river. Fauresmith, lying due north of Philippolis, in the middle of an unproductive plain, derives some importance from the diumond mines, which at Jagersfontein already produce an amual yield of about $£ 50,000$. At Jagersfontein was found the largest African diamond, a stone weighing uncut no less thun 500 caruts, but of very imperfect charucter. The Free State ulso possesses some carboniferous deposits, which occur ohiefly in the western district of Kroonstad.

In the northorn part of the republie the largest centre of population is Harriamith, situated on one of the headstreams of the Vaal, near the Van-Reenen Pass, which leads over the Dralenberg down to the colony of Natal. Harrismith thus constitutes the natural eastarn gate of the Free State, to which it gives convenient access from Durban by the railway, at present terminating at Ladysmith. On the long route leading thence to Bloenfonteiu the principal station is Winburg (Wijnburg), which lies in the most hilly part of the whole territory.

## Administration.-Revenue.

The Orange Free State is governed by a single Chamber, the Volksraad, or " National Assembly," composed of fifty-six menbers, that is one for each provincial capital and one for each rural district (Veld-korwetij or "field cornetcy"). It is elected for four years, but every two years one half of the members vacate their seats and fresh elections take place. During the session they receive remuneration for their services at the rate of $£ 1$ per day. They choose their own president, while the president of the republic is elected by universal suffrage for five years. The executive is vested in the President, assisted by an executive council of five members, that is, the Government secretary, the Landrost (Governor) of the capital, and three unofficial members appointed by the Volksraad, one every year, for three' years. 'The electorate consists of all whites born within the limits of the State, or who have resided three years, or who, after a residence of one year, comply with certain conditions as proprietors or leaseholders. Burghers (citizens) eighteen years old may vote for the veld-kornets (district judges), but not for members of the Volksraad or for the President of the Republio before they have completed their twenty-first year. A landrost (governor or magistrate) appointed to euch of the districts of the republic by the president, but requiring the confirmation of the Volksraad, takes cognisance of minor offences. Crimes of a graver character are remitted to a higher tribunal of three judges, who hold assizes in various districts of the State.

There is no standing army beyond a small artillery corps stationed at the capital, but all able-bodied whites are bound to serve when called upon, and have also to meet twice a year for the military exercises.

The chief sources of revenue are the poll-tax, the tax on property transfers,
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quit-rents, stamps, and trade licences, which generully suffice to cover the expenditure. There are no eustoms dues, and those levied on imports at the senports of Cape Colony are not refunded to the eonsignees in the Free State. A large portion of the revenue is applied to public instruction, and Stute aid is also granted to the Calvinist Church. Till recently there was no public debt, and even now the national barden amounts to less than $£ 130,000$, including an item of over $£ 60,000$ due to the national bank, but eovered by State shares.

In the Appendix will be found a tablo of the eighteen administrative districts, with their white and nutive populations.

## II.-Transvall or South Afriean Republic.

This state is officinlly designated the South African Republic, presumably in anticipation of a future confederation of the other republican states in the southern part of the continent. In superficial extent it is nearly three times larger thun the Orange Free Stute, but having been colonised at a later period it possessed till quite recently a far smaller numbor of white settlers. The disparity, however, is rupidly disappering since immigrants have begun to flock in crowds to the old and newly discovered gold-fields. Thanks also to the admirable climate of the plateau and to the fecaudity of the women, the white population, formerly almost lost amid the sucroundiis, aborigis a, alredy constitutes a respeetable minority. According to the highest estimate , ot more than ten thousand Boers crossed the Orange at the time of the great c:oulus; yet their descendants in the twin republics already far exceed $n \mathrm{~h}$ aing thousand $s \mathrm{~h} / \mathrm{h}$, notwithstanding the heavy losses caused by the protrac ed io trs with the natives and Finglish. As regards the number of the natives themselves, no accurate retu: s have yet been made, except in the southern districts of Transvaal, near the capital. But in the northern provinces the aboriginal element is known to be relatively dense and steadily inereasing. The whole pepulation of the State is probably at present scareely less than half a million, although in 1887 Jeppe estimated the number of natives at not more than three hundred thousand. Including the recently annexed territory known as the "New Republie," a fragment of the old kingdom of Zululand, Transvaal had in $1888 \dot{\mathrm{a}}$ total superfieial area of about 116,000 square miles, with a population variously estimated at from three hundred and sixty thousand to four humas and eighty thousand.

## Boundaries and Naturat Divisions.

Along more than half of its periphery the South African Republic enjoys the advantage of natural geographical frontiers. Towards the south she is separated from the Orange Free State by an affluent of the Vaal, and then by this river itself. On the north-west and north the boundary line follows the course of the Limpopo, separating it from Mate ${ }^{\text {L }}$ leland; lastly, a part of the eastern frontier is clearly marked by the Lobombo age, the seaward slope of which belongs to the Portuguese. while the boundary towards the colony of Natal is traced if 9 the
upper course of the Buffalo River. But in the sections of the periphery not defined by rivers or mountains, the territory of the republic has been considerably enlarged at the expense of the conterminous regions. Between Natal and the Portuguese territory it has encroached on some of the valleys inhabited by the Zulus and Swazis, while similar encroachments have been made in Bechuanalund on the west side. In 1870 a British arbitrator had traced west of the Makwasi Hills in the Potchefstroom district, a limit beyond which the Boers were not to trespass. But they paid little heed to this injunction, and during the temporary annexation of the republic by the English, they neglected to restore to the natives the very district which they had themselves forbidden the Boers to occupy. Since then further encroachments have takon place, and in virtue of a convention with Great Britain, executed in 1884, the territory of the South African Republic now stretches westward to the margin of the great commercial highway which connects the lower Vaal with the Zambese through Shoshong and Matebeleland. Except at one point traders and travellers may follow this route without touching the Transvaal frontier.

Transvaal is usually divided into three more or less distinct physical regions, which are deternined mainly by the elevation of the land, taken in connection with the corresponding natural and economic conditions. These divisions are (1) the Hooge Vald, or upland region, which comprises all the southern districts drained by the Vaal River, together with the Drakenberg highlands, as far north as the Jipalule, or Olifant River. The IIooge Veld stands at an altitude ranging from 4,000 to 7,000 feet, and has a total superficial area of about 35,000 square miles. It includes most of the richest mineral districts, and enjoys a healthy climate, absolutely free from malaria, and well suited to the European constitution. (2) The Banken Veld, or terrace lands, embracing the relatively low-lying eastern zone between the Drakenberg and Lubombo ranges. This division, which includes the whole of Swaziland and the upper Maputa Valley, falls in many places to a level of 2,000 feet above the sea, and covers a space of from 15,000 to 20,000 square miles. (3) The Busch Veld, or bush country, that is the inner plateaux, ranging in height from 3,000 to 4,000 feet, and comprising an area of some 60,000 square miles. Much of this division is strictly steppe land, and may be described as on the whole far more suited for grazing than for tillage.

## Historic Retrospect.

The foundations of this Dutch state were laid under great difficulties. In 1837, when the first trekkers crossed the Vaal and settled in the part of the territory where now stands the town of Potchefstroom, they came into collision with the terrible chief of the Matebeles, one of the most formidable Zulu warriors, who were at that tine "eating up" the peoples of Austral Africa. Most of the Dutch pioneers were exterminated, but the survivors succeeded in holding their ground and eventually driving the fierce Matebele warriors northwards beyond the Limpopo. Their numbers were increased by fresh yearly arrivals from the south, derably nd the by the nuland Lakwasi not to iporary natives Since pn with lic now h conleland. uching egions, on with (1) the ined by e Lipa. n 4,000 les. It slimate, n. (2) rn zone des the a level square ging in square d as on
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and thus was gradually constituted a little commonwealth of wandering adventurers, dwelling in tents or in frail huts of foliage, and like the Bedouins at the other end of the continent, following their herds arms in hand.

In 1848, after the battle of Boomplaats, which for a time extinguished the political independence of the Orange Free State, numerous fugitives from that region sought refuge with their kinsmen beyond the Vaal. Then in reply to the English, who had set a price of $£ 2,000$ on the bead of the leader, Pretorius, that sturdy Boer was elected president of the new republic. Four years luter, in 185\%,

Fig. 59.-Trete of the Borrs.
Scale 1 : 30,000,000.

the independence of the Transvaal was recognised by the British Government itself.

But the everlasting wars between the Dutch and the natives still continued, and were at times accompanied by atrocious massacres and wholesale extermination. Every advance made by the white intruders towards the north was marked by a trail of blood. Thיs the dominant British power never lacked pretexts, and occasionally urgent reasons of state policy and humanity, to intervene and arbitrate between the hostile parties. After the discovery of the goldfields in the eastern districts of the republic, followed by a large immigration of British subjects, other interests were created. Hence interference became imperative when the victorious tribes in the north-east threatened to overrun the whole country, exhausted by a series of reverses in the field, and already on the verge of national bankruptcy.

Accordingly a British Commissioner, attended by a handful of armed men, made his appearance in 1877 at Pretoria, capital of the state, and issued a proclamation suppressing the republic, and formally annexing Transvaal to the colonial possessions of Great Britain. To such a desperate condition had the Boers been reduced at this critical juncture, that no opposition was offered to this sumnary proceeding, which was in fact approved of not only by the English residents, but even by many of the Dutch republicans themseilves. At this time it seemed the only means of saving the country from total ruin, although when the danger of a native rising was over protests began to be uttered against the foreign domination.

The discontent continued to increase, and came to a head when some injudicious measures were taken by the administrator tending to make English the official language in the courts and schools. A deputation was sent to London with instructions to demand the maintenance of the local usages, administrative autonomy, the right of continuing the official use of the Dutch language, and some other provisions which seemed scarcely compatible with the established order. Auyhow, the deputation was coldly received, and the whole Boer nation felt aggrieved and insulted at the supercilious conduct of the British authorities. They began to prepare to assert their rights by force of arms, probably not with much hope of success against the inexhaustible rescurces of Great Britain, but in the expectation that the struggle might at least secure for them the respect and consideration of the conquerors. But to the surprise of everybody, and even of themselves, they triumphed over the British troops in three successive slight encounters, in the last of which, at Majuba Hill, they certainly showed themselves worthy descendants of the brave trekker.: who had faced so many dangers and fought against such overwhelming odds in their endeavours to secure political freedom in their new homes beyond the Vaal. The war now threatened to assume formidable proportions, and possibly to change the whole of South Africa into a battlefield, when the Governor of Cape Colony received from the Gladstonian Ministry a memorable despatch, such as has seldom been recorded in the annals of international strife, to the effect that the Boers bad been wronged, and that peace was to be concluded without further bloodshed. Despite the superiority of their forces, which were preparing to crush all resistance, the English generals were fain to withdraw without being afforded an opportunity of removing the sting of defeat, and the Transvaal Republic resumad its political autonomy, now cemented by the terrible ordeal through which it had passed. Elated by the satisfaction given to their nation sentiment, the Boers, although accepting the nominal suzerainty of Great Britain, have become far stronger than they were before the war, and any renewed attempt on the part of England to deprive them of their freedom would undoubtedly be attended by dangerous consequences.

## The Transtaal Boers.

The Boers of the Transvaal, being farther removed from the centres of culture than their kindred of the Orange Free State, are also less polished. They are even
described as "barbarians" by their English visitors as well as by their countrymen settled in Cape Colony. It is eertain that so recently as the middle of the present century many of them were still clothed, like their Kafir neighbours, in the skins of animals; nor did they feel the need of the comforts of civilised life, of which they had no experience. For weeks together they encamped beneath the stars of heaven, without furniture in their wretched hovels, living on the simplest fare, and possessing no literature beyond the family Bible, which many of them were even unable to read. One cause that most contributed to keep the Boers in their savage isolation was the vast extent of the domains which they had appropriated to themselves during the early days of the occupation. These allotments, or plaats, as they were called, which were assigned to each family of squatters, had a superficial area of 3,000 moigen, or about 6,000 acres, and as no strict boundaries could be traced between the several estates, many of them were found to cover a far more extensive space than that officially specified.

The Boer who was not put in possession of one of these enormous properties felt himself aggrieved by the fates, and, like his fathers, went into voluntary exile in order elsewhere to found a little territorial state more in accordance with his ideas of the fitness of things. From encampment to encampment was thus continued towards the Zambese the great migratory movement which had begun on the shores of the Southern Ocean. It was from the Transvaal that went forth the trekkers who plodded wearily for five years aeross the wilderness from the Limpopo to Lake Ngami and thence to the Cunene, decimated along the route by hunger and thirst and all manner of hardships, until at last the few survivors reached their present home in the Huilla distriet on the Atlantic seaboard. The greater part of these emigrants belonged to the sect of the Doppers, zealous Calvinists, who scrupulously preserve the usages and even the dress of their forefathers, and in whose eyes the modern ideas introduced into their communities by books and newspapers are an abomination. In general the Boers despise everything that does not contribute directly to the material prosperity of the family group. They ignore music, the arts, literature, all refining influences, and find little pleasure in anything except stock-breeding, bullying the natives, and psalmsinging. Despite their numerous treks, they have contributed next to nothing to the scientific exploration of the land. The education of their children and journalism are mainly in the hands of the Englisu, whieh fact affords some hope for the improvement of the next generation.

A solitary life in the midst of his family, his slaves or "apprentices," on a domain stretching beyond the horizon of the surrounding hills-such has hitherto been the normal existence of the Dutch patriarch. . For months together the only strangers he set eyes on were a few casual wayfarers, some Kafir marauders, or occasionally the neighbouring proprietor contiguous to his plaats. But four times a year he felt the need of mingling with his fellow-creatures. Then the Boers saddled their horses, inspanned their waggon teams, and $\mathrm{m} \cdot \mathrm{n}$, women, and children gathering from all quarters, set out for the chapel, the centre of life in the midst of their vast parish from 50 to 100 miles in diameter. On the day
appointed for the nachtmaal, or "sacrament," they assemble in crowds on the marketplace adjoining the church. Religious udministrations of all kinds are performed in the narrow building; the married folk take the communion, the betrothed receive a blessing on their nuptiuls, the young people are enrolled members of the congregation, the children are baptised. A brisk business is plied in the surrounding booths: outstanding accounts are settled between debtor and creditor; owners of live stock and horse-dealers drive sharp bargains. Then the place is gradually deserted, the turmoil subsides, the throng melts away, each family group takes its departure, returning to the solitude and the silence of the wilderness.

Nevertheless a social transformation is slowly taking place under the inevitable change in the outward conditions. The great domains tend naturally to be broken up, and the Boers thus beconing more numerous are drawn closer together. All the young people get married, all the women have several children, and the land has to be further, divided. Many great owners already grumble at their estates, reduced to one-half or a fourth of their former extent, although a thousandth part of what remains were still suffieient to support a fanily if properly tilled. On the other hand come the foreign immigrants, and although they may not always immediately find available lands on which to settle, in the long run a certain number of estates either change hands in the lump or are parcelled out in smaller allotments. It also frequently happens that the new purehasers are either Europeans by birth, or else British or English-speaking colonials. Scarcely an instance oceurs of any genuine Boers settling in the towns or villages as artisans or traders. These pursuits are entirely monopolised by the English and Germans, many of whom thus growing rieher than the Dutch landowners of the surrounding distriets are able to buy up large portions of their domains. In this way the territorial aristoeracy gradually absorbs elements distinct from the original Boer elass.

Of all the white intruders, the Dutch Afrikanders show themselves, as a rule, most hostile to their own kinsmen, the Netherlanders of the mother country. At a distance the two races have a certain fellow-feeling for each other, as fully attested by contemporary literature; but when brought close together the memory of their common origin gives place to a strange sentiment of aversion. The Boer is extremely sensitive, hence is irritated at the civilised Hollanders, who smile at his rude African customs, and who reply, with apparent ostentation, in a pure language to the corrupt jargon spoken by the peasantry on the banks of the Vaal or Limpopo.

## The $\Lambda$ borigines of Transvail.

In the southern distriets the aborigines have no longer preserved their tribal organisation, and, as in the Orange Free State, are tolerated only in the capacity of servants or day labourers. But in the western, northern, and north-eastern provicces they are still constituted in distinct political and social groups. Such are the Ba -Rolongs, the Ba -Tlapis, the Ba -Katlas, the $\mathrm{Ba}-\mathrm{Mapelas}$, the Ba -Hlokoas, Ba -Vendas, and Ba-Soetlas, all of whom belong to the great Basuto (Ba-Suto)
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family, and are occasionally designated by the offensive name of Vaalpens. These natives are separated by the Drakenberg border range from the Ba-Rokas of the advanced hills and plains, who appear to be a people of the same origin as the Zulus and Matebeles.

In general the tribes of the Transvaal consist of elans or heterogencous groups unconnected by the tics of kindred. They form communities whose members are of diverse origin brought under the same rule by some conquering chicf. According to the vicissitudes of war they increase or diminish, get seattered and again grouped together, endlessly modifying the original ethnical elements. Nor have any of these peoples been settled for more than a few years in any particular territory. The waves of Boer migration produced corresponding movements in the opposite direction among the aborigines, and these movements themselves have occasionally brought about hostile reactions. Thus the populations become incessantly displaced, like running waters drawn into a whirlpool.

Not all the tribes occupying the river valleys draining to the Limpopo have yet been reduced, some even exacting tribute from the Buers settled in the vicinity. The tribe longest established in this region appears to be the Ma-Gwamba, or "People of the Devil," so named by their neighbours because they are somewhat given to hard swearing, and all their imprecations contain an appeal to the devil. To judge from their language they would seem to be more closely related to the Zulus than to the Bechuanas. The early Duteh colonists designated these natives by the name of Knob-nuizen, or "Knob-noses," becauso they artificially raised a line of fleshy excrescences (knobs) from the forehead to the tip of the nose; but this eccentric fashion has almost disappeared, and few now are met, except some aged persons, who have any claim to the title of Knob-noses. North of the Limpopo the Gwamba people are known by the name of Ba-Hlengwe or Ba-Hlukwa, and persons speaking their language are met as far north as Lake Nyassa.

## Natural Resources of Transvaal.

Of all South African lands the Transvaal Republic appears to be the most abundantly supplied with all kinds of natural wealth, and it cannot fail sooner or later to become a highly productive region. The fertile soil is suitable for the cultivation of cereals wherever the plough can drive a furrow, and the crops are always of excellent quality. Although only a very small portion of the territory is under tillage, the harvests already yield sufficient for the local consumption, with a surplus exported to Natal. The tobacco grown here is of supericr quality, and is highly esteemed throughout South Africa. All the European cultivated plants thrive well beyond the Vaal, and although the semi-tropical elimate is more suitable for oranges and lemons than for the northern fruits, nevertheless the apples and pears of the Pretoria district have a very fine flavour.

- But as a grazing country Transvaal is less favourably situated than the neighbouring Orange Free State; in the northern parts of the territory there are even many tracts where the farmers are unable to raise any live stock, for this region is
largely infested by the tsetse fly, whose bite is fatal, especially to such domestic animals as the horse and ox. The Limpopo Valley throughout the whole of its lower and middle course, as far as the district to the north-west of Pretoria, roughly indicates the range of this terrible scourge. On the south side of the river the infested zone varies in width from six to about eighty miles, and on entering this fatal region travellers are obliged to outspan their teams of oxen and dismount from their horses and send all these animals back to the platoau. In the districts adjacont to this zone elephants are perfectly aware that in order to

Fig. 60.-Ranae oy the Teeter Fly.
Scale 1 : 14,000,000.

escape pursuit by mounted hunters they have only to place themselves under the protection of the tsetse fly. Hence they often take refuge in the riverain tracts along the course of the Limpopo, where the sportsman can follow them only on foot, or else mounted on horses with a shaggy coat thick enough to prevent the sting from penetrating to the hide. It is commonly supposed that the pestiferous insect will disappear from the country together with the large game, especially the buffalo and certain species of antelopes, with which it is always found associated. Travellers mention certain districts from which the formidable tsetse has already
been driven, and the belief seems justified that this winged pest retreats with the advance of the plough. Hence it is probable that the increase of population and the development of agriculture will one day enable civilised man to introduce his domestic unimals into the Limpopo valley. But on the eustern slopes the permanent difference of elimate between the valleys draining to the Indian Ocean and the elevated Transvaal plateau is so great that horses and horned cattle cannot be transported without great danger from one region to the other. This circumstance accounts for the large sums forwarders of convoys are always roady to give for "salted" animals, that is, thoso that have become accustomed to both climates. Pleuro-pneumonia, which is unfortunately very prevalent throughout the inland plateaux, is treated by the process of inoculation and amputation of the tail.

Another terrible but, fortunately, intermittent plague, are the all-devouring locusts by which the Bosch-teld, or central tableland, is more especially infested. The traveller Mohr gives a graphic account of the arrival of a swarm of these winged insects, which on one occasion he witnessed when carnping on the banks of the Vaal. They appeared like dense volumes of yellowish smoke, rolling up from the south-western horizon, and began to alight, first a few at a time, then by dozens, and presently by countless thousands. They came on in such vast clouds that the heavens were darkened, and the mid-day sun seemed muddy and beamless, as at sunset. No perceptible impression was made on this great surging sea of insect life by the flocks of locust-eaters which assailed it on all sides. It continued to flood all the land, changing the waters of the Vaal to a dirty ycllowish grey colour. Nothing can check their onward march; when their path is intercepted by a stream they rush headlong in, gradually ehoking its bed with their bodies, and thus forming a dry bridge for the myriads pressing on from behind. Whereever they alight the conntry is speedily converted to an absolute desert, every green thing disappearing as by enchantment. But on the other hand the locusts are greedily devoured by domestic animals, such as horses, eattle, sheep, and goats, as well as by elephants and other large graminivorous wild beasts. The natives also regard them as a great delicacy, collecting them in large heaps and eating them dried and roasted.

## Mineral Ẅealth.

As a mining region the South African Republic is no less highly favoured than as an agricultural country. Doubtless the rich diamond fields discovered in the adjacent lands on its northern frontier appear to be continued into the Transvaal territory only in the form of sporadic deposits without economic value. But on the other hand coal and other minerals occur in great abundance. The coal mines already opened in the northern part of Natal extend far into the Boer State, where the farmers now make extensive use of this fuel, which burns with a clear flame, leaving little or no ash. In various parts of the country iron, cobalt, copper, and argentiferous lead mines are already being worked. But far more widely diffused is the auriferous white quartz, which yields a large percentage of gold. In 1867 the geologist Mauch discovered the precious metal on the banks of the Tati, a river 111-Ar
which flows through the Makalaka territory to the north of Transvaal, and which through the Shasha reaches the Limpopo above its great bend towards the southeast. Four years afterwards Button reported the existence of another auriferous district within tho limits of the republic itself, near Eersteling, among the Devonian hills of Makapana, situated about 120 miles to the north-east of Pretoria. In 1873 further discoveries were made in the Lydenburg uplands, which form the northern termination of the Drakenberg border range. Again in 1885 rieh deposits were brought to light in the eastern terraces intersected by the afluents of the Manissa, and within the Swazi territory. Lastly, these discoveries

Fig. 61.-Tife Tranbtaal Gold Fieldes.
Seale $1: 7,000,000$.

were soon followed by other even more extensive finds in the Johannesberg district, on the Witwaters-rand uplands between Pretoria and Potchefstroom. The mines at present most actively worked are situated in this district and about Barberton, north of Swaziland, where the De Kaap deposits have recently attracted a large mining population.

Altogether it may be confidently asserted that gold exists in enormous quantities in tho whole of this region, where "fresh fields are being almost daily opened up, not only in the Boer republic, but in the native districts lying east, west, and north of it." * At a meeting of the Society of Arts in March, 1888,

[^18] uriferous hong the h-east of uplands, Again in ed by the iscoveries

Mr. W. I. Penning read a paper on "The South African Gold Fields," in which he stated that it might now be safely concluded that the whole of the Transvanl was gold-bearing except the "High Veldt" in the centre, although it was by no menns improbable that even this distriet might yet prove rich in the precious metal, which in Africa often occurred in unexpected places and under entirely novel conditions. This experienced geologist is of opinion that here the gold actually lies in beds, a feature of immense importance to South Africa, and indeed to the whole world. He is satisfied that deposits hitherto regarded as mere "country rock" and localities believed to be barren would, on the contrary, prove to be highly auriforous.

But there appeare to be no doubt that the richest deposits are those most recently discovered, that is, those in the east known as the De Kuap mines, from the neighbouring mountain and river, and those lying farther west in the Witwatersrand Hills. The whites alone ure privileged to acquire possession of the mines, from which the natives are rigorously excluded except in the capucity of daylabourers. liy a measure passed in June, 1885, they cunnot even receive payment in gold under the penalty of the lash and imprisonment. Even the Indians and Chinese are admitted to the fields only on paying a heavy residence tux of $£ 25$. In the De Kaap mines the rocky formation consists mainly of slaty schists, sandstones, and conglomerates, with granites, quartz, and eruptive recks cropping out here and there. Those of Witwate:s-rand, os simply Rand, occur in a sort of conglomerate locally known by tho name of mugut, and the reefs, or auriferous veins, are everywhere disposed in the direction from east to west. Auriferous or nugget-bearing sands are rare, hence the metal has to be extracted from its bed by powerful rock-elushing machinery. The consequence is that in the Transvaal independent private miners are not numerous. The operations have necessarily to be carricd on in a large way by speculating companies commanding sufficient capital, whose beadquarters are in Natal, Pretoria, Kimberley, and London.

Round about the works papulous towns rapidly spring up; new centres of European culture are establiched in the midst of the African world; a stimulus is given to the industries, although one of the most flourishing is unfortunately the distillation of alcoholic drinks. The most productive mives enjoy a great economic advantage from their position on, or not far from, the direct route connecting Potchefstroom and the capital of the republic with Delagoa Bay. The railway, which is absolutely indispensable to the rapid commercial development of the State, has been so projected as to penetrate from the coust into the plateaux in the direction of the auriferous districts. Between Pretoria and Barberton, centre of the eastern gold fields, the line will attain an altitude of no less than 6,500 feet at its highest point. Even before the temporary annexation of the country by the English the most prominent subject of discussion in the National Assembly was that of the projected iron road, affording direct communication between the central regions of the republic and the Indian Ocean. Considerable loans had already been made with a view to carry out this undertaking, and rails had even been landed for the future line. But this first outlay was wasted, and the works
entirely suspended by the wars with the natives, ruinous speculations, and the political troubles brought about by the British oceupation. Nor were the English themselves very zealous for the construction ..ns line, fearing that it might have the effeet of diverting from Nutal anis $1:$. Calony the whole of the foreign trade of the South Africm Republic. Henet shated must now be raised in order to complete this great work, which is essential for the material prosperity of the land.

## Topography of the Transvaal.

The southern strip of territory skirting the frontier of the Orange Free State still lies within the Vaal basin. The little town of Standerton, near the conl mines about the sources of the river, and Heidellerg, situated more to the west at the foot of Jeannetto Peak ( 6,300 feet), both lie in tho highland distriet where the orange will not bloom, as in most other parts of the Transvaal, where a subtropical climate prevails. Potehffstroom, some 90 miles still farther west, on the Mooi, or "Fair River," a small affluent of the Vaal, already enjoys a mueh warmer temperature, although still standing at an elevation of 4,300 feet. In the surrounding district maize and tobacco thrivo well. Potehefstroon, which during the early period was the capital of tho Transvaal, and whieh continued to be the most populous town in the republie long after the seat of goverument was removed to Pretoria, is a very agreeable place of residence. The streets are lined with weeping willows, said to have been originally introduced from St. Helena, and all the surrounding gardens are enclosed by quickset hedges where blooms the rose. Owing to the profusion of blooming plants, most of the Transvaal towns present a charming aspeet during the flowering season. The Mooi River, which springs from a cavernous limestone rock, disappears at several points along its course, again emerging in the recesses of underground grottoes, one of which, the Wonder-fontein, reealls the marvellous spectacle presented by the analogous formations in Carniola.

The present eapital of the republic, named Preloria in honour of its President, Pretorius, lies at an elevation of 4,500 feet, on a gently sloping plain, everywhere encireled by hills exeept towards the north, where the Magalies, or "Black Rhinoceros Range," is pierced by a gorge giving egress to one of the headstreams of the Limpopo. The Apies, as this headstream is called, collects in a single channel several rivulets which after traversing the town serve to irrigate the neighbouring gardens. Originally laid out on an ambitious scale, with boulevards and streets crossing each other at right angles, Pretoria long remained in a state of transition between town and country, presenting somewhat the aspect of a large garden relieved here and there with a few groups of low buildings. But since it has become a place of resort for the miners proceeding to the northern gold fields it has put on the appearance of a busy mart. Houses are already crowded together in the central quarter, and large numbers are attracted to the markets, while the sedentary population exceeded six thousand in 1887. A few patehes of the primeval forest still survive on the surrounding slopes, and at one
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 he conl west at t wherea subon the warmer In the during be the ont was re lined Helena, blooms l towns , which long its ieh, the alogous

spot is shown the " Wonder-boom," with its cnormons wide-spreading branches. Thus Potchefstroom's "Wonder Spring" is thrown into the shade by Pretoria's " Wonder Tree."

West of the capital, the little town of Rustenbury, and that of Zeerust in the province of Marico, the "Garden of the Transvaal," are also situated on upper affluents of the Limpopo. A similar position is occupied by Nylstroom, so called because its Boer founder supposed he had here discovered the sources of the Nile. The rivulet which joins the Limpopo above the great falls still retains the name of "Nile," which recalls the lofty ambition of the Boer voortrekkers, or pioneers, who in their crass ignorance fancied themselves on the high road to the Promised Land. Between this river and the Olifant lies the mining town of Ersteling

(Eersteling), near which are extensive gold reefs and the famous Ijzerberg, or "Iron Mountain." Then follows Marubas Town, beyond which, towards the north, the white population diminishes rapidly. Beyond the ruined station of Zoutpansberg, founded in the year 1834 near some productive salt-pans, there are no inhabitants of European origin except the missionaries and a few traders.

The district where the river penetrates into the region infested by the tsetse fly is scarcely even explored. Here the only human habitations are a few native camping-grounds occurring at long intervals on the routes crossing the stream. The Limpopo flows through almost unknown solitudes throughout the whole section of its course, which forms the northern frontier of the republic and which sweeps round to the east of the border range. The white population does not descend from the elevated plateaux, which are kere carved into elongated promon-
tories by the streams flowing to the lower Limpopo. The European settlers are here concentrated mainly about the towns of Middelburg and Lydenburg, in the upper basin of the Olifant, which joins the Limpopo 120 miles above its mouth, and in the upland valleys of the Munissa (Nkotami) and its affluents. Here are situated the recently founded towns of Barberton (already with a population of six thousand) and Eureka, centros of the De Kaap gold fields as Johamnesherg is of those in the Witwater-rand district. In the middle of the year 1887, the latter place was stated to have already as many as ten thousand inhabitants, although its very name was not yet entered on a single map. As soon as the railway from Delagoa Bay penetrates into the heart of the plateau, the population and trade of this region cannot fail to be increased tenfold. This railway had already been pushed forward in 1888 to within 60 miles of Barberton, with which place it was connected by a steam tramway pending the construction of a regular line. Barberton itself, which three years previously consisted only of a few huts, now possesses several hotels, three banks, two share exchanges, a good club, and a theatre. The capital of the numerous companies engaged in developing the De Kaap gold fields exceeds several millions, and more undertakings are being floated every week.* The vast majority of the miners throughout the wholo of this auriferous regions are of British descent, and English is everywhere the current language of trade and general intercourse. Thus with the rapid material development of the country, the Anglo-Saxon race threatens to swamp the Boer element, just as it absorbed the Spanish in California, Texas, and other parts of the United States in a single generation:

South of the auriferous region the escarpment of the elevated plateau comprises the territory of New Scotland, which appears to abound in carboniferous deposits. Here is situated Lake Chrissie, an extensive sheet of water which is now all that remains of the rast inland sea which formerly flooded a large part of the plateau. The coal-fields are continued southwards across the provinces of Wakkerstroom and Utrecht till they merge in the rich coal mines now being worked in the Neweastle district of North Natal. East of the plateau the enclave in Zaiuland, lying near the waterparting and traversed by the Black and White Umvolosi rivers, was occupied in 1885 by some six hundred or seven hundred Boer settlers grouped chiefly in and about the little town of Vrijheidi ("Freedom "), on a small affluent of the White Umvolosi.

## Administration of the Transvaal.

In the South African Republic, as in the Orange Free State, the white element bas reserved to itself all political rights. From their present masters the old rulers of the land can now expect nothing but tolerance, and such a measure of liberty as the administration may voluntarily confer on them. The whites, whether citizens by birth or naturalised after a five years' residence and on payment of $£ 25$, are alone entitled to take part in the elections of the members of the Volks-

[^19] nd other 3edom "),
raad and of the President of the republic. For these offices those only are eligible who are natives of Transvaal or residents of fifteen $y$-ars' standing, professing the Protestant religion, and owners of a domain within the limits of the State. The legislative power is vested in the Volksraad, which consists of fortyfour members elected for four years, one-half retiring every two years. Each district returns three delegates, besides which each mining district is represented in the Assembly by a momber appointed by a syndicate of the miners. All signatories to a petition for the annexation of Transvaal are ipso facto excluded from the right of suffrage and from all public offices. Dutch is the official language of the Volksraad, which holds its sessions in Pretoria. The President is elected for five years by all enfranchised burghers, and is assisted in his executive functions by a council of five members: the State Secretary, the Commander of the military forces, the Minister of Mines, and two non-official delegates named by the Volksraad.

The suzerainty of Great Britain, restricted to the control of the foreign relations of the republic, is little more than nominal. But even the present constitution, which has been frequently amended since the proclamation of the "Thirtythree Articles" in May, 1849, is itself only provisionary. The patriotic Boers of South Africa still dream of the day when the two republics of the Orange and the Transvaal, at first connected by a common customs union, will be consolidated in a single "African Holland," possibly even in a broader confederacy comprising all the Afrikanders from the Cape of Good Hope to the Zambese. The Boer fumilies grouped in every town throughout South Africa form collectively a single nationality, despite the accident of political frontiers. The question of the future union has already been frequently discussed by the delegates of the two conterminous republics. But unless these visions can be realised during the present generation, they are foredoomed to failure. Owing to the unprogressive character of the purely Boer communities, and to the rapid expansion of the Englishspeaking peoples by natural increase, by direct immigration, and by the assimilation of the Boers themselves, the future "South African Dominion" can in any case never be an "African Holland." Whenever the present political divisions are merged in one state, that state must sooner or later constitute rather an "African England," whether consolidated under the suzerainty of Great Britain or on the basis of absolute political autonomy. But the internal elements of disorder and danger are too multifarious to allow the European inhabitants of Austral Africa for many generations to diepense with the protection of the English sceptre.

The Transvaal Republic has no standing army beyond a small force of horse artillery, but in case of war all able-bodied citizens are obliged to serve. The revenue-derived chiefly from the sale of lands, the customs, the but tax payable by the natives, and the dues levied on mines-has increased more than threefold since 1880. Hitherto the annual surplus over the normal expenditure has been chiefly applied to developing the telegraph system. The public debt, which in 1882 exceeded $£ 560,000$, was reduced in 1884 to less than $£ 400,000$. It is partly a
charge on the public revenue and partly secured on the fixed property of the State.

The territory of the South African Republic is divided for administrative purposes into sixteen provinces or districts, which are, for the most part, named from their respective chief towns. They are administered by a landrost, a sort of governor and magistrate combined, who is invested with very extensive powers over the native populations. The districts, which before the great development of the gold-mining industry numbered twelve, will be found tabulated in the Appendix.

## III.-Delagoa Bay.

This inlet on the south-east coast of the continent takes its name, not, as has been said, from the fact that it was the last African port of call for Portuguese vessels bound for Goa and the East Indies, but because it presents the appearance of a lake or lagoon (lagoa). But in any case Delagoa Bay promises one day to acquire great importunce as the natural outlet of the whole Limpopo basin and of the States on the South African platean. The form of the coast-line, and the depth of this land-locked basin, which receives several streams navigable by light eraft, give to this Portuguese possession quite an exceptional value, all the more highly appreciated by the shippers of Natal and Cape Colony that south of this splendid estuary there is not a single well-sheltered and commodious haven. Hence, the English colonists, as heirs of the old Dutch navigators who effected a landing here in the year 1720, and as representatives of Captain Oweu, who acquired a strip of torritory on the coast in 1825, did not fail to claim possession of the bay, which would have been in every way so convenient, and which must have secured for them the unchallenged political and commercial supremacy over the inland States. The priority of pot ession, however, was contested by Portugal, and in 1875 became a suvpees of aroitration, and was decided against England by Marshal MacMahon, President of the French Republic, to whom the question had been referred by the Governments of London and Iisbon. Delagoa Bay was consequently restored to the Portuguese province of Mozambique, although from the commercial point of view the judgment might be said to have been given in favour of the Transvaal Republic, because the bay is the natural outlet of that State on the Indian Ocean, while it is the interest of Portugal to attract all the traffic of the plateaux to the port of which she bas acquired the possession. But not being yet provided with docks, piers, or other shipping conveniences, and with only a short unfinished line of railway and undeveluped communications, with a thinly peopled, unhealthy, and uncultivated territory, this port has, so to say, nothing at present to depend upon except the prospecte of its future prosperity. In faet, the whole distrint of which it is the capital, from the Maputa to the Limpopo, is an unreclaimed region largely covered with primeval forests, savannahs, and marshy tracts. It has a total area of about 16,000 square miles, with an estimated population of eighty thousand, or five to the square mile.

## Lourenço Marques.

The town of Lourenço Marques, founded in 1867 on the site of a village that bore the same nume and whieh had been seized by the Va-Twa Zulus in 1823, is so designated in memory of the navigator who established the first Portuguese factory on tho shores of Delagoa Bay, in the year 1544. But these waters had already been explored by Pedro Quaresma, who made no attempt to seeure a footing in the district. The low houses of the present town, built of stone and disposed along the streets running at right angles to each other, present a pleasant

seaward prospect, although standing at a low level and surrounded by sluggish waters, which formerly served the purpose of moats against the attecks of natives. This position of Lourenço Marques in the midst of low-lying alluvial lands, renders it insalubrious during the hot season; and it is now proposed to carry out a system of drainage and extensive plantations of the eucalyptus, in order to dry up the swamps, which at first may have seemed to constitute an advantage for the rising settlement. But in any case there are some more elevated lands in the vicinity, and a comparatively healthy upper town, inhabited chiefly by the mer-
ehants, is gradually rising above the lower quarters devoted to the shipping interests.

The Zulus of the Lourenço Marques district are described by Mrs. Pringle, who visited the place in 1880, as an execptionally fine looking race of quite gigantie stature. "Many of the women are over six feet high, and have such beautifully developed figures, that they would form perfect studies for a seulptor. Nearly all the hocing and most of the manual labour is done by them. As this must be very hard work, sooner or later it musi kill any who are not naturally strong, whereas those who can stand it have all their museles fully expanded by eonstant action. Not two of the men or women we met were dressed alike. Some had their hair most elaborately frizzled, and all kinds of feathers stuek into it. lustead of a loin-cloth, they wore wild beasts' skins tied round their waists, with a row of tails dangling from them. Others again had their hair drawn out in fine

Fig. 64.-The Lourenģo Margutis-Pbetoria Railmay.
Scale $1: 6,000,000$

strings and plastered with red mud, so that in the distance it looked like a headdress of red coral."*

This traveller speaks in depressing terms of the extremely unhealthy elimate r.f Lourenço Marques, described as a perfeet hotbed of fever, and so deadly that even horses cannot live 1 here. A station of the Eastern Telegraph Company has been established at Lourenço Marques. But one after another the unfortunate officials in charge of it sooner or later fall victims to the elimate. "Now they are trying the experiment of sleeping on board a vessel anehored in the barbour, until they can iuild a station up on the hill." $\dagger$

Luurenço Marques ans not lie on the shore of Delagoa Bay, but oecupies the northern bunk of an estuary which is developed on the north-west side of this extensive sheet of smooth water. Three rivers have their mouths in this common estuary, which is nevertheless still inaccessible to vessels of the largest size. The mean depth is not more than 16 or 18 feet, rising to 24 or 25 during the spring tides. But for average shipping the harbour leaves nothing to be desired, presenting from east to west an uninterrupted stretch of about 8 miles of good anchor-

> * Towards the Mountains of the Moon, p. 75.
> + lb. p. 77 .

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age. The neighbouring bay is capacious enough for hundreds of the very largest vessels, which may here ride at anchor with perfect safety in depths ranging from 40 to 120 feet. The entrance, some 12 miles wide and over 50 feet deep, is large enough to give access to a whole fleet. The railway has its terminus to the south of the town, on the very beach, which is soon to be protected by a sea-wall lined with landing-stages. The line runs from this point mainly in a north-westerly direction to the Manissa, crossing this river at the spot where it escapes through a rocky gorge from the Lobombo Hills, the most advanced border range of the plateau and western limit of the Portuguese territory.

In 1887 the railway had already renched this place, 55 miles from the coast, but to reach the plateau it will have to ascend the escarpment by a gradient of considerably over an inch in the yard. The land routcs followed by the emigrants with their cattle between the Transvaal and the rivers flowing to the port of Lourenço Marques have the serious disadvantage of having to traverse a low-lying tract, usually infested by the deadly tsetse fly. Occasionally this dangerous zone has been crossed without disaster ; but travellers and traders have not unfrequently had to abundon their chattels in the marshy bottom lands, after losing all their draught animuls in the attempt to get over this tsetse and fever-stricken district. The reclaimed lands on the outskirts of Lourenço Marques produce the sugar-cane and tropical fruits, and here are also some coffee plantations. Large numbers of turtles are captured in the neighbouring wuters.

Each successive decade witnesses a consideruble increase in the trade of Delagea Bay, in which some Marseilles merchants, and Banyans from Diu, on the west coast of India, have a larger share than the Portuguese dealers. The exports consist mainly of hides and mineral ores, the imports of brandy and war material. But the total value of the exchanges still falls much below $£ 100,000$, although the transit dues levied on goods destined for the Transvanl is only three per cent. at the Portuguese custom house. The trade in ivory has ceased; while, since the year 1845, no more slaves have been forwarded through this outlet. On the other hand, the voluntary emigration of the natives towards Natal has assumed considerable importance. The agent stationed at Jourenco Marques sends presents to the tribal chiefs, who in return give a certaiu number of young men permission to go abrad on the condition of coming back in a few yeurs with their eurnings.

The territory stretching south of Jelagoa Bay is inhabited by the Amatonga people, who belong to the same group as those occupying the shores of the St . Lucia lagoons and backwaters, and who evon recognise the same tribal chiefs, notwithstanding the arbitrary frontiers traced by diplumatists. In this southern district of Delagoa Bay no European setilements have yet been made. Here the shore, fringed with dunes, is dangerous to shipping, while the mouths both of the Manissa (Nkomati) and Limpopo are of difficult access. Nevertheless here reside a few Banyan dealers, who chiefly import brandies, and whose factories on both rivers are accessible to light craft. The Limpopo factory is situated at Manjoba, a kraal standing at the head of the navigation of the river, 80 miles from the cosst. The influence of the tides is felt as far up as this point. In exchange fur
spirits the dealers take ehiefly hides, caoutchouc, and beeswax. No establishment has boen founded by Europeans, either on the river or in the neighbouring maritime region, and here the only human habitations are a few kraals of the Magwamba (Malolo) natives scattered here and there amid the forests and on the open savannahs. The Magwambas, who belong to the widespread Amatonga (Batonga) family, and the communities that have escaped the ravages of the Zulus, give evidence of a relatively high degree of ative eulture. All these tribes are greatly addicted to the smoking of hemp.


not abruptly interrupted, as it is farther south. hy an unbroken rocky barrier. The track lies rather across grassy or woodied districts, which rise either alnost impereeptibly or with a very gentle slope towards the inland pluteaux. Amid these plains, however, stand out a few isolated ominences or even mountain masses, such as the lofty hills round which tho Subi describes a great bend to the west and south, and which the Kafir ruler of Gazaland has chosen as the best site for his royal residence and citudel.

Above this group of hills, the Ubiri of resent explorers,* riso three conspicuous summits, the Ubiri, Sipumgambili, and Silinsi peaks, porphyry, trap, and basalt erags, with an estimated altitude of about 4,000 feet. The running waters, cutting their beds deep into the living rock, have carvod these heights into several distinct sections, which uro in many places of difficult access, owing to their steep slopes and the tull dense herbage, not easily penetrated by the explorer. Nevertheless the three highest crests are clothed with forests, where progress can be made without mueh trouble between the trunks of tho trees. Aecording to Erskine, the upper valleys of the Buzi, which has its source in these highlunds, are destined one day to become a centre of European colonisation and culture. Here the climato is perfectly sulubrious, and here both the sugar-cane and the coffee shrub find a congenial soil.

Northwards this mountain group abuts on a red and white sandstone tableland over 3,000 feet high, connected by a few eminences with the Sita Tonga range, whose crests rise probably to a height of 5,000 feet. One of these crests, terminating in a sharp point, has received from the natives the expressive name of Gundi-Inyunga, that is, "Moon-shaver." West of the Sabi the granite hills, resting on a more elevated plateuu with a mean altitude exceeding 4,000 feet, present a far less imposing appearance. They are, in fact, for the most part mere undulations of the ground with broad intervening depressions, where the waters lodge in shallow lacustrine or marshy basins. Nevertheless even here the Matippo ridge presents granite domes rising to a height of 5,600 feet, while some of the crests are carved into obelisks and pyramids of the most eccentric outlines.

Farther on the elevated ridges, whose axis continues the line of waterparting between the Limpopo and Zambese affluents, are disposed beyond the sourcas of the Subi in an oblique direction with, the coastline of the Sofala district. Here the highest chain, dominated by Mount Doé, which, according to Kuss, attains an altitude of 8,000 feet, presents the aspect less of a group of mountains than of un irregular plateau. Mere is situated the Manica district, which has become famous for its gold-fields. The granite mass stands at a mean elevation of not less than 6,500 feet, while the surmounting crests are little more than low hills or gently sloping eminences.

East of the Manica uplands the divide between the Zambese and the small coast streams is nothing more than an open plain interrupted at intervals by granite domes rising abruptly above the surface. South of this parting line of the waters the aspect of a frowning citadel is presented by the Gorongoza group

[^20]with its extremely precipitous outer slopes, and culminating in Mount Miranga, which exceeds 6,500 feet in height. This isolated mass, which, like the Manica uplands, is of grunitic formation, is clothed on its upper purts by magnificent forests, presenting a pleasunt contrast to the surrounding tracts, which are mostly covered with a stunted growth of brushwood.

## River Systems.-Marine Curients.

The Sabi (Subia), the largest watercourse in the Gaza country, forms a very extensive fluvial basin, which stretches from the Matebele highlands north-

eastwards to the Manica Mountains. It has its chief source in the Mashona territory, at an altitude of over 3,000 feet above sea-level, and flows at first in a southerly direction. But after escaping from the uplands, while still at a distance of nearly 200 miles from the occan, it trends round to the east, and maintains this direction for the rest of its course seawards. During the rainy season the Sabi expands into a potent stream, rushing between banks from one to two miles apart, with too swift a current to be stemmed by river craft. But on the return of the dry season the waters subside rapidly, and then the Sabi flows in a narrow channel not more than 100 feet broad, and even in the centre of the strean scarcely anywhere quite 2 feet deep. Nevertheless it develops a considerable delta, with a shoreline of at least 60 miles in length, and an area of over 800 square miles intersectiod by the main branches of the Sabi proper. But this space
might be greatly enlarged were it made to comprise the channels of the two neighbouring rivers, the Gorongozi on th north and the Gabulu on the south, both of which might be regarded as belonging to the same hydrographic system. During the dry season the muin branches are converted into arms of the sea, the mangroves everywhere fringing both banks bearing abuadant evidence to the saline properties of the water circulating through the delta.

The Buri, which reaches the Indian Ocean a little to tho north of Sofala, is a far less copious stream than the Sabi. Nevortheless it has been ascended for over 60 miles from its mouth by craft of light draft. Still farther north flows the Pungue, or Aruangua, which in its lower reaches is navigable for vessels drawing 6 or 7 feet. But several other watercourses, which are fed by rivulets having their sources in the uplunds, fail te reach the seu, their mouths being everywher closed by sandbanks.

The great " Mozambique Current," which flows from the Indian Ocean between Madagascar and the mainland southwards in the direction of the Antarctic waters, here impinges on the seaboard at the point where it projects farthest scawards. This headland, indicated from a distance by a blackish little island, wakes the appropriate Portuguese name of Cabo das Correntes, for the stream, which at this place skirts the coast, sets steantly towards the south-south-west at a velocity ranging from $1 \frac{1}{6}$ to over 2 miles in hour. But as farther south a counter-current is developed along the Amatonga coast east of Delagoa Bay and the St. Luciis agoons, in the same way a backwater sets towards the equator north of Cape Correntes. This is clearly shown by the form of the tongues of sand and adjacent islets, all of which are here disposed in the direction of the north or north-north-east-ihat is, in the aplosite direction to the great current flowing farther off the land in the abian Channel.

In the at wow waters separating the mainland from its fringe of islands, and especially $:$ Barazuto, the natives fish for pearl oysters, which they open by exprsing them to the action of heat, thereby injuring and diminishing the market valiu of the gems. Polyps are also at work along the Gazaland seahoard, where at certain points the navigation is endungered by the coral reefs. Here also most of the islands rest on a foundation of coral banks, although now covered with dunes, which give them a hilly aspect.
Climate.-Fiora.--Fauna.

The climate of Gazaland varies greatly between the low-lying zone of coastlands and the terraces of the interior. The winds, which blow nearly always from the sea, whether from the north-east, the east, the south-east, or the south, bring scarcely any moisture to the plains of the coast region. Even the heavy rainbearing clouds which sweep inland during the wet season-that is, when the sun approaches the zenith, from November to March-do not break till they strike against the heights rising above the tablelands and terraces of the interior. It seldom rains while the normal sputh-east current prevails, but when the wind



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veers round to another quarter the conflict of the opposing movements results in storms and tremendous dowupours. On the uplands the changes of temperature are often very sudden. The heats, especially before the rainy season, are most oppressive. A great change sets in with the cold southern breezes, and in the space of a few hours the glass will at times abruptly rise or fall as much as $50^{\circ}$ or even $60^{\circ} \mathrm{F}$.

Thanks to the copious rainfall, the region of the inland plateaux is very fertile. Here the forests present a great variety of species, whereas the low-lying plains offer but a scanty vegetation, far less varied than the animal kingdom. In the wooded districts of the south the trees, usually of small size and growing far apart, are all alike, whether living or dead, covered with a grey moss, which gives them a fantastic appearance. In some of the Gazaland forests, as along the banks of the middle Zambese, a prevailing species is the mopane, a large odoriferous tree, which affords travellers very little shade, its leaves being disposed in a vertical position, like the wings of a butterfly at rest. The coast properly so-called is a mere strip of arid sunds, but farther inland the ground, covered with a reddish arenaceous soil, is much more productive, yielding abuadant crops in the wellwatered bottom lands. But such tracts are rare, and the waters which during the passing rains lodge in the depressions of the surface, soon evaporate after the return of fine weather. Throughout nearly the whole extent of the low-lying plains savannahs everywhere alternate with scrub and thorny plants. In such a region the inhabitants might be expected to settle chiefly along the courses of the streams, where they might procure the water indispensable for field operations; yet the river banks are mostly deserted, and the tribes have taken refuge for the most part in remote and inaccessible retreats, in order to avoid the too frequent visits of their oppressive Zulu rulers. Hence, through long experience, the natives have become extremely skilful in discovering the smallest reservoir where the precious fluid may ooze out drop by drop. They are acquainted with all the forest plants whose leaves or berries contain water, and specially value the imbunga, a caoutchouc creeper, the fruit of which serves to quench their thirst. As in many other parts of Africa, such as the Fazogl district of Senaar, in the Nile basin, and on the Quissama plateau on the west coast, the cavities formed in the trunk of the baobab are also carefully utilised as cisterns. These cavities are enlurged and deepened with the axe and fire until the whole stem becomes, as it were, converted into a sort of aërial well. But the winter rains do not always suffice to replenish it; the water also gradually becomes foul, and at last evaporates altogether; and when this happens, the inhabitants are fain to quit their forest retreats and remove to the more open riverain tracts.

Wherever the population is thinly scattered over wide spaces, the fauna, free from the attacks of its worst enemy, is both numerous and diversified. The elephant still abounds throughout Gazaland, the hippopotamus and crocodile swarm in all the streams, large herds of antelopes bound over the plains, while the uplands are frequented by large numbers of buffaloes. The hyønas, and especially tho leopards, are much dreaded by the herdsmen. Erskine traversed some
districts where the leopards were so daring thet the women scarcely venture to work even in broad daylight in the fields, and tho huts have to be protected by stout enclosures made of stakes interlaced with trailing plants. On the other hand, the lion rarely attacks man, and the natives seldom complain of his presence, as they often come in for the remains of the feast-balf a buffalo, an unfinished antelope, and the like.

In several districts the most noxious animals are various species of termites, which devour the vegetation, and commit such havoc on the plantations that all cultivation has to be abandoned. The domestic animals are unable to live on the low-lying plains, either owing to the tsetse.fly or to some mysterious poison in the air.* Hence travellers wishing to reach the plateaux of Gazaland with their horses or cattle, have to approach from the west through the Matebele or Mashona territories.

## Historic Retrospect.

The Sofala seaboard was possibly frequented by the ancient navigators, and the fleets of the Phonicians are said to have penetrated southwards as far as these eastern waters. According to numerous authorities, here was even situated the far-famed Ophir, whence Solomon brought gold, precious woods, and peurls. But other Biblical commentators have placed this same Ophir either in India or in the Eastern Archipelago, while the total absence of any trustworthy geographical information regarding the true situation of this land of gold gives ample scope for any hypothesis. But whatever be the correct view, there can be no doubt that Gazaland had already been visited by civilised strangers long before the arrival of the Portuguese on the east coast of Africa, for the followers of Vasco de Gama here found the ruins of buildings far superior in architecture to anything the present inhabitants are capable of erecting. Hence it is not, perhaps, surprising that the Lusitanian mariners fancied these edifices must have been the remains of the stations or factories constructed by the Queen of Saba for storing the gold intended as a tribute for Solomon.

Since the time of the first Portuguese explorers the memory of these moniments had never been forgotten, although all attempts of numerous travellers to rediscover them had proved abortive until the year 1871, when the geologist Carl Mauch at last succeeded in bringing them to light. They consist of the remains of two fortresses built of granite on two neighbouring hills, situated near a -western affluent of the Jabi, about 180 miles west of Sofala. From amid the thistles also rose a tower still some forty feet high, and Manch supposed that these military works were intended to guard the gold mines of the surrounding district. The term Zimbaoe given to them by the Portuguese-thet is, the Zimbubyé of tbe present inhabitants-has the meaning of "royal residence." It is also noteworthy that the designs traced on the granite blocks are circles, diamonds, parallel lines, and scrolls, presenting a certain resemblance to the ornamental work on the Kafir utensils. This may, perhaps, point at some connection or affinity between

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the builders of Zimbabye and the present rulers of Gazaland. Nevertheless the unanimous tradition of the natives is that the "Residence" had formerly been occupied by white people who "could do everything." Possibly the renowned Benomatapa, or "Emperor of Mcnomotapa"-that is to say, the Muene Motapa, or "august lord"-who held sway over all the peoples of this region at the .time of the arrival of the Portuguese on the east African seaboard, may have been descended from the kings who created the Zimbabye forts and the other structures still scattered over the plateau and now mostly overgrown by forest growths. Possibly, also, the sacrifices which the surrounding aborigines still offer to the genii within the enclosure of these ruins may but perpetuate the tradition of the great feasts formerly celebrated by some potent sovereign. Mauch-who, however, speuks only on report, not having been himself present at these ceremonies-fancies they betray a great resemblance to the Jewish rites. Some remains of granite walls met here and there round about Zimbabyé are said to be still designated by the name of "altars." All the structures that have subsequently been discovered in this region are invariably situated in the vicinity of gold mines.*

## The Zulus of Gazaland.

Since the middle of the sixteenth century the Portuguese possessed establishments on the coast, which served as revictualling stations for their vessels on the long route between Lisbon and Goa. On several occasions they made expeditions to the interior, and especially towards the gold region of Manica; and various works connected with mining operations attest their residence in districts far removed from the seaboard. But it is evident that their enterprising spirit gradually waned, and till recently the sphere of their influence bad been limited to the neighbourhood of Inhambane, Chiloune, and Sofala. But the nation is again bestirring itself, and active steps are now being taken to resume the effective possession of the domain that has been assigned to Portugal by the common consent of the European Powers. Nor can there be any doubt that these efforts will be crowned with success, thanks to the indirect support afforded to the Government by the immigrants, missionaries, traders, and gold-hunters.

Nevertheless the true sovereign of the country is still the Kafir King of Gaza, a blood relation of the warlike Zulu chief Munikussa, who escaped in 1830 with thirty thousand followers from the oppressive rule of the terrible Chaka, and who, retreating northwards like the Matebeles, founded a new empire in this region. The territory whose inhabitants are at present tributary to the King of Gaza, is bounded on the south, near Lourenço Marques, by the course of the Nkomati, an affluent of the Mancissa, often confounded with the main stream. Northwards it extends as far as the Zambese, and on the west side is conterminous with the Matebele State. The political centre of the empire lies within the stronghold of inaceessible hills where the Buzi takes its souree. Till recently the kraal where

[^22]the king resided was at Chama-Chama, in the upland valloy of the Um.Swelizi or Upper Buzi, but since then the court has already been transferred to two other sites in these highlands.

The Zulus of Gazaland are usually called Umgoni by the southern populations, and Landins by the Portuguese. Camping round about the royal residence, they rotain their original military organisation, being marshalled in regular troops, battalions, and regiments, and officered by indunas or captains, who endeavour to keep alive the warlike traditions of their victorious forefathers. The maintenance of this system is the more necessary that the hosts of the ruling nation, being vastly less numerous than the population of the subject tribes, their political ascendancy can be secured only by terror. The army is so constituted that it can be moved rapidly now on one point now on another, stamping out all resistance by wasting the land and carrying off all supplies and live stock. As is ever the cuse, this method of government has had the inevitable consequence of impoverishing the land and stifling all germs of civilisation. These Zulu sovereigns have no longer a hoe as the emblem of authority, like the old Monomotapa emperors, for they rule only by the sword. The former sedentary and agricultural tribes have become hordes of fugitives ever ready at the shortest notice to abandon their villages and settlements at the approach of the royal army. They were forbidden to work the mines, lest they might grow rich and dangerous; they are prevented from hunting the elephant because that is a noble pursuit, and slaves must not aspire to equality with their masters. Certain communities had lately ventured to keep cattle, and the Ma-Ndandas, who inhabit the plains lying south and southeast of the hills occupied by the ruyal kraal, have begun to breed dogs, in the hope that their oppressors might at least leave them that despised food.

Till recently the policy of the king was inspired by a feeling of profound jealousy towards Europeans. He allowed them to hunt and trade, but only within rigorously defined limits; he assigned them fixed camping grounds, and levied black-mail on all visitors under the name of "presents." In 1872 he made the English traveller, Erskine, wait two months and a half before granting him an audience, although he was the political envoy of the Natal Government, and had actually been invited to the court by the King of Gaza himself. At present the attitude of the sovercign has undergone a change, and the imminent danger of his position has obliged him to display more deference and seeming courtesy towards envoys, missionaries, and miners. Feeling himself no longer strong enough to defy those who will ere long be his masters, he has become, after a vain attempt at resistance, the formal vassal of the Portuguese Government, and has undertaken to respect the mandates of the Resident appointed by the Lisbon ministers.

## Tife Aborigines of Gazaland.

The indigenous populations are commonly known by the collective name of Tongas, although differing considerably from the Amatongas dwelling to the south of Delagoa Bay. They appear to be for the most part related to the Basutos, wo other pulations, nee, they or troops, eavour to 3 mainteion, being political hat it can istance by : the cuse, verishing have no erors, for ibes have don their forbidden prevented must not ventured ind souththe hope aly within nd levied made the g him an ; and had esent the ger of his y towards h to defy ttempt at ortaken to
whom they resemble in physical appearance, usages, und peaceful temperamont. Like them, they show a decided preference for agriculture and stock-breeding, so far at least as permitted by their Uingoni masters, and ulso speak dialects showing marked uffinities to the Sesuto language.

All these despisel Tongas are gifted with a elear intellect and a pussion for learning. Whenever they can escape from the tyramny of the Zulus, they immodiately resume the cultivation of the land and their other industrial pursuits. Being entirely averso from tho military spirit, they diseuss all affinirs of general interest in common, leaving the administration to a council of elders and petty chiefs. Their circular huts, formed of stakes connected ly creepers, with all interstices filled in by elay, are generally higher and better constructed than those of the southern Zulu Kufir peoples.

The Chobi, that is, "Bowmen," occupy the southernmost districts in Gazaland. Those dwelling in the neighbourhood of the Limpopo along the coast dunes have all been reduced by the Zulus. But the northern Chobi, called also Mindongs by the Portuguese, have succeeded in sufeguarding their independence, thanks to the support accorded them by the garrison of the town of Inhambane. These are the Boa Gente, or "good folks" spoken of by Vasco de Gama. This tribe disfigure themselves in a way which to Europeans seems absolutely repulsive. They raise three rows of warty excrescences on the face, one from the top of the forehead to the tip of the nose, the other two from ear to ear, forming two chains, which are brought round one by the upper lip the other by the ehin. . They seem better entitled to the name or Knob-noses even than their Transvaal neighbours. The costume of their women is a sort of bark toga.

North-west of the Chobi the plains are occupied by the Ma-Kwakwa people, where territory may be traversed in all directions without obtaining a sight of a single village, so completely are their settlements conceuled in the brushwood. For a stretch of about sixty miles, Richards came upon nothing but abandoned kraals. These unfortunate Ma-Kwukwas do not dare even to cultivate their little garden plots, such is their dread of sudden visits from their selu kinsmen and oppressors. But they carefully tend their wine yielding palais small trees from 5 to 10 feet high, which resemble cabbage stumps in appearance, but give a large supply of liquor.

The Ma-Gwanzas, who dwell west and north-west of the Ma-Kwakwas, along the banks of the Limpopo and its affluents, are exempt from the visits of the \%ulu soldiery, and are consequently a very numerous people. They own large wellcultivated gardens, and even herds of cattle in all the distriets not infested by the tsetse fly.

Their northern neighbours, the Ma-Longwas or Ma-Rongwis, dwell in bark huts of a rudimentary type. The district stretching still farther north in the direction of the Sabi delta is held by the Bila-Kulu tribe, while the far more numerous Hlenga nation occupies at some distance inland from the coast the region of plains extending towards the interior between the Limpopo and Sabi valleys. Their country being mainly scrub, the Hlengas might almost be called
bushmen. Being unable to till the land for want of water and through fear of the neighbouring Zulus, they are obliged to live almost exelusively on the produce of the chase. They pursue the game by the trail, like hounds, and when they have wounded an animal they follow it up unflaggingly for days together, sleeping at night near the drops of blood so as not to lose the traek. They study the starry skies and consult the flight of the vulture in ordor to take part with it in the carrion feast. They also show great skill in constructing pitfalls, and despite the edicts forbidding all the Tongas from hunting the elephant, they contrive to plant a sharp stake conccaled by the foliage across the path of the huge pachyderm. The wounded animal, overcome by the acute pain, is unable to advance farther and falls an casy prey to his enemies.

North of the Sabi the Tonga tribes, being under the more direct control of the Zulus, are reduced to the condition of abject slaves. Such are the Ma-Ndandas and Ma-Ndowas, who appear to have been formerly a very powerful people, but who are now fain to conceal themselves in the bush, clothed in long robes made from the bark of the baobab. Still farther north, and not far from the Manica uplands, dwell the Ki-Tevi (Gwa-Tevi or Aba-Tevi), probably descendants of the Quiteve people mentioned by the Dominican friar, De Santos, as a large nation forming the central nucleus of the Monomotapa empire. The traditional ceremonious formalities observed at the court of the Umgoni king appear to have been in great part inherited from the Quiteve sovereign. Amongst these natives are scattered some groups of Ba-Lempas, who practise circumcision, and who are said by Mauch to resemble the Jews in their features and social customs. Most of them are distinguished by red eyes and fiery eyebrows, like the Polish Jews. They dwell in separate villages, living by usury and a retail barter trade. They also manufacture the iron wire required for the elaborate headdresses of some of the surrounding tribes.

## The Banyans.

Perhaps the most important section of the population, not only here, but in all the Portuguese East African possessions, are the Hindu traders collectively known as Banyans, or Banians, who have almost monopolised the export traffic of this seaboard for many generations. "Attracted from India more than half a century before Clive laid the foundations of the Eastern British Empire, by an edict of the Portuguese Viceroy, Conde de Alvor, whioh gave to a Banyan Company in 1686 an exclusive monopoly of the trade between Diu and Mozambique, the Banyans, strengthened afterwards by the Battias and other Hindu sects, gradually increased in number and in influence, until at this day, despite the loss of all monopolies, they are in sole possession of the trade of the coast. Others there are, wholesale European merchants, at the chief centres of trade; but they alone are to be found in every accessible port and river of the coast, bartering European manufactures for native produce, and thus, by searching out new markets and creating trade, stimulating the industry of the natives.
" Beyond the trade monopoly, they were formerly granted extensive and peou- roluce of hey havo eping at he starry $t$ in the spite the to plant hyderm. ther and

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 Ndandas ople, but pes mado e Manica of of the nation ceremoe been in tives are are said $t$ of them 8. They hey also te of the jut in all y known : of this century edict of upany in que, the sradually ss of all here are, lone are European kets andnd peou-
liar privileges, amongst which one of tho most curious was a right to have all cases of crime and dispute occurring amongst themselves settled by their own judges, who generally consisted of padres chosen from the order of the Jesuits. Some say that from this union of commerce and religion much trouble und disorder sprang; others, that the power of the Jesuits and the prosperity of the Banyans alike excited the envy of the authorities. Both were spoken of in terms of harsh and severe censure. A drastic measure was therefore taken with their roverences, and in 1759 they were packed off as prisoners to their respective convents in Goa, and the whole of their property in the colony confiscated to the Crown.
"Soon after the Banyans were ordered to return to Mozambique, 'because of disorders spread by them on the coast,' und in 1777 their monopoly was withdrawn. But these restrictions appear to have had little effect, as for nearly a century past their field of trade has been steadily extending. The feeling of antagonism with which these traders are regarded arises ohiefly from the fuct that the profits made by them are neither invested in, nor serve any useful purpose to, this country. India is the land of their nativity, and out of it the. law of their race does not permit them to permanently settle, or even to carry their women. Residence abroad is, therefore, to them but a temporary sojourn, and the wealth they gain is naturally remitted to the only country custom allows them to call their own."*

## Topography.

In the southern part of this region the only town hitherto founded by the Portuguese bears the Kafir name of Inhambane. $\dagger$ It is situated on the east side of a large open bay, free from reefs, which somewhat resembles that of Lourenço Marques, although offering fewer advantages to shipping. Towards the south the inlet gradually narrows to a small creek, and here is situated the harbour, accessible only to vessels drawing 10 or 12 feet of water. The town, which is fairly well constructed, stands on a long hill or ridge, which is almost entirely surrounded by water at the flood. It has a motley population of about two thousand blacks, whites, and copper-coloured Christians, Mohammedans, Banyans, and Parsees. Inhambane being a centre of the Moslem propaganda amongst the surrounding Negro populations, has its mosque as well as its churches. On an island near the coast, some 60 miles farther north, are seen the ruins of an old Arab settlement. Slaves and ivory, which were formerly the only exports, have now given place to beeswax, caoutchouc, gum copal, cocoanuts and groundnuts. In their dealings with the natives the Inhambune traders use as currency little iron bars. The neighbouring palm-groves, which cover a space of over a thousand acres, contain about a hundred and eighty thousand cocoanut-trees. Of late years some sugarcane, tea, and cinchona plantations have also been formed in the vicinity of the town. It is of considerable importance that the whole of this district should be

- Consul H. E. O'Neill, Proceedings of the Royal Grographical Society, October, 1882.
+ The two syllables inta, forming the initials of so many names of places in the Portuguese East African possessions simply represent the Spanish n, transliterated in English by ng. Consequently Inhambane is to be pronounced Ngambane.
brought under cultivation and made to yield sufficient produce for the local consumption, because the port is encompussed by solitules, and lies at a far greater distunce than Lourenco Marques from the agricultural and mining regions of the interior. From these it is separuted by the valley of the Limpopo and by extensive plains, rendered almost uninhabitable by the presence of the deadly tsetse fly. The town itself was captured in 1834 by the Landins (\%ulus), und even recently reports were current of imponding fresh attacks. Yet with all these drawbacks the yearly trade of the place has of lato years risen to nearly £ $\mathbf{L}^{6} 0,000$.

Mrs. Pringle, one of the few English travellers who have in late years visited

Fig. 66.-Manica and Goronaoza Miomlinds.
Scale 1 : 2,600,000.


Inhambane, speaks of it as quite a eharming town. "Wo thought it quite the most beautiful place we had yet scen in Africa. As we approached our anchorage the broad river became blocked with wooded islands. Everywhere we looked there were forest and low-spreading bushes. The town, nestling under wooded hills, is situated at the head of a deep bay about fourteen miles from the mouth of the river. Quite a number of picturesque little huts peeped out from amongst a elump of cocoanut palms, looking from the steamer very like Swiss châlets, only they had no stones about them, and were thatched with palm-leaves. Several were surrounded by high palisades, Kafir fashion. The contrast between this little bit of native town and the more solid-looking European houses, situated on a rising knoll, was very striking. Then the sunset, though short, was exquisite. The whole
sky was full of flecey cloude, a mass of red and yellow, while the bay looked as brilliant as a rainbow under the evening sun. which slanted across is waves, lighting them up with the constantly varying tints of green and gold." *

North of the Inhambane inlet the seabourd is guarded by some small lortuguese posts. One of these stands on the island of Buzaruto, where the neighthouring peurl and holothuria fisheries are little utilised. Another, on the island of shitonur, in the marshy deltu of the Suni, serves as a convict station, which is surrounded by brackish waters frequented by the hippopotumus. Formerly the most frequented harbour on the Gaza const lay beyond the fluvial busin on the low bench of an inlet penetrating far into the interior. Here stands the port of Suffla, ut a point which is unfortunately inaccessible to vessels of heavy draught. When the Portuguese founded in this place their first settloment between the Limpopo and the Zumbese, they supposed they were restoring Solomon's city of Ophir, and gave this appellation to the little fort, one of whose towers is still standing. They were also under the inpression that the river Subi itself had been so named from the Queen of Saba. Before the discovery of the far more commodious port of Buninur, formed by the mouth of the Punguc or Aruanga River, Sofala had the advantage of being the nearest scaport to the highland district where the Zulu conquerors have established their headquarters, as well as to the Manica plateau, famous for its gold-bearing alluvia. Gold-dust has even been found in the sands of the beach close to Sofala itself. This place is no longer, as formerly, the centre of $a$ brisk export trade.

The geologists that have visited the Manica country have hitherto failed to discover either the auriferous rocks in these granitic uplands or the deposits of precious stones where the native women find their beautiful pendants ard carrings. The valley of the stream whose sands are washeả for gold opens on the southern side of the mountains. Here the pits, sunk to a depth of 18 or 20 feet in the alluvial soil, and still perfectly preserved, date from the time of the early Portugucse operations, which were themselves preceded by much older works, traditionally attributed to a " white people with long black hair." Near the village of Massikessé, which was formerly the capital of the province, are also seen some ruins of the ancient city, which had already been almost entirely abandoned at the end of the last century. It was deserted in conséquence of the "just reprisuls" of the revolted natives, and subsequently destroyed by the Zulu invaders, who massacred most of the inhabitants, and forbade the survivors to continue the mining operations.

A so-called "Ophir Company" has lately been constituted for the purpose of resuming these works and reviving the important "fair of Manica," which was formerly held at Massikessé. But according to some geologists, the sands of the Manica valleys are but slightly auriferous, the proportion of the precious metal apparently not averaging more than half a gramme, or about eight grains, to thirty-five cubie feet of matter. The future wealth of the country will be derived, not so much from its mineral resources as from the great fertility of its valleys.

## sOUTH AND EASI AFRICA.

In no part of South Africa are the lands better watered or more productive, and in the Manica territory "droughts and searcity are unknown."

A Negro regulo or " kinglet" resides at Mulassa, on the south-west slope of the Manica hills. As a vassal of the Portuguese Government, he is kept in awe by an officer with the title of "capitao-mor," whose little garrison is stationed in the natural fortress of Massara, a huge bluff with precipitous walls, accessible only by a giddy zigzag path. On one occasion three thousand Zulus in vain attempted to storm this rocky citadel, from which large stones were rolled down, crushing great numbers of the assailants.

The capital of this extensive district, which bears the alternative names of Manica and Quitree (Kiteve), has been recently founded in the Serra de Gorongoza, at the village of Inhangu, usually called Villa Goureia, from the name which the natives give to the capitao-mor. Formerly the surrounding hills were completely deserted, but they are now being gradually repeopled, and companies of disciplined Landins are now enlisted by the Government to protect this new Portuguese conquest from the attacks of their southern kinsmen. The ancient kingdom of Ba -Rue has also been entirely reduced by the capitao-mor of Manica, and is now held by him as his personal domain. This highly favoured official further enjoys a complete monopoly of the local traffic in beeswax and other produce. ible only by ttempted to shing great
e names of Gorongoza, le which the completely disciplined Portuguese kingdom of and is now rther enjoys

## CHAPTER VIII.

## ZAMBESE AND KU-BANGO BASINS.



N length, the extent of its basin and volume, the Zambese ranks as the fourth river in Afriea, being surpassed in these respects only by the Congo, the Nile, and the Niger. But however important it still is, this great artery appears to have formerly drained even a far larger area than at present. Several copious streams which at one time joined it from the west and south-west, have ceased to reach its banks; various waterpartings have been upheaved between the central and the secondary basins, and many of these have beeome isolated marshy or flooded depressions, whieh have no longer any outflow, and whose surplus waters are carried off by evaporation alone. From the geological standpoint, the unity of the whole basin still remains evident enough; but it has ceased to constitute a single hydrographic system. Although they no longer intermingle their currents, the Ku Bango and Zambese clearly belong to the same original area of drainage, as had in fact long been shown by the Portuguese explorations previous to the time of Livingstone.

## General Survey.

But these explorations had been entirely overlooked by most geographers outside of Portugal, and for the scientific world Livingstone must be regarded as the true discover of the Upper Zambese. Numerous travellers have followed in his foot. ps, notably the Portuguese Serpa Pinto, Brito Capello and Ivens, Hermenegildo Capello, who have specially undertaken the survey of this region, which in the recent general distribution of Africa has been assigned to their nation "from ocean to ocean," that is, from the Atlantic to the Indian waters. On their maps it already figures, perhaps on a somewhat too extensive scale, as a future African Portugal.

The scientific exploration of these lands, in anticipation of their political annexation, has beon undertaken partly from the direction of the Lowor Zambesc. But this river being shallower and rarrover than the Congo, and especially more obstructed by falls and rapids, along its middle course, can be utilised only for a comparatively short distance by travellers seeking to penetrate into the heart of the
continent. The extent of navigable waterways presented by its afluents is also far inferior to that of the Congo, while its basin yields to that of the great equatorial river in natural resources of all kinds. The regions included within the Zambese area of drainage enjoy a less copious rainfull, and consequently a less diversified vegetation, and are also on the wholo less densoly peopled, although in certain fertile districts the inhabitants are crowded somewhat closely together.

Taken in their widest sense, the joint busins of the Zambese und Ku-Bango, with the other watercourses belonging geologically to the same area, have a superficial extent of about 800,000 square miles. But according to the most

Fig. 67.-Portuguese Africa prom Ocean to Ocean.

trustworthy estimates the whole populution can scarcely exceed four or five millions, and of this number not more than two thousand are Europeans, including even the maritime settlement of Quclimanc. The long and devastuting wars that bave been waged in many districts of this region sufficiently explain the depopulation of these relatively fertile lands, which might easily support two hundred millions of iuhabitants.

## The Fídibango.

The easten slope of the continent within the contiguous basins of the Zambese and Ku-Bango begins at a relatively short distance from the Atlantic seaboard. The farthest headstreams of the Ku-Bango, or Okovango, have their
sources within 250 miles of the seaport of Benguella, whereas the distance in a straight line thence to the shores of the Indian Ocean is no less than 1,500 miles. 'The Ku-Bango, rising in the liihé district, on the southern slope of the mountains which separate its basin from that of the Cuanza, flows at first in a southerly direction parallel with the Cunene and with the axis of the Angolan coast ranges. Owing to this circumstance many explorers, and amongst others Ladislas Magyar, accepted the native reports that the Ku-Bango drained through the Cunene to the Atlantic Ocean. Notfar from its source the river flows for some distance in an underground channel, and then reappears here and there for short intervals, until it again becomes a surface stream some 6 or 7 miles below the point where it first plunged into its rocky subterransan bed. Farther on the Ku-Bango winds through a narrow glen between grassy or forest-clud hille, then trending gradually round to the south-east receives the contributions of the Ku -Eyo, the Ku-Atir, and the Lua-Tuta, all flowing in parallel valleys in the direction from north to south. At the point where it was crossed by Capello and lvens on July 10th, that is some six weeks after the dry season had set in, the current had still a width of 130 feet with a mean depth of 10 feet and a velocity of nearly two miles an hour.

What becomes of this considerable volume of water, which is greatly increased during the rainy season, and lower down more than doubled by the Ku -Ito affluent, which rises on the transverse continental waterparting south of the Kwango and Kassai, and has a total length of no less than 480 miles? The two Portuguese explorers advance the hypothesis that the united Ku -Bango and Ku -Ito flow directly eastwards, discharging a considerable portion of their waters through the Kwa-Ndo or Chobe into the Zambese. Elsewhere they remark that " they apparently go to feed the southern lakes, or, in some unknown way connect themselves with the Zambese."* This is also the opinion of other travellers, and is confirmed by the reports of many native tribes. Andrew Anderson, who has crossed the district in every direction, merely indicates at this point a marshy tract, where, at least during the rainy season, there is a slow onward movement of the fluvial waters, if not a current in the strict sense of the term.

But however this be, the almost perfectly level disposition of the plains traversed by the Ku-Bango, below where it brgins to converge towards the KwaNdo, gives rise to some remarkable hydrographic phenomena in this region of uncertain drainage. The Cunene itself would even appear occasionally to communicate with the Zambese through the rarambay of Lake Etosha, and an intricate system of channels spreading eastwards. Thanks to the temporary inundations to which the whole region is subject, the hippopotamus has been able graduully to migrate from lagoon to lagoon as far west as the eastern font of the Herero highlands. Several streams descend from these highlands, one of which, according to Andersson, is perennial, never completely drying up even in the heat of summer. At the foot of the Waterberg, an extensive sundstone plateau which absorbs much rainwater, springs one of the largest of these streams, although at first scarcely perceived through the densely matted overhanging foliage.

[^23]Some traces still survive of the ancient inland sea which flooded this region of the continent between the uplands skirting the Limpopo and the Damara high$1^{1}$ nds, before the waters of this vast basin were drawn off through the gorges of the Zambese. Over the old lacustrine bed are still scattered numerous flooded depressions, which become displaced, enlarged, or reduced in size according to the abundance or scarcity of the rains and the deposit of alluvial matter. The long presence of water in a vast continental lake is clearly shown, not only by the almost perfectly level disposition of the land, but also by the formation of extensive lacustrine deposits. The whole plain is floored, as it were, by a kind of

Fig. 68.-Regon of Unorbmain Waterpahthag.
soale 1 : b. $700,000$.

tufa more or less soft according as it is exposed to the air or covered with organic débris. Wherever the soil is turned up freshwater shells are brought to the surface, analogous to those still found in the Zambese.

The bed of the Ku -Bango, as well as those of the streams flowing from the Damara uplands, and ramifying over the groat plain, are flanked by depressions where the surplus waters are gathered in temporary lakes during the rainy season. Moreover, these rivers branch off into distinot chanuels, the so-called molollas of the natives and laagten of the Dutch Boers, which also receive much of the periodical overflow, but in which the current sets in the opposite direction and thus rejoins the main stream during the dry season. In this way is produced $u$ sort of ebb and flow, regularly following the annual alternations of the climate.

The Tonké (Tonka, Tiogé), which receives the surplus waters of the lower Ku -Bango, but which is at times completely dry, is everywhere skirted by moInllas, some with the normal others with the reverse current. The bed of the Tonké, which is bere and there obstructed by a few rapids, is generally followed by the Bushmen in their migrations. After thu rains the Tonke usually discharges into Lake Ngami ; but in 1886 it had shifted its bed and discharged into a vast morass, whose waters were carried off through various channels eastwards and south-eastwards to the Chobe and the Zuga. Every successive explorer who penetrates into these solitudes describes and figures differently the currents of the lacustrine basins and the network of their influents and effluents.

## Lake Ngami.

Lake Ngami, Nagabi, or Naabi, that is "water" in a pre-eminent sense, or according to Chapmun, "Giraffe Lake," is one of those basins with ever-changing margins, like the Shotts of Algeria and Tunis. No traveller traces its outlines in the same way. The least shifting shore lies on the south side, where the land is somewhat more elevated. It even develops at some distance from the lake the chain of the Makkapolo hills, rising 1,200 feet above the level of the lake, which by different explorers is itself estimated at from 2,600 to nearly 3,000 feet above the sea. When discovered by Livingstone in 1849, Ngami appeared to stretch for about 60 miles from east to west, but was much narrower from north to south, ihe opposile shores being plainly visible in this direction. The natives calculated the circumference at a three-days' journey, but its circumnavigation would have presented almost insuperable difficulties, the water being so shallow that in many places the boatmen are unable to use their oars, and are obliged to propel their light craft or reed rafts with poles.

The lake acquires its gractest expansion usually between the months of April and July, when its waters, diluted by its numerous affluents, become sweet and potable; but according as they subside they grow continually more saline, at last even leaving crystalline efflorescences on the surrounding reeds, which in some places form a groen border several miles wide. The basin has been subject to frequent changes of Tevel, which are-evidently due to the difference of barometric pressure on the shallow lagoon waters, combined with the deviations in the volume of liquid brought down or carried off by the Tonké and other tributaries or emissaries. The waters are also displaced by the regularly alternating morning and evening breezes, the former setting from the east and driving them westwards, the latter driving them back again to the east. Thus, as the natives say, the lake goes every day to graze and then returns to the kraal.

According to Livingstone, Ngami is fed not only by surface streams but also by underground contributions issuing from the southern hills, or from porous sandstones resting on a bed of impermeable rock. In many parts of the surrounding district the land is sufficiently watered to support an arborescent vegetation, rivalling in exuberance and splendour that of the alluvial tracts along the Lower

Zambese. But elsewhere nothing is visible except thorny plants, scrub or even dreary wastes of sand.

During the greater part of the yeur, Lake Ngami discharges its overflow eastwards through the Zuga emissary, which, after flowing for somo distance in that direction, trends to the south and again round to the east as far as the extensive saline traet known as the Makarakara, or Makarikari, that is, the "Mirage." This shallow depression is occasionally flooded with a little water, which like Ngami, is constantly displaced by the prevailing and alternating winds. Between both basins, for a distance of no less than 240 miles west and east, Anderson's measurements could detect no difference of level, a few inches at the most probably representing the actual ineline along this section of the ancient lacustrine depression. Hence the least obstruction, the slightest change of barometric pressure, the smallcst, ulternation between atmospheric dryness and moisture, the growth of a fow tufts of reeds, suffice to affect the flow of the waters wandering with undecided course over the plain of the "thousand lakes." The wbole region is traversed in every direction by fluvial beds alternately flooded or empty, by meres, swamps, and salines constantly displaced and restored.

So intricate are the ramifying branches of the laagten, that during the period of high water the natives venturing in their frail barks on the sluggish streams often lose their way and spend days in searching for the right channel to cross the inundated plain. Even the Zuga, the only perennial river in this region of imperceptible slope, reverses its current, which in April and May sets steadily from Ngami, but during the two following months flows back to the lake. During the floods the Mababe branch of the Zuga trends towards the north, and while a portion of its contents disappears amid the surrounding sands, another portion reaches the Chobe, which is itself a tributary of the Zambese. Thus the hydrographic systems of the Ku -Bango and Zambese become periodically intermingled, and the original unity of the whole of this area of drainage is temporarily re-established.

At this season the almost boundless watery horizon is relieved here and there by pleasant stretches of woodlands, clumps of graceful palms, or gigantic isolated baobabs. A few eminences, assuming the aspect of lofty hills, appear as islets and archipelagos in the midst of the ancient inland sea thus annually revived during the rainy period. The periphery of this level plain consists to a great extent of volcanic formations.

## The Chore.

The Chobe or Kwa-ndo (Cuandu), whose lower course connects the Ku Bango with the Zambese, rises like both of these rivers on the southern slope of the transverse waterparting, which stretches from the Bihe territory across the continent in an oblique direction to the region of the great equatorial lakes. The Chobe trickles as a tiny brook from a swamp which fills a depression confined between two hills, and according to Serpa Pinto, standing at an elevation of in that xtensive firage." ich like 3etween derson's robably depresoressure, rowth of th undeis tra. meres, ${ }^{9}$ period streams to cross egion of steadily During while a portion e hydromingled, porarily
nd there isolated as islets revived a great

## u-Bango

 e of the ross the es. The confined ration of4,500 feet above sea-level. It flows at first towards the south-east, and is soon swollen by the contributions of innumerable streamlets into the proportions of a veritable river navigable for the greater part of its course, although obstructed here and there by forests of tall reeds. In this region its basin is separated by a scarcely perceptible sill from that of the Zambese properly so called. Nevertheless it still maintains its independent course west of this low parting line, flowin a southerly direction parallel with the main stream, and at lust emerging on the great alluvial plain which also receives the discharge of the Ku -Bango. The

Fig. 69.-Kabsai, Ku-Bango, and Zanbram.
Scale $1: 11,000,000$.


Kwa-Ndo even occasionally effects a junction with this river during exceptional floods, and then sweeps round to the east, here expanding into the serpentine Lake Chobe, which in many places takes the aspect of a rivor. Whon Livingstone explored it, the current had a mean depth of from 14 to 16 feet, but would nevertheless be inaccessible to a steamer of any size owing to its extremely sharp windings.

The junction of the Chobe with the Zambese is effected through an intricate labyrinth of little channels and paseages, in the midst of which stands an island 118-AF
of volcanic origin. Like all the other watercourses of this region, the Chobe has excavated its deep channel in the layer of soft calcareous tuffa formerly deposited on the bed of the great lacustrine basin. Daring the floods, which last from December or January to March, all inequalities of the ground disappear beneath the vast and always limpid sheet of water formed by the junction of the two streams. The annual difference between the high and low water levels varies from 20 to 24 feet.

## The Liba on Upper Zambese.

The little river Liba, which has its source not from that of the great Lu-Lua tributary of the Kassai, is usually regarded as the true upper course of the Zambese, although both the Ku-Bango and the Chobe take their rise at a far greater distance from the Indian Ocean. One of the affluents of the Upper Liba is the LoTembwa, a stream flowing from Lake Dilolo, which was discovered by Livingstone, and which presents the rare phenomenon of communicating with two distinct fluvial systems, those of the Zambese and the Congo. A great number of other "children," as the natives call the tribut ries of the Liba, send their contributions to the "mother," which soon becomes the Liambai or Zambese, that is, the "river" in a superlative sense. But the greater part of the rainfall, being precipitated on a too uniformly level surface, is unable to reach the main stream. It lodges in stagnant pools scattered over the reed-grown plains, which from a distance resemble a boundless prairie with here and there a few wooded islets rising above the tall, waving grasses.

Amongst the perennial watercourses of this region, all infested throughout the year by numerous hippopotami, the most important is the Lua-Ena, whose basin stretches far to the west. Some sixty miles from the point where the Zambese begins to become navigable, the Lua-Ena mingles its blackish waters with the yollowish current of an affluent which Livingstone regarded as the true main stream, but which is inferior to it both in the length of its course and in volume. This is the Kabombo tributary, first explored by Capello and Ivens.

Below the confluence of the two rivers the mainstrean is swollen by the waters of the Lua-Ngo Nbungo, which rises not far from the sources of the Kwa-Ndo, and traverses the extensive Lobale plains-grassy fens or waterless steppes according to the season. Beyond this junction the aspect of the land still remains unchanged, the united stream flowing directly southwards over a plain standing at a dead level, where the flood waters expand in vast shallow lagoons during the rainy season. On the surface are borne along great masses of tangled vegetation swept down by the current. With the return of dry weather the waters subside, and this apparently boundless sea assumes the aspect of a regular channel winding between steep banks of alluvial soil intermingled with sands and many-coloured clays, where the wasp-oater and kingfisher have their nests.

The river thus flows rapidly but at a uniform speed for a distance of over 180 miles, after which, beyond some wooded islands, it changes the direction of its course, trending round to the south-east. Here the stream winds between rocky

Chobe has ly depolast from $r$ beneath $f$ the two aries from at Lu-Lua Zambese, distance 3 the Lovingstone, o distinct of other tributions at is, the g precipiream. It rom a dislets rising hroughout Ena, whose e the Zamaters with true main in volume.

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the gonye falls, on the zambese.

cliffs, which gradually converge, soon leaving a space from bank to bank of from 60 to 100 yards. Pent up within this rocky bed, the current, which during the rainy senson rises from 50 to 60 feet above the normal level, rushes along in furious eddies at a speed which renders all navigation impossille. But above these rapids, known as the "Gonye Falls," there is a freo stretch of over 250 miles as far as the neighbourhood of the waterparting towards the Kassai affluents which is accessible to riverain craft, doubtless one day to be replaced by steum.

Below the Gonye Falls the Zambese is continually interrupted by reefs und rocky ledges, some of which are disposed athwart the current, forming connecting ridges between the cliffs on either bauk. Here every rapid, every eataract, presents a different aspect. One reef crosses from side to side at a perfeetly uniform height, the water gliding over it without a ripple as over an artificial burrier; another is pierced with gaps and openings, through which the water pours as through the gates of a lock. Elsewhere the current is obliquely stemmed by boulders pilcd up in disorder, or broken by rocky islets rising amid the seething whirlpools. In a stretch of about 12 miles Holub reckoned no less than forty-six cataracts and rapids of all sorts, some of which are extremely dangerous either to shoot or to turn. It would even be quite impossible to make the attempt but for the fact that the crocodiles themselves are obliged to avoid the neighbourhood of the cascades. The boatmen ascending the stream are thus enabled to approach the reefs, deposit their cargo on some convenient ledge, and haul their boats up to the smooth stretch above the fall; then nimbly resuming their seats, they safely continue the journey up this reach amid these vorucious saurians swimming about in the still, deep waters. The last of the series of cataracts is the Katima Molelo, above which the Zambese presents an open course free from all obstruction for a distance of nearly 120 miles, as far as the network of channels ranifying southwards in the direction of the Chobe lagoons above the great fulls.

## The Victoria Falis.

The Mosi-oa-Tunya, or "Thundering Smoke," *which afforded an escape to the great inland sea of which Ngami is but a puny remnant, presents an absolutely unique spectacle. Doubtless many other streams plunge at a single bound into a decper abyss, or roll down a mightier liquid volume. But nowhere else is a great river seen to suddenly disappear in a narrow rocky chasm, whose very bed is completely veiled by the overhanging vapours, and whence the tumultuous waters escepe through a fissure which is not even visible except from the vantage-ground of some dangerous headland. The Zambese seems, as it were, suddenly to vanish in the very bowels of the earth. Discovered, or at all events rediscovered, in November, 1855, by Livingstone, and by him named the Victoria Fulls, this stupendous spectacle is thus described by the illustrious traveller:-
"After twenty minutes' sail from Kalui we came in sight, for the first time, of
*The expression means literally "Smoke does sound there," answering to Livingstone's free rendering, "Smoking caldron."
the columns of vapour, appropriately called 'smoke, rising nt a distance of five or six miles, exactly as when large tracte of grass are burned in Africa. Five columus now arose, and bending in the direction of the wind, they seemed placed against a low ridge covered with trees; the tops of the columns, at this distance, appeared to mingle with the clouds. They were white below, and higher up becane durk, so as to simulate smoke very closely. The whole scene was extremely beautiful; tho banks and islands dotted over the river are adorned with sylvan

vegetation of great varicty of colour and form. At the period of our visit several trees were spangled over with blossoms. There, towering over all, stands the great burly baobab, each of whose enormous arms would form the trunk of a large tree, beside a group of graceful palms, which, with their feathery-shaped leaves depicted on the sky, lend their beauty to the scene. The silvery motonono, which in the tropics is in form like the cedar of Lebanon, stands in pleasing contrast with the dark colour of the motsouri, whose cypress form is dotted over at present with its pleasant scarlet fruit. Some trees resemble the great spreading oak, cof a large aped leaves 10no, which ng contrast $r$ at present sading oak,
others assume the character of our elms and chestnuts; but no one can imagine the beauty of the view from unythiug witneasid in England.
" The falls ure bounded on three sides by ridges 300 or 400 feet in height, which are covered with forest, with the red soil appearing among the trees. When about half a mile from the falls I left the canoe by which we had come down thus far, and embarked in a lighter one, with men well acquainted with the rapids, who. by pussing down the contre of the stream, in the eddies und still places caused by the many jutting roeks, brought me to an island situated in the middle of the river, and on the edge of the ha over which the waters roll. Though we had reached the island, und were within a fow yards of the spot a view from which would solve the whole problem, I believe that no one could perceive where the vast body of water went; it seemed to lose itself in the earth, the opposite lip of the fissure into which it disappeared being only 80 feet distant. Crceping with uwe to the verge, I peered down into a large rent which had been made from bank to bank of the broad Zambese, and saw that a stream of 1,000 yurds broud leaped down 100 feet, and then becane suddenly compressed into a spuce of 15 or 20 yards. The entire falls aro simply a crack made in a hard basalt rock from the right to the left bunk of the Zambese, and then prolonged from the left bank away through thirty or forty miles of hills. In looking into the fissure on the right side of the island, one sees nothing but a dense white cloud, which at the time we visited the spot had two bright rainbows on it. From this cloud rushed up a great jet of vapour exuetly like steam, and it mounted 200 or 300 feet high; there condensing, it changed its hue to that of dark smoke, and came buck in a constant shower which wetted us to the skin."

The narrow gullet through which the whule body of water escapos is only 100 feet broad at the entrance, that is about thirty-six times narrower than the river above the falls. Widening at times, and again contracting to the first dimensions, it winds abruptly through its rocky bed, hemmed in between black porphyry cliffs, trending first to the west, then to the east, and repeating the same meunderings before finally emerging from the gorges and gradually expanding to ite normal size. The rocky walls are broken by deep lateral ravines, and every fissure is clad with a forest vegetation. The higher terraces resemble hunging gardens, whence the designation of Semiramis Cliff, given by Holub to the eastern promontory commanding the entrance of the gorge.

At a comparatively recent geological epoch, before the Zambese had opened this gorge by eating away the barriers damming up the lacustrine waters, it flowed at a higher level in a lateral valley. This valley is now traversed by the Lekone, a northom tributary of the main stream, which flows in a contrary direction to the old current.

## Tife Middle Zambese.

Below the Victoria Fails the Zambese at first continues its easterly course, then trends to the north-east, and again sweeps round to the east. Even here the current is still obstructed, rushing at one point over the Kansalo rapids, at another
traversing the narrow Hariba gorge. Then it is joined by its great Kafukwo (Kafwe) aftluent, which comes directly from the west, and which is reported to be interrupted only by a solitary cataract about a day's journey above the confluence. Still farther up this river would appear to be free from all obstructions as far as the neighbourhood of the waterparting between the Zambese and Congo basins. The valley of this river has consequently already been indicated as probably offering the best route to be followed by the future trans-continental railway from the Atlantic to the Indian Ocean.

Farther down the copious Loa-Ngwe sends to the Zambese the whole drainage of the southern slope of the waterparting between Lakes Nyassa and Tanganyika. With this contribution the mainstream has acquired nearly the full measure of its

liquid volume, when it strikes against the roots of the mountain-range running north and south athwart its seaward course. The Chikarongo Falls, followed by the Kebrabassa rapids, mark the point where the Zambese is deflected by this barrier towards the south-east, a direetion which, with the exception of a few short meanderings, it henceforth pursues to the delta. At this point, marking the commencement of its lower course, its waters begin to lose their limpid clearness, clouded by the muddy deposits and organic remains here lining its banks. Above the rapids it preserved a relative transparence even during the season of the periodical inundations, but it has now become a turbid stream of a brownish or dirty red colour. Along the upper reaches the banks and riverain tracts are covered with a dense herbage, where the current is filtered by depositing most of the sedimentary matter held in solution. Here also the banks are consolidated by
reat Kafukwo reported to be he confluence. tions as far as Congo basins. bably offering vay from the
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the binding effects of the roots, and thus prevented from falling in and disturbing. the stream, as is the case lower down.

The gorge where the Zambese pierces the transverse range which forms a northern continuation of the Manica uplands, has becone famous in the history of African geographical research. By tradition it had been transformed to a tremendous defile, flanked by marble walls of prodigious height, and covered on top with a snowy mantle. The very name of Lupata, which simply means glen or gorge, has been interpreted as signifying the Spina Mundi, or "Backbone of the World," and the place came accordingly to be regarded as constituting the main continental axis. Yet the cliffs skirting these narrows are exceeded in height by many similar formations in European river gorges, not to mention the stupendous cainons of North America. The highest eliffs, standing on the west side, rise vertically to an altitude of over 6.50 feet, everywhere presenting all kinds of folds and faults in the strata of its silicious schistose rocks. But the eastern or opposite side is greatly inclined and completely forest-clad, rising in steps towards the mountains stretching away to the east.

Tise Zambese, from 200 to 300 yards broad in the defile, and contracting to little oves 40 yards at the narrowest point, flows everywhere at a depth of 60 or 70 feet, and being entirely free from reefs might easily be ascended by steamers. The Lupata gorge has a total length of over ten miles, terminating at its issue in a sort of gateway formed by two cone-shaped porphyry hills. Beyond this point the river broadens out between its receding banks, leaving ample space for a chain of alluvial islands in mid-stream. Farther down it branches off into two arms, one of which, the Ziu-Ziu, on the north side, traverses a low-lying swampy district to its junction with the Shire from Lake Nyassa. The river eraft usually take this channel, not only when bound for the upper Shire, but also when they want to reach the lower reaches and the delta. The two branches are separated by the large triangular island of Inha- $\mathrm{N}_{\text {goma, }}$ which is itself cut up into numerous secondary islets by passages and backwaters, where boats frequently get lost amid the reeds. All these intricate streams are known as the Rios de Senna, from the name of the nearest town, and in this region the river itself usually takes the designation of Cuama (Kwama).

## Lake Nyassa.

While the lakes of the Upper Zambese have ceased to exist, or have been replaced by swamps and salines, the Shire still receives the overfiow of the vast lacustrine basin of the Nyassa, which belongs to the system of the East African inland seas. The term Nyassa (Nyanja) simply means "Lake," nor has this great body of water received any more definite name from the natives, whilo its European discoverers or explorers have conferred no special designation on it, as they have on other equatorial lakes, such as the "Vietoria" and the "Albert" Nyanzas. Formerly, when it was still known only through the reports brought from Africa by the missionaries and the Portuguese officials, it was commonly known by the
name of Maravi, like the populations dwelling on its banks. At the same time this Maravi, with an alternative Nhanja Mucuro, figared on the maps of Africa under the most diverse forms and outlines, being in some cases made to occupy nearly the whole of the unknown regions of the interior. But all these vague guesses were for evor swept away in the year 1859, when its true formation was first revealed to the outer world by Livingstone. Since that time it has been traversed in every direction by explorers, and European settlements have even been founded on its shores.

Nyassa presents a striking resemblance to its Tanganyika neighbour. Buth basins are disposed very much in the same direction, except that the axis of Nyassa approaches nearer to the line of the meridian; both appear to fill the beds of cracks in the crust of the earth, produced by the same pressure, but that of Nyassa stands at a lower altitude on the surface of the continent, being scarcely five hundred feet above sea-level. It also presents, like Tanganyika, the aspect of a broad valley, the sinuosities of whose sides mutually correspond, with, however, some deviations here and there. At its two narrowest parts it is only 14 or 15 miles wide, while in other placi 3 it expands to 55 or 60 miles. Excluding the windings of the shore-line, it has a total length of over five degrees of latitude, or about 360 miles, with a superficial area, according to the most recent surveys, of about 12,000 square miles," and depths ranging from fifty to a hundred fathoms, and upwards. Young found sixty-four and even ninety fathoms close to the cast side, while at any distance from the shore the sounding-line of a hundred fathoms almost everywhere failed to touch the buttom.

Towards its north-east extremity the lake is dominated by a lofty range, with steop rocky cliffs sinking sheer down to the water's edge. In some places the cascudes, sparkling on the slopes like silvery streaks, mingle their spray with the foam of the waves breaking on the rock-bound coast. Shallows are rare, and except at a few points on the west side the explorer may sail for days together close in shore without meeting any shelving beach or reed-grown shoals. But some of the bays and inlets are studded with islets which are visited by the hippopotamus, swimming over from the adjacent mainland. So pure are the waters of Nyassa that the sheathing of the vessels launched on its bosom by the English missionaries remains perfectly cloan for years together ; the builers of the steamers are also almost entirely free from any trace of sediment.

The fierce gales which sweep over the lake lash its surface waters into formidable waves, compared by seafarers to the billows of the South Atlantic itself. Hence, although its shores present numerous creeks and inlets with good anchorage, especially under the shelter of the islands, the European navigators have often run imminent peril of foundering. But since the discovery of the easily accessible estuary of the Rombash River, at its northern extremity, they are able to venture on its waters with a greater feeling of security. About forty-eight hours now

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VIEW TAKEN AT THE ZAMBESE AND CHOBE CONFLUENCE.
suffice to traverse the lake from end to end in steamers, whereas the first explorers took from ten to filteen days to make the trip. The natives, who scarcely ever venture far from the coast, make use of canoes or dug-outs, hollowed chiefly by the action of fire, with the gunwales curved outwards to the right and left, so as to strike against the water, and thus secure greater steadiness.

At times the whole surface of the lake becomes enveloped in a thin silvery mist or haze, shrouding all the mountains and veiling the bright solar rays. This kungu, as it is called, is entirely due, not to any aqueous or aërial vapours, but to countless myriads of tiny white-winged gnats, which, when alighting on vessels or houses, cover the whole surface as with flakes of snow. The natives gather these midges by the basketful and knead them into cakes.

Lying, like Tanganyika, in a fissure of the ground, Nyassa is almost entirely encircled by mountains, which are not merely the escarpments or outer slopes of

Fig 72.-Region between Nyassa and Tanganyika.
Seale 1 : a.500.000.

the plateaux, but constitute in some places real elevated ranges. On the north east side especially they even assume the aspeet of an Alpine region, towering with some of its peaks to an altitude of nearly 7,000 feot, and, according to some explorers, even exceeding 10,000 feet. Seen from the lake, this northeastern range, which has received the name of the Livingstone Mountains, in honour of the illustrious traveller and discoverer of Nyassa, appears to terminate towards its northern extremity in a superb pyramidal peak. Southwards it is continued parallel with the axis of the lake, gradually breaking into less elevated heights and low hills, connected by numerous saddles, which give access from the lacustrine basin to the valleys watered by the headstreams of the Rovuma. On the eastern slope the range rises here and there but slightly above the surrounding plateau, in which it rapidly merges altogether. Towards the sources of the Rovuma the culminating point is Mount Mtonia, which rises over 5.000 feet above the lake

On the west side of Nyassa there occur no ranges comparable to the Livingstone chain, and here the ground rises in seme places but little ubove the mean level of the plateau itself. Nevertheless, certuin isolated masses present a very inposing effect. Such is Mount Chombe, to which the English missionaries have given the name of Waller, and which commands one of the narrowest parts of the lake, near Florence Bay. Chombe forms a pyramidal sandstone mass with alternating grey and blackish layers, and rising to a hcight of 5,500 feet. Other less elevated peaks follow in a southerly direction along the coast between the lake and the plateau, as far as the Molomo Mountains, which project between the Zambese and the lower Shire. Carboniferous deposits of easy access have been diseovered in the valleys of the Mount Waller district.

Being thus pent up round about most of its periphery by elevated land, Nyassa is fed by no large affluents. At its northern extremity, ulong the axis of the lacustrine depression, where the explorer Young reported the probable existence of a large emissary, nothing occurs except a few rivulets flowing from the mountains forming the waterparting between Nyassa and Tanganyika. The most copious streams come from the western slope, that is, from the side where the general relief of the land is lowest. On the east or opposite side the partingline between the waters flowing to Nyassa and the Indian Ocean, runs at but a few miles from the margin of the lake, which consequintly from this dizection receives only some small affluents, often falling through a series of cascades down to the shore. Altogethor Nyassa possesses an extremely limited area of drainage compared with its great superficial area. Hence the water is maintained throughout the year nearly at the same level, the rise and fall scarcely exceeding three feet. According to the report of the missionaries there was a continuous slight subsidence during the period from 1875 to 1880 . At its southern extremity Nyassa terminates, like Tanganyika, in a "horseshoe," but even more sharply outlined, and this horseshoe is di-posed in two secondary bays or inlets, tapering gradually southwards.

## The Sure and Lower Z.imbese.

Front the eastern and longer of these bays, the lacustrine overflow escapes through the outlet of the Shire River. The current is at first broad and sluggish, and soon expands into the little Lake Pamalombe, whose flat banks are everywhere overgrown with tall reeds. Beyond this point the Shire continues its southerly course down to the edge of the terrace formation, whence it tumbles over a series of cataracts in the direction of the Zambese. At these cataracts, which have received the name of the Murchison Falls, all navigation, whether for boats or steamers, is completely ariested, but is resumed lower down and continued with little further obstruction as far as the sandbars blocking the moutbs of the Zambese. Throughout the whole of this stretch the only impediment to the traffic are the accumulated masses of tangled aquatic vegetation-nympheacea and other plants, such as the pistia strutiotes and alfasinha, or "lettuce" of the Portu-

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d land, e axis of le exisfrom the a. The e where partingat but a direction les down drainage through aree feet. ht subsiy Nyassa outlined, gradually

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 sluggish, re everyinues its tumbles cataracts, zether for continued tbs of the nt to the beacea and be Portu-guese, through which the boatmen find it difficult to penetrate, especially during the months of May and June, when the vegetable growth is most vigorous.

South of the confluence of the Ruo or Luo, which flows from the Blantyre uplands, and which is navigable by boats for 50 miles, a huge nearly isolated and

Fig. 73.-Zambebe and Silirr Confluenge.
Scale 1 : 800,000.

forest-clad mountain springs from amid the surrounding swamps to an altitude of no less than 4,000 feet. Such is the superb Morambala, or "Sentincl Mountain," a conspicuous landmark fur the boatmen and riverain populations of the Lower Zambese for a circuit of 60 miles. Thermal springs, very efficacious for some disorders, are said to well up at its foot.

## The Zamifse Delta.

The united current of the Zambese and the Shire, which at certain points is stated to be no less than eight miles wide from bank to bank, flows below the confluence in a south-easterly dircetion ; it theu trends to the south and again to

the south-east before ramifying into several distinct branches to form its "goosefoot" delta. All the waters ultimately find their way seawards ilirough numerous mouths, sueh as the Melambe on the south, the Iuhumissenge or Kongoni towards the north, the eastern Lu-Ebo, the Muzelo or Catherine, the Inhamiara, and others. The western Lu-Ebo, or Luasse, a channel winding to the coast on the extreme south, is connected with the delta proper only during the periodical
inunlations. Of all the branches the most copious is the eastern Lu-Ebo, the true Zambese, although shipping most usually prefers the Inhamissengo, where the depth ranges from 10 to 23 or 24 feet, according to the season and the tides. But all the channels are frequently modified by storms and floeds, and both on the north and the south side of the delta are seen old waterc ses which were formerly mouths of the erratic river, but are now merely winding streams or backwaters, either completely separated from the Zambese or only temporarily connected with it during the floods. Sea-going vessels can easily ascend the Lower Zambese as far as the foot of Mount Mirambala, sailing before the east wind which mostly prevails in this region.

Geologically the delta is far more extensive than it appears at present. It may be said to begin almost immediately below the Shire confluence, where the channels of backwaters and false rivers, survivals of an ancient current, and still flooded during the inundations, are seen to diverge gradually from the mainstream in the direction of the east. Here they effect a junction with the sluggish current of the Rio Muto, which formerly communicated with the Quelimane estuary, but which is now completely obstructed by alluvial deposits and aquatic plants. Hence the necessity of seeking another channel or outlet for the riverain craft, which was found somewhat lower down the Zambese at a portage leading to the Barabuundu, better known as the Kwa-Kwa (Qua-Qua), or "Hiver of Forced Labour," because the natives are compelled to deepen or keep it open by dredging. This watercourse winds in the direction of Quelimane, which seaport it reaches after a course of over 70 miles. For more than half of this distauce above the port it is navigable for steamers drawing 6 or 7 feet of water, and the whole distance for light craft.

During the annual inundations of the Zambesc, its banks are completely flooded, and the mainstream thus becomes united with the Quelimane River through an intricate network of marshy depressions. The river has moreover recently shifted its bed, and now reaches the coast some 6 miles farther north, that is, so much nearer to its periodical Quelimane branch. The abandoned channel is still visible, now transformed to a circular lagoon. The same erosive action is still progressing northwards, and the "African Lakes Company" has ulready had to forsake a building which till recently stood about half a mile from the bank, and erect another some considerable distance farther to the north. Should this northward tendency be continued much longer, the Zambese will effect a permanent junction with the Kwa-Kwa, and the original delta will be restored to its full dimensions. In any case a navigable communication might easily be establi-hed between the Zumbese and Quelimane by cutting a canal through the intervening low-lying portage.

Southwards also the Zambese communicates during the inundations with several streams traversing the Gaza territory. Here the junction is effected by a lagoon belonging to the Zangwe tributary to its lower course, and by a succession of channels and backwaters extending as far as the River Pungwe, on the Sofala coust.

## Camate of the Zambese Basin.

In such a vast area of drainage as that of the Ku-Bango and Zambese river systems, the climate naturally presents many contrasts according to the aspect of the land, its general relief and distance from the sea. About the region of the farthest sources, comprising a portion of the plateau where the Cuanza and the Kassai also take their rise, the climatic conditions are the same as those of the Angolan uplands. Here the rainfall is abundant, thanks to the moist west winds from the Atlantic; but the transitions are at times very sudden from heat to cold. So also on the extensive level plains traversed by the Lower Ku. Bango, cool weather alternates with intense heat, ulthough here little moisture is precipitated by the normally dry atmosphere. These regions form, in fact, a northe:n continuation of the Great Karroo and of the Kalahari Desert, and alnost everywhero present nearly the same meteorologicul phenomena.

Farther east, the Middle Zambese region in the same way reproduces the conditions provalent in the Transvaal, while the zone of coastlands, being abunduntly watered and exposed to the regular action of the trade-winds and marine breezes, belongs rather to tropical Africa. The fierce hurricanes so destructive on the high scas, are unknown on this seaboar' of the Yamhere delta. The most carefully studied part of the whole basin ic that of Lake Nyassa, where European missionaries have been stationed for some years. Here the rains, which begin in December and lust till April or May, are sufficiently copious, even in a comparatively dry year, amounting to 90 inches at Bandawe. Towards the south the rainfall gradually diminishes, being scarcely more than 33 inches at Tete, on the Zambese.*

## Flora.

A striking contrast is presented between the wealth of the vegetation on the seaboard and its poverty farther inland. To the rich flora of the ceastlands the aspect of equatorial forests is imparted by the great variety of palms, including even a species of the banyan, or as it is here called, the "many-legged tree." But in the interior an exuberant vegetation occurs only in the districts more favoured by a copious rainfall or an abundant supply of running waters. Such are, for instance, the summits of the cliffe exposed to the heavy vapours constantly rolling up from the bottomless cha $\times m$ of the great Victoria Falls.

Speaking generally the Zambese basin, which is entirely comprised within the torrid zone, yiclds in richness of vegetation to that of the better watered region of the Congo. Its flora is mainly composed of forms common to that botanical zone, but also includes a few species which have penetrated from the Cope northwards beyond the tropic of Capricorn. One of these immigrants is the

[^25]silver-tree (levendendion argenteum) which is met as far inl due the pper Zambese. A number of plants belonging to the Cape flora als, ceur on the highlands skirting the shores of Lake Nyassa at elevations ranging from 5,000 tu 3,500 feet ubove the sea. The southern limits of the fluvial busin coincide very nearly with the zone over which the baobab has spread.

## Fauna.

In certain parts of the Zambese region the fauna is still surprisingly rich both in numbers and diversity of forms. At the time of Livingstone's explorations, before the white man with his fireurms had yet invaded the land, the multitudes of animuls roaming over the riverain savannahs is deseribed as "prodigious," and these countless herds still grazed fearlessly near the haunts of man. The elephant, buffalo, and wild boar had not yet learnt to avoid his presence, and the guinca-fowl in flucks of muny hundreds perched confidently on the neighbouring trees.

According to Holub, the naturalist, who has most carefully explored the Zambese basin, this region, so abounding in animal forms, has no less than seven species of rhinoceros, four of lions, and three of elephunts. Even quite recently Capello and Ivens still speak of the plains watered by the Liba as a vast " zoological garden," where the sportsman has his pick and choice of the game needed to supply the wants of the expedition. In some districts lions are so numerous that at night they lay siege to the villages, and keop up an incessant roar till the "small hours." But in other parts of the fluvial basin the hunter has already done his work of extermination. Prudence has taught the lion to be dumb; the hippopotamus, which snorted loud enough to be heard half a mile off, has learnt the wisdom of silence, and now swims about with bated breath, or at sight of the canoe takes refuge amid the tall reeds.

Since the introduction of firearms some wild mammals have already disappeared altogether in the hunting-grounds visited by Europeans. The white rhinoceros, a gentle and trusting beast, has been rapidly extirpated; but the bluck species, which bre a savage temper, still survives in districts remote from the beaten tracks. On the northern slope of the Zambese neither, the ostrich nor the giraffe is now seen. Both of these animals appear to have been arrested in their migrations northwards by the course of the river, for they are still numerous farther south in Mashonaland and the Kalahari Desert. According to Oswell and Livingstone, the wild animals of Austral Africa diminish in size in the direction from south to north. Thus the antelopes become smaller and smaller as they approach the equator, and even the elephant loses in bulk, while by a singular contrast his tusks acquire a larger growth. A marked difference has also been observed in the proportions of domestic animals of both regions. The horned cattle bred by the Bechuanas are much larger and stronger than those belonging to the Batokas of the Zambese. The rule, however, has its exceptions.

In some of the river valleys of the Upper Zambese, and probably also in the

Kafukwe busin, there exists an extremely curious apecies of antelope, whose broad feet are better adapted ior swimming than for bounding over the plains. These quishobos, ns they are called by the people of Bihé, pass nearly all their life in the water, in whioh they aro often scen to dive, leaving nothing above the surface except their two twisted horus. At night they leave the river to browse on the surrounding grassy piains. Their absonce from the lower reaches of the river muy perhups be attributed to the crocodiles, which are here very numerous and exceptionally vorucious. The nakong, another almost amphibious speeies of antelope, inhabits the muddy swanns which roceive the discharge of the Chobe River. The enormous size of his foot, which is no less than twelve inches to the extremity of the hoof, enables the nakong to pass easily over the trembling quagmires without sinking. Like the quishobo, he also grazes at night, concealing himself during the day amid the tall reeds. When pursued he plunges into the stream, leaving nothing exposed except his back-curved horns and the tip of his nozzle. The nativos set fire to the reeds in orler to compel the nakong to leave his marshy lair; they report that he will allow his horns to be consumed before quitting the water and resuming his flight.

Except in the Upper Zambese, where animal life is comparatively rare, the main stream as well as the riverain lagoons teem with several kinds of fishes. One of these, the Mosheba, which inhabits the waters of the Middle Zambeso, has the power of flight, like the oceunic Hying-fish. After the passage of boats it darts into the track, and rising above the surfuce by the strength of its pectoral fins, follows in the wake for a distance of several yards. The fish-eagle (cuncuma rocifer') destroys an enormous quantity of fish, far more than he can possibly consume. Usually, he seleets only the dainty morsels on the back of the animal, and often does not even take the trouble of capturing the prey himself. When he spies a pelican with its pouch diluted with store for future consumption, he drops like a plummet, all the time beating his wings. This eo scares the pelican that it ruises its head and opens wide its greut mandibles, from which the eagle, passing like a flash, snatches the captured prey.

All the marshy tracts are frequented by flocks of aquatic birds an numerous as the penguins and seagulls on certain oceanic islands. The parrel africana, one of these fish-euters, is provided with such broad feet that he is able to advance into mid-stream on the outspread lotus leaves without bending them, walking; as it were, on the surface of the water as on solid ground. The Zambese waters are also infested by crocodiles, which are here extremely dangerous, thus differing from their congeners in so many other rivers, where they never willingly attack man. Every year reports are constantly heard in the riverain villages of women and children snapped off on the banks of the streams, of travellers and boatmen killed or mutilated by these voracious reptiles, which in the lower reaches of the Zambese are said annually to devour about two hundred and fifty natives. Amongst all the riverain populations any person wounded by the crocodile is regarded as impure, and expelled from the tribe to avert the calamity his presence would be sure to cause.
hose broad 218. These life in the he surface wse on the the river nerous and es of antepobe River. , extremity nires withself during am , leaving zzle. Tho his marshy puitting the ly rare, tho Is of fishes. ambese, has of boats it its pectoral le (cuncuma ossibly conanimal, and When he n , he drops lican that it gle, passing iumerous as cana, one of dvance into lling; as it waters are fering from attack man. women and tmen killed hes of the fty natives. crocodile is his presence

barotse types.

## Inhabitants of the Ku-Bango, Noami, and Upper Zambeee Regions.

The region of the great divide where the headstreams of the Ku-Bango and Zambese take their rise is no more a parting-line for its human inhabitants than it is for the animal species. On both slopes dwell tribes of the same race and of the same speech, who migrate from one side to the other according to the vicissitudes of social life common to all. At present this migratory movement is setting in the direction from north to south. The Kiokos, who on the opposite slope are invading the Lunda territory, are also encroaching southwards on the Ganguella, Lushaze, and Amboella domains, and some of them have already been met as far south as the plains of the Lower Ku-Bango. In the Kassai basin they are gradually attracted beyond their ancient frontiers, chiefly by the inducements of trade; but the motive which, on the other side, impels them towards the south, is rather

Fig. 76.-Inhabtyants of the Waterparting between the Congo and Zanbbsbs. Scale $1: 4,450,000$.

the gradual disappearance of game from the formerly well-stocked huntinggrounds.

The Upper Ku-Bungo and the Ku-Ito valleys are occupied mainly by the Ganguellus, who are akin to those of the same name in Angola, and who, here as there, are divided into numerous communities, destitute of all political cohesion. A dialcet of the Ganguella language is also spoken by the Lushazes of the Upper Kwa-Ndo, who are noted as skilled agriculturists and artisuns, manufacturing highly prized iron implements, wicker-work objects, and woven fabries. Far less vain of their personal appearance, and devoting less attention to elaborate headdressing than most of their neighbours, the Lushazes still clothe themselves in wild beasts' skins and robes of macerated bast.

The Amboellas, also kinsmen of the Ganguellas, are spread in sinall groups over a space of at least 300 miles from west to east, throughout the gently sloping regions watered by the Ku-Bango, the Ku-Ito, and the Kwa-Ndo, 114-Ar
before these rivers emerge on the plains. The timid Amboella tribes shun the open plain, most of them seeking the seclusion of the fluvial islands or the marshy riverain tracts. Their reed huts, containing few objects beyond calabashes used for diverse purposes, are all erected on piles and defended by the stream or the surrounding quagmires. Although magnificent grazing-grounds cover the greater part of their territory, which is also entirely free from the tsetse pest, the Amboellas breed no cattle, their only domestic anim ils being some poultry. But they are excellent husbandmen, raising fine crops, usually of maize, haricots, manioc, sweet potatoes, groundnuts, gourds, and cotton; and, thanks to the great fertility of the soil, their industry generally enables them to keep well-stocked granaries. Being of an extremely gentle and hospitable disposition, they cheerfully welcome strangers visiting them, entertaining them with songs and music, and treating them as intimate members of the family circle.

To the migratory movement drawing numerous northern peoples down to the Zambese basin corresponds an opposite tendency, by which the Bushmen and Hottentot tribes are attracted to the Ganguella and Amboella domains in the region of the Upper Ku-Bungo. Of these the most important are the Mukassekeres (Mu-Kassekere), a timid folk, who dwell in the woodlands and are ever ready to take flight at the approach' of danger. Building no abodes of any kind, they encamp at the foot of the trees, living on wild berries, roots, and such animals as come within reach of their arrows. Occasionally they do a little bartering trade with the Amboellas, exchanging ivory and wax for manioc and other provisions. In some districts they have been enslaved; in others they are still hunted like wild beusts, and are accused of ull the crimes and outrages committed on them by their neighbours. Farther south, on the plains whic a gradually merge in the Kalahari Desert, wander other Bushman tribes, who ilso live on roots and game. But their favourite diet consists of bull-frogs and large lizards. They have even a trick for eompelling the boa to disgorge his half-digested antelope, finishing the meal in his stead.*

## The Ba-Yeye and Ba-Lunda Nations.

On the Lower Ku-Bango and the plain of the "Thousand Lakes" mention occurs of numerous groups, such as the Daricos, Ba-Vikos, Mukossos, and RaNajoas. The last named, instead of cabins construct platforms supported by tall piles, amid which fires are kindled to drive away the mosquitos. The Ra-Najoas are of Bechuana stock, like their western neighbours the Ba-Toanas, who about the beginning of the present century parted company with their Bamangwato kinsmen and sought fresh camping-grounds on the banks of Lake Ngami. Although far from numerous, the Ba-Toanas have become the masters of the land. But after first settling on the castern margin of the lake they have been compelled to remove their chief residence to the Lower Ku-Bango, settling in the midst of the surrounding swamps in order to escape from the inroads of the Matebele people.

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 and Raod by tall Ra-Najoas about the o kinsmen bough far But after apelled to idst of the people.The primitive population of the country, who are also of Buntu speech, are known by the name of Ba-Kuba, that is, "Serfs;" but their own tribal designation is the more dignified Ba-Yeye, or "men." These Ba-Yeye, who according to Chapman number as many as two bundred thousand altogether, are a peaceful, honest, and industrious people, who are chiefly occupied with fishing, hunting, and collecting salt from the surrounding salines. Their pursuits requiring them to be constantly wading about in the shallow waters, they have become attached to their swampy fens and lagoons, even founding their settlements in the midst of the reeds. The Ba-Yeye are very superstitious, and like the Damaras worship or invoke certain " mother trees." Amongst them, as amongst most of the neighbouring tribes, the stranger has to chonse a friend, who becomes answerable for his conduct to the community, and who provides him with food, an ox, and a wife in exchange for his commodities.

East of the Amboellas the whole of the alternately dry and swampy Lobale plains, ay well as the Upper Zambese basin, are inhabited by the Ba-Lundas, who are akin to the Ka-Lundas of the Congo basin, and who officially recognise the suzerainty of the Muata Yamvo, although their chiefs are practically independent. The national usages ure much the same on both sides of the waterparting between the Zambese and the Congo basins. The southern Ba-Lundas file their teeth and tattoo their bodies like the northern Ka-Lundas; like them, also, they go nearly naked, smearing themselves with the oils extracted from various oleaginous vegetable substances as substitutes for the more highly valued fat of oxen, which, when porcurable, is reserved for the chiefs.

As on the banks of the Kassai, the prevailing ornament amongst the Upper Zambese populations is brass wire. Great personages appear in pubhe with their legs laden with this metallic encumbrance, the fashion requiring them to walk swaying heavily from side to side, as if a great effort were needed to raise the foot. Etiquette is strictly enforced amongst the excessively ceremonious Ba-Lunda people. On meeting a superior in social rank everyone hastens to fall on his knees and rub his breast and arms with dust. Endless prostrations, all regulated by established custom, are exacted of those approaching the king, who is seated on a throne holding in his hand a fly-whisk made of gnu-tails. Both the Christian and Mohammedan styles of salutation have penetrated into the country, following in the track of the traders. Thus some of the Ba-Lundas salute strangers with a low. bow accompanied by the expression "Ave-ria," a corruption of "Ave Maria," while others utter the word "Allah!" as an exclamation of surprise.

Thanks to the fertility of their always abundantly watered territory, the Ba-Lundas enjoy a superfluity of provisicns, which they willingly share with their visitors. Profusely hospitable, they are at the same time of a peaceful, genial disposition. No truce of cannibalism has been discovered amongst them; neither do they slaughter women or children to accompany the departed chief to the other world. The Ba-Lunda women enjoy a relatively large share of liberty, the wives of the elders always taking part in the tribal deliberations, while many communitics are even governed by queens. At the death of these queens, the royal
residence, with the whole village, is abandoned, the natives rebuilling their huts and reclaiming fresh land in another district. Although unknown to European explorers, the Ba-Lundas long maintained indirect commercial relations with the Portuguese of the western seaboard through the agency of the Biheno people. The beeswax exported from Loanda and Benguella comes for the most part from their forests, where it is collected in bark hives suspended from the trees and protected by terrible fetishes from the rapacity of marauders.

## The Barotsf Emplre.

The various tribes inhabiting the Zambese valley properly so called, below the confluence of the Liba with the Kubombo, have been united in a single state among the South African peoples variously known by the name of Barotse (Ba-Rotsé), Uugenge, Lui, or Luina. Sebituani, founder of this empire, was a Basuto conqueror, who led a host of warriors vietoriously across the whole region comprised between the Orange and the Zambese, enrolling under his banner all the young men of the conquered tribes along the line of march. On reaching the Zambese and Chobe confluence, Sebituani and his Makololo followers took possession of this peninsular region, which being protected by vast swampy tracts served as the centre of the new kingdom, and was soon peopled by at least three hundred thousand souls. It was here that Livingstone visited them, and their capital, Linyati, a town of over fifteen thousand inhabitants, situated on the north bunk of the Chobe, becamo the centre of his explorations in all the surrounding Zambese lands.

But the missionaries who succeeded him met with less favour, and several of them having succumbed either to the effects of the climate or to poison, the report wus spread abroad that some salamity was pending over the Makololos. The storm was in truth already gathering. The Luinas, or Barotses properly so called, who hud reluctantly submitted to their foreign rulers, now broke into revolt, and falling suddenly on the unsuspecting Makololos, massacred them almost to the last man. Two only, with their wives and children, rere suid to have been spared in the whole peninsula. Terror-stricken by the news of the overwhelming disuster, the Makololos dwelling south of the Chobe fled westwards and sought a refuge amongst the Ba-Toanas settled on the banks of Lake Ngami. By them they were received with apparent friendship, but as soon as the unarmed suppliants veutured within the royal enclosure, they were suddenly attacked and slaughtered by the Ba-Touna warriors. Thus perished the Mukololo nation. Their women were distributed amongst the conquerors, and their children brought up under other names in the villages and encampments of the Barotses.

But despite this change of masters, the kingdom founded by Sebituani was maintained at least south of the Chobe. The Barotses themsel ves did not venture to cross the line of natural defence formed by the surrounding marshes. But north of this limit they took the place of the Mukololos as rulers of the land, and soon after annexed the whole of the Mabunda (Ma-Mbunda) territory, which had been inherited by a queen too weak to maintain herself on the throne. When

Holub visited the Barotse kingdom in 1875, as many as eighteen large nations. subdivided into over a hundred * secondury tribes, were represented by their delegates at the court of the sovereign and the regent his sister. Moreover, a large number of fugitives from other tribes-Matebeles, Bamangwatos, Makulakasdwelt within the borders of the state, to which they paid tribute. From the Zambese and Chobe confluence to the northern frontiers there was reekoned a distance equal to a journey of from fifteen to twenty days, and the superficial area of the whole kingdom exceeded 100,000 square miles, with a population of probably about a million. Each of the tribes in the vast empire speaks its own dialect, but Sesuto, that is-the language of their exterminated Mukololo musters -serves as the common medium of generul intercourse, and as the official language of the state. The Makololos have disuppeared, but their inheritance has remained, and thanks to them the range of the Sesuto tongue has been enlurged tenfold.

The administrative system of the Barotse state is also, at least to some extent, a legacy from the Makololos; but the penal code and many practices are of an extremely sanguinury character, so much so that " no one grows old in the Barotse country." According to Serpa Pinto, the king is assisted by a council of three ministers, one for war and the two others for the foreign affairs of the south and the west, the latter having the management of all negotiations with the Portuguese on the west coast, the former treating with the English and Dutch powers in South Atriea. The regent, sister or mother of the sovereign, and like the king saluted with the title of "Lion," marries whom she pleases, her husbund taking the title of "Son-in-law of the Nation." Europeans are barely tolerated in the country, and allowed to cross the Zambese only at a single point. Nevertheless their influence is considerable. Europern clothes are now worn by most of the natives, having almost everywhere supplanted the uational dress of tanned skins and capacious robes or skirts.

The Barotses, properly so culled, inhabit the banks of the main stream between the Kabompo and Chobe conflueuces. They are skilled boatmen, with chest and shoulders highly developel compased with the lower members; but leprosy is a prevalent disease amongst them. The Zambese supplies them with abundance of food, including besides fish, the hippopotumus. the flesh of which animal is highly esteemed. Special hunters are also stationed at intervals along the banks of the river and lateral channels, whose duty it is to keep the royal household well supplied with this game.

The alluviul soil in this section of the river excceds in fertility all other parts of the valley, and yields magnificent crops of grain and vegetables. Cuttle also thrive well on the pasturages of the boltom lands, which skirt the escarpments of the plateau to the east und west. The rart of the fluviul valley peopled by the Barotres is in some places at least 30 niles broad, and throughout the whole of this territory "famine is unknown" (Livingotone). In order to protect themselves from the annual inundations, which enrich their land and make it another Egypt,

- In one place Holub speaks of "eighty-three," but in another he enumerates one hundred and four distinct tribes subject to the Barotse.
the natives are obliged to build their villages on artificial mounds, scattered like islands amid the inland sea caused by the periodical floods.

The Mabundas, who share the government of the country with the Barotess, inhabit the more elevated terraces which skirt the north side of the Zambese plains. All are very religious or superstitious peoples, invoking the sun, worshipping or paying a certain homage to the new moon, and celebrating feasts at the graves of their forefathers. Lelief in the resurreetion is universal, but it takes rather the character of a metempsychosis, the wicked being born again in the lower animals, the good in more noble forms, but nobody carinc to resume the human state. In this life provision may also be made for the future transformation by eating the flesh of the animal intended to be our "brother," by imitating its gait and its voice. Hence a Ma-Rotsé * will occasionally be heard roaring like a lion, in preparation for his leonine existence in the next vorld.

Of the other nations subject to the Barotse empire some are reduced to a state of servitude differing little from downight slavery; others have preserved their tribal independence, or at least a large measure of self-government for all internal affairs, but paying tribute either in cereals, or fruits, mutting, canoes, or other manufactured wares, or else such products of the forests and the chase as ivory, beeswax, honey, and caoutchouc. The Masupias (Ma-Supia) are serfs employed in fishing and hunting for the Barotess in the region about the Chabe and Zambese confluence. Farther south dwell the Madenassanas (Ma-Denassana), a people of mixed descent, resembling the Bechuanas in stature and physical appearance, the Central African Negroes in their features. Like the Masupias; they are enslaved hunters and peasunts, as are also the Manansas (Ma-Nansa), whose services form a bone of contention between the two neighbouring Matebele and Barotse nations.

A still more important reduced tribe are the Butokas (Ba-Toka), who occupy the left or north bank of the main stream above the Victoria Falls. All the Batokas of both sexes extract the incisors of the upper jaw on arriving at the age of puberty, and this practice, which, like circumcision among the neighbouring peoples, is performed in secret, has assumed a purely religious character. But when questioned as to the origin of the custom, they reply that its nbject is to make them look like oxen. It is noteworthy that the not yet evangelised eastern Damaras observe the same practice and attribute it to the same motive. The incisors of the under jaw, being no longer hindered in their growth by those of the upper, project forward and cause the lip to protrude, thus giving the natives a repulsive appoarance characteristic of decrepit old age.

In the Kafukwe basin, stretching north of the Batokas, dwell the Bashukulompos (Ukulombwe), a people who go naked, and are said to till the land with hoes of bardened wood. They distinguish themselves by their style of headdress from all other African tribes, amongst whom there nevertheless prevails such a surprising diversity of taste and fancy in this respect. Saturating or greasing their fleecy curls with butter, and mixing them with the hair of sundry animals,

- Ma is the singular, Ba the plural personal prefix ; hence $M a$-Rotse equals one member of the tribe,
$B a$-Rotse equals the whole nation. Ba-Rotse equals the whole nation. Cambese rorshipat the it takes 1 in the ume the sformanitating ring like
o a state ed their internal or other as ivory, mployed Zambese eople of ance, the enslaved 38 form a ations. o occupy All the $t$ the age hbouring 3ut, when to make 1 eastern ve. The those of ie natives Bashukuand with aeaddress ils such a greasing animals, f the tribe,
they urrango the whole in the form of cones of various sizes, some disposed vertically, others made to project forwards. Livingstone met a chief whose superb tiara, terminating with a little rod, towered to a height of three feet above his head. The only European travellers who have yet penetrated into the Bashukulompo country are Silva Porto and Holub. The latter was fortunately accompanied by his wife, whom the astonished natives took for a supernatural being. She was proclaimed queen by ons tribe, and on many occasions her presence saved the expedition from complete disaster.

East of the Bashukulompo territory stretches the North Manica country, a state which is quite distinct from the Manica district on the south side of the Lower Zambese. This region, which is contiguous to the Msiri territory, in the

Fig. 76.-Barotae Upiande.
Scale 1: 3,200,000.


Upper Congo basin, is governed by a king who, like so many other sovereigns in Nigritia, "never eats;" that is to say, no subject is permitted to enter his residence when he is at table. At his burial several of his wives are slaughtered und interred with him.

## Topography of Barotseland.

In the Barotse empire are met the first centres of population which may be said to possess any commercial or political importance. But most of these towns are displaced with each fresh accession to the throne. All public misfortunes are attributed to the baneful influence of the ground, and a more favourable site is consequently sought in order to escape from the evil spirits who are supposed to have caused the death of the last ruler: The inundations of the Zambese have
also destroyed many places by sapping the artificiul mounds on which they were built. In this way Nabiele, the ancient Barotse capital, has ceased to exist, or is represented only by a cluster of wretched hovels. Libonta, residence of the queens, visited by Livingstone, has also been dethroned, and Serpa Pinto, who passed close to its site, does not even mention it by name.

In 1878, when this traveller traversed the Barotse valley, the royal residence had been shifted to Lialui, some 12 miles to tho east of the river, and beyond the low-lying zone covered by the floods during the rainy season. Below the Nambwe cascades and rapids the new village of Sesheke (Kisseke, Shisheke), which succeeded to another Sesheke consumed by a conflagration in 1875, has in its turn beoome an imperiul capital, or rather a trysting-place for the chiefs and their retainers. On the other hand, Linyanti, formerly metropolis of the Makololo kingdom, has lost all its importance. It is now nothing more than a group of huts standing on the north bank of the Chobe in the midst of a maze of marshy streams and backwaters. At the time of Livingstone's visit in 1853 Linyanti was the largest market town in the interior of South Africa north of Shoshong.

At present the chief place in the Chobe Valley lies in the upper course of the river, and is known as Matamhyane's, from the name of its chief. A part of the trade of Linyanti has passed to the village of Mpalera (Impalera, Mparira, Embarira), which stunds on a sandy island at the Zumbese and Chobe confluence, above the Victoria Falls. In a neighbouring quagmire a copious thermal spring wells up, although covered by the periodical flood waters for three months in the yeur. Panda ma Tenka, a market lying in a thinly peopled district two days' journey south of the falls, serves as a sort of wayside etation on the route from the Limpopo to the Kambese, and is usually visited by the English traders from the south, by the Mambari, a half-caste Portuguese peoplo, and by the European missionaries. Here the Jesuits had founded a mission, which they have had recently to abandon.

## Matebeleland and Inhabitants of the Middle Zambese.

The territories of three empires converge at the gorge into which the Zambese plunges over the Victoria Falls. To the north and north-west stretches the territory of Barotseland; southwards lies the Bamangwato domain, comprising the plains which are continued westwards in the direction of the Makarikari swampy saline wastes; lastly, the kingdom of the Matebele (Ama-Ndebeli) nation occupies in the south-east the basins of the Gwai, Sanyati, Panyame, and Mozoe Rivers, the crystalline Matoppo Mountains whence these streams flow to the Zambese, and the whole of the opposite area of drainage southwards to the Limpopo. The Matebeles themselves, that is, the "Vanishing" or "Hidden" People, so named because concealed in battle behind their enormous oval bucklers, roam as masters over the whole land as far west as the shores of Lake Ngami, whence they procure their supplies of salt.

Despite their present collective national name, the Matebeles were till recently


not so much a nation as a military host. At first a mere detachment of Zulus, themselves a heterogeneous horde brought together from every tribe, the Matebele band reeruited itself under the terrible Musselekatsi from the young men of all the enslaved or exterminated races attacked during their marauding expeditions. In 1861, when the missionary Mackenzie visited the Matebele king, nearly all the veterans whom he saw in the army were Aba-Zanzi, that is, Kafirs originally from Nutal and Zululand. The warrioss in the prime of life were members of the various Bochuana tribes reduced by Musselekatsi during his ten years' residence in the region which is now known as the Transvaul. Lastly, the younger soldiers were Makalakas and Mushonas, originully from the Limpopo and Zambese waterparting which now constitutes the Matebele kingdom.

All these warriors had begun their career as captives. At first their only duties were to tend the royal herds; then they followed the troops to the wars somewhat in tho capacity of sutlers or conveyers of arms and provisions, on some expedition calculated to test their courage and enduranco. But once accustomed in this way to the sight of blood they became warriors in their turn, slaying men and women, as their own kindred had been slain. Until their assegais had "drunk blood" they were held as aliens and slaves, and the meat thrown to them was first rubbed in sand; they were not reckoned as men till their first victims had fullen. Like Chaka's Zulus, they were forbidden to marry or to bring up a family, for the ranks of the all-conquering host hud to be recruited exclusively from prisoners of war. A violent death alone was held in honour; the sick and ailing were put away and placed in charge of a medicine man, by whom they were either restored to the camp after recovery, or elso when dead thrown into the bush; those enfeebled by age were stoned.

Thus trained to pursue their human quarry, the Matebeles had become extremely skilful at their trade of butchers. According to the king's "great law," they could never retreat before any odds, and cases occurred of whole regiments allowing themselves to be massacred rather than yield even to overwhelming numbers. At the bidding of their master, warriors armed only with the assegai fearlessly attacked a lion or a buffalo, and often captured it alive. Proud of their wounds, proud of their mirtial deeds, the Mutebeles were abject slaves in the presence of their sovereign, whom they hailed with shouts of "Great King : Ruler of Men!" Yet, by a strange contrast, this very shief, whose most glorious title was that of "Cannibul," was personally of an extremely sensitive nature. He disliked the sight of suffering, and in his presence the herdsmen had to lay aside the lash, guiding their droves with large branches or encouraging them with kindness.

Such a system could be kept together only by constantly renewed campaigns. The army itself could procure supplies only by pillage, recruits only from the captured in battle, although their country was one of the most fertile in the world. War being their exolusive pursuit, the Matebeles did not even await $t$ '...ir ruler's orders to fly to arms; they often set out spontaneously to plunder the surrounding lands, killing the men, carrying off the women, childron; and catc.9. All traditions
huving been broken by expatriation and the military life, the Matebeles no longer remembered either the songs, the sayings, or the beliefs of the various ruces whence they sprang. Having no religious rites of their own, they left the sacrifices, charms, and incantations to the professional wizards of the various districts over which they roamed.

Nevertheless a certain sentiment of nationality has at last been developed amongst these heterogeneous communities, while the state of chronie war has at the same time had to give place to a social system more in harmony with that of the surrounding agricultural tribes. Even before the close of Musselekatsi's reign the laws forbidding the fighting men to marry had already fallen into abeyance. Family groups have now been formed, and the warriors have become field labourers. But they still retain their peculiar heuddress, now become the emblem of their manhood. Through the influence of the missionaries and traders commercial routes have been opened across Matebeleland, while the neighbourhood of disciplined British and Dutch troops inspires counsels of prudence in the heir of the great conqueror. He may even have reason to fear that the coveted auriferous deposits abounding in his territory may be the means of at lust reducing him to a state of vassalage. When envoys from the Transvaal Republic cane to ask Musselekatsi's authorisation for European miners to survey the land they were met with a flat refusal. "Tuke these stones," he said, "and load your waggons with them. But I will have no Dutch women, cattle, sheep, or goats brought hore, nor any houses built in my country!"

## Tue Ba-Nyai, Makalaka, and Mashiona Nations.

A certuin number of tribes tributary to the Matebeles are still so far removed from the royal residence, or else so well protected by their natural defences, that they have been able to preserve some measure of political independence. Such are the Bu-Nyai people, who occupy the southern slope of the Zambese valley abóve the Kafukwe confluence, and who usually select rocky strongholds as the sites of their settled abodes. The Ba.Nyai are generally a fine race of men, tall, strong, and somewhat proud of their relatively light complexion. They aro also distinguished from most of the neighbouring populations by their love of cleanliness, and, like so many others, pay great attention to their headdrass, dividing the hair into little tresses, which they twine round with the bark of a tree dyed red. The hair thus disposed in stiff little tufts gives them an aspect somewhat recalling that of the Egyptians of three or four thousand years ago. When travelling they gather all the locks in a single knot on the crown of the head.

Unlike their more servile neighbours, the Bu-Nyai choose their chief by general suffrage. The elected king is no doubt as a rule the son of the last king's sister; but the electors, dissatisfied with this candidate, have not unfrequently sought a ruler amongst some other communities. When the popular choice is announced the new chicf at first declines the honour, as if the burden were too great to be borne. But this is merely a formality or a legal fiction; the authority

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chief by ast king's requently choice is were too authority
remains in his hands, and with it the wives, children, and effects of his !redecessor. In no other African tribe do the women enjoy no much influence as amongst the Ba-Nyai. In all domestic affuirs the decision rests with them. When a young man seeks a girl in marringe he addresses himself to the mother, and if nceepted by her, quits his own roof and comes to reside with his mother-in-law, whose faith. ful servant he becomes, and towards whom he is expected always to pay the greatest deference. In her presence he dare not be seated, but falling on his knees squats on his heels, to show his feti being regarded as a great offence. The children are the mother's property, and the husband, whenever tired of his domestie life, mny return to his own home. But in that case he has to renounce all puternal claims and privileges, unless they have been purchased by the gift of a certain number of cows and goats.

The Makalakus and Mashonas, former masters of the land now ruled by the Matebeles, have been for the most part exterminated, while the few warriors are reduced to a state of servitude. The Makalakas were the greatest sufferers. Dispersed by the Matebele irruption, some towards the Zambese, some to the Limpopo or the Kuluhari Desert, they have forgotten their very languago, and now speuk only a debased Zulu dialect. Although formerly excellent husbandmen und skilled blacksmiths, they have in many places lapsed to the primitive ondition of hunters, living on the spoils of the chase, or even on pillage. Whey have thus, in two or three generations, reverted to such a state of savagery that they are no longer able to build themselves huts. Nevcrtheless the Makalakas still continue, as of old, to be honourably distinguished above all their neighbours for their domestic virtues and consideration for their women. The wife is highly respected, and oaths are taken in the name of the mother. Soon after birth, however, the women are subjected to an extremely cruel process of tattooing. On the breast and lower parts alone the operators make over four thousand incisions disposed in thirty parallel lines, und if the skin is not then sufficiently ridged and blistered the scarification hus to be repeated.

The Makalakas bury their dead in caves, but never allow strangers to be interred in their territory. Hence the followers of the two explorers Oates and Grandy, who had died in the country, were obliged to carry their bodies beyond the fronticr.

The Mashonas, who constitute the substratum of the population on the Zambese or northern slope of the uplands, have been better able to resist oppression, because their industry renders them indispensable to their new masters. Although, like the Makalakas, much degenerated, and by the Matebeles regarded and spoken of as Masholes - that is, "slaves," they alone practise the industrial arts, till the ricefields, make the household implements, weave the cotton fabrics, cut and embroider the leather shields, and forge and sharpen the assegais and other weapons. Smallpox has made fearful ravages amongst them, and this disease is so dreaded that its victims are often thrown alive into the bush.

Some of the Mashona communities, protected by the mountainous nature of the land, have been able to set up independent republics. But they live in constaut

## SOUTH AND EAST AFRICA.

terror of the Matebeles, and take refuge, with their active little cattle, on isolated crags, the only approach to which is blocked by strong palisades. Their huts, raised considerably above the ground, cau be entered ouly by means of notched poles. They have good reason to fear the attacks of the Matebele warriors, who "approach as stealthily and as invisibly as snakes, crawling as closely on the ground, and concealed by the undergrowth, watch the movements of their intended victims, thr timid Mashonas. Then, when a favourable opportunity occurs, up they rise like a wild black clold of destruction. Hissing and shrieking their fiercest battle-cry they bound and leap from rock to rock, dealing with fearful precision the death-giving blow of the assegai, and ever and anon shouting with

Fig. 77.-Chief Triben of the Zambese Babin. Scale 1:22,000,000.

thrilling ecstasy their terrible cry of triumph as they tear out the yet beating hearts of their victims." *

Amongst the wandering outcasts whom the traveller meets in Matebeleland, some are commonly known as Bushmen and Hottentots, whatever be their real origin. The Ama-Zizi, conjurers and medicine men, appear to be really of Hottentot stock. Some of the natives, known to the Portuguese by the name of Pandoros, have acquired great influence over the other blacks by their magie arts. They frequently withdraw to the woods in order to assume their true form of wild $b$ asts, but never condescend to show themselves abrcad exccpt in the oppearunce of men.

Topography of Matebeleland.
The centre of the Matebele empire, whose population is variously estimated at from 200,000 to $1,200,000$, is situated within the basin of the mainstream, near

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 yet beating Matebeleland, be their real ly of Hottenof Pandoros, s. They freld b asts, but e of men.
estimated at astream, near
the sources of the Um-Kosi, which, under another name, discharges into the Zambese over 60 miles above the Victoria Falls. Gubulucayo, the royal residence, formerly stood in the neighbourhood of the granitic water-parting between the Zambese and the Limpopo. But like most of the native towns in the interior of Austral Africa, its site has been changed, and Bulurayo, which is the more correct form of the word, now lies somewhat farther to the north. The royal residence, a house of European construction, crowns a hill in the centre of the village, and is encircled by a number of hive-shaped huts, all comprised within a stout pulisade. The dwellings of the traders are scattered over the surrouuding plain. Besides these traders, who have settled in the neighbourhood of the capital, several others have attached themselves to the king's suite, in order to supply the wants of his off. .als and warriors. Hence they generally accompany the court on its frequent journeys to Inyati and the other towns which follow towards the north-east and the south-west in the hilly Matoppo district.

Both Protestant and Catholic missionaries have also penetrated into the Matebele territory, and to these have now been added the miners, who had hitherto long been refused admittance to the country. On the other hand a large number of temporary emigrants proceed every year in search of employment to the British and Boer states beyond the Limpopo. The Tati mines, the first that were discovered in the Limpopo basin, are now worked by a company with its head management at Cape Town. Here have been found the traces of ancient mining operations carried on by some now forgotten people.

Numerous villages belonging to the Makorikori tribe lie to the north of the Matebele and Mashona territories in a rugged mountainous region, whence impetuous torrents flow towards the Zambese. The Makorikori, no less industrious than the Mashonas, are specially noted for their skill in the treatment of leather, which they draw out in narrow strips and then twist and plait into all kinds of ornaments. The women pierce the upper lip for the insertion of a ring made of tin wire, which is sometimes embellished with pearls.

Farther north, in the valley of the main stream, dwell the Mtande people, whose women also pierce the upper lip, into which they introduce the jaja, an ivory or wooden ring. This district lies within the zone of the tsetse-fly, which the women collect and dry, reducing it to a powder with the bark of a certain root, and mixing the preparation with the food supplied to their domestic animals, goats, sheep, and dogs. On the opposite, or left side of the Zambese, certain ruins still mark the limits of the territory formerly occupied by the Portuguese in the interior of Africa. These are the remains of the ancient town of Zumbo, which, however, was far less a town thar a rural market-place. During the season thousands of native dealers assembled here to purchase European wares from seven or eight so-called "Canarians," that is merchants from Goa, in the Kanara country on the west coast of India. During the period from 1836 to 1863 Zumbo remained completely abandoned by the Portuguese; but, since 1881 it has again been occupied, and is now the residence of a Capitão Mor, or head governor. Hence it is again resorted to by traders of various races, who find customers among the members of the sur-
rounding Basenga (Ba-Senga) tribe. This market-place has been well chosen at the confluence of the Lua-Ugwe and Zambese, below that of the Kafukwe, in a fertile and well-timbered country, encircled by picturesque hills. Zumbo can scarcely fail to recover its former importance whenever the Portuguese carry out the project of estublishing new factories along the course of the Upper Zambese, and working the coal, iron, and gold mines of the surrounding district.

Tete (Tette), covering the slope of a hill on the right bank of the Zambese, is at present the most inland town occupied by the whites, or Mazungos, as they are called by the natives. The European houses are all grouped within the ramparts under the guns of the fort, while the huts of the blacks, made of mud and foliage, are scattered over the outskirts round about the wulls. This Portuguese town was formerly a prosperous place, doing a large trade in gold, ivory, cereuls, and indigo. But it was ruined by the slave-hunting expeditions, which left no hands to till the land and gather the crops. At present it is little more than a group of wretched hovels, where "solitude reigns supreme. On every side you see the wasting work of Time's relentless hand. You see it in the crumbling ruins of the houses at one time inhabited by prosperous merchants. Indigo and other weeds now rise rank umid the falling walls, and upon spots where houses once stood. You see it in the ehurch which has now crumbled to the ground. Departed glory is knelled to you by the bells which toll from the slight structure where the Jesuit fathers and their small flock now perform the rites of their creed."*

The little importance still enjoyed by Tete is derived from its position as a garrison town and fortified outpost in the midst of a more or less hostile native population. It has occasionully been cut off from all communication with the coast by the incursions of the predatory Landins, or Zulu marauders. But the surrounding district has the great advantage of being entirely free from the tsetse, or pepse, as this scourge is called in Zambeseland; but stock-breeders have hitherto turned this great advantage to little account. The riverain tracts on the opposite side are extremely fertile, and here most of the rich traders had their residences.

The Tete district, both north and south of the Zambese, promises one day to become one of the most important mining regions in the whole of Africa. Here are extensive coalfields, as well as auriferous deposits and rich iron ores, long utilised by the Basenga and Makulaka blacksmiths. The Serra Maxinga (Mashinga Range), which rises northwards above the surrounding solitudes, was formerly worked by Portuguese miners. Here the rock containing the precious metal is said to be so soft that the women are able to crush it between two blocks of wood, and then wash it for gold. Auriferous deposits also occur to the south of Tete, in the Makorikori territory, and especiully in the valleys of the Mozoe and its uffluents. Paiva de Andrada describes as a sort of future Eldorado the Shangamira district, which Muuch had previously designated by the name of the "Emperor William Mines." A few ruins of old monuments are scattered over these goldfields, where, according to Kuss, the natives are in the habit of sowing nuggets in the confident hope of gathering a rich golden harvest.

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\text { - Kerr, op, oit. ii. p. } 42
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ition as a tile native 1 the coast $t$ the surthe tsetse, e hitherto e opposite sidences. one day to ca. Here ores, long (Mashinga formerly is metal is 8 of wood, of Tete, in e and its bangamira " Emperor bese goldg nuggets

Further auriferous deposits were brought to light by Mr. F. C. Selous during an exploring expedition to the Mashona country, from which he returned in January, 1888. A considerable truct of alluvial gold-fields was discovered, besides a very remarkable excavation in solid rock, which Mr. Selous believes to be a mine of very uncient date. On this subject he writes: "At Sinoia, near the river Angwa (a tributary of the Manyame), there is an immense circular bole about a hundred feet or more in depth and sixty fect or more in diameter, at the bottom of which is a pool of water which extends some hundred and eighty feet into a vast cavern in the rock. The water is of the most wonderful colour-a deep cobalt blue-and very clear, as pebbles are visible at a great depth on the bottom. There is a slanting shaft or tunnel running at an angle of about forty-five degrees from a point about a hundred yards distant from the top of the hole, which strikes the bottom of the latter just at the edge of the water. We are inclined to think that all these excavations are the result of old gold-workings, and that a vein of quartz has been worked out down the tunnel, and that eventually a spring was tapped, the water of which, welling up from below, has formed the subterranean lake. If the whole thing is the work of man, a truly extraordinary amount of labour must have been expended in this place. The natives have built a stockuded town round the old gold mine, or whatever it is, and go down the tunnel to draw water. We bathed in it and swam up the cavern to the other end of the pool; the water was !uit warm. The rock on each side is covered with innumerable scorings, which les $\quad \because$ they had been done with some kind of iron instrument."*
$\therefore$...ala, or Sao-Marçal, the " moribund," which lies on the right bank of the Zumbese, at the foot of a high bluff, and over against the navigable Ziu-Ziu branch communicating with tho Shire, is even a more decayed place than Tete. It has often had to pay tribute to its Umgoni (Angoni Zulu) neighbours, and even to barricade itself at night against the lions. The climate also is unhealthy, the atmosphere being charged with malarious vapours rising from the stagnant waters left by the river, which is here gradually shifting its bed in the direction of the north. Hence it has been proposed to remove the town to the left or north side of the Zambese, which is swept by the current, without leaving any lagoons or sluggish backwaters.

## Inhabitante of the Nyassa and Shire Basins.

South of the Zambese the military empires of Gazaland and Matebeleland were founded by warlike Zulu conquerors, advancing froin the south. North of the river vast territories have also been occupied by invaders of the same martial race. But being here divided into independent bands, without any national cobesion, they have been unable to found any powerful states. These Kafirs, variously known as Mavitis (Ma-Viti) and Mazitus (Ma-Zitu), are the Munhaes of Gamitto, and are also called Mangones (Ma-Ngone), a name almost identical with that of the Umgoni invaders and conquerors of the region comprised between the

[^28]Zambese and the Limpopo. In appearance also they closely resemble the southern Zulus, and probably at no very remote date dwelt in their neighbourhood. They speak the sume language, which even has a "click" sound, resembling that of the southern Zulu-Kafir idiom. Their warriors arrange their hair by means of gum and an argillaceous ochre in such a way as to form the curious circular nimbus by which the Zulu fighting men are also distinguished.

I'hs well disciplined Muviti hordes ulways rush upon the cnemy without waiting to reply to volleys of musketry or arrows, and fight at close quarters with sword and assegai. But although they have crossed the Zambese they have not penetrated so far north us other branches of the conquering race, for tho formidable Vua-Tutas of the Unyamezi country, on the east slope of Lake Tanganyika, also came from the region of Natul or Zululand, and most African historians agree in regarding as belouging to the same race the terrible Jaga hordes, who overran the kingdom of Congo towards the close of the seventeenth century.

The Maviti of the Nyassa region carried out their work of destruction with terrible thoroughness. Passing to the north side of the Zambese towards the middle of the present century, they overran the Rovuma and Rufiji territories in rapid succession, burning the villages, slaughtering all adult men, enrolling the young warriors in their own ranks, and selling the women to the slave-dealers. When driven farther inland the devastating Maviti hordes at last settled down in the hilly regions west of Nyussa, which extend towards the sources of the LuaNgwa, while those left behind on the east side of the lake gradually merged in the surrounding indigenous populations.

Although much reduced in strength, the fighting bands, which still held together, continued till recently to spreud havoc amongst the Wa-Chungu and Marimba (Munganya) peoples dwelling on the shores of Nyassa. The villages exposed to their attacks are now protected by double and treble enclosures of stout palisades, while others have been built on piles in the lake, or else on strongly fortified narrow headlands. The English have also mude a special treaty with the Maviti, binding them to respect the European stations. Some Mohammedan practices have alrcudy been adopird by these pagan Kafirs. Funerals are conSucted according to the Moslem rite, and the grave is always turned towards the holy city of Mecca. The todies of slaves and ariminuls, however, are still thrown into the bush, where they are supposed to te devcured by the «izards in the form of hyænas.

## The Eastern Makololos.

In this region there is a great complexity of tribes, often differing greatly in their usages and language. No less than seven different forms of speech are current along the west side of the lake.

The Makololos of the Shire, between Nyassa and Zambese, present a remarkable instance of the way distinct tribal groups are often developed in the interior of the continent. Were their history not well known, these Makololos would certainly
be regarded as of the same race as the Makololos of the Chobe Valley, who, after entering that district as conquerors, wore almost entiroly extirpated or driven west by the larotses. But, although not belonging to this group, the Makololos of the Shire have at least preserved the same name. In 1859 Sekeletu, ehief of the western (Chobe) Makololos, placed under the guidance of Liviugstone some twenty youths, with orders to make their way to the coast, and fetch thence a powerful medicine against leprosy, from which the king was suffering. Of this little bund two members alone were of Makololo stock, all the others belonging to various conquered tribes, such as the Barotse, Butoka, Baselea, like most of the warriors enrolled under the Makololo invaders. Finding it inconvenient to return to their sovereign, Livingstone's party settled on the right bank of the Shire, below the falls, choosing one of their number as chief. Under his leadership they became conquerors in their turn, and at the same time retained the name of Makololo, of which they were naturally proud, while fugitives from numerous other tribes hastened to place themselves under their protection. Thanks to the moral influence of Livingstone, they abandoned the practice of slave-hunting, prevalent amongst so many of the surrounding peoples, and the security enjoyed under their government in a few years attracted to the district considerable numbers of runaways and others from all quarters.

Thus was constituted, in less than a single generation, the powerful tribe of the eastern or Shire Mukololos. At the time of Young's visit in 1876 all the riverain valleys lying between the last cataract and the Ruo confluence were subject to their rule. In all these communities the national salutation was the English "good morning," perpetuated since the time of the famous missionary and explorer, under whose guidance the founders of the new state had originally left their homes in the west. Young pays a tribute of admiration to these industrious Mukololos for their strict honesty and love of work. When he had to transport above the cataracts, piece by piece, the steamer Ilalu, the first ever launched on Laké Nyassa, he had to employ a whole army of some eight hundred porters, who plied their work free as air, far from all supervision, along a rough road, where anything might have caused a mishap. Yet at the end of this long portage of 60 miles every piece, to the last rivet, had been faithfully conveyed to the upper reaches without a single accident. The men were perfectly satisfied; all had worked with a will, not one attempting to shirk his share of the labour, for which the only reward was a few yards of calico.

The bulk of the Makololo nation consists of members of the Maganya (MaGanya, Ma-Nyanja) tribe These natives, whose name means "Lake people," are still found dwelling in distinct communities among the uplands filling the triangular space comprised between the Zamliese and the Shire. Generally confused with the people at one time famous under the name of Maravi, the Maganyas are noted less for their prowess than for their intelligence. They display great skill at wickerwork, forging, and weaving, and also till the land wilh extreme care. Men, women, and the young folks all work together in the ficlds, while the children disport themselves in the shade of the neighbouring trees. The Maganyas 115-AF
clear the land much in the same way as the backwoodsmen in America. Felling the trees with the axe, they makea great bonfire of the heaped-up branches, and when the ashes have been blown about by the wind they sow the corn between the still standing eharred stumps. When tracts eovered with tall grasses have to be reelaimed they remove the top soil, burning it tngether with the herbage in order to enrich the ground. Mapira, or sorgho, is their chief erop, but they are also acquainted with nearly all the other alimontary plants of Central Africa, as well

Fig. 78.-North End of Lake Nyagsa. Scale 1: 1,900,000.

as with tobacco, hemp, and two species or cotton, the kaja and manga, that is to say, the native and foreign.

Except in time of mourning, all the Maganya women wear the pelele, as they call the jaja, that is to say, the dise or ring inserted as an ornament in the upper lip. The material is either of wood for the poor or of tin and ivory for the upper classes, while in size this frightful incumbrance rangee from two or three to as many as five inches in circumference. The action of laughter causes the lip to rise, concealing both eyes, but revealing the nose through the opening, as well as the whole row of teeth all filed to a point. But it is even worse in the case of widows, whom fashion compels to remove the lip-ring, when the lip falls, and the great round hole, called lupelele, shows the teeth and jaw quite plainly, especially when they speak. "How any people in all the world," exclaims Mrs. Pringle,
"can admire such a fashion baffles our comprehension. However, it is evident that this custom of lacerating the lips is dying out, for one rarely sees it among the young." * The Maganya women are very swift-footed, generally carrying off the prizes at the races.

## Torograpiny of the Nyassa and Shire Bastes.

In the basin of Lake Nyassa there are no Portuguese stations. The northernmost outpost met on the Shire is Shironji, below the Ruo confluence. North of this place the only European settlements are those founded by the English, or rather Scotch, missionaries, followed by the traders of the same nationality. By them both the river and the lake have been converted into a regular highway of commerce, and at the northern extremity of Nyassa this highway is continued by a well-planned route running in the direction of the village of Cliumda and Lake Tanganyika. A missiouary station has also been founded at Muiaimuanta, 60 miles from Nyassa.

Karonga, lying on the north-west shore of the lake, a short distance south of the main highway, is the centre of the densest population in the whole of the lacustrine basin. But the district is rendered very unhealthy by the exteusive swamps and plains which are laid under water during the rainy season. The villages of the Rikuru valley enjoy a much more salubrious climate, and in the upper part of this valley lies the settlement of Mombrra, chosen by the Scotch missionaries as a heulth-resort. Facing it, on the east side of Nyassa, follow numerous villages built on piles, like those of the old lacustrine peoples in Europe. In this part of the lake the best-sbeltered port is Bampa (Mbampa), which is well protected from the southern gales by a peninsula and some neighbouring islets. About the middle of the west side of Nyassa lies the large village of Bandave, near which place the missionaries have founded their chief station. But it has no natural haven, although a port might easily be constructed at a small outlay. Bandawe has the advantage of being situated near the point where the regular passage is made from one side of the lake to the other. The native craft, starting from this place are able to seek shelter under the lee of the two islands of Shisimolo and Dikomo. The corlesponding station on the opposite or east side is the village of Chitesi, although it lies on a beach exposed to the full fury of the surf. Lisserta is also one of the landing-places on this side.

But on the whole periphery of the lake the most frequented port and chief centre of trade, and till recently the great market for slaves, is Kota-Kota, which lies on the west coast, over 120 miles from the southern extremity of Nyassa. It stands on an almost landlocked bay, which, thanks to their light draught, is accessible to the Arab boats. The Zanzibar traders have here settled in such numbers that Ki-Swahili has bccome the dominant language in Kota-Kota. This Mohammedan colony has the advantage of possessing some thermal springs in its vicinity;

[^29]but the surrounding district is barren, and for a space of over 60 miles going southwards the coastlands are entirely uninhabited.

Great expectations were originally formed respecting Livingstomia, the first station founded on the shores of Nyassa, where were supposed to be united all the elements of future greatness-geographical position, well-sheltered harbour, fertile soil. lBut there was one fatal drawback, a relaxing and unhealthy climate, which compelled the missionaries to abandon all their establishments so pleasantly situated on the peninsula here projecting into the lake and separating its southern extremity into two spacious bays. When Livingstonia was visited by Kerr in 1885 nothing was to be seen except the cheerless sight of abandoned houses which lined

Fig. 79.-Upuands between the Shirk and Nyassa. Scale 1 : $350,000$.

the streets. The missionaries, as the natives assured him, were " all dead, all gone to Bandawee." *

In the interior of the Zambese basin the chief focus of European activity is at present the town of Blontyre, which is situated about 90 miles to the south of Nyassa in a valley of the Shire uplands, whose geographical position has been fixed with astronomic accuracy by the explorer O'Neill, and connected with the whole network of routes between the Zambese and Tanganyika. Blantyre was so named in 1876 from the little Lanarkshire village where Livingstone was born. Thanks to its elevation of nearly 3,400 feet above the sea, it is a relatively healthy place for Europeans, who are here able to perform manual labour without risk. The surrounding district has also the great advantage of being free from the tsetse fly. The community of missionaries, its original founders, has since been reinforced by some traders and by a few planters, who cultivate coffee and the sugar-cane. The

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\text { Op. cit. ii. p. } 185 .
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native chiefs have also been replaced by Europeans in the administration of tribal affairs.

Notwithstanding its distance from Nyassa, Blantyre, or rather the neighbouring village of Mandala, has become the central station of the "African Lake Society," a conmercial association which was founded in 1878 for the purpose of aiding the missionaries, while at the sume time trading wa its own account. This soeiety carries on a considerable traffic in produce of all kinds as far as the Upper Congo basin, and already possesses twelve factories between Quilemane and Lake Tanganyika. It is eatisfactory to know that by the terms of its charter it is forbidden to supply the natives with alcoholio drinks. Through Blantyre passes the missions route, a portage 70 miles long, which skirts the east side of the Murchison Falls, on the Shire, between the Mutopo bend and that of Katongo, where the steamers stop. Other carriuge-roads, lined with plantations of eucalyptus, connei Blantyre with the chief villages of the surrounding district, as well as with some of the stations grouped round about the central mission.

Although situated on the debatable frontier of the two hostile Anyassa and Ajawa (Yao) tribes, and although the whole region was formerly often laid waste by the Maviti marauders, Blantyre has never yet been attacked by any of the neighbouring tribes. This circumstance is all the more remarkable that the protected territory for several miles round about is to a great extent peopled by runaway slaves escaping from the Arab traders. Thus, like the free cities of mediæval Europe, Blantyre owes its prosperity to the hospitable protection it has given to the refugees and outlaws from every quarter.

One of the most salubrious stations in the distriet is the villuge of Zombu, which stands 400 feet higher than Blantyre, and some 30 miles farther north, on the slope of a hill commanding an extensive view in one direction of the river Shire, in the other of the sparkling waters of Lake Shirwa. Here some Scotch planters have founded a considerable settlement, devoted to the cultivation of sugar, coffee, and oleaginous seeds. The hundred thousand coffee shrubs possessed by this establishment have all sprung from a single plant reared in the Edinburgh Botanical Garden. Some cinchonas have also bcen planted on the surrounding slopes.

East of Blantyre rises the lofty Mount Choro, the abode of a powerful spirit venerated far and wide. On all oceasions of public danger or disaster he is con. sulted in the name of the people by his bride, ehosen from amongst the most beautiful young women of the district.

## Administration of the Lower Zamiese.

In the region of the Zambese delta the populations are of a very mixed character. Here also the primitive usages of the natives have been considerably modified by continuous contact with Europeans during the last three centuries. Along the banks of the river the Portuguese hold military and trading stations, round which is centred the political and social life of the riverain population. Till recently Lusita-

## SOUTII AND EAST AFRICA.

nian influences were doubtless on the wane. Inland stations had to be abandoned; important establishments were falling to ruins; the very communieations between the whites of the interior and the senbourd were frequently interrupted by the devastating Umgani (Maviti) hordes, known to the Portuguce by the namo of Landins, that is, Ama-Landi, or "Couriers." Nevertheless the commercial relations and intereourse between the foreigu and native races had never at any time been entirely suspended. Nor did the Mambari, or half-caste Portuguese adventurers, ever cense to visit ull parts of the interi. $r$, while at present the mother eountry has again revived her interest in hei remote colonies on the banks of the Kambese. Her attention has even been direeted towards the distant region of ., waterpartings, and surveying expeditions have been organised for the purpose of preparing the ground for the construction of the trans-continental route which must sooner or later connect Mossamedes on the Atlantic with Quelimane on the Indian Oceun. But the Portuguese have no longer the field all to themselves. The restless spirit of enterprise which is impelling the growing populations of Austrul Africa still northwards, irresistibly attraets traders, squatters, miners, and missionaries towards Zambeseland, and the most inviting points along the middle course of the mainstream have already been selected as centres of future enterprise.

One of these points is Sesheke, eapital of the Barotse empire, standing in the middlo of the basin formed by the junction of the Zambese with the Chobe above the Vietoria Falls. Another Zambese region towards which have already been direeted the efforts of Europeans. represented mainly by British missionaries, is the Nyassa basin, destined to become the future highway leading to Lake Tanganyika and the Congo

Even in the region of the Lower Zambese the Portuguese Government exercises little or no direct action. The territory is divided into great domains, the socalled prazos da corồa, or crown lands, some of which are almost little kingdoms in themselves, covering an extent of 20,000 square miles, and administered by practically independent farmers-general. By them are levied the mussoro, or imposts, generally in the nature of a hut tax, payable in kind, at the valuation of about three shillings and sixpence for every nutive eabin. These great manorial lords also undertake to develop to the utmost of their power the natural resources of their vast domains. When this system was originally introduced the erown lands were conceded for three generations, and the order of succession was to be through the female line, on the condition that the women married Europeans. It was hoped by this arrangement to attract settlers to the country; but the very opposite result was produced, and the great landowners, becoming powerful satraps, sold into slavery their own subjects, whereby the whole land became depleted. Officially this system has been abolished since 1854, but it has been virtually maintained under a slightly modified form, and immense grants continue still to be made to a few potent lords, who pay little more than a nominal revenue to the State.
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Topoghaphy of the Lower Zamoese.
Below the Shiro confluence the Lower Zambese can searcely be said to bo inhabited. One of the principal villages on the right bunk is Shupanga, near the spot where the sprearling brunches of a mighty buobub overshudow the lonely grave of Livingstone's wife, one of the victims of that futal " Zambese Expedition " which in 1862 cost the lives of so many intrepid followers of the illustrious missionary. The tomb is still carofully looked after by the natives, who clear away the rank growth of weeds springing up with the return of every rainy season. Not far from the same place repose the remuins of other explorers, who had accompanied Owen on his survey of the Lower Zumbese.

Below Shupanga, but on the opposite bank, stand the stations of Mopea and Mazaro, half embowered in the dense foliuge of overhanging mango-trees. These villages enjoy som9 importance as landing-pluces for the riverain traffic, and as guardians of the portage between the Zambese and the Kwa-Kwa, or river of Quelimane. Recently, a domain of 12j,000 acres, stretching along the left bank of the Lower Zambese as far as the neighbourhood of the Shire, was granted by the Portugueso Government to an "Opium Company," in the hope that it might compete successfully
 with the British growers of the baneful drug in India. The company also enjoyed several other privileges, besides the right of levying the mussoro tax on the natives. Nevertheless it proved a failure, having been partly ruined by a revolt of the black populations in the year 1884 .

Lumbo, un oll Portugnese town built near one of the months of the river, has been graulually destroyed by the orosive aetion of the strenm. Since its disuppearance the principul fuctories have heen established about the Iuhamissengo mouth. Although lying to the north of the Zambese deltu, on on estuary which communicutes with the mainatream only through uncertain or periodical channels, Quelimane is practically the only seaport of the whole basin. Its position as such will be permanently secured whenever the proposed route from the estuary to Lake Nyassa is constructed. Although founded three huudred und fifty years age, it has ulways remained a small town, not only in consequence of its unhealthy climate, but also because of the vexatious customs regulations. Before 18 õ3 the port had not been open to foreign trade, and its chief traffic was in slaves exported to the plantations of Brazil. Its white population consisted for the most part of Portuguese convicts banisherl from the mother country. It was from Quelimane that Lacerda started on his memorable expedition to the interior of the continent.

Quelimane, or Süo Martimho, as it is officially called, is known to the natives by the name of Chuambo. Its port is of difficult access, owing to a bar at the mouth of the ostuary which vessels drawing over ten or twelve feet can hardly attempt to cross in safety. But this obstruction once passed, the inner waters offer excellent anchorage ull the way to the town, which lies some 12 miles to the north of the coast, on the left bank of the Kwa-Kwa, fumiliarly known as the Quelimane River. The Kafirs constitute the bulk of the urbun population, and also oceupy numerous villages in the surrounding district, where they enjoy the protection secured to them by the little Portuguese garrison. Although generally unhealthy, the climate of Quelimane is said to be faveurable to invalids affected by chest complaints. Unfortunately the residents have no health resort, where they might escape from the malarious atmosphere of the neighbouring marshes and rice-grounds.

The foreign trade of Quelimane, which is chiefly directed towards Bombay, and which increased threefold between the years 1876 and 1885, is partly in the hands of Banyans and Arabs. But the great development of the exchanges during the last few years is muinly due to the enterprise of the British settlers about the shores of Lake Nyassa. Quelimane has supplanted the port of Mozambique for the export trade in ivory, which is now brought down by the steamers plying on the Zunbese, whereas it was formerly conveyed overland to a large extent by the gangs of slaves bound for the coast. As a rule, about twice the quantity of ivory is forwarded from the east as from the west coast of the continent. Between the years 1879 and 1883 about 640,000 pounds were shipped on the western and $1,270,000$ on the eastern seaboard, jointly representing a money value of $£ 800,000$ and the spuils of some 65,000 elephants.
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## CHAPTER IX.

## MOZAMBIQUE.

## From the Gamiese to Rovuma.



HE territory assigned to Portugal hy tho late internaional treaties still continues north of the Zambs as fur as the valley of the Rovuma, and extends from the seavoard inland in the direction of Lake Nyassa. But Portuguese jurisdiction is very fur from making itself felt throughout the whole of this vast rlomuin. Even the inflence of the officials appointed from Lisbon extends in many rinces littlo beyond the immediate vicinity of the coast. They possess nothiver $\epsilon$ xept mere heursay knowlodge of the lands represented on the maps as holonging to the csevn of Portugal. Even down to recent times the slave-trare wis the only tratic carried on in this region; hence the beaten tracks were jenlously guarded by the dealers in human merchandise, and these alone dared to venture into the interior, which they deseribed as inhabited by hordes of ferocious anthropophagists.

The station of Mozambique itself, mainstay of the Portuguese authority along the seaboard, is situated not on the mainland but on a neigithouring island, while the surrounding country might, till quite recently, be described as a terra incognita to within a short distance of the opposite coast. Like all other stutions on the East African seaboard, except Sofala, Mozambique was regarded as little more than a port of call for vessels plying between Europe and India. It had never been utilised as a sturting-point for exploring ryeditions in the interior, and the Portuguese continued to occupy it for three ared years without collecting any information regarding the neighbouring lands and peoples that might, nevertheless, have easily been visited.

The journeys of Lacerda and his successor Gamitto wero the first serious geographical expeditions, and evel. these were direeted towards the regions beyond Nyassa. Then came Roscher, Johnson, Last, Cardozo, and especiully O'Neill, by whom the Mozambique lquads have been traversed in every direction during the latter half of the present century. Strictly speaking, this territory has hecome a part of the known world mainly through the labours of O'Neill, by : 'om the banks of the Shire and of Lake Nyassa have been connected with the maritime
ports by carefully surveyed routes comprising a total length of about 4,000 miles. It would scarcely be unfair, says an English writer, to give to this region the name of O'Neill's Land, in honour of the explorer who first laid down on our maps the true features of its mountains, lacustrine busins, and running waters. The territory thus newly acquired by science comprised a superficial area of about 140,000 square miles, with a population approximately estimated at a million souls.

## Reliff of the Lanj.

The mountain system of the interior is connected westward with the Shire uplands and the ranges skirting the east side of Lake Nyassa. West of Mozam-

Fig. 81.-Chief Routes of Explorers Eabt of Nyassa.
Seale $1: 8,000,000$.

bique the chief eminences are the Namuli Mountains, an almost isolated maes which till recently was supposed to penetrate into the region of snows, but which in any case forms a superb group, dominating far and wide above the surrounding plains and diverging fluvial valleys. The mean level of the land above which it towers is itself about 2,000 feet high. But the hills are much more elevated and precipitous on the southern slope, where the outer escarpments attain an altitude of from 2,300 to 2,600 feet above the neighbouring plains. Here rise the loftiest summits, among others the twin-peaked Namuli, whence the whole group of highlands take their name. According to the explorer, Last, the Namuli,
isolated mass but which in surrounding above which nore elevated its attain an Here rise the whole group the Namuli,
supposed by the natives to be the cradle of the human race, has an absolute elevation of about 8,000 feet above sea-level. After storms the slopes are at times covered with a layer of hailstones, producing the effect of a snow-clad mountain.

Towards the west, Namuli is separated from a rival peak by a deep cleft with almost vertical sides, several hundred yards high. In other directions it presents less formidable approaches, although its polished rocks, on which O'Neill detects traces of a glacial period, were everywhere found to bo so precipitous that the English explorer was unable to reach the summit. Some rivulets, which in the rainy season become copious torrents, descend from the higher plateaux, tumbling from cascade to cascade, and lower down doveloping numerous streams, which almost everywhere disappear under the overhanging foliage. Native hamlets straggle up to a height of 6,000 feet, mostly surrounded by verdant thickets. Both for their wealth of vegetation and charming landscapes the Namuli moun-

Fig. 82.-Namuli Mountains.

tains are one of the most remarkable regions in the whole of Africa. The secondary spurs rooted in the central nucleus, and gradually falling in the direction from east to west down to a mere terrace skirting the low-lying strip of coastlands, are also clothed with a rich forest growth, presenting a striking contrast with the treeless plains at their base.

West of the Namuli Mountains, the uplands have been partly denuded by the erosive action of running waters. Nevertheless here also occur some groups of lofty hills, such as the Milanji Mountains, which rise to the south-east of Blantyre and to the south of the Lake Shirwa depression. In the southern part of this region the extensive plains extending in the direction of the Zambese are dotted over with isolated eminences, such as Mounts Shiperoni and Kanga, which are visible for a great distance round about. In the northern districts the heights rise but little above the level of the plateau, or from 350 to al out 1,200 or 1,300 feet,

## SOUTII AND EAST AFRICA.

yet they present such steep escarpments that they are not easily scaled. The peninsular tract enclosed between the Rovuma and its Lajenda affluent in the extreme north is relieved only by the lateral ridges of the Nyassa coast range from the generally monotonous and dreary aspect of the open plateau country.

## River Systims.

The chicf rivers traversing this plateau between the Zambese and the Rovuma
Fig, 83.-Lakes Kilwa, Chiuta and Ayaramba.
Scale 1:1,200,000.

have their source either in the Namuli highlands or in the neighbouring heights. Such is the Walaga, which, under various names, flows first in the direction of the south-east, then southwaids, falling into the Indian Ocean some distance north
of the Zambese delta. The Ligonya, which reaches the coast midway between Quelimane-and Mozambique, as well as the Lurio (Lu-Rio), which waters the Lomwe territory, discharging into a bay about 120 miles north of the capital, have also their farthest headstreams in the Namuli uplands. Numerous other less copious watercou'ses $r$ sing in the advanced spurs of the same hilly districts have their estuaries on the seaboard between the Lurio and Rovuma mouths.

The Rovuma (Ro-Vuma, Ru-Vuma), which forms the northern frontier line of Mozambique, is a considerable stream whose basin comprises nearly the whole eastern drainage of the mountains skirting the east side of Nyassa. Its farthest affluents even rise to the south of the lake, their united waters forming the Lienda or Lujenda (Lu-Jenda), which for the length of its course must be regarded as the main upper branch of the Rovuma. Till recently it was even supposed to have its origin some 60 miles farther south in the Milangi hills, and that it consequently traversed Lake Kilwa, the Shirwa of English writers, discovered by Livingstone in 1859. But this lake is now known to be an independent reservoir without any present outflow, although it apparently belongs geologically to the same depression as the Lujenda Valley, with which at some former period it was probably connected.

## Lake Kilwa.

The sill confining the lacustrine basin on the north varies in height from about 14 to 30 feet at the utmost. This low ridge also lies considerably more than a mile from the northern extremity of the lake, and is clothed from one end to the other with large timber, showing that this tract has ceased to be flooded for a period of at least a hundred years. Nevertheless it is quite possible that in exceptionally wet seasons the level of Lake Kilwa may rise sufficiently to fill the sluggish marshy channels at its north-west extremity, and thus effect a communication northwards with the sources of the Lujenda, by skirting the western extremity of the old margin of the lake, where the ground is almost perfectly level. According to the statements of the oldest inhabitants, such communication in point of fact frequently took place before the present century; but the level of Lake Kilwa has never ceased to fall lower and lower ever since that time. Hence this basin has now no outflow, the inflow being balanced by evaporation, while its waters, formerly fresh and potable, have now become quite saline

In its present condition the lake has an almost perfectly rectangular form, being about 36 miles long, with a mean breadth of 18 miles and a superficial area approximately estimated at 720 square miles. But it is very shallow, especially on the east side, which is fordable for a long distance from the shore. The deepest part of the basin lies on the west side, under the escarpments of Mount Chikala, which rises precipitously to a height of from 2,000 to 2,600 feet above the lacustrine level, which itself stands nearly 2,000 feet above the sea. The two rocky islands of Kisi and Kitongwe serve to indicate the direction of a sub-lacustrine ridge which traverses the basin from north-east to south-west. This ridge will
perhaps, in course of time, rise completely above the surface, just as the northern ridge has emerged with the continual subsidence of the waters. Shirwa is fed by a few swamps and rivulets, and the overflow of the recently discovered little Lake Limbi.

Kilwa having ceased to communicate with the Lujenda, this great headstream of the Rovuma now receives its first contributions irom the Mtorandanga morass, followed by another farther north. From this point the stream, which changes its name at every ptation, traverses in succession the two elongated Lakes Chiuta and Amaramba. It first takes the name of Lujenda at the outlet of the Amaramba basin, which is lined by pile-built cabins serving as granaries and refuges for the riveruin populations. Here the river, flowing with a uniform and rapid current between steep banks, enters one of the most charming and fertile vulleys in the interior of the continent. The broudening stream is divided by a chain of clevated islands, which are never submerged during the highest floods, and are everywhere clothed with an exuberant vegetation of forest-trees, interlaced from branch to branch with festoons of crecping plants. Along the banks follow in pleasant variety grassy tracts, cultivated lands, and clumps of tall trees, while the distant horizon is bounded by the crests of bluc mountain ranges.

## The Lujenda ayd Lower Rovuma.

Swollen by all the torrente tumbling down from the Nyassa highlands, the Lujenda flows without any abrupt meanderings in the direction of the north-east, then trends northwards, plunging over a series of falls and rapids down to its confluence with the Rovuma. This river, which rises not far from the east side of Nyassu, descends from the uplands in a far more precipitous channel than the Lujenda. Above the confluence it pierces a deep gorge flanked by granite walls, while the current is strewn with huge boulders as destitute of vegetation as are the cliffs themselves that here confine the stream in its stony bed. The wild rocky landscape is here relieved only by a little brushwood clothing the fissures of the escarpments, and although lying within the equatorial zone the riverain sceuery presents rather the aspect of a gorge in some northern region scored by glacial strix and strewn with moraines.

At the issue of these defiles begins the region of plains and lowlands. The confluence itself of both branches stands at an altitude of not more than 730 feet, at the foot of a bill with polished rocky slopes. Lower down, the united stream discharges during the floods a portion of its overflow into two reservoirs near its right bank, Lakes Lidedi and Nagandi, which after the subsidence of the waters flow back to the Rovuma. The level of the stream is little more than 300 feet above the sea at the point where its winding ramifications over the lowlands again converge in a single channel, which is pent up between the escarpments of the two lateral plateaux skirting its lower course. Livingstone ascended to a distance of nearly 180 miles from its mouth, but the trip was made in the month of October, that is, during the season of low water, so that the boat often
orthern fed by le Lake dstream morass, changes Chiuta haramba for the current s in the clevated rywhere ranch to pleasant distant
ands, the rth-east, wn to its east side than the granite egetation ed. The hing the zone the rn region

Ids. The than 730 ae united reservoirs idence of ittle more $s$ over the he escarp, ascended ade in the boat often

grounded in mid-stream. During the periodical inundations there can be no doubt that steamers would everywhere find sufficient depth as far as the first cataracts.

The Rovuma, which falls into a spacious bay just north of Cape Delgado, has no bar at its mouth; nevertheless, small craft run somo risk in penctrating f:om the sea into the river, owing to the eddies caused by the conflict of the opposing fluvial and marine currents.

The Mozambique Seaboard.
The section of the seaboard, extending for a distance of about 300 miles nearly in a line with the meridian, from Mokambo Bay to the Rovuma estuary, presents

a remarkable contrast to the section disposed in the direction from south-west to north-east, extending from Sofala Bay to the Zambese delta and the Mozambique coast. Southwards the beach is everywhere low and destitute of harbours, whereas farther north the const is deeply indented with creeks and inlets, while ramifying headlands, continued by islets, stretch far seawards. This striking contrast is explained by the action of the Mozambique current, combined with that of the coral-building polyps. The oceanic stream flows close in shore south of the Rovuma, eating away the foot of the cliffs, striking against the rocky promontories, and sweeping in rapid eddies round every inlet on the seaboard. The bays are thus scoured of all their sedimentary matter, and while the current is accomplishing this work the coralline animalcules are building up their structures in
deep water off the coast, although even here a ceaseless struggle is maintained between these new formations and the waves of the sea. In one place the reefs ure carved into islands, in another the eurrent sweeps away the less compact coral massos, or else hollow out channels and nurrow

Fig. 8is.-Ports and Reeps of North Mozambique. Scale 1: 2,000,000.
 passages through them, whero ebb and flow alternute with the velocity of a mill-race.

But south of Mozambique the marine current, ceasing to follow the shore line, sets far seawards, the consequence being that wll the inlets along the coust are gradually ehoked with sand or mud. According to the observations of suilors navigating these waters, the stream follows its normal direction from north to south for nineteen days in twenty, but its course is at times checked and even arrested, while it has been observed on some rare occasions actually to set in the opposite direction, towards the north.

Between Quclimane and Mozambique the coralbuilders have erected a continuous chain of reefs and islets, skirting the coast at a distance ranging from 12 to 18 or 20 miles, and enelosing a broad channel, which in many places affords good anchorage. Natural harbours of refuge follow in quick succession along this marine highway within the reefy Primeira and Angosha (Angoxa*) islets. But at the point where the shore line takes the direction from south to north, these outer roadsteads are replaced by harbours formed by erosive action on the coast itself. Here the port of Mokambo develops an extensive basin where whole fleets might ride at anchor in depths ranging from 60 to 90 feet. Mozambique commands from its low islet a labyrinth of inner havens, followed northwards hy Conducia Bay and the magnificent group of sheltered inlets presented by the Fernão Vellozo or Masasima basin. Memba Bay, with those of Mwambi, Montepes, Ibo, Musimbwa, and Mayapa, not to speak of the many excellent anchorages formed by the islets off the coast, render this seaboard one of the most favourable for navigation in the whole world. At the sume time the barrier recfs and the swift currents striking against them require great caution on the part of skippers frequanting these waters. Even 60 miles
*The Portuguese $x$ answers exactly to the English sh, which should be substituted for it every where except in strictly Portuguese words.-Ed.

## nintained

 the recfs pact corul narrow ,w altereurrent, seawards, rlong the or mud. avigating direction a twenty, arrested, occasions wards the the coralof reefs e ranging g a broad od anchor-- in quick within the lets. But e direction steads are action on bo develops ght ride at o 90 feet. a labyrinth y Conducia tered inlets sima basin. ntepes, Ibo, $f$ the many lets off the aost favourd. At the em require an 60 milesit every where
off the coast, under the latitude of Ibo, there occurs the dangerous murine bank of St. Lazarus, where vessels have oecusionally been wrecked, although it is covered mostly by depths of from 6 to 18 futhoms.

## Climate.

On the Mozambique coast the south-east trade-winds have so little foreo that they are frequently deflected from their normal course by the centres of intense radiation, developed at one time on the mainland to the west, at another on the great island of Madagascar to the east. Moreover the broad Mozambique Channel, which is disposed in the direction from north-east to south-west, offers to the atmospheric currents an easy passage, which they usually follow, setting either northwards to the equator or southwards to the Antarctic seas. The trade winds prevail most frequently during the cooler months, that is, from April to September, when the vertical solar rays strike the globe north of tho equator. Nevertheless, even during this season the aërial currents are generally deflected towards the north. They sweep round the south coast of Madagasear, and on reaching the Mozambique Channel set steadily northwards in the direction of Zanzibar.

But from October to March, when the sun has moved to the southern hemisphere, followed by the whole system of atmospheric currents, the prevailing winds on the Mozambique coast are those blowing from the north-east. They set parallel with the seaboard in the same direction as the marine current itself, which now acquires a mean velocity of from about 2 to 4 miles an hour. In these maritime regions hurricanes are extremely rare. Fully forty years have elapsed since one of these atmosnheric disturbances has been witnessed, when in January, 1841, a terrific cyclone churned up the Mozambique waters, tearing the shipping from its anchorage and strewing the coast with the wreckage. During the two following years Mozambique was again visited by similar storms, and on each occasion at the same period.

## Flora and Fauna.

The moisture precipitated in the basins of the Rovuma and the other coast streams north of the Zambese is not sufficiently copious to nourish a luxuriant vegetation. Great forest-trees matted into an impenetrable tangled mass by trailing or twining plants are met only on the banks of the running waters. But although the coastlands have no large growths except on the irrigated tracts, the thickets on the elevated terraces are none the less very difficult to traverse. Here the brushwood and small shrubs are often so inextrieably interwoven that it might be possible to walk for hours without once touching the ground. Caravans that have to force their way through this underwood move very slowly. The porters have to cut themselves a passage bencath the overhanging branches, avoiding the sharp points of many a projecting root, and in some places even creeping on all 118-Ar
fours over the interwoven network of foliage and lianas. West of these thickets clothing the terraces near the coast, tho inland plains, enjoying a far less abundant rainfall, support few vegetable growths beyond grasses and thorny mimosas. Forests properly so-called occur only on the slopes of the mountains, which intereept the moisture-bearing clouds rolling up from the Indian Ocean. The plants yifiaing copul and caoutchnuc do not thrive beyond the zone of brushwood.

On the other hand, the Mozambique fauna is surprisingly rich. The region of the Upper Lajenda and the plains traversed by the Rovuma below the confluence of its great tributary from the south, are hunting-grounds such as are now seldom elsewhero seen in Austral Africa. The various species of antelopes, as well as the gnu, buffalo, quagga, and zebra, herd together in thousands, and are preyed upon by large numbers of lions and leopards; hyenas are also very numerous. But this multitude of wild animuls is entirely due to the rareness or absence of man.

## Iniabitants.-The Magwangwaras.

Within a comparatively recent period the Rovuma basin was still thickly peopled; but at present scarcely a village is met for tracts 60 miles in extent below the Lujenda. They have almost everywhere been replaced by numerous ruins surrounded by now abandoned banana groves. The land has been laid waste, and now that there remains nothing more to destroy, the wild beasts have resumed possession of their domain. The only aborigines, whose rare campinggrounds are still met at long intervals on the plains, are the Matambwes (MaTambwe), protected by the branches of the river, which thej place between themselves and their enemies. During the dry season they occupy the islands in the Rovuma; but with the return of the periodical floode, which inundate their huts and fields, they retire to the elevated cliffs on the right bank. A few Matambwe eve also met either as guests or as slaves amongst the powerful tribes which have given them a home or a rofuge. Some groups of Manyanjas (Ma-Nyanja), timid savages akin to the Matambes, have a few obscure settlements in the recesses of the region about the confluence.

The predatory tribes by whom the Mozambique lands have been wasted are the Magwangwaras (Ma-Gwangwara, Ma-Conguara), who dwell to the north of the Rovuma, along the north-eastern shores of Lake Nyassa, and in the region where the Rufiji has its source. With these Magwangwaras have been associated some other marauders, who are known, like the Zulu-Kafirs beyond Nyassa, by the general designation of Maviti. But they are not entitled to the name, and these pretended Maviti are really Wanindis (Wa-Nindi); who seem proud of continuing the work of the conquerors by whom their own territory was formerly wasted with fire and sword. They have adopted the warlike garb, the arms, usages, tactics, and the very name of these terrible Zulus. But in their country the traveller Porter heard of two persons only who were really of Zulu blood.

Setting out from their villages to the north of the Rovuma, they turned the : continuing erly wasted rms, usages, country the
whole of the Matambwe country into a howling wildorness, and for many years ull the markets along the coast were furnished with hundreds and thousunds of sluves from this source. So abundant was the supply, that at that time a mun fetched a less price than a shcep or a goat. But things lave greatly changed wince then. The Wanindis have withdrawn to their camping-grounds, where they have ugain begun to till the land. There was nothing left to plunder when the late Sultan of Zanzibur interfered to stop their depredations.

## Tie Makuas.

The Makuas (Ma-Kua, Ma-Kwa) occupy a vust domain, which stretchos from Mozambique liay westwards to the Numuli highlands and the lakes where the Lujenda has its sources. They are divided into numerous groups, such as the Medos and Mihavanis, nearly all hostile to each other, although closely related in language and usages. Each tribe, however, is specially distinguished by its peculiar style of headdress, and methods of tattooing the face and filing the teeth. During the last few decades the race has been much reduced by their constant intertribul feuds. Ruined villuges, abandoncd fields and gardens, are met in many places, and considerable tracts have become solitudes. The naturally fertile Namuli uplands are almost uninhabited.

Amongst these tribes spirit-worslip is universal, and in certain villages, notably at Mpassu, on the route between Quelimane and Blantyre, every cabin has its trophy of offerings to the local genii. Bifore all the villages are piled up heaps of presents, such as food and merchandise, which are expected to secure the favour of tutelar deities. On the southern slope of the Namuli mountains and tie banks of the Lukugu River there is a Mukua tribe, recently visited by Last, whese warriors still eat human flesh. These are the Mawas (Ma-Wa), uho occasionally devour their own dead, as well as captives in war, and still more frequently slaves and people secretly condemned eith. for their magic arts or because they happen to be corpulent, that is, in "prime condition." The victim must be kept ignorant of his fate; at some publio feast he is made drunk with beer, and then his executioners suddenly fall upon him and club him.

Like their Maganya and Maviha sisters, the Makua women wear the pelele, or lip-ornament. They consider themselves fully equal to the men, and in some respects even take the first rank. Their right to hold property ie perfectly recognised; they keep "establishments," huts, and fields, and can dispose of themselves according to their own fancy. In case of divorce they also keep possession both of the children and the land. Nevertheless the wives of the chief kneel before him, and when ordered salute him by clapping of hands. One of them is also selected to accompany him as his swordbearer. The wives have often been buried alive in the same grave with distinguished members of the community.

The eustoms, however, vary greatly from tribe to tribe, and certain practices, such as circumcision, held to be a point of vital importance amongst most of the natives, are left by the Makuas to the option of the individual. Each petty state

## sOUTII AND EAST AFRICA.

is governed by a chief and a council of elders, who are seated for the greater part of the day in it publie hall hung with leopurl skins. The Makuas are very fluent orators, und at all the feants, celebrated by the neighbouring peoples with masir and the dance, they hold rhetorical tournaments. Jach orator is accompanin'. . a seeond, who, like the flute-phyyer in classic times, stands behind to regulate :". movement of the voice by his modulated utte rance of harmonious syllables, filling dy his music the gaps in the flowing periods, lending more insinuating softners to the pathetic phrases, heightening the effect of the peroration by a low cadenced

Fig. 80.-Chizy Nations of Mozambique.
Seale 1 : e,oxiowo.


- 180 Milew
muttering, and terminating the discourse by a muffled sound which seems to die away like a distunt echo.


## The Lomwes, Yaos, and Mayhas.

The Lomwes, who according to O'Neill belong to the same stock as the Makuas, dwell chiefly in the Lurio basin to the north of the Namuli highlauds, and of the mountains continuing this system eastwards. They aro usually looked on merely as an ordinary Makua tribe, although they are clearly distinguished by their peculiar idiom, and also regard themselves as a separate people. Before their territory was explored, the Lomwes had the reputation of being a most formidable nation. All strangers were supposed to require a special invitution
sater part ery fluent ith muair minime fulate filling less to the cadenced ally looked guished by le. Before ing a most I invitution
from the council of chiefs kefore daring to enter their territory, as to do so without this precaution was considered certuin death. The depopulated borderlands on their frontiers were also stated to be carefully guasded by elephant-hunters, instructed to kill all intruders of other races or tribes. But all this was idle popular report. The Lonwes are, on the contrary, now known to be a peaceloving and even timid pecple, who are harassed by their Makua neighboure.

Fig. 87.-Lumpioapa me Lujempa.


They are even threatened with extinction at no distant date, unless peace be restored to this distracted land under the influence of the European traders or missionaries.

For intelligence and industry the Yaos (Wa-Hiyao), called also Ajawas, certainly take the foremost rank among all the Mozambique populations. The upper and Ljeu Valley forms the chief domain of these aborigines, who were formerly a powerful nation, but who, like their neighbours, have suffered greatly from the
incursions of the Maviti and other plundering hordes bearing this name. The Yaos are also met more or less intermingled with other tribss along the banks of Nyassa and the Rovuma, and wherever they have penetrated they have almost invariably acquired the political preponderance.

They neither disfigure their features by tattooing, nor do their women wear the repulsive pelele. Of eleanly habits both in their dress and dwellings, they readily adapt themselves to foreign ways, and are specially distinguished by their enterprising spirit, so much so that they might be called the Vuangamezi of Mozambique. The Yaos are also excellent husbandmen, and those of the Lujenda Valley have converted the whole land into a vast garden, where groundnuts, sweet potatoes, punipkins, haricots, and here and there a little rice are cultivated, jointly with maize and sorgho, the coreals serving as the staple of food. In the upland valleys draining to the Rovuma, they have founded settlements on the crests of the steep hills, where they defy the attanks of the Magwangwara raiders. The upper slopes of these natural strougholds are for the most part covered with huts. Johnson estimates the number of cabins grouped in the large settlement of Unyanyo at certainly not less than nine thousand. The summits of the mountains swarm with children, who climb the terraces and spring from crag to crag with the agility of monkeys. Chivagulu, another rocky citadel, is almost as populous as Unyango.

The Yaos are frequently visited by the Arab traders, but they have not accerted the Moslem fuith, and still remain pagans. Sanguinary funeral rites and banquets of human flesh are even still kept up by the chiefs, although for the most part secretly. Young women and slaves are buried alive in the graves of the great chiefs, but it is said that should an intended victim have the good luck to sneeze during the funeral procession he is at once liberated, the spirit of the departed having in this way expressed his unwillingness to be attended in the other world by such persons.

Till recently the Yaos displayed great enterprise and activity, especially as slave-dealers They acted as a sort of middlemen in forwarding nearly all the convoys of captives to Kiloa and the other ports along the coast. Nor has this traffie been yet completely suppressed. Thomson estimated at about two thnusand the nuinber of slaves annually sold by the Yaos in the coast towns. Probably in no other part of Africa are the effects of the slave-trade seen under a more hideous aspect than in the Rovuma basin, where cultivated tracts have been abandoned, villages burnt, and whole communities dispersed or carried into bondage. At the beginning of the present century slaves were annually exported from this district to the number of from four to five thousand, and when the traffic was a'oolished by Portugal, the Mozambique slave-hunters and dealers were powerfui enough to incite an insurrection against the Government.

Thanks to the inaccessible nature of their territory, the Mavihas or Mahibas (Ma-Viha, Ma-Hiba), were able to escape from the attacks of the raiders. But although their villages, situated in the clearings of the coastlands, were strongly palisuded, and moreover protected by their almost impenetrable thickets, their
name. The the banks of have almost
women wear ellings, they hed by their angamezi of the Lujenda groundnuts, re cultivated, food. In the nents on the wara raiders. covered with settlement of he mountains crag with the populous as
aey have not funeral rites hough for the the graves of the good luck spirit of the tended in the
especially as nearly all the Nor has this two thnusand Probably in more hideous en abandoned, dage. At the m 'his district 8 a'oolished by fui enough to as or Mahibas raiders. But were strongly thickets, their
immunity was purchased at the cost of keeping far from the highways of commerce, and excluding the Arab traders from all their settlements. Now, however, the buyers of copal and caoutchouc have gainod access to their bitherto secluded retreats, and they have thus been gradually drawn within the sphere of commercial activity centred in the Portuguese seaports.

The Mavihas are remarkable for their symmetrical figures and graceful carriage, but they disfigure themselves by incisions, while not only the women but even the men wear the pelele in the upper lip, giving to the mouth somewhat the appearance of a nozzle. This lip-ring is prepared by the husband himself for his wife, and the ornament thus becomes a symbol of love and fidelity, like the wedding-ring worn by married people in civilised countries. When the wife dies the husband religiously preserves her pelele, never forgetting to bring it with him when he visits her grave and pours libations to her memory.
$O^{\prime}$ Neill is of opinion that the Mavihas belong to the same race as the Makondes, who dwell to the north of the Rovuma. They have the same customs, and the people of the coast apply the same collective name to both groups. As amongst the Makondes, the Maviha women enjoy the privilege of choosing their husbands.

## Topography.

The seaports where European and Asiatic dealers have settled for the purpose of trading with the natives of the interior are not numerous on the Mozambique coast ; nor have any of them acquired the proportions of a large city. They are, however, supplemented by the missionary stations founded in the regions remote from the seaboard, for these stations have become so many little European colonies, where the indigenous populations are brought into contact with a now and superior civilisation.

North-west of Quelimane, the first frequented port is that of Angoshn, formerly a busy centre of the slave-trade. But the point selected for connecting the submarine cable and for the regular mail service is the famous island of Mozambique, which was occupied by the Portuguese at the beginning of the sixteenth century, and a Lundred years later made the capital of all their East African possessions. This island was already a great Arab market, trading with the East Indies, when Vasco de Gama discovered it in 1498. The Portuguese had merely to fortify the place in order to secure a station of vital importance on the highway between Lisbou and Goa.

Mozambique Island, a coralline rock about two miles long and a few hundred yards broad, partly closes the entrance of the spacious Mossoril Bay, a perfectly sheltered haven from 25 to 50 feet deep, where vessels frequenting these waters find a safe anchorage during the prevalence of the south-east monsoons. But on the east side of the island there is also developed another haven well protected from the surf by some coral reefs, low islands, and Cape Cabeceira, a prominent headland lying to the north-east of Mozambique, and connected with the mainland by a wooded peninsulf. The town, where no traces are any longer scen of the

Arab occupation, has some regular buildings in the Portuguese style, protected by the guns of Fort Saint Sebastian, at the northern extremity of the island. The huts of the " black town" are grouped in the southern part of Mozambique, near Fort Saint Laurence.

On this urid islet the rainwater is carefully husbanded and sold at a high

price to passing vessels. Till recently reduced to a state of decay owing to the falling off of its trade, this Portuguese town has again recovered some of its former importance as capital of a province, destined one day to join hands with Angola across the continent. The movement of exchanges now exceeds $£ 220,000$ yearly, the staples of the export trade being gums and ivory. Caoutchouc first
began to be shipped at Mozambique in 1873, and in six years the value of this article alone was about $£ 50,000$. But it then fell off almost more rapidly than it had increased, whole forests having been destroyed to supply the demand. In the same way the ivory tride has ceased with the almost total disappearance of the elephant from the whole region east of Nyassa. The foreign commerce, which is made almost exclusively with England and France, is in the hands of a few hundred whites, Portuguese of Goa, half-castes, and Banyans. As at Ibo and Quelimane, woven fabrics are imported almost entirely by the Bombay merehants.

The bulk of the population consists of Mohammedan blacks, who are descended from various coast tribes, but who have abandoned their national customs and distinctive characteristics, and become gradually transformed to a proletariate class, such as is met in all European seaports. The current language amongst them is an extremely corrupt form of the Makua, one of the idioms of East Africa that has been most carefully studied by the missionaries. Mozambique, which has a population of over ten thousand, is one of the few places on the East African seaboard which possesses "learned societies," amongst others a geographical society. Here also are published some books and journals. On one of the neighbouring beaches is collected some salt, which people connected with this industry compare with that of Setubal, the best in Europe.

Natural deperdencies of Mozambique are the so-called Terras Firmas, that is to say, the villages and settloments of the mainland situated on the shores of the bay. Amongst these is Mossoril, where the governor and European traders have their country seats, scattered with other houses to a distance of 6 miles to the north-west of the town towards the neck of the Cabeceira Peninsula, which projects between Mossoril and Couducia Bays. The magnificent natural harbours of Mocambo to the south and Conducia to the north of Mozambique, lie completely idle, owing to the sparse population on the surrounding coastlands, and the absence of routes leading to the inland regions.

Even the group of splendid harbours lying to the north of Conducia Bay in the Gulf of Fernão Vellozo (Veloso), is, if not entirely neglected, at all events very little utilised by sea-going vessels. But the natives are well acquainted with its value, for they have given it the name of Masasima, that is to say " Perfect shelter." It penetrates some six miles into the interior of the land, and at its upper end branches off into two very deep inner havens protected from all winds. The north-western port, called Nihegehe by the natives, and Belmore Harbour by the English, has over 65 feet at the sill near the entrance. Nkala also, that is, the corresponding south-west mn basin, although shallower than the passage through which it cummunicates with the sea, is nevertheless deep and spacious enough to afford accommodation for whole fleets. The east side of this magnificent basin, which ramifies into several secondary inlets, is skirted by cliffs and headlands from 100 to 200 feet high, and this district appears to be sufficiently salubrious to supply favourable sites for European colonisation.

Several little wateccourses fall into the basin on the west side, which is low and covered with a rich alluvial soil, where, with a little labour, heavy crops
of rice, tobacco ${ }^{\text {n }}$ nd sugar, might be raised. This region, which in 1870 was inhabited, is now completely deserted, the native populations having taken refuge in the Mwamhakoma peninsula lying to the north-east, in order to escape from the oppression of a neighbouring Makua chief.

North of the Portuguese capital the nearest frequented harbour on this coast is
Fig. 89.-Ports of Fernão Veliozo.
Scale 1 : $240,000$.

that of $I b o$ or Uibo, which is fully 180 miles distant from Mozambique. The island on which is situated the town, capital of the coast district of Cabo Delgado, is larger than that of Mozambique, and at low water is connzeted southwards with another islet called Querimba. But the barbour, although perfectly sheltered, is
much shallower than cither of the Mozambique havens. In the year 1754 the Portuguese, who had already been long established at Querimba, occupied the island of Ibo, which could be much. more easily fortified against the attacks of corsairs. But trade and population have made little progress in these waters, where the coral banks off the coast are barren reefs, while a regular traffic could scarcely be developed with the neighbouring Mabiha (Ma-Biha) territory, sparsely peopled by a few wild tribes. Speoulators have often engaged native coolies on the Ibo coast for the plantations on the French island of Nossi-bé. The total annual trade of this port averages little over $£ 25,000$.

Amongst the numerous islands which follow northwards as far as Cape Delgado, several, such as Matemo, have small groups of civilised communities, while some of the villages on the neighbouring coastlands are also under the direct jurisdiction of Portuguese officials. Such is Musimbwa (Mucimba), situated on the bay of like name about 60 miles south of the Rovuma estuary. Recently also the Portuguese have by force of arms vindicated their claim to the possession of Tunge Bay, an inlet on the coast contiguous to Cape Delgado. This place had already been ceded to them by previous treaties, as well as by the convention concluded with Germany in 1886 But an attempt was made to dispute their right by the late Sultan of Zanzibur, who based his claims on the nationality of the Arab traders by whom the district was administered, and on the geographical explorations undertaken by his command in the interior of the country. The question has now been settled by the Portuguese gunboats in favour of the Europoan power.

But if Portugal has thus become mistress of the whole seaboard, she is still represented in this region by a mere handful of her European subjects. In 1857 a batch of emigrants was sent direct from Portugal to form permanent settlements on the shores of Pemba or Mwambi Bay, south of Ibo, one of the best harbours on the coast. They received free grants of land, cattle, rations, and arms; but on the other hand they were subjected to a rigorous administration, including personal supervision and the regular observauce of public worship. The result was that despite the relatively salubrious climate of the district, the colony made no head, but rapidly fell into utter decay.

On the mainland over against Ibo stands the village of Kisanga, a small port on Montepes Bay, where the Mtepwesi (Monttpes) River reaches the coast.

## Administration of Mozambique.

Being formerly considered as a simple port of call on the route to India, Mozambique depended administratively from Goa to the middle of the eighteenth century; but since the year 1752 it has been governed directly from Portugal. Like the province of Angola on the west coast, it is now administered by a governorgeneral assisted by a council of high functionaries. A provincial nouncil has also been instituted for the purpose of examining and sanctioning the local budgets and generally superintending all affairs of secondary importance. Special commit-
tees take charge of the finances, public works, and sanitary matters. The province is unrepresented by any delegates to these boards and committees; but it elects two deputies, who have seats in the Lisbon Cortos.

The Mozambique budget, which shows a heavy yearly deficit, amounting in 1886 to nearly $£ 51,000$, is fixed by the central Government. The revenue is derived chiefly from the customs and a poll-tax of seven shillings levied on every bead of native families. Public instruction is but slightly developed in the province, the few schools for both sexes showing a total attendance of less than four hundred pupils.

The bishopric of Mozambique, which is still subordinate to the archiepiscopal see of Goa, enjoys scarcely any ecclesiastical jurisdiction except over the Portuguese and men of colour connected with the trading establishments. None of the numerous tribes of the interior have yet accepted the Roman Catholic form of Christiunity, although a first Jesuit mission was sent from Goa so early as 1560 to the "Monom "apa" empire for the purpose of "enlightening" the unbelievers, "as black of sous us of body;" and although subsequently all tho military expeditions were arrmanied by missionaries who were charged "to reduce the indigenous
 wreatiog of tw Jesuits and Dominican friars, the spiritual administration of pries a wamed from the home country for civil crimes or for simony, and above all, tietraier : ituves, both pagan and Christian, ress!? in the disappearance of most of the paisisnes founded at any distance from the settlements on the coast. The churches crumbled to ruins, and in many places these melancholy remains of misapplied zeal are still seen, surrounded by the superstitious respect or awe of the aborigines.

Even so recently as 1862 the slave-trade was still actively carried on between Mozambique and the island of Cuba, but in that year the traffic was at last abolishc 1 in the great Spanish West Indian colony. The slaves imported from the African seaboard to Madagascar had also become so numerous that they were long familiarly known to the Sakelava and Hova inhabitants of that island by the nume of "Mozambiques." After a long period of gradua. transition the last traces of legal slavery finally disaypeared in the year 1878 throughout the Portuguese possezsions.

The province of Mrizanbique is divided into districts, each administercd by a governor, who delegaics his authority in the villages or in the tribes either to the native chiefs or else to capitäes mórs, or "captains-majo"" In the Appendix is given a list of the ten districts into which the province is at present divided, together with the names, and where possible the population, of their chief towns.


22,000 square miles. But this is the mere nucleus of the vast colonial empire which Germany reserves to herself the right of gradually extending as far as Tanganyika, source of the Congo, and to Victoria Nyanza, source of the Nile In taking possession of these lands the German traders, sure of tho support of their Government, proceeded with rare boldness and foresight. Disguised as poor emigrants they landed at Suadani, without betraying their true eharacter, and within seven days they had executed their first treaty of annexation, which was soon followed by soveral others. Hastening to take their stand on accomplished facts, they obtained from the Berlin Government a "letter of protection," and then an Imperial charter, armed with which documents they felt confident that

Fig. 00.--Chief Routes of Explorers North of the Rovuya.
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their interests would henceforth be safeguarded against those both of Great Britain and the Sultan of Zanzibar.

A German flect then made its appearance before the royal residence, and under the muzzles of the guns the Sultan was fain to reeognise that his suzerainty had ceased for ever. He even surrendered the two chief ports that still remained to him on this cnast, thus handing over to the agents of the German customs the keys of his treasury. In 1886 a special convention signed with England recognised not only the annexations already made by the Germans, but also those which they intended making at some future time. The respective " zones of influence" which England and Germany propose to incorporate in their colonial empires as soon as their first acquisitions are consolidated, are henceforth limited

1 empire as far as the Nile upport of das poor cter, and hich was mplished ion," and dent that
by a conventional line running south-eastwards from Kavirondoland on the east side of Victoria Nyanza to the Indian Ocean. This line passes to the north of the snowy Kilima-Njaro, monarch of African mountains, while on the south the future Gerinan domain is bounded by the course of the Rovuma, separating it from the Portuguese Mozambique lands.

Beyond a narrow strip of coastlands recognised by a sort of "diplomatic fiction" as still belonging to the Sultan of Zanzibar, the region figuring on the maps as forming the future German East African domain covers a superficial area of $\mathbf{1 2 0 , 0 0 0}$ square miles, with a total population approximately estimated at not more than three million souls. To this domain may already be added what remains of the Zanzibar state, to which the new Sultan, Said Khalif, succeeded in March, 1888, as the officially acknowledged vussal of Germany.

Thus consolidated on a sure political footing, the financial society by which the first treaties were concluded has been able to develop into a more powerful company disposing of a considerable capital. The association also commands the services of a body of skilled and learned explorers, who are now studying the mineral, agricultural, and commercial resources of the country, indicating the points to be occupied, and tracing the routes destined soon to connect the inland stations with the ports on the east coast. Numerous stations have already been founded in the Kingani, Wami, and Rufu river valleys, and the ground in the neighbourhood of all these places has been cleared by the planters for the cultivation of coffee, cotton, tobacco, European and African vegetables. Protestant and Catholic German missionaries have also established thenselves in these new settlements, where chapels and schools are to be opened. Through the intervention of the Pope the French missionaries, who had long been labouring in this field, have now been replaced by Germans.

But however active and enterprising may be the "protectors" of the populations dwelling in the region comprised between Zanzibar and Tanganyika, a large extent of the territory claimed by them.still remains to be explored. The best-known district, one of those that have been most frequently described by travellers, is the zone of the caravan routes, whose intersecting tracks wind through Ugogo and Unyamezi from the Indian Ocean to the shores of Tanganyika. This is the region first traversed by Burton and Speke, by Livingstone, Stanley, and Cameron, and since the time of these pioneers of geographical discovery, by numerous other European explorers, traders, missionaries, or soldiers. A portion of the territory has even already been carefully surveyed by means of astronomical observations, while a first map of the neighbourhood of Kondoa, in the Wami Valley, is based on a scientific triangulation. But vast spaces stretching to the north and south along both sides of the commercial highways are still known only through the vague reports supplied by the natives, and the geographical features of these districts are figured differently on the different maps of travellers and explorers.

## Pirvical Features.

The Rufiji (Ru-Fiji), Rufu (Ru-Fu), and Wami Rivers, which water the region of coastlands till recently known by the general nume of the Zanzibar coust, from the neighbouring island of /anzibar, are characterised by basins whose natural limits are in many places somewhat undecided. On the south west the lofty ehain of the Livingstone Mountains separates the farthest sources of the Rufiji from the torrents rushing impetuously down to Lake Nyassa. This watershed is continued northwards by other ranges, the Yomatema heights and plateaux, all of which fall continually in this direction. Hence in the Ugogo territory crossed by the caravan routes, the transition is very gradual between the headstreams of the Malagazi, flowing to the Congo basin, and those ruming east to the Indian Ocean. Here the divide is formed by an extensive tableland standing at a mean altitude of from 3,500 to 4,000 feet, and in the most elevated parts rising to 4,300 feet. Here and there the uniform surface is broken by a few granite crests cropping out through the prevailing sandstone and reddish laterite formations. Northwards the horizon is limited by the table mountains which are inhnbited by the Wahuma people, and which from a distance appear to rise a few bundred yards above the level of the plateaux.

The nountain ranges, properly so called, are doveloped entirely within the basins of the rivers flowing seawards, between the dividing tablelands and the seaboard. To these ranges Burton has given the name of the "African Ghats," comparing their outlines to those of the Indian Ghats which form the outer escarpments of the Deccan. But unlike the Indian Ghats, these Usagara ranges are not merely the ouier escarpment of an elevated plateau, but, although to a less degree, present also the aspeet of true mountains en their inner or landward slopes, rising on this side in steep scarps alove the tableland on which they stand. Connected with the Livingstone range by a alightly inclined plateau, which is carved into terraces by the Rufiji headstreams, and which rises in some of its crests to altitudes of nearly 6,600 feet, the Usagara system ramifes into two parallel main chains running south-west and north-east, in the same direction as the seaboard north of Zanzibar. Nevertheless these chains present great irregularities in their general outlines. In many places they throw off transverse spurs, and amid the chaos of crests everywhere bounding the horizon it is often impossible to follow the main axis of the systen:. 'Ike Rubeho hills, which here form the waterparting between the Rufiji and the Wami busins, present on the whole the aspect of a ridge disposed in the direction from north-west to south-east. In the southern or Rufiji basin occur some coalfields, whose economic value has been differently estimated by explorers.

The Usagara (U-Sagara) Mountains are mainly of granite formation, interspersed however with diorites and other eruptive rocks, as well as with schists und sandstones. The highest crests exceed 6,500 feet, and the Rubeho Pass, crossed by Burton and Speke in 1858, would appear to stand at an elevation of 5,700 feet. These pioneers gave it the name of the "Terrible Pass," owing to the rugged charactor of the escarpments and the wild disorder of the boulders which, exhausted
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as they were from fever, they found so difficult to surmount. But however savage in appearance, these uplands are at least favoured with a salubrious climate, and the Europeans enervated by a residence on the marshy plains of the seabourd might 'here establish health-resorts to recover their strength in an atmosphere resembling that of the temperate zone. Most of the Usagara villages are built above the river valleys on the advanced spurs of the main ranges.

## River Systems.

A few inconsiderable watercourses reach the coast north of the Rovuma estuary; but the first large fluvial delta is that of the Rufiji or Lufiji, which lies 180 miles beyond that point. This river does not flow from Jake Nyassa, as was reported to Livingstone by the natives; nevertheless its farthest headstreams have their sources to the west of this lacustrine basin, and its ramifying affluents drain a vast extent of land on both sides of the ranges skirting the plateau. The whole area of drainage comprises an area roughly estimated at 6,000 square miles. The Luwego, or Luvu (Lu-Wego, Lu-Vu), the chief southern tributary, has not yet been surveyed to its source. It is not navigable, and probably has its source in the Livingstone Mountains, flowing thence in a north-westerly direction to its junction with the Uranga (U-Ranga). This branch comes from the west, plunging from fall to fall in a rocky bed flanked by granite wails. But hundreds of cunocs formed of single trunks of trees are met in the navigable reaches, which during the rainy season sometimes expand to a breadth of over 2,000 yards.

The united Luwego and Uranga take the name of Rufiji, which a few hundred yards below the confluence tumbles over the Shuguli Cascades, a series of falls and rapids skirted by granite cliffs. Above these cataracts some rocky islets in both converging branches serve as refuges for the natives exposed to the sudden attacks of marauders. Lower down the Rufiji continues the north-easterly course of the southern or Luwego branch, and offers at intervals a few navigable reaches, although in many places the canoes of the natives are arrested by rapids, reefs, and sandbanks. These obstructions grow more numerous as the mainstream approaches the confluence of the Ruaha (Rua-Ha), a large stream from the west, whose basin comprises a large tract of country between Urori and Ugogo. Like the Luwego, the Luaha is unnavigable, notwithetanding the large volume of water it rolls down during the rainy season, when it becomes the largest branch of the whole aystem. But during the period of drought it is a less copious stream than the Rufiji.

After its confluence with the Ruaha, the Rufiji receives no further contributions from any quarter; but before reaching the sea it has still to surmount the barrier presented by the most advanced ridge of the coast ranges. This ridge runs north and south athwart the course of the river, which pierces it at the gorge where it rushes over the Pangani Falls. No accurate measurement has yet been taken of the total incline at this point, but it must be very considerable, 117-Ar
as is evident from the relief of the hills, which is much greater on the eastern or outer than on the inner side.

In the Mrima, or coast region below the Pangani Falls, the Rufiji is navigable for the rest of its course seawards, a distance altogether of about 120 miles. But

great care and skill are required to avoid the sand or mudbanks, which are formed or shifted with every recurring inundation. In this part of its course the river has even excavated a new channel, which winds to the south of a now abandoned branch. Lower down, in the delta proper, these branches are constantly being
displaced. The alluvial deposits, incessantly disturbed by the current, presents every year a fresh system of ramifying chummels, while seuwards the outlines of the coast are continually modified by the ceaseless action of the coral-building polyps.

In proportion to the size of its basin, the Rufiji deltu is very extensive, developing a coastline about 54 miles long and covering a total superfieial area of no less than 600 square miles. It is intersected by about a dozen so-culled mios, or estuaries, some of which are not in constant communication with the fluvial system, although connected with it for the greater purt of the year, when tho sweet and saline waters are intermingled in their channels. The lurgest volumes of the fluvial current are discharged through the northern branches, the Bumba or Msala, the Kiomboni, Simba-Uranga, and Kibunya, and these are consequently the most accessible to shipping, which is able to ascend them at high water. The Simba-Uranga mouth especially is much frequented by coasters, which come to load timber on the banks of the river. All the channels in the neighbourhood of the sea are fringed by dense mangrove thickets, and here the few habitations of the natives are raised on piles sunk in the mud. Higher up, where the soil is less saturated with moisture, no more trees are seen, and the ground is covered with tall grasses, yielding where cultivated rich erops of rice.

Compared with the Rufiji, the other streams discharging into the Zanzibar waters are of inconsiderable size. The Kingani, which Holmwood ascended for a distance of 120 miles from its mouth, is also known as the Mto, Mbazi, or Rufu ( $\mathrm{Ru}-\mathrm{Fu}$ ), names which have all the same meaning of "river." It has its source in the valleys of the castern slope east of the Usagara uplands. The Wami, which also reaches the coast opposite the island of Zanzibar, but a little farther north, collects its first waters much farther west in the hills skirting the plateau.

## Lake Rikwa.

But the space comprised between the basins of these rivers and those flowing to Tanganyika is dotted over with shallow flooded depressions without any outflow. The largest of these reservoirs, lying west of the heights where the main branches of the Rufigi have their origin, is Lake Rikwa (Likwa, Hikwa), whieh was diseovered by Thomson in 1880 , and has since been visited by Cotterill and Kaiser. Seen from the summit of the Liamba Mountains enclosing it on the northwest, and separating it from Tanganyika, Rikwa appears to fill a regular valley disposed north-east and south-west parallel with the axis of Tanganyika and Nyassa, and forming part of the sume lacustrine system in the continental relief. It stunds at an estimated altitude of nearly 2,600 feet, that is to suy, about 100 feet ubove the level of Tanganyika, and has a probable length of about 60 miles, with a breadth varying from 15 to 20 miles. Rikwa receives several afluents at both extremities, including even a considerable stream, the Katuma or Mkafu, which takes its rise north of Karema, in the mountains skirting the great lake. But all these contributions of fresh water, being carried off by the evaporation of the
basin, cannot prevent the formation of a residurn of saline substances in this lacustrine reservoir, whose waters, according to native report, have a flavour of sulphur.

## Climate.

To the Usagara Mountains, rising between the plateau and the seaboard, are mainly due the contrasts of climato, and consequently of all the phenomena depending on it, including those of the running or stagnant waters. In this region of East Africa the mean direction of the winds is normal with the coast. Whether the south-east trades are in the ascendant, as is the case during the greater part of the year, or whether they are succeeded by those of the north-east, as in tho month of January, when the whole atmospheric system is shifted southwards with the course of the sun, or whether the aërial currents are attracted to the interior of the continent, these currents always set in the direction of the coast. The rain-bearing clouds are thus arrested by the mountain ranges of the interior. For the same reason the alternating daily breezes are felt only on the maritime slope. Hence the opposite side facing landwards, as well as the inland plateaux sheltered from the prevailing easterly winds, are much farther removed from marine influences than might be supposed from their proximity to the Indian Ocean.

The massikn, that is to sar, the rainy season, during which the people remain " confined to their houses," generally begins on the coastlands in January, when the east winds are displaced by the north-east monsoon. But the heavy downpours scarcely set in before March or April. After the month of May they fall off, returning again in the vuli season, which lasts from the middle of October to the end of the year. September is the driest month, although even then occasional showers occur. In certain inland valleys opening in the direction of the moisturecharged winds, it rains throughout the whole year, except perhaps for a fortnight or so in September. Here the massika makes its appearance much sooner than on the coast, and the mountains are frequently wrapped in dense fog. The total rainfall certainly exceeds 120 inches on the seaward slope of the Usagara uplands. The same contrast that is observed towards the southern extremity of the continent between the Atlantio and Indian Ocean seaboards, is also maintained in these tropical regions lying between the tenth and sixth degrees of south latitude. At equal distances from the equator both the rainfall and the temperature are higher on the east than on the west coast. According to Hann, the difference of temperature under the tenth degree of south latitude, that is about the Rovuma and Cuanza estuaries respectively, is as much as eight degrees Fuhrenheit, a contrast which must be attributed to the direction of the marine and aërial currents on the two coasts. The monsoons on the Atlantic side blow almost constantly from the south, and are consequently tempered by the cold Antarctic waters. But on the opposite side of the continent the prevailing winds come from the east, that is by an oceanic basin heated by the vertical solar rays.* The contrast is even greater

[^30]between the respective marine carrents. A stream of cold water sets steadily in the direction from south to north along the Athmic scaboard, while a flood of tepid water, escaping from the great contral basin of the Indian Oceun, bathes the enstern shores of the continent, flowing southwards through the Mozambique Channel.

The hilly plateaux lying to the leeward of tho Usagara highlands are mainly an arid region like the Karroos of Cape Colony. In many districts there is almost a total absenco of water, so that the natives are obliged to siuk deep wells in the gravel in order to collect the little moisture that oozes through the subsoil. In these districts the vuli season passes without bringing any regular lieavy ruins, whilo the massika is occasionally interrupted by a period of dry winds, sure forerunner of famine. The same atmospheric currents that bring the raincharged clouds to the maritime slopes often deprive the plutean of the neeessary moisture. To the dryness of the air are added the sultry heat of the day and cool nights. Whirlwinds of dust are often developed on the elevated plains, sweeping furiously over the land, and in their eddics bearing along coarse sand and at times even tho shingle itself. What the Spaniards say of the Philippines, Burton applies to the Ugogo country: Seis mazes de polvo, seis mezes de lodo. "Six months of dust, six of bog." The vapour-charged fogs of the coastlands, which at night precipitate a copious dew, do not penetrate far into the elevated lands of the iuterior.*

## Flora and Fauna.

The wealth of vegetation is regulated by the quantity of the rainfall. The zone of coastlands, being sufficiently watered, is everywhere clothed with herbaceous or forest growths. North of the Rovuma the terraced lands inhabited by the Makondes present the same general aspect as the region south of that river, where the Mavihas have their camping-grounds. Here serub and brushwood are matted into such dense masses, that no wrogress can be made except axe in hand. In various parts of the northern sectis: if the coustlands the vegetation, while equally dense and more leafy, has a more forest-like character. On leaving the villages, convoys at once plunge into arboreal avenues where the porters have great difficulty in forcing a passage through the tangled branches. Elsewhere the trees are rarer and often grouped in picturesque clusters. In the vicinity of the marshy tracts the reeds and tall grasses grow to a height of 12 or 14 feet, forming a dense jungle, where marauders at times lie in ambush to full on the unwary wayfarer, or where runaway slavos find a temporary shelter.

The msandarusi, or copal-tree, which yields the best gum known to commerce, flourishes along the banks of the Lower Rufiji for 35 or 40 miles from the coast. The highlands are clothed especially with mimosas and other plants of low

[^31]
## SOUTH AND EASi' AFRICA.

growth ; interspersed, hewever, with gigantie tamarinds and sycameres, whose huge spreading brushes might shelter a whole reginent; or the calabash-tree, in whose hollow trunk a family might be aceommodated. The Usagara Mountains ubound especially in arborescont species with sweet-smelling flowers and delicious fruits, ulthough never improved by cultivation. Wooded tracts are often met where the traveller might faney himsolf ever! where surrounded by dense forests, yet as he advanees the trees are seen to grow rarer and noom give place to the open savanmah. In the Ugogo district, on the opposite side of the mountains, wools aro still met in the well-watered bottom-lands, while elsowhere fuel is st searce that the natives are obliged to burn cow-dung, as in the prairies of the Far Wost. Nevortheless, in these regions some large trees are still met, here a few calabashes or a solitary baobab indicating the site of human abodes, there a gigantic euphorbia serving as a landmark or station for caravans.

But if forest growths are rare, large animals still abound, especially in the districts remote from the trade routes. Certain parts of the plateau are still frequented by the elephant, the rhinoceros, giraffe, buffalo, and ostrich. Till recently even lions were so numerous that villages had to be displaced to avoid their dangerous neighbourhood.

## Inhabitants.

Several of the tribes dwelling in the northern part of the Rovuma basin scareely differ in speeeh and usages from the populations inhabiting the southern slope. Some lead an unsettled existence, frequently changing their settlements and making ineursions on both sides of the river. Thus the Wanindis and the Magwangwaras, or Makondes, who assume the formidable name of Maviti in order to strike torror into their more timid neighbours, and who have wasted so many districts and enslaved so many peoples on the south side of the Rovuma, have now established their chief encampments on the opposite slope. The two groups of tribes which emantront each otber from their elevated terraces on both sides of the Lower Rovuma, speak a common language, and in other respects present such a strong fumily likeness, that they are evidently branches of the same race, notwithstanding their distinctive tribal names.

On the south reside the Mavihas (Ma-Viha), on the north the Makondes, (Mu-Konde), the latter rendered extremely repulsive by the scarifications covering face and body, which are renewed from time to time in such a way as to ruise prominent ridges on the surface of the skin. The pelele is also universally worn by the women, giving the upper lip from a distance somewhat the appearance of a boar's snout. Nevertheless the Makonde women enjoy a considerable share of independence. They are not purchased, nor do their parents claim the right to dispose of them in marriage. On the contrary, they choose their own husbands, and when the matter has been settled by mutual consent, the bride enters her new home, sweeping the floor and setting everything in order. She is then joined by the bridegroom, who leaves his gun or other arins at the door. But although this
completes the simple wedding rites, unions are, us a rule, much respected. Cases of infidelity are extremely raro, und when they do oocur, the offence is ulways punished by the banishment of the delinquent. After a confinement the wife lives apurt from her husbund till the child begins to speak. 'Then on the duy of reunion the mother brings her offepring to the crossing of two puthe, symbolising tho different ways of life, and after rubbing it over with oil resigns it to the father, and the family life is resumed.

At the death of a Makonde all the grain he possessed is immediately converted into beer for the benefit of the community, and the mourning or feasting lasts until all the liquor is eonsumed. Enriched by the sule of the gum copal and

caoutchouc, large quantities of which are produced in their territory, the Makuas have become very proud and overbearing, and show much mistrust at the visits of strangers. Some English missionaries settled in the Masasi country, on the western border of the Makonde territory, have hitherto failed to establish uninterrupted relations with these natives. In the year 1877, when Chauney Maples penetrated into one of their villages, the inhabitants, who had never before seen a European, took him for a ghost, but consented to supply him with food.

The Masasi country belongs to a powerful branch of the Makua nation, which farther south occupies such an extensive domain in the Mozambique region. The Faos of the Nyassa highlands are also numerously represented in this part of the Rovuma basin. Here are also met some Wamueras (Wa-Muera), a feeble remnant
of a formerly ${ }^{\text {powerful tribo ahost entirely extermimated by the Maviti. These }}$ Wamueras were at one time very numerons, expecially in the neighbourhood of the const near Kiloa.

The Wangindos or Wagindos (Wa-Ngiado, Wa-Giads), who have replaced the Wamueras in the districts to the north and north-west of the terrace occupied by the Makondos, are one of the many warlike tribes that have ussumed the name of the Maviti. To keep up the fiction they have also adopted the dress, war-ery, weapons, und custons of these formidable kinsmen of the Zulus. By some of their neighbours they are callod Walihuhu (Wali-Huhu), a namo formed in imitation of their battle ery. The Mahenges (Ma-Henge), who dwell farther north in the Rufiji basin between Uranga mad Ruaha, also try to strike terror by the same device, after having had themsolves to tremblo before those fiorce warriors. Tho Wanyakanyakos (Wa-Nyakanyakn) have beon reduced by them to the condition of serfs.

## The Wazaramos.

The territory east of tho Mahenges, in the Rufiji basin, belongs to the Wundondes, or Wadondis (Wa-Nidonde, Wa-Dondi), who aro conterminous with the Wazuramos (Wa-/aramo) of the region comprised between the Rufiji, the lower Kingani, and the territory of the Swaheli, or "Coast People." The Wazaramos are for the most part men of medium stature, but of rare physical strength. They are evidently of mixed origin, and present a corresponding variety of types. Some truvellers have been struck by the great number of albinos met in their country. Since tho middle of the present century they have been frequently visited by Arab traders and European explorers; hence the accounts now received of their social usages differ greatly from those of the early observers. Through contact with the outer world their customs have been considerably modified, and they now wear the Arab dress, purchase arms, implements, and ornaments from the traders, and bave discontinued many of their ferocions ancestral practices.

But in the more remote districts Wazaramos may still be seen whose features are slushed with deep gashes from ear to mouth, who wear no clothes except short skirts of foliage or grassy fibre, who by mixing elay with the hair build up headdresses in the shape of a roof, and make use of poisoned arrows, which they keep in a carefully ornamented quivor. Cruel punishments for real or imaginary offences wero by no means rare amongst the Wazaramos: they burnt the wizard with bis wife and children, threw to the bush all infants whose teeth presented any departure from the normul disposition; at times twins shared the same fate, as well as all children born on unpropitious days. Even those who had survived the dangers besetting their infancy were murdered if they ground their teeth in sleep, or had any other physical defect considered likely to bring misfortune on the family. On the other hand, the mother who lost her child through an accident or any illness, was held responsible for its death; she was driven from

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the village, had to danb her face with clay, and silently to endure the insults heuped upon ber.

The Wazaramos do net practise cireumcision, although they have in many other respects been subjected to the influence of the Mohammednus on the coast. Most of them speak Swaheli as well as their mative language, and on guta days the chiefs wear the flowing robe, vest, and turbun of the Arabs. The women also have udepted the Mussulman style of dress, but do not go veiled. The dwellings of the wealthy classes are palaces compared to the ordinary native huts, being small houses presenting almost a European aspeet.

The Wakweres (Wa-Kwere), Wakami (Wa-Kami), and Wakhutus (Wa-

Fig. 03.-Eaft Afuidan Thiams between tue Rovuma and Paoani.


Khutu), who dwell farther west in the hilly region about the headstreams of the Kingani, are clogely related to, although far less civilised than, the Wazaramos. They wear nothing but seanty bark elothes, and their habitations are rather dens of wild beasts than human abodes. In their country trials for witcheraft, followed by the inevitable punishment of the stake, are still terribly frequent. Much more civilized are their Wazeguha (Wa-Zeguha, Wa Zegura) neighbours, who with the kindred Wangurus (Wa-Nguru), inhabit the unproductive plains on the north side of the mountains traversed by the Lower Wumi River. Nearly all these tribes have been converted to the Mohammedan religion through the influence of the contiguous Swaheli and Arab communities; the possession of firearms has also made them formidable slave-hunters.

The Wazeguhas are almost the only people in this region of East Africa who do not recognise the principle of inheritance in the transmission of the supreme authority. The succession depends rather on personal qualitics, strength, courage, or wealth, and the consequence is that incessant warfare is carried on by the rival candidates for the position of tribal chief. Occasionally their ncighbours become involved in these intertribal feuds, which at times lead to the extermination of whole communities. Thus the Wadoes ( Wa -Doe), one of the local clans, has almost entirely disappeared during the ceaseless broils by which the land has been wasted, and fugitive members of this group bave been scatlered northwards as fur us the neighbourhood of he equator. Their territory was generally avoided by travellers, because the Wadoes were known to be cannibals. Both sexes disfigured themselves by two broad red scars, traced from near the temples down to the point of the chin. The two upper incisors were also extracted, and the national costume consisted of skins dyed yellow. At the death of a free man two slaves were buricd alive in the same grave, a woman in order to prop his head during his last sleep, a man furnished with an axe in order to supply him with fuel in the cold, dark earth. The village chiefs try to make themselves look more terrible by cutting their nuils in the form of lions' claws, and avoid mceting each other on the highway, pretending that their glance must prove fatal to a rival in authority. Hence when they have to deliberate on matters of common interest, the meeting takes place in a hut divided into two or more compartments, one for each chief, and the discussion is then carried on over the partitions.

## The Wasagaras and Wagogos.

The highland district lying between the seaboard and the inland plateau is inhabited by the various Wasagara (Wa-Sagara) clans, some still as barbarous as the Wakhutu peoples, others already mors or less civilized through their continuous intcrcourse with the Swaheli, the Arabs, and the European explorers. Their language, divided into several dialects, is one of the most widely diffused in the interior, being current in some communities as far as the neighbourhood of Mombaz. The Wasagaras are generally distinguished by a fuller growth of beard from all the surrounding populations. Some of their chief branches are the Watchos (Wa-Heha), in the sumthern batin of the Ruaha, and farther north, towards the frontiers of Masailund, the Wamegis (Wa-Megi), the Wakagurus (Wa-Kagurn), and the Wagejas (Wa-Geja). The distinctive sign of all these groups is the lower lobe of the ear, which, by the insertion of ort ments such os wooden, metal, or horn dises, continually increasing in size, is gradnally distended until at last it touches the shoulder. The cavity thus produced is often utilized for holding little boxes, tobacco pouches, instruments, and other nicknacks. While most of the tribes are bearded, the Wahehes, whose language closely resembles the Ki-Swaheli, have absolutely hairless faces. They have enslaved the Wabenas (Wa-1ena), a peaceful nation who have become famous for their


remarkable skill in carving and sharpening swords made of ebony. Their territory, a hilly plateau considerably over 6,000 feet above sea-level, is a rugged bleak region swept by biting winds.

The Wagogos (Wa-Gogo), who occupy the section of the plateau stretehing as far as the watershed towards Unyamezi, were formerly much dreaded as fierce marauders. When the first Arab caravan made its appearance in their territory, Burton tells us that they were so surprised at the corpulence of the leader, that they took him for a god, and called upon him to bring down rain from heaven; but their prayers not being inmediately answered, they were about $t$, murder the strange dcity when an opportune shower intervened to save his lifo. Yet the Wagogos are now said to be the least superstitious of all the East African populations. They have very few magicians amongst them, and even these have tallen into great discredit. Most explorers who have visited these communities have been struck by the small size of the skull compared with the broad features and the prominent ears, which are likened by Burton to the handles attached to two sides of a jug or pitcher. The lube is pierced and distended as amougst their Wasagara neighbours. In this part of Africa ears enlarged in this way are a mark of freedom, slaves being forbidden either to pierce the lobe or attach any ornament to this organ. Nearly all the Wagogos are amply clothed, even the children wearing a large robe. Their language is much harsher than that of the neighbouring tribes. It is generally spoken in a loud, aggressive voice, sometimes even with a certain brutality, the Wagogos being very proud of their numbers, and long accustomed to bully the timid traders visiting their country.

## The Waswaheli.

But however powerful they may be, all the nations of the interior have alike yielded to the influence of the language spoken by these despised dealers. The Ki-Swaheli, that is the language of the Waswaheli (Wa-Swaheli) or "Coast People," is daily becoming more widely diffused amongst all the native peoples in this part of the continent. Yet the tribes by whom this idiom is being propagated far and wide are neither stronger nor more numerous than the others. On the contrary, they cannot be said even to constitute a distinci elhnical group at all, for the Waswaheil are of most diverse origin, and lave become intermingied with immigrants from all the neighbouring regions. What gives them a certain national unity apart from most other Bantu populations is the Mohammedan religion, which they have adopted and profess with more or less zeal. The Arab element also has greatly contributed to modify their usages, and transform the agricultural communities into groups of active traders.

Ki-Swaheli is spoken in its greatest purity in the districts north of Mombaz and Malindi, where the dialect known by the name of Ki-Ngozi has preserved its archaic forms, and is consequently used by poets in preference to all others. As it gradually spread southwards along the coastlands and adjacent islands as far as Mozambique, the curreut specch becume more and more affected by Indian,

Persian, Portuguese, and espeeially Arabic elements. Notably in Zanzibar it has been extensively Arabised, and here all abstract torms are of Semitic origin. Nevertheless the Bantu substratum has been preserved, and the grammatical structure has remained purely African. From the seaports, eentres of commercial life for the whole of East Afriea, Ki-Swaheli has been disseminated throughout the regions of the interior, and like the Bunda language of Angola and neighbouring lands, like the Se-Suto of the Basuto people between the Drakenberg and the Zambese, it has beeome a general medium of intercourse which in some places is already supplanting the local dialeets altogether. Aithough spoken as their mother-tongue by probably not more than a million persons, Ki-Swaheli seems entitled to rank as "one of the twelve most important languages of the world with reference to the vast area over which it is a lingua franca, its position as a leading language amidst a host of uncultivated congeners, and its power to assimilate alien elements, especially the Arabie, which has done for it what it has already done for the Turkish, Persian, Urdu, Hausa, and Malay" (Cust). Cameron tells us that during his journey from east to west across the continent, he met in every tribe of the interior one or more persons conversant with this language of the east coast. It was by comparing a number of Ki-Swaheli words with the corresponding terms in the West African and Kafrarian dialects that so early as 1808 Lichtenstein was able to advanee the hypothesis of the fundamental unity of the Bantu peoples from Algoa Bay to Mombaz on the east and the Gaboon on the west coast. This hypothesis has since been amply confirmed, so far at least as regards the unity of the linguistic family spread over this vast area of many millions of square miles.

Ki-Swaheli possesses a relatively copious literature. It comprises, Jike so many other Negro dialects, translations of the Bible and of various religious treatises, as well as collections of proverbs, legends, poems, in the publication of which the uatives themselves, as well as the missionaries, take an active part. The Arabic alphabet, till recently almost exclusively employed, has now been generally replaced by the Roman characters, which are much more suitable for expressing the sounds of all Bantu languages. But authors have not yet come to an understanding as to the best dialect to be definitively adopted as the common literary standard. The preference, however, will most probably be ultimately given to the Unguya, that is, the form current in the island of zawibar.

## Topography.

The gradual aseimilation of the inland populations to those of the seaboard in all social respects is being steadily effected, not by military expeditions, but by the development of trade and peaceful intercourse. Various centres of population, most of whieh, however, contain scarcely more than two or three hundred huts, follow successively along the commercial highways leading from the maritime ports to those that have already sprung up on the shores of the great lakes. But many favourably situated harbours are still almost entirely cut off from all communication with the interior by incessant intertribal feuds and slave-hunting expeditions,
or else their only commerce consists in that of the captives obtained during these marauding incursions; for the seaports comprised between the Rovuma and Rufiji estuaries still serve for the export trade in human flesh, notwithstanding the vigilance of the British cruisers.

Mikindani, one of the first of these ports occurring to the north of the Rovuma, presents an excellent anchorage, where shipping might find good shelter. But it is little frequented, and the movement of exchanges is entirely in the hauds of Hindu traders, who take gum copal, ivory, and rice in exchange for textile fabrics, glass beads, and arms. Lindi, lying more' to the north-west, on a bay where the

Fig. 94.-Ports of Mirindani and Mto-Mtwara.


Ukeredi River reaches the coast, is a thriving little seaport of about two thousand inhabitants. Here the staple export is caoutchouc, tho trade in which is shared between the Banyans and Arabs. The forest where the caoutchouc-yielding lianas twine like coiling snakes round the stems and branches, occupies a strip of the scaboard with a mean breadth of from 18 to 20 miles. A rock near the extremity of the estuary is crowned with the ruins of an old Portuguese stronghold.

The valley of the Ukeredi leads inland to the Masasi district, where the English missionaries have founded an important station, which has become a centre of acclimatisation for European plants in the Makua and Makonde territories. The

Yaos, who are a much-travelled people, and who therefore regard themselves as much superior to the simple stay-at-home Mukuas, have also numerous settlements in this country. The missionary village has been built on a small northern affluent of the Rovuma in an extremely fertile clearance encircled by forest-clad hills. This Masusi station, standing at an elevation of about 1,800 feet above the sea, is one of the most salubrious places in all Africa, at least for the

Fig. 95.-Kiloa-Kisiwani.
Soale 1 : $\mathbf{1 1 8 , 0 0 0}$.


European constitution. Chauncy Maples considers that a line drawn from Lindi through Masasi towards the upper Rovuma would indicate the very best route between this coast and Lake Nyassa.

## Kiloa and Dar-eg-Salaam.

Beyond Lindi follow other ports on the seaboard, which is here fringed by coral reefs with steep terraced escarpments. Here one of the largest inlets is that of Kiloa-Kisiwani, which at the entrance is sheltered by a cluster of islets, and which


## KILOA.

penetrates some 12 miles north-westwards into the interior, presenting in many places a perfectly safe anchorage in deep water. Novertheless this splendid harbour, although frequented in the tenth century by the Persians of Shiruz, is now but little utilised, its importance having been greatly diminished since the fifteenth contury. At that time a flourishing eity, the (Quilon (Kilon) of the Portuguese, was the residence of the Zonj sultans, who ruled over the whole seaboard from Cape Delgado to Mombaz. During the first half of the fourteenth century Ibn-Batutn, the famous Arab geographer and traveller, visited this great emporium, which he culled Kulua, and whieh was governed by a Mussulman prince by him described as a person of perfect generosity towards the fatuirs (religious mendicants) and a pious observer of the holy war against the Infidel. At one time Kiloa was said to have as many as three lundred mosques. Francisco d'Almeida's fleet captured the place after a destructive siege in the year 1505, but the conquerors were soon decimated by fever, and this seaport was gradually abandoned by shippers. In the seventeenth century it fell, with the rest of this soaboard, into the hands of the Imam of Mascat. At present it belongs to the Sultan of Zanzibar, but since the suppression of the export trade in slaves the traffic of Kiloa has become insignificant. A few Hindu and Arab traders are settled in the little village of Kiloa-Kisiuani, that is, "Insular Kiloa," which stands on the island of Kiloa beneath the walls of an old citadel and the crumbling remains of some crenellated ramparts.

At present the chief stream of traffic has been deflected some 18 miles to the nortb-west, towards the far less convenient harbour of Kiloa-Kivinje, or "Conti. nental Kiloa," whose little houses and hovels, interspersed with ruins, are grouped in the shade of the surrounding cocoanut groves. But the marshy tracts running parallel with the seashore have hitherto prevented the construction of a road to the interior. Yet Kiloa-Kivinje, which has a population of about three thousand, was, till recently, the chief port on this coast for the exportation of slaves, and altbough the traffic is legally abolished and supposed to be suppressed, the Arab dhows still occasionally secure a cargo of living freight from the surrounding creeks.

The routes followed by the dealers in ivory between Kiloa and Lake Nyassa are still very dangerous, for they traverse the territories of the Wangindos, Wanindis, and Magwangwaras, all of whom are marauding tribes who hold in little account the lives of their visitors. North of Kiloa a safer route runs along the coast, crossing the Rufiji at the head of the delta. In the yeur 1880 Beardall saw no less than twenty-seven large boats employed in the transport of the convoys to the village of Nya-Ntumbc, which at that time marked the site of the ferry.

Another important station on the banks of the Rufiji is Korogero, which lies below the fluvial cataracts and gorges at the converging point of the trade routes from Kiloa, Dar-es-Salaam, and the intermediate seaports. But this important centre of the local traffic is exposed to the incursions of the Wamahengis, who pay periodical visits to the district, burning the villages and carrying off the
inhubitants into slavery. To avoid those raiders the natives, after gathering in their crops, take refuge in the islands of the river, where they are protected by the erocodiles infesting these waters.

Dar-es-Sallum, lying north of the Rufiji, is the port which the Sultan of Zanzibar has selected as the chief mainland station of his fleet. Its Arab name means

"House " or "Abode of Peace," but this appears to be merely a popular etymology of the Ki-Swaheli Dari-Salama, which is its true name, and which has the sense of "Safe Roof." The harbour, which is one of the best on the whole seaboard, can be reached only through a long channel winding between coral reefs. The inner basin communicating through this channel with the sea penetrates nearly five miles farther inland, and offers to shipping an available space several square miles in superficial extent. However fiercely the storm may rage beyond the channel,
ring in by the

Zanzi means
the waters of this landlocked haven always remnin unruffled. The town and the neighbouring populous village of Mimucema ne built on un upheaved cliff, which was formerly a coral reef commanding the old marine chamel now converted into an estuary.

The German officials stationed at Dar-es-Salaam are endeavouring to attract to

this port a portion of the import trade which was till recently entirely centred in the roadstead of Zanzibar, and their efforts have already been attended with a certain measure of success. North of Lourenço Marques, Dar-es-Salaam is the only place on the East African seaboard where a beginning has been made with the construction of a carriage road leading towards the interior of the continent. This great highway, which it is already proposed to convert into a railway, first traverses 118-AT
the zone of lowhands often inundated during the rainy season, and then climbs the hills to its culminating point at the village of holn, about :30 miles west of Dar-es-Kulum. At Koln, where it deseends westwards in the direction of the Kingani Valley, two routes will branch off, one running to Lake Tangunyiku, the other to Nyassa The former, keeping more to the west, will traverse the mountains and valleys of Usagarn and Ugogo, and so on probably through Taboro to Ujiji, while the latter, bending to the south-west, will eross the rolling plains of Uzaramo, the Rufiji gorges, and the Lawego Valley. Although still fur from perfect, the Dar-es-Sulum roud is ulroady utilised for a consideruble local traffie, and the riverain planters so highly appreciate its advantages that they have constructed several branches to connect the more remote villages with the main highway.

## Bagamoyo.

North-west of Dar-es-Salaam follows Bagamoyo, which, however, unlike it, possesses no natural haven. It stauds on an open beach which slopes gently down to the water's olge nud then shouls so gradually that the shipping hus to ride at uncher ubout two miles off the coast. But this point of the buy, whose name of Baga-Moyo, or "Bottom of the Heart," indicates its central position on the concave curve of the shore, enjoys the advantage of standing exactly opposite the city of Zanzibar, about 26 miles distant. It thus oceupies the most convenient point on the coast for the truffic between the capital and the mainland. Bagamoyo also lies only a few miles to the south of the Rufu or Kingani estuary, and thus commands the entrance to a thickly peopled fluvial valley, which descends from the Usagara uplands, strategical centre of the whole country.

Thanks to these favourable conditions, Bagamoyo has already become a large African town, with a population of as many as ten thousand during the scason for engaging porters to join the caravans which are here equipped for the interior. Like Zanzibar and other Arab towns, it has its bazaar, and several of its buildings have been constructed in the European style. But the surrounding district is low and insulubrious, the streets and open spaces are encumbered with refuse of all sorts; on the beach are left rotting in the sun the remains of the fish which forms the staplo food of the Warimas (Wa-Rima), or coast people; lastly the place is occasionally visitcd by fierce cyclones, which uproot the trees and sweep away the native dwellings.

The Arabs are relatively less numerous in Bagamoyo than in the neighbouring island of Zanzibar ; but on the other hand the Hindus of various castes have here formed a powerful colony, which has monopolised nearly all the local trade, and disposes of the Wanyamezi porters to the caravans on its own terms. The place has a garrison of Baluchi troops, who mount guard before the governor's palace, lying in the midst of shady gardens some two miles farther south. To the north of Bagamoyo rise the numerous structures connected with the Catholic mission, head centre of all the other missionary stations throughout East Africa. Here nearly six hundred children, purchased for the most part from the slave-dealers,
mbs the of DarKingani pther to ins und i, while mo, the he Durriverain several
like it, ly down ride at name of the conthe city point on oyo also us comrom the
a large ason for interior. uildings t is low e of all h forms place is way the bouring ve here sde, and he place palace, e. north mission, Here dealers,
are taught varions trades, and culiivate the surrounding orchards and gardens of acelimatiation. Even ufter they have become ndulte they remuin under "the firm and wise tutelage" of the fathers, and continue to work five days in the week for the benefit of the community. The cocoanat grove surrounding the mission,

and containing about a hundred and sixty thousand plants, yields sufficient produce to supply all the wants of the colony.

Saaduni, lying some 30 miles farther north, occupies a position somewhat analogous to that of Baganoyo. Like this place, it is situated on the struit of Zanzibar, over against the island, and in the immediate vicinity of an estuary, that of the river Wami, But the roadstead is much less frequented, the local population scarcely exceeds two thousand, and here are organised few curavans for the
iuterior, exeept those of English travellers, favoured by the British mission stationed in this place.

## 'ílife Caravan Trade.

The whole of the commercial movement between the coast, Lake Tanganyika, and Unyamezi, is carriod on by means of the so-called pagazi, or porters, each of whom balances on his head a load averaging about sixty pounds weight. Most of the men engaged in the seaboard towns come from Unyamezi or Usukura, and although nominally free, these men are in reality the slaves of the Arab and IIindu traders, whe get them into their power by payments of wages in advance, charging such heavy interest on the money that their victims are never able to clear off the debt. The askari, or soldiers who act as escorts to the convoy, and also usually earry half a load, are equally in the hands of the Dar-es-Salaam and Bagamoyo traders, who in fact ultimately receive nearly all the profits on every expedition equipped for the purchase of ivory.

The caravans, commeed generally of several hundred, at times even several thousand persons, march like armed forces through the land. They are under the command of a kirongozi, or captain, and are again divided into a number of brigades, each under a separate nyampura, or major. The order of march is planned beforehand each day; the main body is preceded by a van-guard and followed by a rear-guard, while the flanks are protected by scouts and others engnged to clear the way and collect fodder. A special place is also assigned to the women and children in the convoy and in the camping-ground. In the Mgunda Mkhali solitudes the serub is traversed by three parallel tracts about 65 feet apart. In the middle track walk the women, the children, and the porters bending under their houvy burdens, while the two side paths are taken by the lightly loaded pagazi and the armed men. The caravans have now, however, seldom to defend themselves from direct attack, but have rather to fear lest a solitude be made in front of them, and that they may in this way be cut off from all supplies. A source of trouble are also the exactions of the kinglets or tribal chiefs, who under one pretext or another levy a sort of blackmail, the so-called hongo, or road-tax, the amount of which may at times be arbitrarily increased. Provision has also to be made against fever, epidemics, inundations, droughts, and the thousund other accidents by "flood or field" incidental to such long expeditions.

Thanks to the experience already acquired by explorers since the first journeys of Burton. Livingstone, Stanley, and other pioneers, the time occupied by the trip between Bagamoyo and the shores of Tanganyika has been diminished by threefourths. This space of alout 600 miles may now be got over in six weeks or so, bit all attempts have hitherto failed to replace the porters along this route either by paek animals cr whecled traffic. Horses cannot be empioyed, because within $n$ ten days' mareh of the coast begin the regions infested by the tsetse fly. The ass recists better, but this animal at last yields to the poisoned sting of this insect. Lissays have also been made with pack oxen, while Roger Price has tried
to forward goods by the long teams of cattle employed by the traders in South Africa. But all these experiments have ended in disappointment, and the ,Usagara highlanders nre now the heirs of the useless waggons abandoned by the wayside near Komlou (Miomloa), the station founded in the year 1881 by the French commission of the "African Association."

In 1879 it was hoped that the problem of transport had been solved by introducing from India four well-trained elephants. The intelligent und docile animals did in fact accomplish one-third of the journey without accident ; between Dar-es-Salaam and Mpwapwa they surmounted all obstacles of mountain, swamp, and river, their only food being herbs and foliage. Nor did they appear to be much the worse after an exposure of twenty-three days to the bite of the tsetse pest. It was supposed that the experiment had succeeded, when suddenly one of the four died, without any apparent cause. Soon after, all the other clephants perished in the same way, whether through change of food or of climate, or possibly worn out by the hardships of the route, for along these rugged mountain tracks they had been laden with burdens of sixteen hundred or eighteen hundred pounds weight. Since then the costly experiment has not been renewed, and it is now proposed to settle the question of transport by constructing a railway, which as it gradually penetrates into the interior may enable the traders to dispense with porters and pack animals alike.

Along the highways of commerce leading from the coast to Tabora there are no towns properly so called. Even the villages are frequently displaced, and many capitals of petty states visited by the early explorers are now nothing more than a heap of ruins. The wayside caravanserais most usually selected for revictualling the convoys are the stations of the missionaries, such as Mamboya and Mpucapwa, both situated to the west of the highlands, on a plateau where the headwaters of the Wami take their rise, and where the alimentary plants of Europe thrive to perfection. They stand nearly about midway between Bagamoyo and Tavora, and immediately beyond them begins the wilderness of brushwood, acacias, and gum-yiclding plants, which the wayfarer hastens to traverse as rapidly as possible in order to reach the Ugogo villages, themselves scattered amongst the bush.

Bounded on the east by the Marenga Mkhali region, as the wilderness is called, Ugogo stretches westwards to the verge of another solitude known as the Mgunda Mkhali, or "Land of Fire." This iuhospitable tract, which it formerly required fifteen days to traverse, but which has gradually been somewhat reduced by clearing and cultivating the ground, is an open plain covered with scrub, where the traveller plods for hours together without noticing the least change in the dreary landscape-everywhere a stunted brushwood, and rolled shingle brought down by now dried-up torrents. In some districts of the Land of Fire, masses of granite or of syenite stand out amid the scrub, some ronnded and hummocky, others presenting the outlines of towers, smooth or fissured, isolated or grouped together in hundreds, disposed in avenues, forming huge gateways, or piled in terraces one above the other.

The chief resting-place in the midst of this wilderness is the village of ,Jup-In-Mkon, or the " Round Hill," so called from the syenite eminence over 120 feet high, at the foot of which are clustered a few native cabins.

Fig. 99.-Oceanio and Landward Coabts of Pemba comparmd.
Scale 1 : 4 80,000 .


Zanzibar and Mafia.
The island of Zmazibar, centre of the commercial activity and of the religious propaganda radiating from the scaboard towards the interior of East Africa, is of itself of very small extent. But by its geological formation it is connected with
two other islands also lying at a short distance from the mainland, and also resting on rocky coralline reefs. Mafia, Zanzibar, and Pemba, are either the remains, or possibly the first fuundation stones, as it were, of a future continent, developing beyond the inner an outer coastline almost everywhere presenting precipitous buttresses to the fury of the breakers rolling in from the deep. All three islands are disposed exactly in the same direction as the coast of the opposite mainland. Thus the axis of Mafiu is inclined from south-west to north-east, like the neighbouring shore between the Rovuma delta and the ras or headland of Mwamba Mku. Zanzibar in the sume way runs south-east and north-west, parallel with the seaboard between Dar-es-Salaam and Saadani, while Pemba. like the contiguous continental shore-line, follows the direction from north to south, with a slight inclination towards the east.

The great oceanic depths do not begin till some distance off the windward side of the islunds. On the west or landward side the reefs are very numerous, some strewn over the bed of the sea, and at low water resembling the remains of another "Giant's Causeway," some always awash or completely flooded, and endangering the navigation along the line of tortuous channels open to shipping. The most dreaded section of these waters lies between the islund of Mafia and the Rufiji delta, where the turbid fluvial stream spreading over the surfuce of the heavier marine layers prevents the pilots from sceing the submerged reefs and shoals. Hence skippers never attempt to venture through this passage at night, and most vessels avoid it altogether by keeping on the east side of the island in the deep waters of the open sea.

The Zanzibar channel is broader and deeper than that of Mafia; nevertheless at one point it is contracted to a space of little over three miles, or about one-fifth of the whole distance from shore to shore. In mid-channel vessels ride at anchor in some 20 or 22 fathoms of water.

Mafia, called also Monfia, southerumost of the three islands, is also the smallest in extent, as well as the least important in population and natural resources. The original coral reef, about 200 square miles in superficial area, is now almost completely covercd with a layer of fertile soil supporting a large number of cocoanut palms. The island is continued southwards by an exteusive reef strewn with upheaved rocks, on one of which stands the village of Chobe, capital of Mafia, and residence of the governor and of a few Arab and Hindu traders. The surrounding district is well cultivated but does not yield sufficient produce to support any considerable export trade. In any case the creek on which Chobe stands is scurcely accessible at low water, so that shipping has to anchor at a distance of 9 miles to the south-west of the island.

Zanzibar, the native name of which is Unguya, or the "Station," is the only land in East Africa whose usual designation still recalls the ancient Zenj people described by the mediæval Arab writers as inhabiting the section of the seaboard which stretched south of Somaliland towards the unknown southern waters. The expression "Zanguebar coast," till recently applied to the coastlands comprised between Mombaz and Kiloa, and now transferred under a corrupt form to the
adjacent island of Unguya, simply means "Zenj Coast." Thus Zang-bar or Zanj-bar, corresponding to Hindu-bar, or "Coast of the Hindus," on the east side of the Indian Ocean, indicated the whole seaboard skirting the west side of the same marine basin. Hence also the Arabs called this strip of coastlands Bilad-ezZenj, that is, the "Land of the Zenj people." Marco Polo probably refers to this

stretch of the mainland when he somewhat vaguely speaks of "the island of Zanguebar, which extends about two thousand good miles, and where a very great commerce is done." The term Zanguebar, corrupted to Zanzibar, has thus been gradually restricted to a small section of the east coast, and then, as it were, banished from the mainland to a emall contiguous ieland. This is the reverse process of what usually takes place, the tendency of geographical names being
ang-bar ast side of the ilad-ezto this


ZANZIBAR.

rather to expand, as we see in such instances as Africn, originally a small part of Mauritania ; Asin, at first a little district on the Ionian coast ; Borneo (Brunei), a town on the west side of the great island to which it now gives its name.

Although resting on a coralline foundation, the island of Zanzibar is not exclusively composed of these organic remains. It also presents a few hills formed of a reddish and ferruginous clay, which riso in gentle undulations above the surrounding plain, and which in many places are furrowed by the running waters and carved into columnar formations of surprising regularity. In the southern part of the island the highest eminences do not exceed 450 feet, but on the north-west coast a chain of hills running parallel with the shore attuins un elevation of 1,000 feet, culminating point of the island.

Nearly the whole surface of Zanzibar has been brought under cultivation; hence the population is relatively dense, considerably exceeding two hundred thousand souls in a superficial area of not more than 650 square miles. The island is thus proportionately more thickly peopled than France, and during the north-east monsoon the settled population is said to be increased by over thirty thousand strangers from Arabia, the Comoro Islands, India, and Persia.

## Flora and Fauna of Zanzibar.

The insular flora is the same as that of the adjacent mainland. A few orchids and one or two ferns appear to be the only indigenous species, or at least the only varieties that have not yet been discovered on the opposite seaboard. The fertile soil of the island yields in abundance all the fruits of tropical lands, American species here intermingling with those of the eastern archipelago. Two crops of corn are raised in the twelvemonth, and four of manioc, which forms the staple food of the inhabitants. Of palms the prevailing species is the cocoanut, which covers extensive tracts and supplies the natives with food, drink, timber, cordage, oil for exportation and for making soap. The date-palm also grows in the island, but its fruit is inferior to that obtained from the oases of the Sahara. Magnificent mangoes, whose fruit has a flavour of strawberries and cream, are extensively cultivated, while the guava, the orange, the lime, and bread-tree interlace their foliage with the mangosteen and durian (durio sibethinus), introduced from the Sunda Islands, whose fruit, after giving a smack of onions and mitey chetse, is said to be altogether unrivalled for its exquisite flavour.

Zanzibar also produces the spices of India and Malaysia-cinnamon, nutmeg, pepper, and, especially since 1830 , cloves, the yearly crop of which already exceeds many millions of pounds weight. The tremendous hurricane of 1872 almost entirely destroyed the clove and cocoanut plantations, uprooting four-fifths of these plants, and for a time ruining the island.

Being a natural dependency of the African mainland, of which it probably formed part at some former geologicul epoch, Zanzibar has an exclusively continental fauna. But the animals are not numerous, most of the species having either become extinct in this confined space, or been exterminated by the peasantry.

About the year 1865 a hippopotamus swam across the intervening marine channel, and was scen for several months disporting himself in the shallow waters along the shore; but there is no record of either the elephant or the rhinoceros having ever visited the island in this way. Most of the local quadrupeds are of small size, as, for instance, the dwarf antelope (nanotragus), the otolicnus, a half-monkey or lemuroid, the civet, a few felines, such as the serval and wild cat, but no hyanas. Rats, including some from Europe, have been introduced by the shipping.

The avifauna is represented by a large number of species, the murine channel not being broad enough to arrest the flight of ordinary birds. The local guineafowl, by some supposed to be a distinet variety, is probably identical with the continental species. Nevertheless naturalists have discovered a few animals. amongst others a lemur and a lizard, which really appear to be quite peculiar to the island. Till recently Zanzibar, in common with the neighbouring Pemba, possessed a very beautiful monkey, the colobus Kirkii; but when first noticed by naturulists it had already become extremely rare, and according to the statement of Johnston, has since entirely disappeared, the few surviving specimens having unfortunately been killed by the hunters whom Sir John Kirk had sent either to capture or to report on its existence.*

## Inilabitants of Zanzibar.

On the east side of Zanzibar there still survive a few groups of aborigines, who have hitherto kept aloof from all the intruding peoples. These are the Wahadimus (Wa-Hadimu), who have become Mohammedans, and whose Bantu diulect has become in a more or less modified form the current speech of the whole island, as well as the commercial language of a large part of East Central Africa. The bulk of the people consist of Negroes, some free, but for the most part descended from slaves introduced at various times from various parts of the continent. These different elements have at last been fused in a single almost homogeneous population enjoying uniformity of speech, religion and social institutions. The practice of eating an argillaceous clay, common to so many African and other peoples, is very prevalent amongst them.

The Arabs, who are politically the dominant race, are also the landed proprietors, several residing like great lords on their plantations. Some of these Arabs have retained their purity of blood, and consequently look with supreme contempt on their sovereign, who is of mixed descent. They share with the Europeans, Americans, "Canarians" or Portuguese of Goa, and Hindus, the wholesale trade of the island, which consists chiefly in ivory, caoutchoue, copal, orchilla, and skins, brought from the opposite coast and here shipped in exchange for such imports as dates and European wares, notably the so-called amerikani, that is, bales of cotton, which serve as a kind of currency in all transactions with the native populations of the interior. In the island itself tho Indian rupee is the legal tender.

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The Americans were the first Western nation who made a treaty of conumerce with Zanzibar, in 1835, and, thanks to the privileges then seeured, their trade with the island has long surpassed that of the other foreign nations. Most of the Europeans living in Zunzibar are either speculators or connected with the ship-

ping. As traders they find it difficult to compete with their Eastern rivals for the general traffic with India and the neighbouring continent. A number of political agents also find their way to Zanzibar, in connection with the international rivalries of the European powers. Since the year $18 i 3$ the local merchants are forbidden to take any part in the slave-trade. but before that time
from twelve thousund to fifteen thousund Negroes were annually exportod from this place to the const-towns of Arabia and the P'ersian Gulf.

The immigrants from India include Pursees, Hindi Shiah Mohammeduns, Khojas, und Bhoras, from Bombuy and Surat, who are accompanied by their wives; lastly, the ubiquitous Banyans. These last, who occupy a separate quarter of the capital, and who are ulso met in the seaports along the opposite coast, come ulmost exelusively from the peninsula of Cuteh, where reside their employers and ussociates. They never bring their families with them, and are consequently Always eager to return to their homes, where they can freely observe all the usages and religious rites of their native land. They yearly send to India the eurnings of their trude, keeping nothing for themselves except the capital required to conduct their business transactions. Being extremely conscientious, they scrupulously observe all the practices handed down by religious tradition. They shave the head and beard, leaving only tho moustuche, the whiskers, and a little tuft of hair on the forehead. They wear a red turban and one or two lengths of coton gracefully folded round the body. They are excessively frugal, restricting themselves entirely to a vegetarian diet of breadstuffs, milk, butter, cheese, fruits, and vegetables. All that has lived an animal life-icasts of the field, birds of the air, or fish-is absolutely prohibited. In order to be sure that no impure ingredients get mixed with their food, they send to India for their cooking butter, and themselves prepare the meal. Were a stranger but to touch their rice or wheat-meal, all would be polluted and thrown aside. The eatables are served on fresh broad leaves, and the water drawn from the spring or cistern in their own vessels, unsullied by the contact of a profane hand. The cow is their sucred animal, and on feast days for her is prepared a choice banquet of potatoes and maize. They nevor fail to burn their dead on the beach. a rite attended with much ceremony. First of all the skull is riveted with large nails, to prevent it from bursting with the heat; then the body is stretched on a funeral pyre composed of as many blocks of wood as there are Banyans present to honour the dead. After cremation, the ashes are cast to the winds.

Customs so entirely opposed to those of the Arabs and Swaheli, expose the Banyans to the jeers and laughter of their neighbours; but they endure all uncomplainingly. But these mild and resigned devotees quietly revenge themselves by growing rich at the expense of the scoffers. Unlike the Arabs, however, they take no part in the shave-trade. It is always a good sign when the Banyuns are observed to increase in numbers, and the Arubs to diminish, in the seaports along the coast. In the islund itself the sale of Negroes is forbidden, but the slaves have not been emancipated, and the children still follow the social condition of their mother. The families of these captives are said generally speaking to be far from numerous.

Topociral v.
The city of Zanzibar, which lies near the mildle of the " const, to io north-cust of Bagamoyo, its outlet on the mainland, is the lar $z_{z}$; place or the whole seaboari of East Africa washed by the Indian Ocean, +1 even om, the whole periphery of the continent execpt Alexandria, Tunis, midi !erhupw Algiers. Seen from the water it presents a pleasant aspect, thanks to the bright look of its huge white houses, barracks, and forts, with their massive rounl towers. But all this glittering frontuge serves only to musk a dense mass of hovels, amid wiich wind the nurrow, filthy streets. A recently constructed aqueduet, however, now supplies the place with puro water, to the great improvement of its health and cleanliness. Hence Zanzibar is no longer such a dangerous residence as formerly.

A saline lagoon, dry at low water and crossed by two bridges, separates Shangmi, or the city properly so-called, from its custern suburb, inhabited by the Swaheli, the slaves, and fishmongers. At the entrance of this lagoon are generally moored the Arab dhows, while the large oceen steamers, packets, und men-of-war. ride at anchur off the town in six or seven fathoms of water. Several lines of stoum packets call regularly at Zanzibar, thus keeping up the communications with the coust towns, the Suez Canal, India, Mauritius, Réunion, and Madagascar. The Sultan himsolf owns about a dozen trading vessels, besides a man-of-war. At present the total annual trade exceeds a million sterling, while the shipping entered and cleared represents a total capacity of about two hundred and ten thousand tons.

Zanzibur already commands mauy of the conveniences of tho great European scaports, including repairing appliances, an apparatus for distilling salt water, and electrie harbour lights. The Protestant and Catholic religious establishments are supplemented by some large schools for both sexes, and even some workshops for instructing the natives in the mechanical arts. In some other parts of the island, where the wealthy Arab landowners have several fine country seuts, a number of fuctories have sprung up for the extraction of sugar and cocoanut oil. One of the most important of these mills is that of Kokofoni, situated on the harbour of like name, some 24 miles to the north of Zanzibar. This inlet, which is perfecily sheltered by an island off the entrance, is accessible to large vessels, which cun here anchor in depths of from four to eight fathoms of water.

## Pemba.

Pemba, third member of this insular group, has a superficial area of about 380 square miles. Bat although it is thus fully two-thirds the size of Zanzibur, its population scarcely exceeds ten thousund souls. Yet the soil is everywhere fertile to the summits of the cliffs, and it often takes the name of the "Green," or the "Vegetable Island," from its rich and productive vegetation. Its products are the same as those of Zanzibar, including both cloves and the cocoanut, which
the groat Arub landed proprietors export to the markets of the neighboaring eity.

Shaki-Shaki, capital of Pemba, lies on the west side, near the houd of a creek inaceessible to shipping at low water. Even small c:aft have to wait for the flow before venturing to penetrate up the inlet. On the other band the port of Kishi-Kayhi, towards the north-west extremity of the island, is deep enourh to ateommodate large vessels, which might here ride at anchor in perfect sufety. But the narrow and dangerous channel through which it communicutes with the sea has not yet been buoyed. The head of the Arub aristocracy in Pemba, a vassal rather than a subject of the Sultan of Zanzibar, has his residence at Kishi-Kushi. More than half of the inhabitants of this islund are still in a state of slavery.

## Administration.

As now regulated by the conditions of the German protectorate, the authority of the Seïd or Sultan of Zanzibar is almost entirely restricted to the islands. Recently the narrow strip of territory about eleven miles broad skirting the continental seaboard between the Rovama estuary and Somaliland, was also placed under his jurisdiction. But even in this contracted zone there are many places where his authority is not recognised, while his rule is reduced to a diplomatic fiction by the assignment of the Dar-es-Salaan and Pungani custom-houses to a board of foreign traders presided over by the great ehancellor of the Germanic Empire.

In the large villages along the coast of the mainland the Sultan of Zanzibur is represented either by walis, or by jemadirs, nearly all full-blood or half-eas.e
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Arubs, who collect the taxes and keep, watch over the truders to prevent the traffic in slaves, now legally suppressed. At least this is one of the functions assigned to these officials by the terms of the treaties concluded with the Einglish before the recent changes. Bat the German commissioners have practically ubrogated these treaties and have hitherto left the slave-dealers full freedom of action.*

The sultun's army, under the command of a Eurnpenn, consis's of about three thousand well-diseiplined men, either Swaheli or nutives of the Comero Ishands. Formerly the army was recruited chiefly amongst the Beluchis of Beluchistan.

- Deuiscne Koionial-Zeitung, October 1st, 1887.



## CHAPTER XI.

## KILIMA-NJARO, KENIA, MOMBAZ, AND MALINDI COAST.

## Masai Land.



HE maritime region which stretrhes north of the territory facing Zanzibar, and which is bounded on one side by the Pangani, on the other by the Taua, holds a political position analogous to that of the southern lands. Here also the narrow zone of coastlands was receutly placed under the authority, or at least the suzerainty, of the Sultan of Zanzibar, while the seaports are drawn henceforth within the sphere of foreign trade. The inland tribes also, although really independent, have in the same way been assigned by international treaty to European influences. The Germans are the future masters in the Pangani basin, while the northern area of drainage has become a British possession.

At the other end of the continent the question of connecting the two great French dependencies of Algeria and Senegal by means of a trans-Saharian railway has already been more than once seriously discussed. In the same way British politicians foresee the day when it may be possible to traverse north-east Africa, from Alexandria to Mombaz, without ever quitting territory directly or indirectly subject to the Anglo-Saxon race. But the two regions which have thus to be brought under the respective dominion of France and England in the west and east of Africa present the greatest contrast in their physical and ethnical conditions. From the Mauritanian plateaux to the banks of the Senegal, there stretches the unknown and almost inaccessible wilderness of the Sahara, whereas from Egypt to the Usambara uplands there follows an alternating succession of unfertile and productive, of desert and popuious lands, already traversed if not yet thoroughly explored by the white man. The most famous historic river of the continent, its largest lake, and one of the two loftiest mountain masses in Africa, are all comprised within the limits of this vast domain, the two extremities of which have already been brought under the control of England. The central region can scarcely fail to be assigned to the same power as protector of Egypt, should the expedition under Stanley succeed in again bringing the whole of the Upper Nile basin within the sphere of European influence.

## MASAI LAND.

Doubtless all these anticipations were made when Great Brituin took virtual possession of the territory which rises from the const at Mombaz towards the elevated plateaux enclosing the great depression of Lake Victoria Nyanza. This territory being still undefined with any accuracy except on its cast side, towards the sea, any attempt would necessarily be premature to give even an approximate idea

Fig. 103.-Cher Routes of Explorers in the Kimia-Nyaro Region.

either of its superficial area or of its population. It may, however, be stated in a general way that the rectangular region comprised between the Indian Ocean, the eastern edge of the plateaux sloping westwards towards Lake Nyanza, and two parallel lines, one passing to the north of Mount Kilima-Njaro and Usambara, the other drawn from Mount Kenia to the Tana estuary, presents an area of about 55,000 square miles. According to the reports of Kıapf, Fischer, Thomson, and 110-A

Johnston, the population of this territory may be roughly estimated at nearly two millions.

## Puysical Features.

In 1885 the trader and explorer, Fischer, skirted the east foot of the dividing range towarls the Victoria Nyanza basin, and found that this range, forming the
 outer scarp of a plateau, runs with great regularity in the direction from south to north. This long line of cliffs, rising abruptly above the plain, very probably represents the ancient shore-line of a now vanished inland sea, of which nothing remains except a system of stagnant waters, lakes, and saline wastes, covering a large space at the foot of the escarpments. The volennic cones occurring at intervals along the edge of the plateau are the flues of the underground fires formerly fed by the chemical ingredients which were elaborated in the depths below the bed of this extensive lacustrine basin. The still flooded depressions, mainly disposed in the same direction from north to south, stand far below the level of the rim of the tableland, which has a mean elevation of about 6,500 feet above the sea, wherens one of these depressions rises scarcely more than 2,000 feet above that level. A sort of trough or deep lacustrine cavity, with no present outflow, thus separates the elevated western plateau from the raised platform on which stand the great igneous masses of Kilima-Njaro, Kenia, and their associates.

So far as is at present known, the chain of lakes terminates southwards in the saline Manyara basin, which however has not yet been visited, and is known only from the reports of the natives. Some 60 miles north of this " natron lake" lies another, which is commanded on the south side by the extinct volcano bearing the name of Dunye-Ngai, or "Heavenly Mountain" (7,200 feet), and on the east by the imposing Mount Gelei, nearly twice as high ( 14,000 feet). The "Minaret," as the terminal cone of Dunye-Ngai is called, is suid to constantly emit smoke, the summit being wrapped in a dark vapoury cloud even in the fairest weather. The rumbling of the underground thunders is continually heard like
the roll of di-tant artillery. No lavas, however, ure discharged, although the vapours floating round the peak have a ruddy hue during the night. At the foot of the mountain, and along the margin of the lake, thermal waters bubble up at a temperature hot enough for the caravan people to cook their food in.

Northwards stretches a boundless saline steppe, maintaining in unbroken monotony the dead level formerly produced by the lacustrine allurial deposits. This is the dreary Dogilani wilderness, which is everywhere strewn with fragments of obsidian resembling broken picees of glass bottles. Westwards rise the blackish escarpments of the plateau, which here takes the name of Maū, while on the opposite side the plains are skirted by the no less imposing rocky walls of the Kapte and Kiluyu tablelands. In the midst of these rugged rampurts are developed numerous bays or inlets, where the bed of the long dried-up basin contrasts sharnly with the rich verdure of the headlands. Here also the regular line of cliffs forming the scarp of the plateau is broken by magnificent igneous cones, conspicuous amongst which is the Dunye la-Nyuki, largest and southernmost of the group. Seen from a distance this volcano appears to terminate in a great crater, one side of which has been blown away and in the centre of which has risen a secondary cone encircled as by a wall or embankment by the southern half of the crater rim. Farther north stands out the lofty Dunye Longonok, or "Mountain of the Big Pit," ascended in 1884 by Joseph Thomson, who on reaching the top found himself on the sharp rim of an enormous pit, apparently from 1,500 to 2,000 feet decp. "It was not, however, an inverted cone, as volcanic craters frequently are, but a great circulur cavity with perfectly perpendicular walls, and about three miles in circumference, without a break in any part, though on the south-western side rose a peak several hundred feet above the general level of the rim. So perpendicular were the enclosing walls, that immediately in front of me I could not trace the descent owing to a slight angle near the top. So sharp also was the edge of this marvellous crater, that I literally sat astride on it, with one leg dangling over the abyss internully, and the other down the side of the mountain. The bottom of the pit seemed to be quite even and level, covered with acacia trees, the tops of which at that great depth had much the general aspect of a grass plain. There were no bushes or creepers to cover in the stern and forbidding walls, which were composed of beds of lavia and conglomerate. The scene was of such an astounding character that I was completely fascinated, and felt under an almost irresistible impulse madly to plunge into the fearful chasm. Looking towards the north, the first sight that riveted my gnze was the glimmering, many-isled expanse of Naivasha, backed to the west by the Maū escarpment. To the east rose abruptly the plateau which we had so recently left, and over the bamboo-clad heights of Mianzi-ni could be seen the higher masses of a splendid range of mountains. To the south stretched the desert of Dogilani, with the less perfect but larger crater mass of Donye la-Nyuki. My observations indicated a height of 8,300 feet ; the highest point, however, would be little short of 9,000 feet." *

The natives assured the explorer that the great pit is inhabited by snakes of

[^33]
## SOUTH AND EAST AFRICA.

enormons dimensions. They also speak of another remarkable pit in the neighbourhood, in which animals are immediately suffoeated if by any chance they happen to fall into it. This is doubtless due to an emanation of carbonic acid gas.

## Lake Naivasha.

Lake Nuivasha, also first explored by Thomson, is a shallow island-studded basin standing at an elevation of about 6,000 fect above the sea. It has no outflow,

Fig. 105.-Regon between Zanzibar and Lake Nyanza.
Soale 1 : 10,000,000.

evaporation balancing the contributions of several small affluents; yet its waters are sweet, which seems to indicate that this lacustrine basin is of recent origin. Its formation may perhaps be due to the damming up of the fluvial valley by some eruptions of lavas and ashes accumulating on the north and east sides and separating the plain from the Upper Tana basin. In this re-ervoir there are no fish, which have probubly been destroyed by the escape of mephitic gases.

The underground forces elsewhere quiescent or extinct, are still active in the district to the north-east of Naivasha. Here rises the Dunye Buru, or "Steam
eighboury happen
d-studded o outflow, and separe no fish,

Mountuin " nearly 9,000 feet high. which is pierced by " stenn-holes," from which at short intervals und with remarkuble regularity are puffed or hissed out elouds of vapour, accompanied sometimes by a gurgling sometimes by a rumbling noise. The Masai approach these orifices with superstitious awe, casting in tufts of grass in order to propitinte the troubled spirits of the earth. They also collect the crimsonred clay of the rock decomposing through the action of the steam, and smear themselves all over with this ochre, which is supposed to have much virtue in conjuring the ulverse fates. The mountain, on which the vent-holes have frequently been displuced, no longer preserves the typical form of a volcano. The numerous cones which huve successively broken out and again subrided in close proximity to each other, have at last been merged in a single irregular mass.

Farther north, the depression the deepest purt of which is occupied by the Nuivasha basin, is bounded by a hilly plain where the bosses of eruptive scorix huve also become intermingled in a confused mass. All these formations are moreover broken into polygonal sections by numerous lines of faults or fissures. These are disposed with such regularity that in many places the effect is produced of the moats and ramparts of fortified lines. In all the cavities are seen the skelctons of thousands of dead trees, killed by some unknown cause, possibly by some eruption of mephitic gases, or rather, as Thomson suggests, through the decrease of the rainfall brought about by the slow modifications of the climate.

## Lake Baringo.

Beyond this desolate region of bare rocks and crevasses, the depressions of the vulley are flooded by other lakes, such as Elmeteita and Nakuro. Scen from a distance extensive tracts along the margin of Elmeteita seem to be diffused by a pinky glow, an effect caused by the multitudes of flamingoes frequenting these waters. A little to the north of the circular suline basin of Lake Nakuro, a small stream flowing northwards in the same direction as the general line of fault which skirts the western waterparting, winds between the two parallel plateaux as far as the southern extremity of Baringo or Mbaringo. Since the time of Speke's expedition this sheet of water was supposed to form the north-east gulf or inlet of Victoria Nyanza; but it is now known to be completely isolated, ocsupying a closed basin about 200 square miles in superficial area. - Yet although it has no visible outlet, its waters are perfectly fresh, without the least trace of salinity and teeming with animal life. Thomson, the first European by whom it has been visited, expresses his surprise that it does not increase in volume, reeeiving as it does considerable contributions all the year round, even during the dry scason. He found that from one period to the other the difference in the lacustrine level scarcely exceeded twenty-four inches, and to explain this slight annual oscillation, as well as the total absence of salt from the lake, he advances the theory of a possible underground emissary, through which the overflow may be carried off. But it would be premature serivusly to discuss this somewhat improbable hypothesis, until an accurate

## SOUTH AND EAST AFRICA.

estimate has been made of the comparative quantity of water contributed by the affluents and lost hy evaporation.

In the middle of the lake rises the island of Kirwan, inhabited by the Wakwafi, who culticate the soil, rear cattle, sheep, and goats, and navigate the basin in canoes of a very peculiar type. "They are formed to hold only one man or two boys, and are composed of a remarkably light mimosa wood, found growing round

Fig. 106.-Lactsthane Regon West of Mount Kemia.
Reale 1 : 2,0 ),000.

the lake in marshy places. It seems to be as light as cork. The component parts of the canoe are simply tied together in their rough state. I tried to get ferried over to the island, but the islanders believed I wanted to bewitch the place, and point blank refused to take me" (Thomson).

From the reports of the natives it is now known that in the unexplored regions north-east of Baringo the line of fault stretches away for several hundred miles, broadening out in the direction of the great Zamburu (Sumburu) saline swamp or
lagoon. This unexplored basin appears to be encircled by tracts of pasturage, whore the nomad Galla herdsmen have their southernmost camping-grounds. West of Baringo Thomson cume upon the headstreams of the Wei-Wei river, which flows in the direction of this terminal depression, or of Lake Sûk, another lorge basin reported to exist in the same region.

## Usambara and Bura Mocrtains.

East of the great volcanic fissure containing the flooded deprossions of the salt and freshwater lakes following in a long line from Manyara to Zamburu, the whole land, apart from a few scattered sulines, bolongs to the oceanic area of drainage. Even the western slope of Kilima-Njaro, turned towards the interior of the continent, sends some of its waters to the rivers flowing eastward to the Indian Ocean. But this is a vory rugged mountainous region, and in immediate

Fig. 107.-Kilima-Njaso and Nyiza Uplands.
Scale 1 : $\mathbf{3 , 0 0 0 , 0 0 0 . ~}$


60 Miles.
proximity to the coast begin the heights which rise continually higher and higher until in the mighty Kilima-Njaro they at last penetrate beyond the line of perpetual snows. The first hills visible from the sea are the Usambara uplands, an almost isolated granitic mass with mostly rounded crests, some of which attain an altitude of 5,000 feet. From the town of Bulua, which crowns one of these crests, a view is still commanded of the seaboard 60 miles distant, with its fringe of verdant vegetation and broken line of gulfs and headlands.

These uplands are followed towards the north-west by the Paré range, beyond which the horizon is broken by the Ugono riage, dominating on the west the charming Lake Jipé, and north of which towers the imposing mass of the giant of African mountains. On the continually ascending plains, which extend from the coast at Mombaz towards Kilima-Njaro, the surface is strewn with granite eminences from 4,000 to 5,000 feet, which in several places are disposed in the form of regular ranges. Such peaks as Kilibasi, or Kilimabasi, that is, the
"Solitary Mountain," the truneated cone of Kusigao, and Maungu with its half ruined crator, stand out in complete isolation like reefs or rocky islets in the midst of the sea. But Mount Ndara, called also Kilima-Kiburu, that is, tho "Great Mountain," lying due west of Maungu, is flanked by a number of less elevated crests, giving to the whole group the aspect of a short but continuous chain. Still farther west tho plain stretching away towards Kilima-Njaro is dominated by a somewhat similar but more extensive group bearing the collective name of the Bura Mountains. But on every side-north, south, east, and west-

Fig. 108.-Kinma-Njabo.

all these secondary heights, whether isolated or grouped in clusters, disappear at some distance from Kilima-Njaro, leaving the monarch of African mountains to stand out in solitary grandeur.

## Kluima-Nuaro.

Kilima-Njaro, that is, the "White Mountain," as explained by Thomson, or more probably the "Demon's Mountain,"* as interpreted by Johnston, attains an altitude estinated at from 18,800 to nearly 20,000 feet. $\dagger$ It thus exceeds the
*From Kilima, Mountain, and Njaro, the name of a demon supposed to cause cold. But this name, ourrent amongst the coast people, is quite unknown to the natives of the interior.

+ Meyer, 10,500; Thomson, 19,800.

Kumeroons hy about 5,000, and the Abyssinian Simen by 3,700 feet. It is also much lofticr than Mount Wosha of Gullaland, to which Antoine d'Abbadie assigns an altitude of 16,400 feet, and has no other rival on the $A$ frican continent except Mount Kenia, which, however, according to Thomson, does not exceed 18,400 feet. Nevertheless Kilima-Njaro does not appeur to have been known to the ancients, unless it was included in one of their numerous "Mountaius of the Moon." The first mention made of it, evidently from the reports of the Portnguese visitors to Mombaz, is due to the Spanish gengrapher, Eneizo, who culls it the " Ethiopion Olympus," adding that it is rich in gold, inhabited by wild boars and by people who eat locusts.

The missionary Rebmann first of modern explorers beheld the superb mount in with its glittering snowy crest in the year 1848. But some erudite geographers, anoh as Desborough Cooley, having already mapped out an inland Africa from their inner consciousness, immediately questioned this discovery, and suggested that Rebmann must have been the victim of some mirage or other hallucination. Nevertheless Rebmann's report was confirmed the next year by Krapf, another missionary, who after crossing the Bura runge penetruted to the very foot of the great mountain. A farther advance was mude in 1861 and 1862, when the explorers Von der Decken and Thornton sealed its southern slopes to a height of about 10,500 feet, although still far below the lower level of the perpetual snows.

Since then Kilima-Njaro has been visited by New, Fiseher, Thomson, and especially Johnston and Meyer. Johnston spent six months on its southern slopes studying its natural history, and exploring its upper parts to within a short distance of its crest; while Meyer, after five duys or ascent, succeeded in $188 \%$ in reaching the highest summit, close to the rim of the crater itself; but he found it impossible to scale on icy pinnacle which rose about 150 feet still higher. The mountain cannot fail henceforth to become one of the chief centres of attraction for African travellers, for it has now been included within the limits of the German possessions. Hence it will no doubt soon be connected with Monnbaz and the other ports on the east coast, if not by easy highways of communication, at least by well-beaten tracts and stations where travellers may renew their supplies.

This huge volcanic mass is no less than 60 miles long from east to west, and about $\tilde{0} 0$ in the transverse direction, with a total periphery of at least 160 miles. It is thus twice the size of Etna, whose lower slopes are still vast enough to support a population of over three hundred and twenty thousand inhabitants. Kilima-Njaro consists in reality of two distinct volcanoes connected together by an elevated saddle-back. The central dome and culminating point, falling very little if at all short of 19,000 feet, takes the name of Kibo, while Kimawenzi, the lesser cone, attains an altitude of 16,250 feet. But when seen from the east foot, the loftier summit is completely masked by the sharp peak of Kimawenzi. On the north, west, and east sides the entire mass slopes regularly up to the higher escarpments. But on the south side numerous igneous cones have been opened near the base of the twin peaks, and the eruptive rocks that have been discharged from these cones have gradually developed a broad terrace with a mean elevation
of from 4,000 to 6,000 feet, whieh has been carved into parullel sections by the rumuing wuters, and which grudually merges in the surrounding plains. This vast sustaining platform, which projects some 12 miles bayond the normal slope of the volcuno, constitutes the Chaga country, the only fertile and inhabited purt of the whole chmp of mountuins.

The suow rests throughout the yeur on both crests of Kilima-Njaro, either in u uniform mass, or in streaks and patches. From season to season, almost from duy to day, und even during the dry poriod, the aspect of the upper slopes undergoes eontinual change, due to the alternate expansion and decrease of the snowfields. Till recently the coust people supposed that this snowy muntle, glittering in the tropieal sun, was a solid mass of silver, and expeditions wero frequently orgumi sed to scale the escurpments of the mountain in seareh of the precious metul, which when reached melted into water at the touch of their profane hands. The snows usually descend lowest in the month of Oetober, especially on the western slopes, where they stand at the level of nbout 14,000 feet above the sea; in July and August they recede nearest to tho summit of both cones. The uscent of the mountain, nt all times extremely difficult, is most easily performed during the suowy months, because at that time there is less fog, and, strange as it may seem, the eold is then less intense. The summits are seldom altogether free from clouds or mist. But when the snow-capped dome is seen glittering in the sun high uhove the lower fogs, it appears all the more magnificent that it seems entirely severed from the earth by the intervening oceans of vapours. Then it is indeed the Ngujé Ngaï, or "House or God," as the Masai call it. They also give it the mode siluple tille of Dunyé Ebor, or "Whito Mountain."

## The Njiri Plain.

The opposite slopes of Kilima-Njaro present a mosi remarkable contrast in their general uppearanee. All the streams which take their rise amid the snows of the higher regions flow exclusively down the southern flanks of the mountuin. A few torrents have no doubt their sources on the east and west sides, but these sources are all situuted about the base, so that here the upper slopes are destitute of runuing waters, while the northern flanks are everywhere perfectly dry on the surface. It is watered by no streams. Hence the Njiri plain, whieh on this side stretehes along the foot of the mountain, is a complete desert, although a few springs are seen bubbling up here and there. These springs, whish How to the surrounding lagoons and saline reservoirs, are evidently themselves fed by underground streams concealed amid the ashes and scorim of the volcano.

The Njiri reservoirs are not the only closed basins occurring round about the periphery of Kilima-Njaro. One of these basins lying at its south-east foot, and known as Lake Chala, is a flooded igineous erater, whose almost vertical walls of scoriæ are encireled on the summit by a garland of verdure. Its waters are sweet and transparent. 'The Masai have a tradition that the lake was formed during a violent eruption, during which one of their villages disappeared; and, as in so of the ig the seem, clouds 1 high ntirely indeed it the antain. it these estitute on the ais side a few to the under
wot the ot, and walls of e.sweet uring a as in so
many other volcanic regions, they fancy they still occasionally hear the bellowing

Fig. 109.-Kibo, Westean Peak of Kilima-Niaio.

of the cattle, the bleating of the sheep, aud the shouts of the herdsmen rising like
a distant echo from tho depths of the abyss. This illusion is, with great probability, nttributed by Wray to the confused noise of the flocks of aquatio birds reverberating from side to side of the walls of the basin.

## Morau anil Ulu Mountains.

West and north-west of the central mnss the sustuining platform bears several other eminences of igneons origin, and sone of these abso attuin considerable elevations. Conspicuons amongst these is Mount Moeru, which is separated from Kilina-Njaro by the level Sigirari plaiu, whoso mean altitude is fully 4,000 feet above the sea. Moeru may almost be regurded as a rival of Kilima-Njaro itself, for its terminal cone is considerably over 16,000 feet high, and even in the month of July slight streaks of nnow are occasionally observed on its summit in the eurly dawn, which, however:, are son dissipated by the rays of the rising sun. At most other times, when the volcanic peak shakes off the muntle of fleecy clouds in which it is usually wrapped, $i v$ is seen standing out dark against the azure sky. It thus presents a striking contrast to the white-crested Kibo and Kimawenzi, and has accordingly received from the Musai people the distinctive title of Dunyé Erok la Sigirari, that is, the "Black Mountain," of Sigirari. But it is not the only Dunye Erok in this region, for several other "Black Mountains" raise their isolated pyramidal cones above the plateau to the north-weat of Lilima-Njaro, one of them attaining an altitude of no less than 13,000 feet.

The eminences rising above the rugged uplands stretching north of KilimaNjare present in many pluces the aspect of varitnble mentain rumges. The Kiulu und Ulu mountains, both of which send affluents to the Subaki, constitute a long chain disposed first in the direction from sou $h$-east to norti-west, and then trending due north parallel with the esearpments which skirt the east and west sides of the crevassed waterparting. The northorn extremity of the Ulu range puints precisely in the direction of Mount Kenia, which ranks next to KilimaNjaro as the loftiest mountain in the whole continent. Owing to the gentle slope of its flanks, Kenia covers an extensive superficial area. Its lava-streams have been discharged on an incline of not more than ten or twelve degrees down to the base of the mountain, which reste on a platform with a mean altitude of about 5,500 feet above the sea.

## Mount Kenia.

From the centre of this blackish platform rises the highest peak, a regular pyramid considerably over 3,000 feet high, and so steep in several places that the snow is unuble to lodge on the roeky ground. The cone is rather of a greyish than a white colour, whence its Masai name, Dungé Egéré, or "Grey Mountain," ulthough, according to Von der Decken, it is also known as the "White Mountain." Kenia lies nearly 200 miles farther nurth than Kilima-Njaro, the line of the equator crossing its slopes north of the centrul peak. Nevertheless the climatic
conditions are much the same as those of ite momethern rival. Like it, the Grey Mountain is also frequently wripped in fogs, being usually shrouded in mists during the greater purt of the duy, unrobing itself ouly in the evening at the hour of the setting sun, or else at dawn when struck by the first solur ruys.

The existence of Kenin was unknown in Europe before the year 1849, when it wus first mentioned by the missionary, Krapf ; but no traveller has yet succeeded in climbing the slopes of this volcuno. Eiven Thomson, who appronched nearest to it, surveyed ouly its eastern face, and that at some distunce. Like KilimuNjaro, Kenia discharges much more water by its southern valleys thun on the other slopes of its vust periphery.

## Mount Elann and its Caves.

West of Kenia other mountain musees, ranges, or isolated eminences, follow in continuous succession us far as the shores of Victoria Nyanza and the bunks of the Nile. A chain of lofty mountuins, to which Thomson has given the name of Aberdare, runs south-eust and north-west in the same direction as the general axis of all the uplands in Masailand. Lake Buringo is also dominated by some elevated heights, whieh rise above both sides of the great volcanic fissure. Lastly, to the north-east of Victoria Nyanza appears the superb cone of Mount Elgon or Ligonyi, which has an altitude of no less than 14,000 feet, and which, like mont of the isolated mountains of this region, is an extinct volcano. In the tuffa sides of this mountain deep caves or pits have been excavated, or at least enlarged, by the hand of man. One of these pits, examined by Thomson, was found to be 30 tset deep, 100 feet long, and about 20 broad, cut perpendicularly out of a volcunic aggiomerate of great compactness. "In the centre of this pit, or (as it may have been) mouth of a cave, stood several cows, and a number of the usual beehive urrangements for storing grain. On the side opposite me were the openings of several huts, which were built in chambers out of sight, and which only showed the doorways, like the entranees to a dovecot. In and out of these were children running in a fashion thoroughly suggestive of the lower animals, especially as seen in the midst of their strange surroundings. On inquiring as to who made this curious excavation, I was told that it was God's work. 'How,' said they, 'could we with our puny implements ' (exhibiting a toy-like axe, their only nonwarlike instrument), 'cut out a hole like this? And this is nothing in comparison with others which you may see all round the mountain. See there, and there, and there! These are of such great size that they penetrate far into utter darkness, and even we have not seen the end of them. In some there are large villages with entire herds of cattle. And yet you ask who made them! They are God's work.'
" There was absolutely no tradition regarding these caves among the people. 'Our fathers lived here, and their fathers did the same,' was the invuriable reply to all my questions. Clearly there was no clue in that direction. And yet the caves bore incontestable evidence on the face of them that they had neither
a natural nor supernatural origin. They must have been excavated by the hand of man. That such prodigious excavations in extremely solid rock, extending away into complete darkness, branching out in various directions, and from 12 to 15 feet from floor to ceiling, were formed as dwelling-places, or even as strongholds, is simply absurd. For natives such as those of the present day to have cut out even one cave would have been a sheer impossibility, with the tools they possess. But there are not merely one or two excavations. There are surprising nuunbers of them-sufficient indeed to house a whole tribe, as I am informed that they extend all round the mountain.
"There is one point of great interest as tending to throw some light on the subject. The caves all occupy a certain horizon or level of the mountain, and all occur in the compact agglomerate, none in the level beds immediately overhead.
" Lcoking at everything, I can come to but one conclusion, and that is, that in a very remote era some very powerful race, considerably advanced in arts and civilisation, excavated these great caves in their search for precious stones, or possibly some precious metal. However improbable this theory may seem, it is the only one that suggests itself to me after months of cogitation. Unfortunately, though I was from the first without a doubt about their being of artificial origin, this idea never crossed my brain while I was at Elgon, and I consequently made no special examination for evidence of precious stones or metals. Are we to suppose that the Egyptians really got so far south? If not what other race could have cut these extraordinary recesses?"*

## The Pangani and Tana Rivers.

The Pangani River, whose lower course forms the boundary between the British and German protectorates, receives its first supplies from Mounts Moern and Kilima-Njaro. Of all these mountain torrents the easternmost is the Lumi. which rises at the foot of Kimawenzi, and flows at first southward to the elongated basin of Lake Jipé at the foot of the Ugono escarpments. This bacin stands at an elevation of no more than 2,400 feet, nevertheless the plain stretching south of the Kilima-Njaro terraces lies at a still lower level, for an emissary flowing from the lake immediately to the west of the Lumi influent trends north-westwards in the direction of the foot of the mountain itself. After its confluence with the Ruvu ( $\mathrm{Ru}-\mathrm{Vu}$ ), and several other torrents, this emissary from the lake is already a river of considerable volume. Fiseher found that it was nearly 350 feet broad, with a depth of over 3 feet. Farther down the stream, which here receives scarcely any tributaries, flows southwards and then to the south-east, forcing its way over a series of falls and rapids through the rocky barriers which run transversely to its course. It continues to be obstructed by other falls down to the lower reaches, so that the Pangani becomes navigable only within some 24 miles of the coast, where its channel is confined by two elevated terraces of coralline formation.

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 origin, y made we to ce could un transn to the 24 miles corallineTwo other large rivers of this region have their sources in the upland valleys of mountuins in the western parts of the plateau. The Sabaki, or "Forest River," receives one of its affluents, the Tsavo, from the slopes of Kilima-Njaro, whereas its chief headstreams take their rise in the Kiulu and Clu ranges, and farther north in the chain skirting the plateau near Lake Naivasha. The Tana (Dana), the whole of whose middle course is still unexplored, has also its origin in the same border range, whence it here takes the name of Kilama-nsi, or " River of the Mountain." But the Tana does not become a considerable stream till it penetrates south of Mount Kenia, from the southern flanks of which it receives the contributions of numerous torrents.

North of this region flow some other copious rivers, one of which, the Cruru, that is to say, "Thunder," has been so named from a tremendous cascacie visited by Thomson, and by him described as plunging down several hundred feet without a break into a fearful gloomy gorge. The Ururu and the other streams which flow to the north-west and north of Mount Kenia, converge in a single channel to form the Gwaso n'Erok, or " Black River," but east of Kenia the farther course of this river is still unexplored, and it is uncertain whether it continues to flow eastwards in the direction of the Juba, or bends round to the south-east to form a junction with the Tana. At Massa, the highest point of the valley where it was observed by the brothers Denhardt, the Tana is a stream averaging about 160 feet in breadth, with a rapid current exceeding three and a half miles an hour. Its depth varies from 12 to uver 30 feet, and it is obstructed only by a small number of sandbanks covered by at least 3 feet of water.

Like most other rivers in this part of the continent, the Tana receives no affluents along its lower courso. On the contrary, it here overflows its banks to the right and left during its two annual floods, forming temporary morasses and lagoons, which spread out beyond the horizon on the low-lying plains. The riverain populations have raised along the river low embankments scarcely more than three feet high, which are pierced at intervals by irrigating rills ramifying amid the surrounding ricefields. When the waters subside in the mainstream, the overflow retires from the lagoons through these channels back to the Tana. Some of these channels, gradually deepened by the current, become navigable streams, communicating from opening to opening along the meanderings of the Tana, which itself occasionally shifts its bed and flows bodily into one or other of the lateral streams.

As it approaches the coast the Tana bifurcates, the Mto Tana, or chief branch flowing southwards to Ungana Bay, the Bahia Formosa of the Portuguese, while the other, merely a shallow passage, merges eastwards in the estuary of the Ozi, that is, the " Black River" of the Gallas. The Belezoni, or Belondsoni, as this eastern branch is called, would soon be obstructed by the reeds, were it not kept open by the riverain people, who are able to navigate it with their light craft. In some places it is scarcely more than three fect from bank to bank, and is crossed at a bound by the natives. Nevertheless the Belezoni might easily be transformed to $a$ broad navigable channel, by simply dredging and cutting through the soft alluvial soil of the surrounding plain.

By taking advantage of the general lie of the land, the Tana itself might in the same way be connected with the lower course of two other rivers, the Kifili and the Sabaki, which reach the coast more to the south. The natives are unanimous in asserting that during the periodical inundations, its current traverses the intervening lake and overflows into the southern alluvial tracts, flooding the depressions to a sufficient depth to allow light craft to pass from one fluvial basin to the other, keeping to the inner or land side of the dunes which here fringe the coust. This transverse navigable waterway is even continued southwards beyond the Sabaki by lacustrine cavities which are regularly flooded during the rainy season.

According to Thomson, there would appear to be distinct evidence of upheaval all along this coast. The coral terrace formations have been raised in some places from 50 to over 60 feet, and farther inland from 120 to about 200 feet above the present sea-level. But indications of an opposite phenomenon are said to have been observed in the neighbouring Tangata inlet. Whether through subsidence of the ground, or the erosive action of the marine waters, several villages with their palm-groves have here entirely disappeared.

## Flora.

Apart from the mountainous district, the whole region stretching from the Indian Ocean to the upper Pangani, Sabaki, and Tana fluvial basins may be compared in its general uspect to a uniform carpeted floor over which the running waters have traced a number of variegated designs. This level floor takes the name of Nyika, that is to say, "Savage Land," or "Wilderness," lacking sufficient moisture to support a vigorous tropical vegetation. Here the arid soil produces little beyond short herbaceous growths, thorny scrub, and here and there a few stunted trees. Nyika is in fact a true reld, and would certainly have been so named by the Dutch settlers in South Africa. Its Wnayika inhabitants suppose that the rains are the property of the Swaheli people, because they possess the Koran, that is, the great book of divine magic ; and Krapf tells us that envoys from the inland tribes are frequently sent to the governor of Mombaz to beg the favour of a few much-needed showers. But for a space of at least 12 miles in breadth along the seaboard, the coastlands, being fertilised by the marine vapours, are elothed with a rich mantle of tropical vegetation. Towards the interior also the monotonous Nyika plains are interrupted by the highlands which intercept the moisture-bearing clouds, while the running waters descending from these uplands support a growth of riverain forests winding in narrow green belts across the country. The cocoanut-palm, which usually occurs elsewhere only along the seaboard tracts, herc penetrates through the river valleys into tbe interior as far as the slopes of the Ndara hills, a distance of some 70 miles from the coast.

The vegetation which encircles the base of Kilima-Njaro to a height of about 3,000 feet, seems all the more beautiful and diversified for the striking contrast presented by it to the arid and almost waterless wilderness of the Nyika country. Nevertheless the forest growihs of these lower buttresses have scarcely a tropical rior also rcept the uplands ross the long the as far as
of about contrast country. a tropical
aspect, but recall rather the general physiognomy of the woodlands in West Europe. The valleys between 3,000 and 6,000 feet are extensively overgrown with the musn ensete, or wild banana of Abyssinia. The lovely tree-ferns, which are intermingled with the vegetation of the lower slopes, eontinue to ascend as high as the line of 8,000 feet. $\Lambda$ few hundred yards higher up they are mostly replaced by giant heaths of the common erica genus, growing to the size of tallish trees; and here "lso the stems and branches of the trees are densely hung with mosses, orchilla-lichen, or delicate cpiphytic ferns.

An extraordinary composite plant, named from its discoverer senccio Johustoni, flourishes in the marshy ground, and sometimes grows to a height of 20 feet. From a distance it looks somewhat like a banana, with huge broad leaves at tho summit of a slim black trunk, but with yellow flowers like a groundsel, to which it is allied. Some of these curious plants are met as far up as 14,000 feet, in regions where the snow lodges in some seasons. Farther up the flowering vegetatiun is represented only by some low plants, such as dwarf heathers, beyond which nothing is seen except red or green lichens, yellowish sands, recks, and snowfields. The species of these higher regions are connected on the one hand with those of Abyssinia, and on the other with the Drakenberg Alpine flora: Johnston also describes some varieties which show a certain affinity to the characteristic forms of tropical Africu, and which appear to have been slowly modified in order gradually to adapt themselves to the new conditions of life in the higher altitudes. But two distinct genera seem to be altogether peculiar to Kilima-Njaro, or at least have hitherto been met nowhere else. On the other hand the superb calodendrons of the Cape regions, which till recently were supposed to extend no farther north than Natal, are now known to be common on the slopes both of Kilima-Njaro and Kenia.

## Fiacna.

Some species of birds frequenting the Kilima-Njaro woodlands are new to science, and on the surrounding plains a variety of the ostrich (struthius dmaoides) has been discovered which differs from the common species. Although quadrupeds of the mammal order differ in no respects from those of the surrounding regions, the explorer is surprised to mest certain species at such great altitudes on the flanks of the mountain. Thus the elephant roams over its valleys and rocks up to an altitude of over 13,000 feet; the lion and the leopard do not range so high, but are still met as far as 8,000 feet. Monkeys, and especially baboons, are very numerous. They keep for the most part in the neighbourhood of the plantations, where they live on terms of friendship, or at least of mutual forbearance, with the natives. The colobus, however, with his magnificent bluck and white fur coat, which is much prized as an ornament by the Masai warriors, always carefully shuns the vicinity of human hubitations. Sportsmen also occasionally meet a member of the canine family which differs from the jackal, but like him is of nocturnal habits.

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The hippopotamus, which was formerly very common in the rivers, has now withdrawn to the riverain lagoons of the interior. On the plains encircling Mount Kenia, Thomson observed herds of captured camels among some Galla tribes. But the Masai people make no use of this animal either for riding or transport purposes, reserving it exclusively for the shambles.

The tsetse fly, so fatal to cattle and other domestic animals, infests some of these districts, whilst others are visited by the donderobo, another species of fly, whose sting is deadly to the ass. A large section of the seaboard, however, is free from the mosquito scourge.

## Inhabitants.

Throughout the whole of these regions the populations are distributed in much the same way as the vegetable species. Thus the Masai warriors and pastors, like their Galla kinsmen, chiefly roam the herbaceous, scrubby, or arid plains; while the forest tracts are occupied by the agricultural Bantu tribes, akin to those of Austral Africa. These agricultural tribes, although very numerous, have been frequently obliged to displace themselves in order to avoid the incursions of their predatory neighbours. Extensive districts have thus been completely depopulated, the peaceful cultivation of the land being rendered absolutely impossible by the lawless habits of the Masai nomads.

The Bantus, who occupy the southern part of the territory in the vicinity of the Pangani river, are known to the surrounding peoples by various names. Thus the Waswaheli call them Washenzi ( $\mathrm{W}_{\text {a-Shenzi), that is to say, "Conquered," }}$ whereas to the Wasambaras of the western uplands they are simply Wabondei (Wa-Bondei), or '" Lowlanders." All, however, are greatly intermingled with other reduced populations, and merge by imperceptible transitions into the Mohammedan inhabitants of the coast, who are themselves made up of the most varied elements.

## The Wasambaras.

The Wasambaras (Wa-Sambara), who occupy the southern highlands, are distinguished from all their neighbours by several peculiar social customs. The marriage ceremonies especially are very curious. The bride and bridegroom are placed in the same cabin with a great fire between them, and then left for five days without food, beyond a little lukewarm water when they feel faint. On the fifth day they take a little nourishment, in order to acquire sufficient strength to join in the wedding procession, which takes the road to the mother-in-law's dwelling, und which is headed by the bridesmaid, dressed as a man, and armed with sword and gan.

But these primitive usages are gradually disappearing since regular commercial relations have been established between the Wusambaras and the Swaheli. The Ki-Swaheli language is even becoming the general medium of intercourse amongst
all these inland tribes. The English missionarics established at Magih, in the eastern Usambara highlands, have acquired a fluent knowledge of this idiom, which they make use of for instructing the Wasambara natives. But Mohammedanism has penetrated farther into the upland villnges, probably because a mere outward sign suffices to effect a conversion to the faith of Islam. Just as a Moslem captive becomes a pagan by being compelled to eat pork, the pagan is transformed to a Mussulman by the simple process of having his head shaved.

So early as the year 1848, at the time of the missionary Krapf, two of the king's sons had been converted to Islum, and had at the same time learnt to read and write, Mohammedanism and civilisation being considered in this region as synonymous terms. The king, who bore the title of the "Solitury Lion," had his harem, in imitation of the sultans on the coust. His wives, of whom there were several hundred, went veiled like all Moslem women, and no stranger was allowed access to their village, which stood on the brow of a hill, surrounded by chamilas, or gardens cultivated by sluves attached to their several households.

Many of the local usages are evidently due to Arab influence. Thus four holy villages have been set apart as places of refuge, and here rcside all the native magicians. No strangers are permitted to enter these places, where the Wasambara or Washenzi murderers and other criminals find a safe retreat. Those who are fortunate enough to touch the king's garment are also henceforth regarded as privileged persons. In the same way slaves acquire their freedom by crossing the threshold of a royal dwelling, but in this case the original seller is obliged to refund to the last purchaser the price paid for the freed man.

The king of Usambara is a powerful sovereign, who in the time of Krapf ruled over about half a million Wasambaras, Washenzi, and other tribes. His territory, which lies between the coast, the valley of the Pangani, and the Paré Mountains, is one of the most fertile regions in Africa. Till recently it also comprised a great part of the Zeguha country on the south side of the river, and beyond the Pare uplands, but the Wasambara tribes that had penetrated into these districts have been gradually driven back, and the conterminous peoples have succeeded in establishing their independence. Sume runaway Negro slaves have also founded petty republican states in the easily defended forest tracts which encircle the Usambara highlands.

All the agricultural and pastoral inhabitants of the Usambara state are required to pay the king an annual tax amounting to one-tenth of their crops and livestock, and this tax suffices to support a considerable export trade in the local produce, which is forwarded through the neighbouring seuports to Zanzibar, and even as far as Arabia. All the women of the country are regarded as the personal property of the sovercign, who may choose whom he will without paying the usual dowry. "He is master, he is God!" All are his slaves and proclaim themselves as such.

## The Waruves and Watavetas.

Between the Wasambaras and Wazeguhas, the islands in the Pangani are inhabited by the Waruvas (Wa-Ruva, that is to say, "River People," who constitute a distinct tribe differing in speech and customs from their neighbours. These Waruvus hnve established themselves in their insular strongholdis in order to avoid the attacks of the Masai freebooters, who roam over the extensive plains stretching southwards in the direction of Ugogo. Their island retreats are reached by the shepherds, with their flocks of sheep and goats, by means of ricketly plankings resting on stems of the dum-palm, while the animals cross over by swimming.

The Waruvas are regarded by all the surrounding populations as powerful fetishmen, very skilful in churming the crocodiles that infest these waters. Hence the Mohammedin caravan people, not satisfied with invoking Allah against the rapacious saurians, also appeal to the Waruvu magicians, who throw a potent "medicine" into the streum and thereby make the reptiles harmless It is popularly believed that no caravan entrasted to a Waruvu guide has ever met with any accident in crossing the river. Sturies are even told of crocodiles which, after soizing some domestic animal, dropped it again at the voice of the charmer.

Above Mkaramo the fluvial islands are uninhabited, all the natives of this district having taken refuge in the mountuins. The Waparé (Wa-Paré), pastors and peasants, stand in such fear of the Musai marauders that they do not even venturo to drive their herds to the pasture-lands, but rear them altogether in the inclosures. Yet notwithstanding all their precautions, the raiders often succeed in carrying them off. The Wagonos (Wa-Gono), who inhabit the uplands which skirt the west side of Lake Jipé, are less exposed than the peoples of the plains to the attacks of the Masai hordes.

South-east of Kilima-Njaro, the little Wataveta (Wa-Taveta) community occupies the narrow zone of woodlands stretching along the banks of the Lu-Mi River as far as lake Jipé. Here it has succeeded in maintaining its independence protected by the large forest growths of the district. The chief town is further defended by stout pulisader, behind which the natives are able to defy the Masai, usually armed only with short swords. The Watavetas are related to their northern and castern neighbours, the Wachagas and Wuteitas (Wa-Chaga, Wa-Teita), and speak a dialect of the same language. But they are now a very mixed people, owing to intermingling with $W$ akwafi fumilies which have sought a refuge in their midst. Of these Wakwafi strangers, those who have best preserved the original type are distinguished by more regular features, more prominent cheekbones, and a more animated expression than the true Watavetas. Several have also preserved their national dress; but with the exception of circumcision, which is still practised according to the Màsai rite, they have adopted all the usages of their Wataveta hosts. They have settled down as peaceful agriculturists, no longer prowling about the villages to carry off the women and children, and no longer making a trade of war, as their Masai kinsmen still do.

In general the inhabitants of Taveta are distinguished by their geniul, cheerful disposition, and the friendly reception they give to all penceful strangers. Hence their town is the chief resting-place and revictualling station for caravins journeying backwards and forwards between the coast and Masai Land. In the neighbourhood the Swaheli traders have founded a settlement, where they maintain temporary establishments. Thanks to these visitors from the coast, the Watnvetas lave acquired a considerable degree of instruction, and noarly all speak Ki-Swaheli us well as their own Bantu dialect. But they have not yet taken to the Arab custom of wearing elothes. Most of them still go naked, unless, for love of finery or as a protection against cold, they now and then throw some flowing drapery or animal's skin across the shoulders.

The state is udministrated by a council of fivo razi, or clders, usually chosen from amongst the families of the original Tuveta stock. But the decrees of this council are controlled and often modified by public opinion, which enjoys much force in the Taveta republic, and which is itself largely regulated by established usage or tradition. The marriage laws are somewhat lax, while those regulating betrothals are remarkably severe. Once engaged, or only partly purchased, the young woman can no longer go gadding about after dark; nor can she converse with any of the opposite sex, not even her future husband, until the stipulated price in cows or oxen is fully puid up. Before the birth of her first child she displays herself before the dwellings of her female friends, preceded by a matron, and decked in all her finery : iron-wire, veil, pearls, chains, rings, and bracelets.

The traditional funeral rites are also still scrupulously observed. The body is in the first instance buried in a squatting attitude, one arm resting on the knee and the head supported by one of the hands. Then, when nothing remains except the bare bones, the skull is removed-that is, if it belonged to the head of a family or to his principal wife-and transferred to the shelter of a wide-branching dracona, which it is henceforth charged to protect against the evil spirits.

## The Wachagas and Wanyikas.

The Wachagas, who are divided into several petty monarchical states, inhabit the volcanic terraces of the Chaga country stretching along the southern slope of Kilima-Njaro. They speak a distinct Bantu dialect, which shows marked affinities with that of the Wasambara nation. Muchame, their most important state, is not strong enough to protect itself against the attack of the Masai raiders who infest its southern' and western horders. Hence large tracts of extremely fertile land, which might support many hundred thousand inhabitants, have been entirely abandoned to nature. But however murderous the constant warfare carried on between the Masai and the Wachagas, the women of both nations are always mutually respected; they enjoy such absolute immunity that they pass freely backwards and forwards between the hostile tribes, as if perfect peace prevailed amongst them. The complete isolation of the farmsteads still attests the former peaceful habits of these people, so different from their present unsettled relations,

Each family lives quite apart, occupying a group of cabins amid a thicket of bamunas eneloserl by tall hedges or stockades. Hence not much importunce can be uttaehed to the hypothesis of M. Duveyrier, who suggests that the Waehagas of the Kilima-Njaro heights may possibly be a remnant of the concuuering Jaga warriors who overran the Congo empire in the sixteenth century. The two people seem to have nothing in common buyond a fanciful resenblance between their respective nutional designations.

Like the Wasambara monareh, the Wachaga chiefs enjoy absolute power over their subjects. All the men are their slaves; all children born within their domain are destined to serve them, and as soon as they have aequired sufficient strength they are employed for the " works of the king," such as constructing defensive lines and irrigating canals, tilling the land, building cabins, and manufacturing arms. All matrimonial affuirs are settled by his majesty, who puts the wedling ring on the bride's finger, selects her future lord, and fixes the nuptial day. Unions are far less premature than amongst most Afrieun peoples, and to this circumstance may probably to a great extent be attributed the fact that the Chaga race is one of the finest in all Africm. The salubrious climate, their regular agricultural habits and frugal fare, combined with the excellent quality of the fruits and vegetables, also tend to givo to the Waehagas a decided superiority in heulth and physical strength over all their neighbours. They live chiefly on a milk diet, and place pitchers of milk on the graves of the dead, whereas the people of the plains make offerings of rice and pulm wine to the departed.

The Wachagas, who are skilled agrieulturists, raise abundant crops of wheat, excellent pulse, various vegetables, and bananas of unique quality, rivalled in Havour only by those of the Seychelle Islunds. On the other hand, they have developed seareely any industries, being ignorant even of the weaver's art. But as blacksmiths they are unsurpassed, if even equalled, by any people in East Africa, manufacturing lanees, darts, axes, variously ornamented shields of great artistic merit. They also eurry on a brisk trado with the seaboard populations, from whom they procure elothes and sundry European wares. One of the prominent items of the import trude is the so-called emburla, a kind of alkaline earth from the southern plains, which they dissolve in water, using the solution as a substitute for salt in their diet.

Thanks to the absence of the tsetse fly throughout the whole of the Pangani valley, except on the bauks of the Taveta, earavans are able to employ asses as pack-animuls in the transport service between the coast and Chagaland. This is a point of such vital importance that it would necessarily secure the preference for the Pangani route above all the southern highways, but for the faet that it is still exposed to the frequent attacks of the Masai freebooters. Aecording to the still surviving local traditions, the Portuguese formerly visited the interior by following the Pangani fluvinl valley. Towards the beginning of the eighteenth century some Mohammedan pioneers also settled in the country, where they even founded a royal dynasty ; but all traces of their social and religious influences have since been completely effaced.

North of the Pangani valley the Bantu race is represented chiefly by the Wanyikas (Wa-Nyiku), or "People of the Pluins," who form a group of about a dozen distinet tribes. They number altogether perhups ubout fifty thousand, and oceupy the whole region whieh slopes from the Mombuz const gently upwurds to a height of some 2,000 feet in the interior. The Ki-Nyika langauge diffors little in

Fig. 110.-Tuibes North of the Pangani.

its structure from the Ki-Swaheli, but, unlike it, is entirely free from Arabic elements. By far the largest Nyika tribe are the agricultural Wadigos (Wa-Digo) who inhabit the coastlands stretehing south of Mombaz, and who alone number about thirty thousand souls. Another important branch of the family are the Wadurumas (Wa-Duruma), of whom some knowledge has been acquircd through the English missionaries stationed in their neighbourhood.

Amongst the Wanyikas the division of time into four days still prevails, as in certain West African regions. They worship the sun, and their priests possess the mwanza, a mysterious instrument which is sometimes heard booming through the forosts, but which, aceording to popular helief, no profane eye ean behold without being struck dead on the spot. When they reach the period of manhood the young men have to cut great gnshes across their breasts in order to "renow their blood," andalso to give proof of unflineking eouruge. Another test is reserved for the sons of chiefs, who are recuired to live apart in the forests until they have "killed their mun." Aft re this net of prowess thoy are allowed to return to the patornal roof, and are declared worthy of succeeding to th. chief power in the tribe.

Some Wakumbas from the north-west, and Swahelis from the coastlands, as well as various other immigrants, also dwell amid the Wanyika eommunities. In their territory numerous colonies have also been established by the Mobammedans, whose sheikhs are gradually beeoming formidable rivuls to the indigenous tribal chiefs. Besides these strangers the European missionaries have for some years been engaged in evangelising the Wanyiku nation. One of their most flourishing stations is that of Rabai, wh:ch was founded about the middle of the present eentury by Krapf and Robmann on an eminence in the neighbourhood of Mombaz. From the crest of this hill, about 1,000 feet high, the view sweeps over a vast horizon of pluins, reefs, islands, and surf-beaten headlands.

The Teita Mountains, which are erossed by the route leading from Mombaz to Kilima-Njaro, are also occupied by tribes of Bantu stoek, speaking a dialect elosely related to Ki-Swaheli, and acoording to Rebmann colleetively numbering about a hundred and fifty thousand souls. These Wateittos (Wa-Teitta) are constituted in republiean communities, which sheltered behind their rocky fastnesses, have often repulsed the attacks of the savage Masai marauders. Amongst them the primitive custom of earrying off the bride by violence still survives in the form of a pretended abduction. The husband and his friends remove her by a show of foree to his newly ereeted hut, where both are left shut up for three days without any food whatever. But the make believe capture is always preceded by a present of eattle to her parents, and the number of animuls usually demanded on these oceasions is so great, that rich persons alone are able to afford the luxury of a regular marriage. Owing to the general poverty, many less formal alliances are consequently eontracted, often within elose degrees of kinship.

The Teïta women enjoy a large share of personal freedom. Whenever she feels herself in any way aggrieved, the wife may leave her husband without let or hindrance on his part. The Wateïtas bury their dead in the first instanee, but after several months of interment the body is dug up and the head detaehed and placed apart in a sacred grove, where it is regularly consulted by the magicians. Although possessing numerous herds, the Wateitas eat only such animals as die of the cattle-plague. through ld with. ood the ow their rued for ey have to the in the ands, as ies. In medans, is tribul e years rishing present Lombaz. or a vast unbaz to dialect nbering itu) are stnesses, st them he form show of without present on these ury of a nces are wer she hout let nce, but hed and tgicians. ts die of

## The Wapokimos anio Wakamias.

To the same Bantu stock ulso belong the tribes dwelling in the distriets north of Mombaz, such as the feeble Dakulo people enslaved by the Gullas, and the Boni and Wasunieh (Wa-Sanieh) groups, who oceupy the shores of Formosa Bay. But all of these tribes are being gradually merged with the powerful Galla nation, whose language they have already adopted. Owing probally to this circumstance the traveller Denhardt regards the Waboni as Galias rather than Bantus. Further north the valley of the Pokomoni or 'Iuna (Dana) river is oceupied by the Wapokomo (Wa-Pokomo) nation, who constituta the northernmost group of Bantu peoples on the East African seaboara, where thoy have hitherto su ceeded in preserving their distinct nationality. But along the lower course of the river they are exposed to so many onemies, Gullu and Somuli maurauders, and oppressive Swaheli tax-gatherers, that they have abandoned all hope of being leng able to maintain an independent position. They are in fact already practically onsluved, although allowed to remain in their own homes, and not sent into captivity like so many other native populations.

The branch of the Pokomo nation occupying the upper course of the river above the alluvial plaius have preserved thoir political autonomy, and are still distinguished by the national virtues of honesty, candour, gentleness, and love of freedom. No other African people are animated by moro friendly feelings towards strangers, or display an equal degree of kindness and consideration for their guests. In these respects the brothers Denhardt regard the Pokomos as a model community. Although at present confined to the banks of the Tana, where they number from twenty-five to thirty thousand souls, they appear to have originally come from the north, and their line of migration seems to be indicated by several geographical names still surviving in the district lying between Kilima-Njaro and their present domain. According to Krapf, this domain is the cradle of the true Swaheli race, which was probably driven southwards by the Pokomo tribes advancing from the north.

Physically the Pokomos compare favourably with the surrounding populations, being tall and robust, with pleusant and even handsome features. But, like most of their neighbours, they endeavour to heighten their charms by tattooing the body. The women also daub themselves with ngoi, a kind of red ochre brought from India, which they mix with butter or the fat of wild animals. Neither sex wears any covering to the head or feet, their whole costume being limited to a cotton loincloth. Circumcision is not universally practised, each clan following in this respect its own peculiar usages. At the birth of a child the husband must retire, and is not permitted to return to the conjugal home for fully five months after the event. During the whole of this perind the wife is herself confined to the house, and allowed to go abroad only at night in company with her sisters or other relations.

The children are brought up with the greatest care, and learn to make themselves useful from their earliest years. Until their marriage the girls remain with their mother; but on reaching their twelfth year the boys are subjected to the
usual rites preliminary to the state of munhood, after which all reside together in one large cabin. Burials are accompanied by a very strict cercmoniul, which varies with the age and sex of the deceased, und every year a national feast is held in honour of the dead. This feast of "All souls" is in fuet the chicf national soleminity, and provision is made for the lavish expenditure usull on these oceasions by much previous thrift and ceonomy.

The l'okomos are essentially an ngricultural people; all take an equal share in fiold operations, and devote their attention especially to the cultivation of rice and maizo. Some of the young men also oceupy themselves with fishing and hunting, but the industrial arts are entirely neglected. They neither spin nor weave, ner practise metallurgy, but, apart from their huts and boats, import from the const people all the manufactured wares of which they stund in need. Their communities are organised in petty republicun states, elljoying complete self-government. Each groip is sepnrately administered by a msé, or elder, assisted by other "putriarchs," who deliberate in council with him, and who are entrusted with the executive power. The Pokomos have a sort of truditionul common law based on the principle of "eye for eye und tooth for tooth."

North and north-west of Kilima-Njaro the most advanced, or northernmost, Bantu tribes are the Wakambas and Wakiluyus (Wa-Kanba, Wa-Kiluyu). The missionary Wakefield also mentions a tribe of the same stock, the Mbe or Dhaicho people, who are said to inhabit the plains stretching to the north-east of Mount Kenia. The Wakambas, called also Warimangaos (Wa-Rimangao), who dwell to the south of this huge mountain mass, and whom Krapf estimated at about seventy thousand souls, are divided into as many republican communities as there are native villages in their territory. They are an enterprising people, who have been exposed to the constant attacks of the neighbouring Masai and Galla nations. But they have hitherto successfully resisted these attacks, thanks to the natural lines of defence presented by their rugged bush-grown territory. Novertheless one of their tribes was compelled to emigrate in the year 1882 , when men, women, and children, leaving the dangorous neighbourhood of the Masai nomads, succeeded in reaching the Usagara country in the upper Wami basin over 300 miles farther sonth.

The Wakanbas are of a roving disposition, and being accustomed to long journeys, they are chiefly employed for keeping up the commercial relations throughout the vast region comprised between the Mombaz coast and Lake Vietoria Nyanza. Most of the porters engaged by the Swaheli traders in the transport service across this region are members of the Wakamba nation. These natives have the curious habit of drinking cows' milk mixed with blood drawn from the necks of their bulls.

Beyond the volcanic plateau, the watershed of the Victoria Nyanza is again occupied by tribes of Bantu speech. Here the Kavirondo people of the uplands, who differ greatly from those of the same name settled on the shores of the great lake, speak a Bantu dialect so closely related to Ki-Swaheli, that the coast populations have no difficulty in understanding them.

Besides the lantus, the hilly, wooded, and allusial regions suitable for tilluge would also appent to be inhabited by other peoples deacended from the aboriginal races. Such are the Ala tribe, who dwell in the recesses of the forests between the Usamhara and Pare highlands, and the Wasiliknmos (Wa-Silikomo), that is, "Jwarfs," who ure said to romn the districts lying west of Kilima-Njaro. But no European traveller has yot been able to visit them, and their very existuce as a distinct race still remuins somewhat deubtful.

## The Wakwaft.

The struggle for the ascendency is henceforth earried on exclusively between the lantu populations, who are mainly tillors of the soil, and the Ma ai and Gulla nations, who are members of the Hamitic fumily occupied chiefly with pasturuge and ehronic warfure. The Wakwafi (Wa-Kwafi), nlthough of the name origin as the Masai, may be regarded as forming a sort of transition between the Buntu and Humitie ethnical groups, for several of their tribes have given up the nomad lifo, and become intermingled the the agricul aral and settled populations. These Wakwaf aro scattered over a torritor: of vast extent. Some, under the name of Humbia, are settled in the vicinity of Mamboia, a missionary station in tho Usambara country, others dwnll over 400 miles farther north on the lower slopes of Mount Kenia. But the great majority of he nation is at presont concentrated in certain parts of the volcunio and lacusive depression which separates the eastern and western plateaux, and on the western terrace 'unds sloping in the direction of Lake Victoria Nyanza.

In the year 1830 the $W$ akwafi were also still the ruling peoplo in the region which is bounded on the west by the Ugono and Puré distriets, on lit cast by Teïta, and southwards by Usambara. But since that time this section of the nation has been exposed to an almost uninterrupted series of crushing calamities. Some of their pillaging or foraging partic were cut off to a mun, their crops were devoured by swarms of locusts, their cattle perished of disease and hunger ; then came the Masai hordes of the surrounding districts, who fell upon and massacred the greater part of those that had escaped from the previous disasters. The few survivors were fain to seek a refuge amongst the Bantu populations of the neighbouring highlands, foundin-s nericultural and trading settlements in the midst of the Taveta, Teïta, Paré, Gu:o, sambara, and Zeguha communities. This change from an unsettled, predatory existence to a peaceful mode of life has been attended by excellent moral results. The eastern branch of the Wakwafi nation, who were fermerly so much dresded, is st present regarded as one of the most industrious, honest, and hospisaule people in East Central Africi.

## The Masar.

The Niasai properly so called, who claim for themselves and the kindred Wakwafi the distinctive appellation of Il.Oikob, that is, "Men," * believe, like so
*This term is, however, also diversely explained to mean, "Brave," " Free," or " Masters of the Land," that is, autochthones, or men of the soil.
many other peoples, that they are the elect of mankind. According to the nation.l legends, they are of divine origin, $b$ sing sprung from a god who has his seat above the cloud capped summit of Mount Keuia. Like the Wakwafi, however, they have already become diversely intermingled with the surrounding Bantu populations; but the domain elaimed or roaned over by them stretches somewhat more to the sonth than that of the Wakwafi branch. They occupy nearly the whole of the open country which stretches between the Upper Pangani and Ugogo, and are also very numerous in the voleanic depression separating the two plateaux. The triangular Dogilani depression situuted to the south of Lake Naivasha belongs entirely to the Masai people, who, however, have frequently shifted the limits of their territory, either by voluntary migrations, hostile encroachments, defeats, famine, and other vicissitudes incidental to their loosely organised political system. They certainly number at present several hundred thousund souls, and must be estimated at over a million if in this ethnical group are to be included the Wahumbas bordoring on Ugoge and the Wahumas scattered over Unyamezi and around the shores of Vietoria Nyanza.

The Masai physical type is one of the finest and noblest in the whole of Africa. According to Thomson, the men of pure Masai blood average six feet high, and have generally slim, wiry figures, admirable for running. Their features frequently resemble those of Europeans, being distinguished especially by broad foreheads and straight, slender nose; but the upper incisors generally tend to project forwards, especially amongst the women, many of whom even find it difficult to make both lips meet. The cheek-bone is ulso very prominent, while the eyelids and the orbits have the oblique disposition characteristic of the Mongolic races. The skull, which is elongated and well developed, is covered by a mass of hair somewhat less crisp than that of the Negro and at times even quite lank. But this feature cun be observed only amongst the young men, for all married men and all women without exception keep their heads carefully shaven. In the same way all the Masai people pierce and enlarge the lower lobe of the ear, inserting at first little rocs, and afterwards distending it by means of heavy pendants made of iron or copper wire. Like some of the Nilotio and North Abyssinian tribes, the Masai pastors will frequently remain for hours standing on one feot with the other planted against the calf, and the body resting on their lance or shield. So F. L. James tells us that the Basé tribe "have a very peculiar way of resting, which is, I believe, common among many of the tribes of the White Nile. They place the sole of the right foot against the left knee, a mode of repose which to a European seems most uneomfortable and almost impossible."*

Being essentialiy a pastoral people, the Masai lead a restless wandering life. Their usages are also in many respects intimately associated with the nomad existence of herdsmen. In various ways they show the greatest veneration for their cattle, even respecting the very herbage which serves as the daily food of their herds. Grass is in their eyes a sacred plant, which may not be thrown to the flames, nor yet cut down to be uscd for thatching their huts or strewing over

[^35] omewhat early the gani and the two of Lake requently s, hostile ir loosely hundred cal group scattered of Africa. high, and tures freby broad $y$ tend to ad it diffiwhile the Mongolic a mass of uite lank. 11 married a. In the sar, insert 7 pendants Abyssinian $n$ one foot $r$ lance or iar way of hite Nile. of repose lering life. the nomad eration for ily food of thrown to ewing over
their beds. No negotiations are valid unless the contracting pariies hold at the time a tuft of gruss in their hands; no warlike expedition can hope for success unless a few wisps of herbage are first scattered along the route leading in the direction of the country they intend to march against. In order to escape from any pending misfortune the Masai smears his forehcad aıd cheeks with cowdung; and when he feels the approach of death, he begs to be pluced in the midst of his belove:I cattle, so that he may pass away amid hallowed surroundings. He lives

- Fig. 111.-Masai Warriors.

almost exclusively on an animal diet, drinking the milk of his cows, eating the flesh of his steers and oxen ; but, strange to say, he considers it unlawful to take both milk and flesh on the same day. He can also be seldom induced to give or sell milk to strangers. The national diet is altogether regarded in a very serious light, and is regulated by severe ordinances, especially during the period when the young persons of both sexes are preparing for the rites admitting them to fellowship with the adult members of the community, and later when the young men are passing through the noviciate required to take purt in the warlike expeditions.


## SOUTH AND EAST AFRICA.

At that time the youths are gorged with the flesh of oxen, and drink the hot blood spurting from the arteries of the wounded animals, in order thereby to lay in the greatest possible store of muscle and forocity. Tobacco and all alcoholic drinks are at the same time strictly forbidden, the national experience having shown that indulgence in these dissipations leads to a general deterioration of the physical and moral qualities.

Masai society is divided into the two great classes of warriors and men of peace, respectively distinguished by the terms elmuran and elmorua. These terms, which bear some resemblance to that of IIm.Orma, the collective national name of the Gaila people, would seem to argue in favour of the common origin of the two races, a view which is also supported by other arguments. The young men who have the prospects of a rich inheritance in cattle are usually grouped in the peaceful olmorua division ; on the other hand, the more numerous class whose prospects are less brilliant, enroll themselves in the warlike division, in order to improve their position by taking part in plundering expeditions. These generally live apart, far from the camping-grounds of the married people, but acompanied by young girls whose duty it is to tend the herds, to provide the necessary supplies, and prepare the equipments of the young braves.

Their incursions range over vast spaces, often suddenly surprising peaceful populations some hundred miles off. The marauders creep stealthily along amid the nearer tribes, which are usually on the alert, and generally return to their homes by different routes, accompanied by the herds which they have seized, and which meekly follow them, as if charmed by some secret magic incantations. Acting always under the guidance of leaders in whom they place implicit confidence, the cattle-lifters observe the strictest discipline on the march, and display great skill in executing the various tactics of sudden surprise, retreat, feints, and suchlike movements of border warfare. They fight in silence, without the beating of drums, or any battle-cries; the warrior who betrays any symptoms of cowardice is hacked to pieces by his companions. Whoever fails to bring back the spear and other equipments of his comrade in arms, with whom he bas made brotherhood by drinking the same blood, meets with universal scorn, can make no more friends, and becomes little better than an outcast.

Like all fighting people, such as the Kafirs, Matebeles, and Zulus, the Masai exhibit a great love of finery and persenal ornamentation. They are fond of painting their bodics in red; a flowing white cotton robe, edged or striped in some bright colour, falls from the shoulders, being attached to the neck like the poncio of the Mexicans. The oval contour of the face is also enclosed in a leather band or strap, which is embellished either with a zebra's mane or the tufted bristles of a wild boar, or better still with a bunch of black ostrich feathers, this remarkable object forming an elliptically shaped headdress which is disposed diagonally in a line beginning under the nether lip, and running in front of the car to the crown. Beneath this singular head-gear, from which the face appears to protrude as from the empty frame of a looking-glass, the shoulders are enveloped in a short enpe which seems to consist of one mass of kites' feathers. Other white plumes ars also
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he Masai e fond of d in some he poncho ther band ristles of markable sally in a he crown. e as from hort cnpe es aru also
disposed above the head, the hair of which is sometines drawn out in long ringlets by means of bark fibre. The arms are protected by a horny ring and many coils of brass wire. To the calves are attached the flowing white flecce of the colobus in such a way as to resemble fluttering wings as he runs, and the gorgeous equip:nen' finishes off with little tinkling bells attached to the heels. The weapons usually consist of a short sword passed through the girdle of a loathern tunic, a long broad-headed lance held in one hand, and in the other ugreat slield, painted all over with many-coloured heraldic devices.

The women are far less sumptuously arrayed. They usually wear little clothing beyond a robe of dressed leather leaving exposed one arm and half of the breast. But they are on the other hand overladen with metal wire wound round the arms and legs, and disposed about the neek in the form of an inverted metal salver. Burdened as they are with such a weight of iron or copper ornuments, it is surprising to see the amount of bodily work they are able to get through, attending to the wants of tbeir husbands and children, milking the cows, keeping the household in order, and swen duing a brisk trade with passing strangers. Less cruel and less aager for gain than the men, they have of en saved the lives of their guests from the fury of their husbands or brothers. So inconvenient are the metallic adornments, that the wearer can neither walk properly nor sit down or rise like other people, and can never run. When these ornaments are once on they :ecome permanent fixtures, till finally taken off, as it would require many days of painful work again to adjust them in their proper places. They chafe the ankles especially, and evidently cause much pain. As they are also put on when very young, the calf is unable to develop to its natural size, and the consequence is that in the adult woman the legs remain at a uniform thickness, from ankle to knees-in fact, mere animated stilts (Thomson). The weight of this armour varies from four or five up to as many as thirty pounds, according to the wealth of the family; and to the iron wire some even superadd great quantities of beads and iron chains, disposed in diverse ways round the neck.

As a rule, the life of war and pillage is at an end as soon us the elmuran thinks of settling down as a family man : that is, when he hus acquired sufficient wealth to purchuse a wife with the customary dowry of cuttle. For a fuli month during the engagement the young man dons the dress of his betronned, doubtless to signify that he has at last been subdued by the power of love, like an African Hercules seated at the fcet of a dusky Omphale. Custom also requires the newly married couple to live on a milk diet fur the first month after the wedaing. But luter they acquire full freidom in this respect, and the ex-warrior, now become a man of peace, is no longer restricted even to the alternating regimen of milk und beef. He may now add to his ordinary fare cereals, fruits, and vegetables, as well as such luxuries as snuff, tobacco, which he has learnt to chew, and fermented drinks. He now also turns his attention to local politics; he takes his place in the assemblies held to deliberate on matters of public interest, and votes at the election of the liigonani, or deputy, by whom he is represented in the more important discussions.

Although naturally proud and arrogunt, the Masai has always a cordial welcome for hie friends. He even condescends to show a cortain degree of courtesy to foreign traders, and will at times go the length of expectorating on them, to express his friendly feelings in the most approved fashion. Speaking of this remarkable national custom. Thomson ussures us that it expresses " the greatest good-will and the best of wishes. It takes the place of the compliments of the season, and you had better spit upon a damsel than kiss her. You spit when you meet, and you do the same on leaving. You seal your bargain in a similar manner. As I was a lybon (wizard) of the first water, the Masai flocked to me as pious Catholics would do to springs of healing virtue, und with the aid of occasional draughts of water I was equal to the demand. The more copiously I spat upon them the greater was their delight, and with pride they would retail to their friends how the whito medicine-man honoured them, and would point with the greatest satisfaction to the ocular proof of the agreeable fact." *

The Masai displays little love of work, and practices no industry of any kiud. The women attend to all his personal wants, while the various trades and professiuns are carried on by some enslaved tribes, such as the Wandorobbos ( Wa Ndorobbo), who manufacture the warriors' weapons and the domestic utensils, and also hunt the buffalo and elephant. In their physicul features, speeeh and costume, these artisans arpear to belong to the Masai stock; but they have been mach debased by slavery, and Krapf regards them as related rather to the aboriginai Ala tribes, who still survive in the upland valleys of Usambara. The Wandorobbos are at present chiefly found scattered in small village groups in the forest districts on the slopss of Kenia and the Kikuyu highlands, where they live mainly on the produce of the chase.

The Masai people have no regular form of religious worship, although when taken by surprive or stricken by any sudden terror they frequently invoke a supernatural being whom they call Ngaii, and whom they confound with the wind, the sun, the mountain snows, the peals of thunder, and lightning-flash. Amongst them there is a numerous class of laibons (lybons), or magicians, who interpret the flight of birds and all the phenomena of animated nature, who call down blessings on the herds, ward off pestilence, and conjure the fury of the elements. The mbutian, a potent medicine-man regarded as the wisest of soothsayers, is $t$ ! $e$ wealthiest person in the whole of Masui Land. He is the owner of countless flocks, and like all other Masai sages, gives proof of his power and wisdom by his corpulence. By an artificial system of diet he has grown so obese as to have almost lost the faculty of locomotion, and is consequently all the more venerated by his votaries.

In some districts the Masai, like the Wanyikas, ply a sort of homage to "father hyæna," the animai that devours all bodies thrown to the bush. When the carcass of one of these beasts crosses their path the whole tribe goes into soourning, for the hyæna is regarded as a kind of tutelar deity of the race, and a varue belief in metempsychosis finds expression in the idea that the souls of their

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forefathers pass into the bodies of these rapacious felines. But Fischer met with no traces of this worship in the southern parts of the country, whore the most respected animal is a species of stork, which also preys on carrion and follows the warriors on all their marauding expeditions.

The dead are not buried, but exposed under some wide-branching tree. To consign them to the earth would be regarded as an net of desecration. Hence passing caravans are obliged to carry all their dead with them, the bodies being usually concealed in a bale of cotton goods. Were their preseuce suspected the convoy would be turned back, to keep the sacred soil of Masai Land from the risk of pollution by their burial.

## The Gallas and Neighbouring Tribes.

In the Tana basin the southward displacement of the Bantu populations has been caused by the Galla hordes advancing from the north. These Gallas, who themselves suffer from the encroachments of the Somali people, are probably the original stock whence the Masai branched off at some remote period. On this southern verge of their extensive domain they formerly constituted two main groups, the Bararettas who dwell on the right or southern bank of the Tana, and the Kokawés, who are scattered along the north side of the river, but who have been almost completely exterminated by the Somali. In 1878 all had disappeared except four village settlements, and there can be no doubt that all the Gallas of the district would have been swept away but for the timely intervention of the Swaheli and Arab traders on their behalf. These traders settled along the neighbouring coast had certainly no great love for the insolent Galla people, and would have complacently looked on at their utter extermination, but for the fact that thereby they would lose an established market and regular customers for their wares.

Having been plundered of all their cattle, the local Galla communities have been compelled to take to the chase, to agriculture and trade, pursuits altogether repugnant to the great bulk of the nation. Their clans are governed by the heiyn, or chief, who is chosen from some distinguished family, and who is himself subordinate to a higher chief, also appointed by election, but only for a term of seven years. This advanced southern branch of the great Ilm-Orma nation is fully conscious of their common origin with the northern Galla people, to whom they are said occasionally to despatch envoys.

North-west of Lake Baringo the district watered by the upper course of the Wei-Wei, which flows northwards in the direction of the Zamburu, is inhabited by the Wakamasia and Wa-Elgeyo tribes. Although certainly related to the Masai, these peaceful and industrious peoples betray little resemblance in their social usages to their fierce and predatory neighbours. Their tutelar deity is not the repulsive hymna, but the fertilising water, which they show great skill in distributing through an intricate system of irrigating canals over their fields and gardens. When crossing any of these ruuning waters they seldom fail to manifest
their respect by expectorating on a tuft of herbage, and thon casting it into the streum.

## Topography.

Since the Portuguese have had to abandon the stations and strongholds which they possessed on the Eust African seaboard north of Zanzibar, the whole of the commercial movement betweon the coast towns and the inland regions has fallen ints the hands of the Arab and Swaheli traders. The latter especially are proud of their decided genius for trade, and should any doubt bo expressed regarding the success of their undertakings, they are apt to excluim. "Are we not Swahelip" as if that were sufficient to guarantee a favourable issue. Till recently not a single European merchant had gained a footing on any part of this coast, and the only whites in the whole country were the Protestant missionuries stationed at Magila in Usambara, at Freretown and Rabai in the vicinity of Mombaz. But a change has taken place since the steamers plying between Zanzibar and Aden have begun to call regularly at some of the intermediate seaports along this coast. Nor can there be any doubt that in the near future the seaboard towns whence the caravans start for Masai Land and the shores of Lake Victoria Nyanza must become important centres of European influence as well as of direct commercial relations with the interior, indcpendent altogether of the Zanzibar emporium.

The group of villages situated near the mouth of the Pangani on its left bank, already constitutes a town of some importance. Over a thousand Swahelis, Wazeguhas, and half-caste Negroes have here erected their little houses or huts on a low-lying plain bordered scawards by a fringe of mangrove forest. On the opposite or right side the village of Burmi nestles at the foot of a nearly vertical eminence about 200 feet high. Before the loss of the caravan which started from Pangani in the year 1878, this place was almost exclusively chosen for the equipment of the trading expeditions destined to proceed from the coast to the KilimaNjaro region, and the territory of the southern Masai tribes. Since the recent treaties with the Zanzibar Government, its custom-house is in the hands of German officiale.

Till recently the Arabs, properly so-called, took scarcely any share in the commercial life of Pangani. They are more numerous at Tanga (Muoa), a town situated on the south side of a small but sheltered haven which communicates with the sea by a deep channel winding between two walls of coral reefs. Of all the towns lying north of Pangani on the mainland, Tanga, which is girdled round by a zone of cocoanut groves, offers the greatest abundance of provisions to passing vessels. It forwards a great part of its live stock to the Zanzibar shambles, and also yields considerable quantities of fruits and vegetables. It was at Tanga that Buron von der Decken equipped his caravan for his famous expedition to KilimaNjaro. Muorougo, which lies on Tangata Bay between Pangani and Tanga, is also a frequented little seaport. In the neighbourhood are seen numerous ruins and tombs of uncertain origin.

Mombaz, the Mombasa of the Arabs, the Meita of the Swaheli traders, the city sung bv Camoens in the "Lusiad," was ulready a famous place even before the arrivul of the Portuguese navigators. In the fourteenth century it was the residence of the king of the Zenj state, and was at that time described as "a great city visited by ships." When Vasco de Gama came to survey the entrance to its port he ran an imminent risk of being taken prisoner. So far from increasing the commorcial activity of Mombaz, the appearance of the Portugucse in these waters marked the

beginning of ita decline. The place was again visited by Pedr' Alvares Cabral in 1500, and five years later it was burnt to the ground by Francisco d'Almeida.

In 1528 the Europeans once more established themselves in this seaport, which they again lost and again recovered before the close of the century. By them was erected the imposing fortress which is still seen to the south of the city, crowning a low coralline eminence. On the gateway may even still be read the date, 1635 , inscribed by the Portuguese builders of this stronguold. But in 1660 it had already fallen into the hands of the Imam of Muscat, and in 1698 the Lusitanians
were finally expelled from the place. Its Arab masters pulled down the Christian churches, using the materials in the erection of their palaces. Then fresh wars broke out during the eighteenth century, from which, however, the ruler of Muscat came out victorious.

At present the Arabs are merely commercial agents under the protectorate of
Fig. 113.-Forts and Hilen of Monaaz.
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Great Britain, but the town itself is little more than a heap of ruins. Recently it had even ceased to be a starting-point of caravans bound for the interior. The three convoys which had successively set out from this place for the purpose of reaching the Kavirondo territory through Masai Land, had each lost over a hundred
ristian h wars ulor of orate of ecently it ior. The urpose of hundred
porters. Consequently truders no longer ventured to send curavans by this dangerous route, which was oven completely abnudoned during the years 1882 and 1883. " Biverywhere ruins of houses und mosques tell the tule of decayed grandeur, of the luss of former spirit, energy, and enterprise. Mad luts are replucing the wellbuilt dwellings of the Mazrui. The Arubs are leaving the town ns ruts leave a

Fig. 114.-Malindi and Vasco de Gama's Pillar.
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sinking ship, and a general want of life characterizes this ancient and interesting city."

The town of Mombaz stands on the east side of a coralline island, which has been upheaved more than 40 feet above the level of the surrounding waters. A few stone houses belonging to some Arab and Hindu traders, together with some groups of native cabins overshadowed by cocoanut groves, constitute the present town. Large vessels ride at anchor in the channel skirting the east side of the island, and forming an excellent harbour perfectly sheltered from all winds, but
*Thomson, op. cit., p. 38.
too confined to afford much accommolation for shipping. West of the island, however, there is developed the deep and safe inlet of Kilindiai, which ramities northwards forming other landlocked basins, where vessel ", "his largst tennage might find ample room in smooth water. The island is connec , i's, tho minland north of Mombaz by a cmiseway which crosses the estuary ai - point where it is ulmost completely choked by sandbanks.

North-east of Mombar, and on the oplosite side of the creek, stands the English station of Frecetorn, so named in honour of Sir Bartle Frere, who took so much interest in the colonisation of these regions by means of emancipated slaves. A headlaud, rising to the west of Freretown with its shady mungosteen plantations, is crowned by the villnge of Rabai, which has been occupied since the middle of the century by the missionaries, and which has also received a large number of runaway slaves from the interior. Not far from this station atands the ridge of elevated hills which is visille from the sea, and which serves as a lundmark to mariners bound for the port of Mombaz. Hence this ridge hus received from the l'ortuguese the nume of Coroua de Mombaz, that is to say, the "Crown of Mombar."

Of still less importance, at least for the present, are the other seaports which follow northwards between the ancient city and the mouth of the Tana. Kilefi (Quelifa), situated a little to the south of the river of like nane, presents nothing but a low beach where the Arab dhows often run nground. The splendid havens in the vicinity are now completely abandoned, and Tangannku, which was a flourishing place in the eighteonth century, is now little more than a camping-ground for the slaves scattered amid the surrounding bush.

Farther north stretch the open roadsteads of Malindi (Melinda), memorable in the history of navigation in the eastern seas. After doubling the Cape of Good Hope, the intrepid Vasco de Gama touched at this place and took on board the pilots, under whose guidance he boldly stcered for India. To commemorate his visit he erceted, about four miles nortls of the present town, a padräo, or pillar, which still exists, inseribed with a cross and the arms of Portugal. This is the only surviving monument which still recalls the days of Lusitanian predominance along this section of the seaboard. All the inseriptiona hitherto discovered in the ruined grass.grown eity, till recently exposed to the nightly visits of the elephant, are of Persian or Arab origin. According to the local tradition, Melinda was founded many conturies ago by Persiun immigrants from Shiraz. During the period of the Zenj power it was renowned far and wide for its potent magioians and snakecharmors. Recently this famous seaport has begun to recover a little of its former greatness; but boing destitute of a well-sheltered natural harbour, it can never hope to rival the southern ports of Mombaz and Pangani, even should the tide of prosperity again set towards this now desolate seaboard.

## The Butish Gast Afur an Company.

This association, founded for the purpose of giving effect to the provisions of the international treaties awarding to England the region between the territory of the German East African Society and Somali Land, was virtually constituted a sovereign power under the suzerainty of Great Britain by the issue of royal letters patent in the month of Muy, 1888. The extent of the territory over which the new state claims jurisdiction has not yet been accurutely defined. But, roughly speaking. it stretchos along the coast from the neighbourhood of Mombaz northwaris to the 'Tana estuary, and thence westwards in the direction of Lake Albert Nyanza. Within this wide range are ineluded the prosent independent mative states of Ugandu and Unyoro, which, it is assumed, will ultimately accopt the British protectorate. Here are some of the finest lands in the whole of Central Africu, and many parts of the country are thickly inhabited by industrions populations accustomed to an organised government. Around the eastorn and northern shores of Vietoria Nyanza, which are comprised within this domain, thero is a more or liss settled population of probably over twelve millions, while numerous tribal communities are also grouped round the other great central lakes.

England had long exercised an informal protectorate over the sultanate of Zanzibar and adjacent lands. But when that protectorate was practically surrendered to Germany by the convention of October 29th, 1886, far-sceing politiciuns felt that it would be unwise to leave to other nations the entire control of the trade routes between the coast of Zanzibar and the great equatorial lake regions. It was also considered that, Central Africa being tho chief hunting.ground of the slave-dealers, if a strong administration could once be established in this region an effective check would be put upon the nefarious trade in human flesh.

Actuated by these motives, Mr. D. Mackinnon, of the British India Company, in conjunction with a number of influential persons long identified with philanthropic work in England and abroad, conceived the idea of founding an East African Association, which should be empowered to perform higher functions than those of a mere trading company. The Sultan of Zanzibar was uppealed to in the first instance, and reudily induced to make liberal concessions, giving the society control over the seaboard north of the German company's domain, with special privileges constituting it practically an independent state. Included in the eoncessions are several small islands along the coast, amongst which is the important island of Pemba, hitherto forming an integral part of the Sultan's dominions.

But these concessions would be of little practical use without the recognition of the European powers, and especially of Great Britain. For the purpose of securing this recognition representations were made to the British Government early in the year 1888, with the result that a royal charter was granted to the association, authorizing it to assume the administration of the region above roughly outlined. The British East African Company thus stands in the same rela-
tion to the Imperial Government as did the former East India Company, or as does the present North Borneo Association.

Under the express terms of the concessions and charter, the company is empowered to build and maintain fortified stations, to equip ships of war, to enlist and support an independent force of soldiers and police, make and enforce civil and criminal law, levy customs and taxes, open up trade routes, and in general perform all the normal functions of a sovereign power. The affairs of the new state are entrusted to deputies appointed by the board of managers in London, subject of course to revision and control by the imperial authorities.

The company has already taken steps to fortify several of the small islands, and place garrisons in them for the purpose of protecting legitimate trade and checking the Arab slave-dealers. Several stations on the mainland have also been selected, where the flag of the new state will he hoisted, while routes have been traced running inland along the northern frontier of the German territory, and beyond it towards Lakes Victoria and Albert Nyanza. In this direction the domain of the British East African Company will ultimately be conterminous with the province of Egyptian Sudan on the White Nile, which was successfully held by Emin Pasha against the forces of the Mahdi. When Egyptian Sudan is again brought within the sphese of civilising influences, the British protectorate will virtually extend from the Mediterranean up the Nile Valley to the great equatorial lakes, and thence eastwards to the Indian Ocean between Zanzibar and Somali Land.

## CHAPTER XII.

## SOMALI AND EAST GALLA LANDS.



HIS easternmost region of Africa projects in rude peninsular form beyond the normal continental coast-line, in such a way as to skirt for sume 600 miles the south side of the Gulf of Aden, which separates it from the far larger Arabian peninsula on the north. Few other African lands present an equal degree of geographical unity, both as regurds its main physical outlines and the homogeneous character of its unruly nomad populations. Tuken as a whole, Somali Land constitutes a region of triangular shape, which is bounded on the north by the Gulf of Aden, on the east and south-east by the reefs and shores of the Indian Ocean as far as the Tana estuary, and on the west, that is, landwards, by the little known and rarely visited mountain range which forms the outer escarpment of the inland plateaux from Mount Kenia to Wosho and the Ankober highlands.

This extensive tract, which has a superficial area of over 400,000 square miles, is inhabited by tribal groups which present. great uniformity of type, language, and usages, from one end of the territory to the other. They even appear to have maintained the same uniformity, or at least to have undergone but slight change since the remote ages recorded on the ancient Egyptian monuments.

## Progress of Explohation.

Although it has been known for thousands of years to history, the Somali domain has remained almost entirely excluded from the sphere of European influences, which have elsewhere made themselves felt in nearly all regions washed by the marine waters. The geographical exploration of the country is even still very far from being completed. Students of historical geography are unacquainted with the itineraries both of Jorge de Abreu, who accompanied an Abyssinian army to the shores of Lake Zuai in 1525, and of Antonio Fernandez, who traversed this region a century later. On the other hand, the routes of the modern explorers who have ponetrated farther inland-Cruttenden, Burton, James, Von der Decken, Brenner, Menges, Révoil, Paulitsehke, Mokhtar Bey-stop far short of the mountain range bounding the plateaux of Gallaland, nor have they yet been connected with
those laid down by d'Abbadie, Des Avanchers, Cecchi, Traversi, and other reeent travellers in the Alyyssiniun and Shoa highlands. A broad zone of unvisited lands stili separates the northern and southern networks, whereas the various systems of iineraries for the most part already overlap each other in the other little known regions of the African continent.

Unfortunately the present political condition of Somali Land renders the explo-

Fig. 115.-Chief Routes of Explorers in Somait Land.
Seale 1 : $10,000,000$.


ration of the interior both difficult and dangerous. The division of the tribes into numerous distinct clans also obliges travellers to pay a considerable amount of blackmail, levied by every little village potentate under the form of presents or other pretexts at every station along the route. Moreover, strangers have to adapt themselves, as everywhere throughout tropical Africa, to a more or less dangerous climate, which, however, thanks to the dryness of the atmosphere, is here less fatal than in most other torrid zones. Other terrors also dog their rteps, und several
tribes into amount of resents or e to adapt dangerous e less fatal nd several
have already fallen victims either to the hardships of the route or to the assassir's dagger.

Owing to all these obstacles it seems improbable that the country can be thoroughly known in all the details of its relief until the towns along its seaboard have been occupied by Europeans, and regular trade routes with the inland districts opened by them, either as allies of friendly tribes or as military masters of the land. Already at the time of the Khedive Ismail Pasha, when the Egyptians had taken possession of the Upper Nile basin as far as the frontiers of Uganda, they also endeavoured to establish their supremacy on the Sonsal coast. Their fleets made their appearance before some of the ports along the seaboard; but British intervention prevented the modern Pharaohs from annexing to their empire the land of aromatic herbs.

At present the struggle for political ascendancy is mainly confined to the rival British and Germun nationalities. The Germans have officially annexed the south coast, where they have already "baptized" a port by the eccentric name of Hohenzoliern-hafen. The English reign supreme throughout the whole of the northern regions lying over agaiust their formidable stronghold of Aden. The island of Sokotra, which commands at once both cousts, is also regarded by them as British territory.

## Physical Features.

Nothing beyond conjectures can be hazarded regarding the main axis of the mountain range which stretches from Kenia northwards in the direction of the Abyssinian highlands. We do not even yet know how far north runs the great fault or lacustrine depression flanked by volcances which traverses Masai Land, separating the sections of the plateau between the Victoria Nyanza and oceanic watersheds. According to the reports of the natives it seems probable that this extensive fissure scarcely extends beyond the lacustrine plain of Zamburu. North of this shallow basin the mountain ranges, running in the direction from southwest to north-east, that is, parallel with the shores of the Indian Ocean, seem to be disposed in separate ridges at different elevations, whose terraced crests thus present the aspect of steps ascending, like the Indian ghats, to the inland plateaux. Above one of these ridges towers the Mount Wosho, which d'Abbadie beheld ut a distance of 150 miles.

Farther north Cecehi and Chiarini in $18: 9$, after crossing the border ranges with a muan altitude of from 9,000 to 10,000 feet, descended from the plateau above which rises Mount Wariro, and thence made their way over a pass down to the lower terraces which send their surface waters to the basin of the Webi. Still farther north two parallel chains of extinct volcanoes enclose a lacustrine depression, where are found three lakes which have been seen from a distance by the Italian explorers. The northernmost of these basins is that of Lake Zuai ( 6,000 feet), which was till recently supposed to be an affluent of the Awash river. Now, however, it is known to receive several tributaries from the north, amongst others
the Katara, described as an "immonse" river. According to native report the Znaii communicates southwards with the second lake, which is known by the name of Hogga, and it is quite possible that both of these reservoirs send an emissary in a southerly direction to the basin of the Juba. In the north the Awash also escapes towards the plains through a deep mountain gorge, beyond which are seen the summits of the Shoa highlands standing out against the horizon.

Between the escarpments of the inland plateau and the seaioard, the intervening regions do not slope uniformly in any given direction. According to. the information collected by Guillain, Wakefield, James, and other explorers, the monotony of the plains is diversitied by isolated peaks, chains of hills, and rugged uplauds. But in the northern part of Somali Land the ground rises from the coast inland in such a way as to develop a long ridge of irregular mountains, which are mainly disposed in a direction parallel with the shores of the Gulf of Aden, and which in their general formation resemble the chaius of South Arabia on the opposite side of the gulf. Thus the volcanic heights appear to corrcspond on both sides of the marine inlet.

The group of the Harrar Mountains, by which the city of the same name is encircled as by a magnificent natural amphitheatre, may be regarded as the western limit of the North Somali coast range. Mount Mulata, one of the summits lying to the south-west of Harrar, is said to attain an alitude of 10,000 feet; while Mount Hama, to the north-west of the same place, rises to the height of 7,300 feet, and several other crests exceed 6,500 feet. East of these granite eminences, the waterpa.ting between the Gulf of Aden and the Indian Ocean becomes more uniform with the surrounding plains. It no longer anywhere presents any imposing elevations, and even gradually merges in a vast and almost level steppe to which Burton has given the name of the "Marar Pra cie," and the northern range of which falls in terraces down to the eLores of the Gulf of Aden. This plateau, the $O g n$ of the Somali natives, is furrowed bere and there by ravines or river-beds which are now mostly waterless, and terminat's abruptly in the cliffs and escarpments of the Bor, that is to say, the northeru coast range.

The prevailing formation of these escarpments are granites veined with white quartz and overlain with sandstone and limestone. The rains and running waters have swept away all the vegetable soil from the upper slopes, lodging it in the cavities on the rocks, where are seen a few acacias of pale-coloured foliage, somewhat resembling stunted olive-trees at a distance. The eliffs of the Bor are rent at iniervals by deep gorge-like crevasses, through which, after the tropical rains, the torrents escape seawards. At the foot of the escarpments stretches the Goban, or maritime plain, with its dunes and shingle, its wadys and depressions, alternately saline and marshy.

South of Berbera the coast ranges again acquire a considerable elevation, and here one of the summits, the wooded and twin-crested Gan Libash, or Toro, exceeds 6,500 feet in altitude.* A narrow pase crossing the divide between the two marine basins stands at a height of 4,500 feet. Beyond this point going eastwards the

[^36] more uniimposing to which range of s plateau, river-beds d escarpvith white ng waters - it in the tge, someare rent at rains, the Goban, or elternately
ation, and o, exceeds wo marine twards the
coast range draws continually nearer to the shore, and such peaks as the Golis, the Ankor ( 3,700 feet), the pyramidal Haïs ( 6,100 feet), the Airensit ( 5,300 feet), near the Yaffar pass, stand at an average distance of not more than 18 or 20 miles from the sea. The intervening space is largely occupied by rocky scarps and bluffs, leaving only here and there a few narrow strips of verdure, generally nar the mouths of the watercourses.

## Cape Guardafei and the Somadi Seabiahd.

The eastern extremity of the African "Horn" is carved by deep fissures into

a number of distinct plateaux, huge quidrangular masses above which rise a few low eminences. Thus this conspicuous continental headland is limited southwards by the rocky bed of the Togueni, which trends in the direction of the Gulf of Aden, und by another fluvial ravine which drains towards the Indian Ocean. Near the western edge of this limestone plateau rises the Jebel Karoma (Kurmo). 4,000 feet high, which still beurs the name in a scarcely modificd form of the "Aromatic Mountain" formerly given to it by the Greek navigators. The Gor Ali, lying more to the east, has the same altitude, while another crest close to Cape Guardafui still rises 2,800 above the sea.

The farcous headland itself, variously known to the Arabs as the Ras Assir and Jard-Hafun, and to the Somali natives as the Girdif, Girdifo, or Yardaf, whence the Guardafui of Europeun navigators, consists of a nearly vertical rocky wall rising to a height of about 900 feet above its surf-beaten base. So deep is the water at this point that vessels might easily double the headland by keeping close inshore. Nevertheless there are few places where shipwrecks are comparatively more frequent, and where the pilot has to take his soundings more carefully in order to avoid a disaster. Hence the name of the cape has been often explained, in defiance of etymology, as derived from the Italian word "guarda," which in the lingua frauca of the Levant has the sense of "beware."

During the south-west monsoon the surrounding waters are generally rough, the atmosphere is heavily laden with moisture, and the horizon is veiled in dense fogs and vapour. The marine currents are also very strong, and change their direction suddenly in the vicinity of the coust, at one time setting landwards, at another towards the high sea. Hence in the midst of these conflicting elements the navigator scarcely feels himself free from prail until he reaches depths of 30 or 40 fathoms. When a ship runs aground, the current with which it has drifted leewards almost invariably carries it to the south of the headiand. Here it is generally again stranded on the shore of a creek well known to mariners, where the Somali wreckers await their prey.

Some 90 miles to the south er Cape Guardufui, another much dreaded promontory, the Ras Hufûn or Medur?du, projects seawards. This headland is formed by a quadrangular rocky islet with precipitous walls, whose summit develops an undulating table or plateau, with ridges ranging from 400 to 600 feet in height. The island is connected with the mainland by a low isthmus about 12 miles long, and overgrown with stunted brushwood. Thus are formed two open bays north and south of the isthmus, like the north and south sands at Scarborough, where the Arab craft ride at anchor alternately according to the direction of the monsoons. Owea mentions a local tradition to the effect that the Portuguese had begun to cat a canal between the two bays, in order to transform the island to an impreguable fortress.

The upheaval of the sandy spit courecting the Ras Hafun with the adjacent $c_{0}$, sst may perhaps be due to a general phenomenon of oscillation going on all along this seaboard, for in many places old marine beaches are observed strewn with banks of fossil hell, snd at some puints penetrating far into the interior of the continent. The whole of this coution of the coast is rock-bound except about the mouths of the tocrents by which the shore-line is here and there interrupted. For a distance of over 300 miles to the south of Ras Hafun, the seaboard is designated by the characteristic name of Barr-el-Khassain, that is to say, "Rugged Land," or region of rocks. According to Owen's suggestion, this very term Khassain may perhaps be the same that appears under a corrupt form in the word Azania, already employed by the ancient Greeks, and in the expression "Land of Anjan," which occurs on the old maps.

The height of the cliffs along the coast ranges from 200 to about 400 feet, and

Assir and f, whence vall rising o water at e inshore. more freor to a void lefiance of gua frauca 1ly rough, 1 in dense enge their dwards, at s elements pthis of 30 has drifted Here it is where the d promonformed by evelops an in height. miles long, says north agh, where the monaguese had land to an
e adjacent ${ }^{\circ}$ ing on all ved strewn interior of cept about aterrupted. d is desig. " Rugged very term n the word " Land of 0 feet, and
the ravines by which they are broken at irregular intervals give access to shingly steppes where the gravel is in many places covered by a blackish silicious layer, interspersed with ierruginous nodules. These elevated plains reminded the French explorer, M. Révoil, of the appearance of the Crau formations in the south of France. A zone of upheaved coral reefs some miles in breadth, which here skirts the present shore-line for some distance, seems to indicate a general upheaval of the

Fig. 117.-Capz Guardafun.

land, or else a corresponding subsidence of the sea-level in these waters. The chain of sandy dunes which still marks the line of the old beach lies some distance

## Rivers.

Of all the fluvial systems in Somali Land the most important, both as regards the length of its course and the volume of its waters, is that which, under the
name of Gugsa, takes its rise in the very heart of Ethiopia, and which at first describes a great bend to the north, the east, and south-east of the Kaffa highlands, as if it intended ultinately to join the White Nile through its eastern tributary, the Subat. In fuct, this was the hypothesis suggested by M. Antoine d'Abbadie, who fancied that the Gugsa formed a southern pendant to the Blue Nile, which by an analogous bend described in the reverse direction, also joins tho White Nile. But although no explorer has yet visited the upland valleys and gorges through which the Uma, as it is also called in this part of its course, escapes

from the Ethiopian highlands, nevertheless the native reports are unanimous in asserting that after sweeping round the southern base of Mount Wosho, the Gugsa trends eastwards to the Galla country through a fissure in the border range. The Gugsa would therefore appear to be identical with the Dawa or Durka of the riverain pastoral and agricultural populations. It is also known as the Webi, a name which differs little from that of the Abai, or Upper Blue Nile, and which has also the same meaning of "River," or " Running Water." After its junction with several other "Webis," the Ethiopian stream at last takes the direction from north to south, reaching the Indian Ocean some 24 miles to the south of the
h at first ffa high s eastern . Antoine the Blue also joins alleys and se, escapes
equator. In this part of its course it is known to the Arabs as the Juba (Jub or Jeb), which has been identified with the Rio dos Fuegos of the old Portuguese navixators.

The volume of water sent down by the Juba is not sufficient to scour the estuary to any great depth. The consequence is that even vessels of light draught have great difficulty in erossing the bar by which its mouth is obstructed. In the

Fig. 119.-Mouthe of the Juba and Bubashi.
Soale 1: 1.500,000.


Depths.

year 1798 an English man-of-war surveyed the waters about the entrance, but the boat which attempted to overcome this obstacle capsized and lost nearly all its crew, who were either drowned or massacred by the coast Somalis. In 1865 the explorer Von der Decken succeeded in penetrating into the river, but was soon after wrecked at the rapids. At last the American Chaillé-Long, in the service of the Khedive, successfully crossed the bar in 1875, and ascended the river 122- $\Delta \mathrm{F}$

## SOUTH AND EAST AFRICA.

for 165 miles above its mouth. Had he not been racalled, he might bave even penetrated farther inlund, for the strean was still sufficiently deep beyond the point actually reuched by him.

The waters of the river being arrested at its mouth by the chain of red sandhills which here fringes the coast, are displaced towards the south-west, and consequently flow in the same direction as the coastline and the neighbouring marine current. In this direction are also disposed the lateral lagoons and swampy depressions which have been developed above the estuary, and which receive the overflow from the mainstream during the periodical intafutions. The river Sheri,

Fig. 120.-Lower Couras of the Webi.
scale 1 : $8,500,000$.

-60 Miles.
which takes its rise in this marahy district, and which flows sonth-westwards in a depression parallel with the const and chain of dunes, seems to be nothing more than an old branch of the Juba, although the two estuaries are now separated by a distance of no less than 80 miles.

The southern estuary, known to the Sornali natives by the name of Mto Bubashi, and by the English called Port Durnford, but again recently re-named HohenzollernHafen by the Germans, forms an excellent harbour where the largest vessels can ride at auchor in smooth water for some miles above the bar. Off the coast and parallel with it stretches a barrier reef, which indicates the future shore-line in process of formation. Here all such physical features as sandhills, watercourses,
beach, shoals, f.nd reefs are uniformly disposed in precisely the same direction from north-east to south-west.

Another Webi, like the Gugan Webi which rises in Kaffaland, has also its chief sourve in Ethiopia, bnt farther north in the Gurage district, und on tho offshoots of the border range, some little distance south of the $A$ wash. This Webi, or "River," which possesses no other name in geographical nomenclature, is fed by the waters of an extensive area of drainage. All the torrents between Gurage and the Hurrar country converge towards this importunt watercourse ; but all do not reuch the mainstream, especiully in the dry season, while severul are lost in saline depressions without any outflow.

During the floods the Webi overflows its banks like another Nilo, fertilising the rich plains of Ogaden, the "earthly paradise of Somali Land." Like the Juba, it sweeps round to the south in its lower course; but as it approaches the coast it has no longer sufficient vigour to force its way seaward through the intervening chain of sandhills. Hence it skirts the inner buse of these dunes in a perfectly straight line for a distanc about 165 miles, and at last runs out in a marshy depression before reachi $i_{c}$, eleft bank of the Juba. Thus is presented the singular and extremely rare phenomenon of a not inconsiderable watercourse which, after vainly endeavouring to pierce the sandy barrier intercepting its seaward course, follows the inner face of this rumpart, like some broad and deep moat artificially excavated for defensive purposes. This Tuni, or narrow maritime zone, separating the river from the Indian Ocean, has an average breath of scarcely more than twelve miles. The long line of sandhills is here and there streagtheacd by some rocky masses which are evidently upheaved reefs.

Lill the other watercourses which, north of the Webi, traverse the Somali country as it gradually tapers towards the north-east, also fuil to reach the Indian Ocean, except perhaps after unusually heavy downpours. The moisture, however, collected in their sandy beds suffices at least to nourish a somewhat scanty growth of riverain shrubs. The largest of these inland or intermittent fluvial basins has its rise immediately to the east of the Webi, in the Harrar mountains, and under the name of Tâg Faf terminates its arrested course in a marshy depression within the territory of the Hawiyah people. A nother tag or wady, which takes its origin to the south of the Berbera hills, runs out in the country of the Mijertin Somalis, more than 120 miles from the sea. The last of these wadys comprised within the oceanic area of drainuge is the Tug Darror, or "River of Fogs," whose valley lies between the Ras Hafûn and Cape Guardafui.

On the slopes draining to the Gulf of Aden, the beds of the torrents are nothing more than short ravines excavated in the thickness of the escarpment. Here running waters are as scarce as in the corresponding gorges on the opposite coast of Arabia.

## Climate.

In the southern district the climate of Somali Land resembles that of Zanzibar ; on the northern slope facing the Gulf of Aren, it corresponds with that of South

Arahia; towards the west, that is, on the terruces ad spurs of the Ethiopian highlands, it differs little from that of Shon. No dhubt this region, taken as a whole, is comprised within the influence of the north-enst trade winds; but these atmowpheric currents are frequently deflected from their normal course by the changes of barometric pressure and temperature, by which they are attracted towards the interior, at one time of the African at another of the Arabian peninsulu.

During the winter months of the northern hemisphere, from October to Mareh, the north-east tude winds prevail with most uniformity, blowing at this period mainly parallel with the sonth-west const of Somali Land. During the summer months the normul wiads are reversed, and lier monsoon then veers round towards the north-west, and even the north. Partial shiftings also deflect the atmospheric current in the direction of the west, and they are then accompaniod by fogs and apour-charged clouds from the Indian Ocean.

The mean winter tomperature ranges from about $75^{\circ}$ to $79^{\circ}$ or $80^{\circ} \mathrm{F}$., while that of summer is seldom more thun $86^{\circ} \mathrm{F}$. According to Menges, tho range for the whole year scarcely exceeds an extreme deviation of $20^{\circ} \mathrm{F}$. between the hot and cold seasons, at least on the Berbera coast.* The regular winter rains, which however are rarely very copious and attend only by comparatively mild thunder storms, are due to the north-east monsoons, which prevail from December to March. As a rule, this season is marked rathor by fair weather and clear skies, or elso by light eloulis, which drift over the coastlands without precipitating any moisture. The true wet season is ushered in with the southern monsoon, which lasts from April to July or August, and which is aecompanied by tremendous hurricanes beating furiously agri $\%$ the :xposed seaboard. Farther inland the mostly waterloss wadys and to sem flushed by the tropical downours, and the arid wastes bloom $\mathbf{a}$ a, . or a brief interval.

This rainy perios, the $g a$ or $g u g i$ of the Somali, is followed by the $h u g a$, when the skies are :vercast, but no moisture falls, and the surface of the land resumes its usual arid aspect. The cycle of the seasons is completed by the duir, the coldest period, and the jilul, a dry month which precedes the return of the heavy rains. These various seasons are delayed in the direction from east to west, that is to say, from the coastlands towards the inland plateaux; but here the rain-bearing clouds, being arrested by the slopes of the mountains, discharge a more abundunt rainfall than along the seaboard. The average annual rainfall on the Shoa highlands is estimated at about forty inches.

## Flora.

In the low-lying districts the soil, being badly watered, is naturally unproductive except in a few favoured localities, where the vegetation vies in splendour and exuberance with that of the Indian seaboard under the same latitudes. But elsewhere the few scanty wells or reservoirs and rivulets of brackish water are insufficient to support anything beyond a poor stunted flora scattered thinly over

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wide spaces. Along the seacoust little is seen but the plants characteristic of alkaline soils, except in the vicinity of the wadys, which are often fringed with leafy trees. On the hills and uplands the prevailing forms are gum-yielding acacias, mimosus, euphorbias, and the aromatic growths from which are obtained the frankincense and myrrh of commerce, and for which this region, like the opposite coast of Arabia, has :a been famous. Some authorities have even derived the very word myrrh its If hom the Marehan (properly Murreyhan) tribe, in whose territory it is obtained in the greatest perfection, although it seems more probably connected with a Semitic root mar, or mur, meaning " bitter." Another curious member of this family is the Olibamum, or Boswellia, which grows on the bare rocks, to which its white roots seem glued as with a coating of mastic.

Nevertheless a leafy vegetation becomes continually more prevalent in the direction of the south. Clumps of the date-paln occur only in the neighbourhood of the coast towns; but even here the fruit never comes to maturity, the Somali not having yet learnt the art of fertilising the female plant, an art of which the Arab date merchants are careful to keep them in ignorance. The dûm palm is met in a few isolated spots, but the banana is nowhere seen beyond the gardens of the seuboard district.

On the uplands of the interior, botanists have collected a large number of new species. Here some of the more abundantly watered mountain slopes, such as those of Gan Libash, present a magnificent vegetation rivalling in beauty that of the Abyssinian highlands. In these districts the naturalist Menges has found the giant juniper and the superb jibara, with its mass of bright blossom rising several yards alove the foliage. The coffee shrub also flourishes on the spurs and offshoots of the Shoa highlands. The central territory of Ogaden, which stands at a mean elevation of about 3,000 feet, appears from tho information obtained by Sottiro to be mainly a vast region of steppes. After the light showers to which it is exposed the whole surface is converted into a boundless sea of tall grasses interrupted in some places by tracts of shingly wastes.

## Fauna.

The fanna of Somali Lamd differs little from that of the Galla country in the Ethiopian uplands, except that it becomes continually poorer in the direction of the coastlands. 'The elephant and other large animals roam only in the southern and western parts of the country, which are more copiously watered and have a correspondingly richer vegetation. Numerous herds of elephants climb the difficult escarpments of the Gan Libash, which man himself is scarcely able to ascend. They also frequent the Ogaden steppes, and are suid to withdraw to the banks of the Webi at the approach of death.

In the northern regions the forests, bush, and stony tracts harboar various species of monkeys, a prevalent type bring that of the cynocephalous, or dog-faced apes. Carnivorous beasts, such as the lion, leopard, panther, jackal, hyana, and other felida, infest the Ogaden steppe, while all the plateaux are roamed by the
ostrich and herds of wild asses, gazelles, and antelopes, amongst which Menges has discovered a nev species, the curious " harnessed" untelope, with a combination of white stripes and spots on a greyish brown ground, somewhat resembling the trappings of $\mathfrak{a}$ horse. Hares and other rodents are common on the coastlands, but the lively macroscelides, which differ from the shrew chiefly in the greater length of the hind legs, and which French writers call the rat a tromije (Macroscelides Rozeti), keep chiefly to the dry rocky places, looking at a distance like squirrels, and continually hopping about, after the manner of kangaroos, in scarch of insects and other small animals.

Amongst the lizard tribe occurs the remarkable agama Ruppellii, which ehanges its colour when an attempt is made to seize it. Another curious member of this family is the Uromastix batilliferus, which hides in the fissures of the rocks, presenting to its pursuer nothing but its tail armed with sharp spines. Indigenous in Somali Land is the Acryllirm rulturinmm, the finest variety of the guinea-fowl, which has the head of a vulture and many of its habits, for it feeds not only on corn but also on insects and carrion.

The naturalists who have visited this region, notably Von der Decken and Révoil, have discovered several new species of molluses and insects, as well as a new termite, which builds tall nests in the furm of obelisks. In the neighbouring waters the fishermen capture many sharks, whose flesh is prepared for the Zanzibar market and the fins exported to China, where this gelatinous article of diet is highly esteemed as a choice delicacy.

## Inhabitants.

The inhabitants of Somali Land were known to the ancient Egyptians under the general name of Pûnt. In one of the temples at Thebes, Deir-el-Bahâri, Dümisten and Mariette have discovered some remarkable mural paintings, which represent the payment of tribute in gums, frankincense, and myrrb, offered to the queen of the Egyptians by the people of Pûnt. The figures themselves wear the same garb and have the same general appearunce as the present Somali people. At that time they had already a knowledge of metuls, so that the stone implements discovered in many parts of the country must belong to a prehistoric period, at least three thousand six hundred, and more probably over five thousand years, removed from our days. Nevertheless, most of the Somali, ignorant of their true descent, and as zealous Mussulmans anxious to include some saiut of Islam amongst their ancestry, pretend to be sprung from a fumily of Koreish Arabs. Like their Danakil neighbours, they even claim closo kinship with the Prophet's family, and point to a house still existing in Mecca which was the residence of their forefathers. According to one tradition, their direct progenitor was a certain Sherif Ishak ben Ahmed, who crossed over from Hadramaut with forty followers about five hundred years ago. But other legends go much farther back, tracing their descent from the Himyarite chiefs, Sanhaj and Samamah, said to have been contemporaries of a mythical king
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Afrikus, who is supposed to have conquered the whole continent and given it his name about the year 400 of the new era.

Unfortunately the ruins discovered in various parts of the country are so shapeless that it is no longer possible to tell from the style of arehitecture whether they are to be attributed to Egyptian, Assyrian, Persian, or other uncient builders. A thousand different objects, however, have also been found which attest a longstanding commercial intercourse with all the maritime regions connected by the yearly alternating trade-winds. Amongst these objects are glazed earthenware, enamels, and glass, stone and alabaster vases, pcarls, and other gems, which clearly show that the ancestors of the Somali people maintained extensive relations with the flourishing and industrious nations of the East. The sudden destruction of any present trading place on the seaboard would not reveal to future treasure-seekers amongst its débris so many remarkable objects as have been found amid the ruins of the cities overthrown two or three thousand years ago.

Numerous barrows, or sepulchral mounds, dating from those remote times, still exist in certain parts of the country. They generally consist of pyramidal piles of stones interspersed with shells, fishbones, and implements belonging to the successive stone, bronze, and iron ages. The graves that have been rifled in the neighbourhood of Zeila appear to be of Galla origin, and the natives of this district point to the site of an "immense city," which is also said to have belonged to the Galla people. Yet no settlements of any Galla tribes are now found nearer to Zeila than the Harrar territory, which is distant about 120 miles to the south. Doubtless extensive migrations and shiftings of populations here took place in former times, and similar changes and displacemen's, especially of the nomad communities, are still continued in our days as actively as ever.

## The Somatr.

There can be no doubt that, taken collectively, the Somali belong to the same ethnical group as the Danakil on their northern and the Gallas on their western and southern borders. In several places along the frontiers it is even difficult to decide on the true nationality of the intermediate populations, so indistinct are the transitional types. Nor has the term Somal itself any very definite meaning, in virtue of which it may be unhesitatingly applied to all the inhabitants of the region comprised between Tajurah Bay and the Juba River. According to Hildebrandt, this ethnicai designation has the sense of "bluck," or "swarthy," a description which does not hold good for all the Somali people, although they are on the whole of a somewhat darker complexion than either their Danakil or their Galla neigbbours. Other etymologists have interpreted the word in the more disparaging seuse of " miscreant," "ferocious," or " truculent," while the Somali themselves offer no explanation of their general appellation. By the Gallas they are called Tumr, a name which is also of uncertain origin and meaning.

The country is designated by the Arabs as the Barr-es Soral, that is to say, the "Abode of the Somali," although the limits of this "abode" are far from
being determined with any attempt at accuracy. Southwards the race is rapidly eucroaching on the conterminous populations of Galla and Bantu origin. Till recently the Juba River had been indicated as the southern frontier of the Somali domain, but during the last fow years the Somuli have advanced as far as the


Tana, that is to say, 270 miles farther south, and they have even crossed this river, as if to join hands with the equally aggressive Masai invaders. On the other hand, at the opposite extremity of their territory, that is, on the shores of the Gulf of Aden, they are in their turn retiring before the Danakil nomads. One might almost say that a sort of etbnological equilibrium is being established
in the direction from north to south, eorrosponding with the alternuting coast streams and trade winds of the same region.

The Somali people can scarcely be suid to have a common racial type, so great is the diversity in the physical appearance of the different tribes and nations, a difference which is itself mainly due partly to the differences in the social habits, partly to the varying climatic conditions and ethnical interminglings. Nevertheless the Somali may in a general way be said to resemble the Dunakils, although as a rule they are taller* and less robust; the figuro is also somowhat more slim, the bearing more martial, the complexion darker. The figure seems all the taller that the head is smaller in proportion to the size of the body. Scarcely any invulids are found amongst them, although they ago rapidly. A young man not more than twenty years old may sometimes be taken for one of forty, while one of forty looks like a venerable patriarch. Many who are in complexion as black as the Shilluks of the White Nile, or the Sencgambian Wolofs, have nevertheless the same regularity and even delicacy of features as the very finest Europeans. The women especially are often admired for their harmony of expression and dignified carriage, as well as for their soft and musical voice. On these points very strong testimony is given amongst others by Captain Wharton, who lately spent some time surveying the Somali seaboard, and who describes the coast tribes near the equator as the handsomest race of men and women he had ever seen, black in colour, but with magnificent physique. $\dagger$ At the same time the life of hardship led by the women gives them almost a decrepit look before they are thirty years old, and this effect is intensifiod by the tendency to steatopygia which is very common amongst the married women.

The models of physical beauty so frequently met amongst the Somali have by some authorities been attributed to crossings with non-African populations, and especially with the Semites of the neighbouring Arabian peninsula. Such interminglings have certainly taken place, and during the centuries when active commercial relations were carried on all along the seaboard, Aryan influences, represented both by the Greeks and Persians, may even have had some share in modifying the primitive Somali tyne. But on the other hand many so-called Negro populations in the interior the continent are also known to be distinguished by the almost classic outlines of their featurcs. The closest resemblance to the Arabs in physiognomy, as well as in social habits, is found amongst the tribes of the coastlands. The western Somali, and especially the Issa people, who dwell nearer to the Gallas, in the same way show a corresponding closer resemblance to the type of that race, being distinguished from the other Somali by a broader face and coarser features. The flat features and high cheek-bones, characteristic of the true Negro type, are most prevalent in the southern districts, and especially amongst the Rahanuin conquerors, who have already come in contact with the Bantu populations of the Tana basin.

[^38]The Somali language, of which grammars, voeabularies, and collections of mational proverbs havo already been published, confirms the evidences of kinship with the surrounding Damukil and Gulla peoples, whth have been derived from their physical appearance and traditions. Nevertheless a consideruble number of Arubic words, and even expressions, have been introduced into the current speech, through the freguent relations which the Somali have maintained with the Arabs ever since the Mohummedan religion has been spread throughout the region of plateaux and uplands stretching between the sea and the Ethiopian highlands.


The few natives who have uny knowledge of letters make use of the characters employed by their Arab teachers, from whom they have also borrowed numerous social and religious institutions.

The inhabitants of the northern districts lying nearest to Arabia scrupulously observe the prescribed rites, never failing to repeat the prayers at the stated times in all the towns, wherever a hovel is to be found dignified by the name of mosque. They are summoned in the usual way by a muezzin, or crier, while the sacred ritual is recited by Arab priests. Travellers never leave their homes without
tions of kinship ed from amber of speech, - Arabs egion of ghlunds. without
providing themsolves with the woolen bowl required to holl the water for the ear ${ }^{1}$ mary ablutions. Adults also shave their heads in the Mussulman fashion, und werr a costume almost identical with that of the Arabs.

But throughout the inland districts und in all the southern parts of the country the natives have proserved their animistie superstitions and a manner of life more analogous to that of the Danakil and Beja Iamites. The men still swear by the rocks and worship large trees. They wear the loin-eloth combined with a sort of white cotton trga, which is draped in Greek fashion, usually leaving the right shoulder exposed. When travelling they wear sandals, and generally plaster their alundant head of hair with a preparation of lime aud clay, whieh serves the double purpose of protecting it from the heat of the sun and getting rid of troublesome purasites. In order not to disarrange the head-dress, they sleep with the neek resting on little wooden blocks or pillows, like those commonly met ill Japan and amongst most people of Central Africa.

A great number of the Somali have also their ears pierced in the Bantu fashion, although the lobe is seldom distended by the insertion of heavy wood, mother-ofpear, ivory, bone or metal ornaments. Round the neek, however, they wear strings of large amber or coral beads, and some still practise tattooing on the arms, breast, and other parts; but these designs have no lonzer any symbolic or distinctive meaning, as amongst most of the southern tribes. Like the Beja, the Somali wears in his hair a carved scraper, and makes constant use of his scented wood toothpick, so that his teeth are always immaculately white.

The women wear a red skirt and white toga fastened round the waist with a coloured girdle; they are also generally more overladen with oruaments than the men, all displaying pendants attached to the ears, necklaces, rings, bracelets, charms, chains, and other trinkets. Custom requires boys to be circumcised in their third year, while girls when six years old are subjected to a still more cruel operation. In times of sickness, and even when small-pox is prevalent, the victims are occasionally abandoned to the lions, hyxuas, and other wild beasts of the wilderness.

Like most people that eat at irregular times and have often to go for long periods without food, the Somali are, according to circumstances, great gluttons or models of sobriety. None except the fishermen of the seaboard districts ever touch fish; nor will they eat even game or eggs, and also scrupulously abstain from the flesh of animals forbidden by the precepts of the Koran. Antelopes and gazelles are left to the pariah or outcast populations. Coffee also is very little used as a drink in Somali Land, although it is often eaten after the Galla fashion, that is, reduced to a powder and kneaded up with butter, the same mixture being at the same time used for lubricating the body. - The consumption of alcoholic drinks is strictly forbidden, except in the Ogaden country, where a fermented beverage is made of camels' milk. Tobacco is little smoked, but is taken in the form of snuff and also chewed mixed with ashes. Like the Harrari people, the Somali also meet together in the evening to masticate the leaves of kat (Celastrus edulis), which acts as a stimulant, enabling them to prolong their vigils through the night. This is
a convenienee, for they are great talkers, as well as very eager for news, so much so that the Somali plants his spear nt the entrance to his village to indicate that the rond is barred to strangers until they have informed him of all the tidings from the distant parts whene they have arrived.

Somali Land has for ages been wanted by incensant tribal warfare. "The only fied here cultivated," says M. Résoil, in the figurative langunge of the East, "is the ficld of death." Being divided into a grent number of petty staten, the people are almost constantly at feud with each other. Each suspects his neighbour and the warrior nover goes ahroud unamed. The rich man has his gun, purchused in one of the semport towns ; the por have their spear and their dart, occasionally supplemented by a murderous donble-edged hlude and a knobkerry for braining the enemy that falls in the combat. Like the Masai, the Somali warrior usually "stands at ease" ly leaning on his spear and bending the right leg, somewhat after the fashion of persons walking on stilts. Ho is proud of having killed his man, and to commemorate the event cither adds an ostrich plume to his headdress or wears an ivory bracelet on his wrist.

In some districts the friends of the doparted hero pile round his grave as many blocks as the victims that have fallen to his prowess. But it is fair to state that if the Somali takes the life of his adversary without a pang, he is himself equally indifferent to the same fate. When wounded he suffers without a murmur, and holds out his urm unflinchingly to the native surgeon, who cauterises it in his primitive way with fire or a red-hot iron. Thanks also to the climate, the Somali frequently recovers from wounds that would inevitably prove fatul to a European.

If it is honourable to kill, it is no less glorious to plunder, provided always that it be done in open warfare. No one steals in time of peace, " because all the Somali aro brothers," and no one takes the superfluous trouble to close his house. But all are free to attack the stranger, who dare not even venture to penetrate into their territory until he has first procured by purchase an aban, that is, a protector or patron in the tribe. When a vessel is wrecked on their inhospitable shores all claim the established rights of flotsam and jetsam, and the wreekers hasten to the spot from distances of sixty or seventy miles round about. Not a single household in the whole of the Guardafui peninsula but has some objects to show which belonged to Europeans wrecked on the surrounding seaboard. Graves mentions a famous sheikh, a very pious dovotee, who lived near the cape, and who, during the bad season, was handsomely feed to invoke Allah night and day in order to bring about the wreck of passing Christian vessels. But it should be remembered that not so very long ago the villages along the west coast of France and souin coast of Englund not only prayed for such contingencies, but set up false beacons to allure their victims to destruction.

The Somali of the coastlands, and notably the Mijertin people, would conside: themselves degraded by cultivating the land. They are shepherds, fishermen, sailors, or traders, but not husbandmen. Some are even daring mariners, who in their light dhows of forty or fifty tons burden venture on long voyages to Bombay and Zanzibar. A great many live a half-nomad existence, following their flocks
from pasturage to pasturage in the grassy rugions of the interior. Tho industries, by fur the most important of which is the munafacture of matting, are ulmost entirely in the hands of the women, who are all very laborions.

Few of the tribes make any use of the horse, and it seems probable that this unimul was not introduced into the country till compuratively recent times. It even still benrs its Arab nume of faras. Aecording to Sottiro, cvery village in the Ogaden territory keops a park of a few dozon ostriches, which feed upurt undor the charge of children, and which pass the night in the huts; during the migrations they also join the caravan in company with the camels. l3at they ure not allowed to breed in captivity, und the domestic stock is consequently kept up nltogether by cupturing the wild birls in the chase, or perhups taking them when young.

Slavery is manown amongst the northern Somali tribes, who kill but neither buy nor sell their fellow-men. But the case is different in the central and southern regions, where a section of the population is reduced to servitude, and where the slaves themselves are trented with horrible cruelty. Nearly all these unhappy wretches have their feet shuckled with two rings connected by an iron bar ; they eat nothing but refuse, yet they are compelled daily to dri $r$ themselves to the fields and till the land under the broiling sun. Every fault is punished with tortures, and under these circumstances it is not surprising that the slaves frequently seek in a voluntary death rief from their miserable existence.

In many districts the Somali warriors are addicted to slave hunting, and the captures made by them serve as the current standard of exchange, the trade value of this "commodity" being estimated at from a hundred and twenty to a hundred and fifty dollars. It also frequently happens that the Somali treat the members of their own family as slaves. "If you despise not wife, child, and servant, you shall yourself be despised," says a local proverb. According to Burton, the young married man welcomes his bride whip in hand, and begins by giving her a sound thrashing, in order to establish his authority over her from the outset. Nevertbeless, the women move about freely enough in the rural districts. As in other Mohammedan countries, the busband repudiates his wife whenever the whim takes him, and at his death she becomes the inheritance of his surviving brother. Most of the divorced or otherwise disgraced women enter into the service of the caravaus as water-carriers.

## Tribal Groups.-The Rahanuin

Being destitute of all national cohesion, the Somali are divided and subdivided into a multiplicity of rers or fakidas, that is, tribes and septs, which band together or break into fresh fragments according to the vieissitudes of wars and alliances. Nevertheless, in the midst of all these minute divisions the existence may be recognised of three main ethnical families or tribal groups: the Rahanuin in the south, the Hawiyn in the centre, and the Hushiya in the north.

The Rahanuin or Ruhhanwin, who are constantly at war with the Gallas and

Bantus, whom they have gradually driven southwards to and beyond the Tana river, are the least known of all the Somali peoples, the very names of most of the clans belonging to this warlike nation being still unrecorded in ethnological works. Along the banks of the Webi, of which they hold the south side, they are collectively called Gobron; farther south, that is, in the narrow peninsula comprised between the Webi and the Benadir territory on the seaboard, dwell the Tuni, most peaceful of all the Somali tribes, who, instead of the spear, go about armed only with a stick. The Rahanuin division also includes, according to Paulitschke, the Abgal people, who occupy the north side of the Webi. The Abgals, who are noted for their exceptional ferocity, still live at enmity with all the surrounding tribes, and are here and there even still opposed to the doctrines of Islum. All these fakidas are in a state of constant warfare with those of the Hawiya division.

## The Hawiyas and Midgans.

The IIawiyas, who are dominant in Ogaden, that is, the great central territory of Somali Land, are certainly the most powerful of all the Somali people. M. Révoil describes them as less bellicose than the other branches of the race, but at the same time more fanatical and more dangerous to foreigners. They belong to a distinct Mohammedan sect, which, to judge from their practices, seems in some way akin or analogous to that of the Wahabites in Central Arabia. According to the accounts received by Sottiro, the Hawiyas have a large infusion of Galla blood, to which may perbaps be attributed the fact that their complexion is of a lighter shade than that of the seaboard tribes. In the inland regions most of them appear to be settled agriculturists, which is doubtless due to the greater elevation of this region, which is also better watered and more fertile than the low-lying coastlunds. In Ogaden, a land of pasturage and of cattle, they are on the contrary all nomads.

In several parts of their domain the Hawiyas are numerically in a minority. In fact in these districts they constitute a higher caste or political rulers, who regard with contempt the bulk of the inhabitants us belonging to alien tribes, or even to conquered races. Thus the Adoné people, who occupy the southern parts of Ogaden, differ altogether from the Somali proper, and acoording to their language and social habits should rather be grouped with the Bantu populations. The Adone idiom is closely related to the Ki-Swaheli of the Zanzibar coastlands.

The two castes of the Yebirs and Tomuls, who, like the European gipsies, are the fortune-tellers, blacksmiths, and tinkers of these regions, are also regarded as tribes of different origin from the true Hawiyas. The Yebirs are somewhat addicted to magic practices, such as manufacturing amulets, conjuring snakes, healing the sick, casting lots, and interpreting omens. They also take a leading part in all feasts and public ceremonies. The Tomals, called also Handads, forge the spear-heads; but although indispensable to the community they are kept beyond the precincts of the villages, and obliged to marry amongst themselves, being despised and feared as baneful magicians. of the logical e, they ninsula rell the 0 about ing to The vith all ctrines of the

In still greater contempt are held the Midgans, called also Rami, that is to say "Archers," who are universally regarded as the lowest of the low. They worship trees and snakes, and eat all the probibited food, such as fish, fowl, eggs, hares, 'and gazelles. They are also daring hunters, fearlessly attacking the lion and the elephant, whom they pierce with their poisoned arrows. Like the Yebira, the Midgans also practise medicine, and have the reputation of being extremely clever charlatans. According to the Somali legends, the lower castes are the issuc of erossings between Abyssinian women and maleficent genii, while the Midgans are of still more degraded origin, their ancestors having been the slaves of these Abyssinian women.

## The Hashiyas.

The Hashiyas, or Northern Sumali, more commonly known by the name of Aji, have evidently been most affected by contact and family alliances with the Arabs. So far as they are concerned, the national traditions are to some extent justified and the Hashiyas may to a certain degree trace their genealogies back to the Koreish family of the Hashims, one of whose warriors, named Arab, is supposed to have emigrated to Africa towards the end of the twelfth century, or less than six hundred years after the Hegira. His residence, which became the capital of a powerful empire, is said to have been discovered at Zeila, or in the vicinity of that place.

The Hashiyas are subdivided into two main groups, respectively named Tarud (Darode), that is, the "Banished," and Ishak, from two descendants of Arab. From Tarud are descended the Mijertins, most famous of all the Hashiya nations, comprising some thirty tribal groups under the common suzerainty of a boghor, or sultan. To the Ishak branch belong the Issa, or better Eiissa, and the Gadabursi, who occupy the shores of Tajurrah Bay and the districts about Zeila and Berbera, and are consequently of all the Somali people the best known to Europeans. With the same branch are grouped the Hubr Tol, Habr Ghar Haji, Habr Awal, and the other tribes whose name is preceded by the word habr. In the Somali language this word hahr has the meaning of "grandmother," "venerable matron," and seems to indioate a faint reminiscence of a previous social system in which descent was reckoned only through the female line, as is still the case amongst most African populations. If this conjecture be correct, traces of the matriarchal state would thus still survive amongst these fierce Somali populations who at present treat their women with so $\mathrm{mu} \cdot \mathrm{h}$ contempt. It is notewortby that amongst tho threo above-mentioncd Habr tribes are found the very finest specimens of the Somali type.

The south-western Hashiyas-Ghirri, Bersub, and Bertiri-appear to be allied to the Gallas, and jointly with the Jerso, one of the tribes of this nation, they even constitute a onorra, or political confederacy, worra being a Galla word meaning "clan," or "frmily." In this region commercial relations and the development of social intercourse between the conterminous tribes have arrested the devastating
wars which almost everywhere else are incessantly carried on between the Somali and Galla populations.

## The Eastein Gallas.

The Gallas, who give themselves the general designetions of Orômo, that is "Men," or "Brave," and Ilm-Orma, that is, "Sons of Men," are more commonly known to their Somali enemies by the appellation of Durr, that is, "vile," or "abj.ct." But although thus despised by the neighbouring Somali people, the Gallas greatly surpass them in intelligence, love of industry, peaceful habits, and trustworthiness. They are also far more numerous, thanks to the fertility of their plains, whose light reddish soil they diligently cultivate.

According to the Egyptian officers, who till recently held command in the city of Harrar, there was a population of several millions in the province of the Upper Webi annexed to the Khedival. posvessions. Paulitschke, however, while confirming the reports regarding the extremely dense population of this region, reduces to about $1,300,000$ the probable number of north-eastern Gallas concentrated in the Upper Webi basin. The southern districts, that is, the valleys watered by the streams flowing to the Juba and the Tana, are also very thickly peopled. The Gallas who dwell beyond the limits of Ethiopia, properly so called, that is, on the slopes draining to the Indian Ocean, cannot in any case be estimated at less than three millions. On the other hand, the whole of the Somali territory contains a population of scarcely one million, of whom about 100,000 belong to the great Mijertin nation. The Somali secupying the coastlonds along the Gulf of Aden between the Jebel Karoma and the Gan Libash, are estimated by M. Révoil at scarcely more than 30,000 altogether.
*- Nevertheless in these incessant border feuds, the aggressors are invariably the numerically inferior Somali tribes. These fierce nomads, who go about constantly armed and ready for the fight, and who are always lying in ambush to fall unawares on the foe, have naturally a great advantage over the sedentary Gallas, occupied chiefly with the cultivation of their durrah fields. But on the verge of the desert stretching north of the Harrar Mountains some of these Galla tribes have, as nomad pastors, adopted the habits and customs of their hereditary enemies. In order to resist the aggressors, who are attracted chiefly by the love of pillage and the hope of plunder, the Orômo have in many places been obliged to abandon their fertile plains and settled habitations, or else sink to the position of serfs, mere " hewers of wood and drawers of water" to the rapacious Somali marauders. In the extreme southern regions they hive already ceased to defend the territory comprised between the rivers Juba and Tana. But in the northern districts they still show a bold front to the enemy, and here the river Errer, a main branch of the Webi or Harrar, has not yet been crossed by their adversaries. Strict watch is constantly kept against the raiders by the Enniya tribe all along the frontiers of the conterminous domains.

In any case the Gallas certainly vindicate their claim to the national desig- babits, and ty of their in the city the Upper le confirmon, reduces ntrated in vatered by pled. The t is, on the $t$ less than contains a ${ }^{3}$ great MiIf of Aden Révoil at ariably the constantly ush to fall tary Gallas, he verge of talla tribes ry enemies. of pillage to abandon on of serfs, marauders. bo territory istricts they a branch of Strict watch frontiers of
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galla types.

nation of "Brave," and even when inferior in numbers they have frequently enough repelled the attacks of the Somali nomads, and even of regular troops. When the city of Harrar was still held by the Egyptian forces, who were constantly endeavouring to extend the Khedival authority over the surrounding Galla populations, the Orômo werriors, armed only with sword and dagger, were often seen hurling tuemselves desperately against disciplined regiments equipped with firearms. Rushing forward to the battle-cry of "Kukuku! kukuku!" they more than once threw the hostile forces into confusion, and even occasionally put them to flight. But like their kinsmen of the Ethiopian highlands, the eastern tribes shamefully mutilate the dead.

These eastern tribes differ from the other branches of the Galla race only in a few trivial respects, and some customs borrowed from their Danukil, Sonıali, or Masai neighbours. In their physical appearance they show no inferiority, while their women display the same elegant proportions, the same graceful carriage, and occasionally even the same nobility of expression. The Gallas are a sound stock, not yet sapped by inherited ailments, and unlike the Somali, are a long-lived people anongst whom centenarians are by no means rare. Cheerful and impulsive, but with a well-balanced temperament, they seldom yield to their angry feelings, at least in the presence of strangers. They are a warm-hearted, kindly people, in this also favourably distinguished from their Somali neighbours, amongst whom cruelty and treachery are characteristic vices. The Gallas are moreover distinguished from their Somali neighbours by their cleanly habits, shown especially in their tidy, well-swept dwellings. They also display great skill in the cultivation of their land, maintaining its fertility by systematic manuring and a due rotation of crops. Certainly the Gallas, although hitherto giving little or no proof of any common national sentiment, are one of the African nations which may look forward to a bright future of social progress, and even take its share in the general work of human advancement.

Under the Egyptian rule, the Gallus of the Harrar district had been fain to accept as masters a number of foreign officials whose functions were almost exclusively restricted to the collecti $n$ of the Government taxes. At present these same Gallas, together with a large section of those dwelling east of the Ethiopian highlands, are subject to the sway of Menelik, King of Shoa; hut elsewhere the tribes have maintained their primitive autonomy. The community is organised on republican principles. The administration of the commune is invariably entrusted to a council of elders, whose moti, or president, is charged with the executive functions. With him are associated the treasurer, the high priest, and the boku, or director of the general assembly, these ministers being usually chosen for a period of eight years. The director or "speaker," who presides over the public discussions, holding a wooden mace as the sign of his office, is required to keep the debate open until absolute unanimity is arrived at. All have the right of veto, as in the ohd Polish Diet, and the consequence is that the deliberations are frequently continued from session to session, the principle of " closure" not having yet been introduced. But once a final decision is reached, the question assumes a
sacred character. The forefathers of the tribe are invoked, and in their honour is immolated a spotless steer; the boku imbues his sceptre with the blood, and the priests, coiling the entrails round their neck and arms, traverse the land, proclaiming to all the people the resolutions taken by the national assembly.

At other times special functionaries are despatched along the caravan routes, in order to gather from foreign traders tidings of the outer world. Nothing escapes the ears of these public agents which may in any way interest the members of their community. Like the old Greek euxenoi, they are also required to represent the citizens with all strangers, to introduce them into the villages and offer them the bowl of milk, symbol of hospitality. One of the elders is also required, by way of blessing, to expectorate after the Masai fashion three times on the clothes of the stranger.

Being partly annexed to the kingdom of Shoa, the eastern Gallas differ from those of the Ethiopian highlands more in their religious than in their political relations. Most of the western Gallas are still pagans, worshipping trees, mountains, and flowers, while numerous tribes have also become members of the Abyssinian Christian Church; amongst these highland populations the Mohammedans are thus everywhere in a minority. But in the region of the eastern slopes and plains the contrary is the case. The Roman Catholic missions established in Harrar and its vicinity have hitherto made but few converts, whereas the preachers of Islum have already penetrated a long way into the southern regions, far beyond the Wcbi, and here nearly the whole of the Orômo populations have accepted the teachings of the Koran.

Under the infiuence of the new religion the national usages have been modified. The young Galla Mohammedans no longer decorate their face, arms, and body with elaborate tattooings; they now shavo their heads instead of smearing their long tresses with clay and butter. Circumcision, which was never customary amongst the pagan Gallas of these regions, is henceforth universally practised on the youths between their tenth and fifteenth years. The children also receive Mussulman names, which disadvantageously replace such pleasant names as "Joy," "Hope," "Welcome," and so forth, which were current in pre-Mohammedan times. These worshippers of Allah no longer eat raw flesh, like their kindred in the Ethiopian highlands. The marriage rifes are performed in tho Arab fashion, and the young men no longer carry off their brides by a sort of make-believe abduction.

Nevertheless certain customs of the highland Ilm-Ormas still survive amongst the Moslem lowlanders. Such is the numerical excess of female births, that, notwithstanding the institution of polygamy, a large number of young women remain without husbands. In this cuse Paulitschke tells ns that they have the privilege of choosing temporary husbands till the birth of a child. It is also customary for families without posterity to adopt a son and heir. When the elders of the village bave given their consent, the child is taken to the forest, where he is supposed by a kind of legal fiction to be found by his new parents; then a bull is killed, and his body smeared with the animal's blood and fat, after which ceremony d , and the proclaim routes, in ng escapes hembers of 0 represent offer them qquired, by the clothes
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## East Gaila Tribal Divisions.

There appear to be no despised classes or pariah castes among the eastern Gallas as there are amongst their Somali neighbours. Nor do these Gullas themselves keep any slaves, although they allow the slave-dcalers a free passage through their territory.

In the Upper Webi basin the most powerful Galla tribes are the Nolés, who dwell
Fig. 123.-Vitu Land.
Scale 1: 1,300,000.

in the upland valleys of the Harrar country, and the Jarsos, or "Ancients," who are associated in a common political confederacy with their Somali neighbours, the Barsubs, the Ittus, and the Alas. These latter, according to the Egyptian census returns, would appear to have no less than 2,182 villages. Farther south live the Enniyas, and beyond them the Jiddas and the Arissi (Orussi), who are not to be confounded with the Arussa people who occupy the Upper Juba basin, and who are said to constitute the " mother" nation of the eastern Gallas. Krapf tells us that these natives fight naked "in order to terrify the enemy," or more probably in accordance with some traditional custom handed down from their forefathers.

The half Mohammedan Panigals revere the shrine of an apostle who brought
them the Koran and had it translated into their lunguage. The Borani, or Vuoranas, who are mot as far south as the neighbourhood of Mount Kenia, are also a powerful Gulla nation, who, necording to Breuner, number as many as a hundrod and fifty thousand souls. Thoy are daring riders, and have long been at war both with their Somali and Masai neighbours. The Borani are a very religious people, who worship a supreme being, to whom they sacrifice black auimals, whether oxen or goats, near black rocks, or clse at the foot of some large tree isolated on the plain. Although they do not practise tattooing, they have the breast covered with scars, which are produced by striking themselves with some sharp instrument during the frenzy of the national war dance. They inter their dead seated in an attitude of meditation, for, say they, "Man dies not, he only dreams."

The Borani are said to be divided into two great brunches, the $\mathrm{Y}_{\mathrm{a}}$ and the Yûl. But our information is still extremely defective regarding most of the populations occupying the regions which are comprised between the Somali seabourd and the unknown territory of South Ethiopia. Here there is utill a complete gap between the itineraries of explorers like Thomson and Fischer advancing through Masai Land northwards, and those of Révoil, Brenner, Chaillé, Long, and others, who have penetrated very little inland from the south coast of Somali Land. A great interval also still remains to be filled up between Thomson's farthest north and Schuver's farthest south, the whole of this unknown region being roughly comprised between the equator and the tenth degree of north latitude, and stretching from the Indian Ocean westwards in the direction of the White Nile basin.

In the Appendix will be found tabulated the names, with approximate population ', of the chief nations in Sumaliland and the territory of the Eastern Gallas.

## Topography.-Vitu Territory.

The ubiquitous German traders, who bave reoeived a "concession" of the whole seaboard as far as the Jebel Karoma, and who have become the "protectors" of its inhabitants, have made their first essays at annexation at the southern extremity of the Somali coast. In this they have acted wisely, for the district chosen by thein is one of the most promising in the whole of East Africa. The valley of the Tana, which reaches the sea at this point, is a natural highway towards the Upper Nile basin, and thus affords considerable facilities for opening up the resources of the vast but still almost unknown region which stretches from the Indian Ocean westwards to the eastern affluents of the White Nile.

In the year 1885 the brothers Denhardt, who had already a few years previously traversed the country in various directions, obtained from Sultan Akhmed of Vitu, surnamed Simba, or the "Lion," the concession of a territory about 500 square miles in extent. The whole of this tract, which is limited towards the south by the course of the river Ozi, they immediately placed under the suzerainty of the German Empire. In vain the feeble Sultan of Zanzibar protested against these high-handed proceedings, urging his own undoubted prior

Borani, or in, are also a hundred at war both ous people, ether oxen ted on the hst covered instrument pated in an

Ya and the nost of the the Somali e is atill a nd Fiseher er, Chaillé, th coast of Thomson's own region ee of north tion of the ate popula--n Gallas.
on " of the protectors" 1e southern the district frica. The al highway for opening etches from few years rom Sultan a territory h is limited laced under of Zanzibur oubted prior
claims and even threatening hostilitios. His protests were met by the appearance of German ironclads in the Zanzibar waters, and he soon found that it would be necessary to accept " accomplished facts."

The population of the Vitu territory and neighbouring archipelago is one of the most heterogeneous in the whole of East Africa. Gallasimmigrants, Jantus from the soath, and those Wa-doé people who were till recently regarded as anthropophagists, have flocked in crowds to the district; while runaway slaves, contident of

Fig 124.-Double Coagthine North of Bubarit.
Scale 1 : 960,000.

here finding a safe refuge, and even land to cultivate, have been attracted in thousands from every part of the seaboard. Then, in order to provide the new arrivals with wives, the "Lion" introduced into his kingdom some Wapokomos, Wabonis, and other members of various Bantu tribes. Esen the Portuguese element is represented at Vitu by some families of half-eastes.

The numerous ruips which may still be seen on the shore near the mouths of the Tuna, attest the commercial importance formerly enjoyed by this district.

## SOUTH AND EAST AFRICA

Within the bar, and on the north or left side of the Ori branch, stand the two little towns of Shagga and Kipini, near which aro some long-abandoned and sandencumbered anciont structures resembling the ruined edifices of Melinda. According to Denhardt these ruins date from the fifteenth or at latest the sixteenth, century. The modern town of Kipini, founded so recently as the year 1868, has been rapidly developed, thanks to the local traffis which it fostered. Within ten years of its foundation it had already as many as two thousuud inhabitants, and it

Fig. 126.-Jebel Karoma.

acquired such importance that the Sultan of Zanzibar here established a wali, or political agent, as well as a custom house.

Kau, lying farther up but on the same left side of the Ozi, is another little trading place inhabited chiefly by Swaheli traders. These coast people support the national reputation for hard dealing, and they also rule with a hand of iron the unfortunate Wapokomo peasantry whom they employ to cultivate the delta. Vitu, residence of Sultan Akhmed, who has placed himself under German protec-
tion, lies not on the coast, but on the banka of a little atream wh.ch joins the Oxi over against Kau. Its port on tho Indian Ocenn is at Lamm, whoso harboar is formed by a long deep channel flowing between the two islands of Lamu and Manda, and commanded by a large fort, where till recently was hoisted the flag of the Sultan of Zanzibar. Lamu, which some travellers report to have a population of some fifteen thousand, is now regularly visited by the steamers plying on the East Afrienn seaboard; but the sandhills are already threatening to swallow up a part of the town.

Other excellent havens are formed by the creeks which ramify between the islands of the archipelago. Such are the well-sheltered ports of Mandu and Patta, where the ruins still lining the beach date back to times anterior to the arrival of the Portugucse. But whether they be Arab fortresses, Persian or Hindu structures, they are all alike equally avoided by Somali, Galla, and Swaheli as the abodes of evil spirits. Patta especially was at one time a very flourishing place, with a large trading and industrial population. North of this island and of the Mto-Bubashi estuary is seen a striking example of the phenomenon of a double coastline, consisting of an outer barrier reef and the inner continental shore. In these waters every creek and channel gives access to a fine natural haven.

## Kismiayu-Brava.-Merka.

Kismayu, or Kisimayu, is the last anchorage on the Somali coast, going northeastwards in the direction of Cape Guardafui, to which the term port can be applied. But even this place is little used except as a harbour of refuge, so little developed is the movement of exchanges along this inhospitable seaboard. Nevertheless, Kismayu is the natural outlet of the vast basin of the Juba, which reaches the sea about 12 miles to the norlh-east. In 1860 this town did not $y c t$ cxist, but in that year some Somali emigrants from the Upper Juba Valley, and especially from the neighbourhood of Bardera, or Bal Tir, the chief market of the interior, established themselves at this favourable point of the coast, and opened dircet commercial relations with Zanzibar. Later some members of the Mijurtin tribe, the most energetic traders on the whole seaboard, also settled in the same place, the population of which had already risen to eight thousund six hundred in the year 1873. At that time the suzerainty of the Sultan of Zanzibar was represented in Kismayu by some Arub traders and a small Baluchi garrison. In 1870 a Marseilles commercial house had hoisted the French flag in this port, but after the battle of Sedan the Sultan of Zanzibar hastened to reassert his authority over the place.

Bardera is inhabited by Mohammedans, who if not actually Wahabites, are fully as fanatical as those troublesome sectaries. They neither smoke nor take snuff, and displey an almost rabid zeal in their efiorts to enforce their peculiar views on the surrounding Somali populations. Hence insurrections, massacres, migrations of tribes, and disorders of all sorts. In the year 1845, the town of Bardera was utterly destroyed by the enraged inhabitants of the district, who slew
all the men and sold the women and ehildren into bondage. A few fugitives, however, contrived to break through the fiery circle closing round the floomed eity, und going northwards to the Ganané country, foumled a town on the left bank of

the Webi, which has flourished, and is̀ now a great centre of trade. Bardera also again rose from its ashes, and with it was rovived the old spirit of religious intolerance. Here were massacred in 1865 the two travellers Link and Von der Decken The vessel with which the unfortunate explorers had navigated the river, and
which the natives had succeeded in recovering from the rapids, was till recently used by them as a ferry-boat between the two banks of the Juba.

Elast of the lower course of the Wehi, where it runs for mome miles purallel with the sea, the coustline describes a slightly concave curve, to which the Arabs have given the nume of El-Banaler, that is, "the ports." Yet the villages along this section of the seaboard offer nothing but exposed and often dangerous roudsteads. From this designation of the coast the Bimal, Tuni, Abgal, Wudan, and other neighbouring populations, are often collectively called Banaders, or Benadirs. Braca, or Baliren, the first of the roudsteads, where the little Arab dhows find some whelter behind a chain of reefs, has at lenst the advantuge of an abuadant supply of good water. Vessels skirting the const in the direction of Cape Guardafui, here take in their last provision of fresh water. Brava may be regarded as the outport of the Lower Webi, for this river, before running out in the surrounding swamps and sands, pusses within 7 or 8 miles of this place. In the intervening space is developed a chain of hills 400 to 500 feet high, which assume the outlines of the towers and rumparts of a fortified city. Sume Arab and Swaheli families are settled at Brava in the midst of the surrounding Somali populations. Although Mohummedans, these populations, which are mixed with Galla elements, are extremely tolerant. Their women, who are allowed to go unvoiled, arrange their hair in the form of a crest reaching from the brow to the nape of the neek.

Merka, which stands on a rocky headland, has the best clain of all these villages to the title of baudar; or "port." Here a creek well sheltered from the north-eust trade winds affords some accommodation to the Arab dhows which obtain cargoes of hides, ivory. and gum-copal from the surrounding distriets. A slightly leaning ruined tower still recalls the Portuguese occupation of Merka in the sixteenth century.

## Magdoshy.-Opia.

Farther north follow a few towns now in ruins, beyond which is seen rising above the beach the massive square tower which commands the terraced houses of Mugloshu,* a place which, like Kismayū, Brava, and Merka, is governed in the name of the Sultan of Zanzibar. Within the jurisdiction of the governors of all these towns is included a little enclave or separate territury 10 or 12 miles in circumference.

Magdoshu is the famous city which Ibn Batuta describes as "immense," and whose name, gradually expunding with its renown, was at lust extended to the great island of Madagascar. In his account of the wonders of the world, Marco Polo had described as an island the coast of "Zanquebar;" he did the same with that of Magdoshu, or "Madeigasear," which accordingly figures as an island on Martin Beham's old Atlas. As pointed out by M. Grundidier, this was the land

* Other forms of the word are Mogdushu, Makdishu, Madisha, Mogadisho, that is, the Magadoxo of the Portuguese maps.
which, aftor doubling the Cape, the Portuguese fancied they had discovered in the great island inhabited by the Malgashes, or Malagasy people. But in our days Magdoshu has fallen greatly from its high estate. Vast spaces are strewn with ruins invaded by the sands, and here and there eaten away by the waves, although a few mosques standing amid groups of hovels still recall the architectural glories of the ancient city. One of these edifices bears the date 636 after the Hegira, corresponding to the year 1238 of the Christian era.

Magdoshu comprises two distinct quarters, Hamarhwin and Shingani, the former of which has been almost abandoned and is now gradually becoming a heap of ruins. In Shingani are at present concentrated most of the inhabitants, numbering

Fig. 127.-Magdoshu.
Scale 1 : 45,000 .

about five thousand altogether, and between the two quarters stands the governor's palace. Amongst the inhabitants of Magdoshu are a few Arab families, including some Shurfas, or "descendants of the prophet," besides several Hindu traders and one or two thousand Somali. But fully two-thirds of the population consist of the so-called $A b e s h$, that is to say, the descendants of emancipated slaves, on whom still falls nearly all the hard work.

The principal local industry is the manufacture of cotton fabrics. Before the invasion of the African markets by the products of the European and American looms, the textiles of Magdoshu were forwarded far and wide throughout the interior of the continent, as well as to Arabia and even as far as the Persian coasts. Now, , although ral glories ae Hegira, the former a heap of numbering
however, the number of buyers of these goods is greatly reduced: nor is much business any longer done in slippers and matting, the other staple industries of this district. The future of Magdoshu will depend not so much on its local products as on the movement of exchanges between foreign markets and the Webi basin as far as the Galla territories in Harrar and Ethiopia.

Magdoshu is separated by a distance of scarcely 24 miles from its fluvial port, Gelidi, a town composed of latticed cone-shaped huts, where the explorer, Kinzelbach, was poisoned in the year 1869. The mediæval Arab writers speak of the watercourse flowing to the west of Magdoshu as of another Nile, comparable to that of Egypt itself. Yet this river at present is scarcely more than a hundred feet broad at Gelidi, where the natives cross it in little ferry-boats held together by cordage made of creeping plants.

The last point on the Somali coast going northwards, the possession of which is still claimed by the Sultan of Zanzibar, is the village of Warshek (Warrishir), whose harbour is inaccessible during the prevalence of high winds. Beyond this place stretches the domain of the Somali coast tribes, who were till recently independent, but over whom Germany now claims dominion in virtue of some treaty concluded with the Sultan of Opia, an obscure princelet now put forward as the "chief of all the Somali people." His very existence is unknown to the vast majority of the nation, as is theirs to him. This village, or rather camping-ground of Opia, which has been thus suddenly promoted to the dignity of a capital, is situated on a heudland between the territory of the Hawiyas and that of the Mijertin tribe. But even diplomatists will never be able to make it the centre of any large population, for the surrounding country is a waterless steppe, while the neighbouring seabourd is absolutely destitute of harbours.

## Aldula.-Bossassa.

The Mijertins, the most powerful branch of all the Hashiya nation, inhabit the whole of the northern section of the coast as far as the shores of the Gulf of Aden. The point of the seaboard where they are concentrated in the largest numbers is in the neighbourhood of.the Ras-el-Khnil, or "Horse Cape," near an inlet where the waters of the Wady Nogal are discharged during the rainy season. According to Graves, as many as twelve thousand Somali are occasionally attracted to the fair or market of Ras-el-Khaill. The half-Arab, hulf-Portuguese name of Bender $a^{\prime}$ Agoa ("water haven") indicates the point where the small coasting craft finds nost convenient anchorage.

At the time of M. Révoil's visit in 1881, the sultan of the Mijertin nation had bis residence at Berghel, a hamlet of some forty inhabitants, which is sheltered on the north by the sandy slopes and lofty spurs of the Jebel Karoma, terminating eastwards in Cape Guardafui. In the neighbourhood of this modest little capital of the Mijertins are seen some ancient sepulchral mounds and the remains of a fortified camp.

The section of the Somali seaboard which skirts the south side of the Gulf of

Aden is carved into a large number of little secondary gulfs or inlets, to which are applied the terms Bari or Makhar in the eastern parts, Dalled or Dabir in the west. Several trading-places follow along this north coast of Somali Land which lies ovor against Arabia. Here commercial intercourse is much more easily maintained than ulong the exposed seaboard facing towards the Indian Ocean. The proximity of the grassy slopes, with their herds of cattle and clumps of trees, also supplies more produce to the surrounding population.

At the northernmost extremity of the coast, two tongues of sand projecting seawards enelose the bender or port of Allula (Haluleh, Luleh), where the Egyptian flag was flown for a few years, previous to the revolt in Soudan. Farther on-that is, towards the south-west-stands the headland of Ras Filuk, that is "Elephant Cape," whose speekled rock seen from the west presents the rough outline of the huge pachyderm. South of the cape the sandy beach is interrupted by an inlet similar to that of Allula, forming the little haven of Bender Filuk (Felek), which is followed by the Bender Meraya, still within the domain of the Mijertin nation, and frequently chosen as a residence by their sultans. From this place is exported a large quantity of myrrh and frankincense, collected by the women in the surrounding districts. About the first days of March, incisions are made in all the trees, and three monthe afterwards the gums and resins are in a fit state to be gathered.

Bender Khor, or Bottiala, differs from the neighbouring ports by its position on an estuary. Here the tide ascends for a distance of about six miles into the interior, through a gorge in the mountains traversed by the Tokuina torrents. Through this inlet the Arab dhows gain access to the little town of Bottiala, whose houses stand at the base of earthen towers, built in the form of truncated pyramids. On a recently upheaved beach to the north-east of Bottiala is picturesquely situated the new town of Gandila, which is also protected by similar towers. One of the neighbouring escarpments contains some deposits of good salt. Gandala takes its name from the ganda tree, which grows in the surrounding lagoons, and which the natives are careful not to touch, for should they happen to break one. of its limbs they are sure to lose one of their own.

Farther on stands Bossassa, or Bender Ghazem, defended by four forts, and forming the most important trading station on the whole of the Mijertin coast. This place is visited by the caravans of the inland War-Sangeli and Dolbohant tribes, who here exchange their produce for such European wares as they require. Las Gore, lying over sixty miles more to the west-that is, beyond the Ras Hadadarivals Bender Ghazem in commercial activity. Las Gore is the port of the WarSangeli nation, who dwell to the south of the Almedo mountains, and whose sultan resides in this seaport, which is defended by two earthen towers.
Mayet.-Berbera.-Buliarr.

Other havens or roadsteads follow in the direction of the west, where Mayet (Mehet) is the seaport of the Habr Ghar-Haji people. According to the local
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re Mayet the local


STREET IN BERBERA.

tradition, here died the great Sheikh Ishak, ancestor of all the IIabr. or "Grandmother" tribes, which belong to the widespread Hashiya division of the Somuli race. Formerly the Somali advaneed in years came from ali the surrounding regions and settled near the venerated shrine, in order after death to secure a last resting-place near the remains of the founder of their nation. All the houses and cabins of Mayet were at one time grouped round about the tomb of the saint; but they have since been displaced in the direction of the west, near the mouth of a little coast-stream. Towards the north-east is visible the volcanic islet of Jebel-Tiûr, or " Bird Mountain," which contains a deposit of guano, and to which the English

Fig. 128.-BERBERA.
Bcale 1 : 40,000.

have given the name of Burnt Island, from the colour of its lavas. The island is annually visited by about forty Arab dhows, from the port of Makalla in Hadramaut, returning laden with cargoes of this manure for their tobacco plantations.

West of Mayet follow the seaports of Heis, Ankor, Kerem, all of which belong to the Habr Tol nution. Then, after rounding a headland, the seafarer comes in full view of a deep inlet in the coast forming the important harbour of Brriera. This is the only thoroughly sheltered haven on the whole seaboard, and has consequently been a busy seaport from the remotest antiquity. The town still keeps the old name of Barbaria formerly applied by the Greeks, not to any particular point, but
to all the coastlands skirting the south side of the Gulf of Aden. Yet notwithstanding its obvious maritime advantages, this privileged seaport has at times been completely abandoned. Thus a war which broke out in the year 1870 between the surrounding Gadibursi and Dolbohant nations compelled all the inhabitants of Berbera temporarily to quit their homes. But under the protection of Great Britain, which has inherited all the rights of Egypt as the ruling powor on this seaboard, Berbera has again become the centre of considerable commercial activity. It has now a lighthouse, piers, warehouses, and even an aqueduct, whose copious water, thermal at the fountuin-head, is brought from a distance of about seven milos. Berbera is the successor of Bender Abbas, another town some ruins of which ure still visible on the lowlying shores of the Tamar peninsula enclosing the roadstead on the north and north-west. Lying 160 miles to the south of $A d e n$, and nearly under the same meridian, Berbera shares with that town and with Zaila, another port belonging to England, the whole of the commercial movement in the western parts of the Gulf of Aden.

On the beach at Bulhar, about 45 milcs farther west, lies the market-place where the Berbera traders meet the caravans coming from Harrar and from all the Somali and Galla Lands to the south and west of that place. During the busy season, from October to January, as many as 15,000 persons are attracted to this place. Then, after all the commodities have changed hands, the tents are struck, the long strings of camels laden with their purchases move off in all directions towards the interior, the Arab dhows set sail, and solitude once more prevails along the seaboard. The Somali prefer the Bulbar market to that of Berbera itself, because they find in the neighbourhood convenient pasturages for their numerous herds and flocks, whereas round about Berbera nothing is offered except here and there a few trailing plants and shrubs. Bulhar has unfortunately no harbour, and its surf-beaten shores are too often strewn with wreckage. The explorers who have ventured to penetrate from this point into the inland plateaux report the existence of numerous burial-places.

The most frequented trade route running south-westwards in the direction of the city of Harrar has its seaward terminus at Bulhar. But Samavanak and Dumgareta have been spoken of as more convenient starting-points for the future railway, which has already been projected, and which must sooner or later run through the Gadibursi territory towards the great city of the Upper Webi basin, easternmost station and bulwark of the kingdom of Shoa. Accordingly England and France have recently put forward rival claims for the possession of this future gateway to the interior of the continent from this direction. The English meantime retain in their hands the disputed station, recognising in return the absolute sovereignty of France over the Gulf of Tajurah, which also gives access to the inland regions from the head of the Gulf of Aden.

Thr 3 is completed the chain of conquests round about cice continentsl periphery, by means of which the European powers hope gradually to annex to their dominions the whole of the vast domain of the dark races. Year by year the circuit is drawn tighter, while at the same time our knowledge is enlarged of the
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## CHAPTER XIII.

EAST AFRICAN ISLANDS.<br>Sokotra-Maidgascar-Comoros-Seycheiles-Amirantes.



F all the insular regions in the Pacific Ocean, Sokotra, or Socotora, may with the greatest confidence be regarded as a simple geographical dependence of the African mainland. Although separated from Cape Guardafui by a channel 150 miles broad, with intervening spaces fully 3,000 feet deep, the disposition of the island, with its main axis disposed in a line with the extreme point of Somaliland, together with a continuous row of reefs and islets stretching right across the channel, clearly shows that Sokotra is nothing more than a detached fragment of Africa.

But in its commercial and political relations this island has always formed part of Asia, and depends at present on the town of Aden, one of the British strongholds on the Asiatic mainlund. From 1885 to 1839 it was even occupied by an English garrison, but afterwards abandoned for Aden, a position of far greater strategic importance. In 1845 Sokotra was declared a Crown colony, although its possession has always been more nominal than effective. The same remark applies to the suzerain authority claimed for the last five centuries by the sultans of Keshin, whose territory lies north-west of the island at the nearest point of the Arabian coast.

The very name of Sokotra attests the great antiquity of the memories and legends associated with the island. In the geography of the Hindus it was regarded as one of the petals of the great lotus-flower floating on the waters. It was the Dvipa Sukhatara, the Diu-Skadra - that is, one of those "Fortunate Islands" which at all times people yearning for a happier fate have supposed must exist beyond the gilded clouds of the setting sun. 'The Greeks identified it as the Dioscoridi Insula, or "Land of the Dioscuri," while the old Hindu name has been more correctly preserved by the Arabs in its present form.

## Inhabitants.

The island was visited by Greck traders, and tradition even speaks of a colony said to have been sent hither by Alexander the Great. During the first centuries of the present era the inhabitants of the island were converted to Christianity, a religion which at that time was professer i a great part of the people of Yemen. 'lowards the close of the thirteenth century, Murco P'olo states that "all were baptised," and recognised the authority of an urchbishop. They still culled themselves Christians at the time of the arrival of the Portuguese, who made their appearance in 1503, and afterwards settled in the island in order to guard the approaches of the Red Sea and capture the Arab dhows frequenting those waters. According to

the local tradition, the Sokotrans had been conserted by St. Thomas, Apostle of India; but they no longer understood the language of their ritual, although they still venerated the cross, placing it on their altars and wearing it as a pendant to their necklaces. Their rite resembled that of the Abyssinian Jacobites, and liko them they also practised circumcision.

They were visited in 1542 by Frunois Xavier, who baptised several of the natives. In the middle of the seventeenth century, the Carmelite frimr, Vincenzo, was still able to detect some traces of Christianity amongst the people. They knelt before the cross, carried it in their processions, and gave their girls the name of "Maria." But they also sacrificed to the moon, and observed no "sacrament" except circumcision, which, however, is not even yet universally practised. At present Kollcsen, or Gullonsir, the name of a village on the north-west coast, may possibly still recall the existence of an ancient church (erclesia) in this part of

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the island. If so, this name and the cross seen on the graves are all the vestiges that now remain of the Christian faith.

Nearly all the population, although really of very mixed origin, call themselves Arabs, and profess the Mohummedan religion, but without fanaticism, ulthough the Wahabites occupied the islund in 1800, and for some years subjected it to their intolerant rule. Sehweinfurth thinks that the heaps of stones met in some distriets are ruined ultars; but he has discovered no other old monument except a few undecipherable Greek letters inseribed on a rock.

The so-called "Bedouins" of the interior, who are distinguished by their tall stature, developed muscular system, and robust health, are evidently a different race from the people of the coast, who appear to be mostly Arabs, either of pure doscent or else crossed with Negroes. These Bedouins are supposed to represent the indigenous element. Their language, which is dying out, is sufficiently distinet from Arabic to be absolutely unintelligible to any iuhabitants of the Arabian peninsula, except those of the nearest coastland. The Sayeni or Kishin hillmen, near the capital, Tamarida, claim kinship with the Portuguese; while the Monié of the castern district would appear to be partly of Abyssinian descent. Others again resemble the Jews, and in faet are said to be of Hebrew origin.

## Physical Features.

Sokotra, which has an estimated area of 1,000 miles, with a pupulation of twelve thousand, has the form of an elongated triangle with its apex facing eastwards. The sides of the triangle, however, are not rectilinear, but towards the centre are deflected southwards, so that the south side has a convex, the north a slightly concave, curvature. Near the middle of thic north coast rises the granitic mass of the Hagsiar, or more correctly, Hujar, that is to say, "Rock," whose jagged crests attuin an elevation of 4,700 feet. The other hills, which are much lower, consist of limestono rocks, pierced by numerous caves ocsupied by large colonies of birds, and here and there converted into human dwellings.

The island appears to be geologically of very old forination, and botanists speak of it as a last retreat in which many primitive forms have take refuge. Of the 828 known species, including as many as 575 flowering plants, about one-fourth occur nowhere else.* Some districts, especially along the south coast, are covered with dunes disposed in parallel ridges. Elsewhere the island is very stony and consequently far from fertile. Nevertheless in many places the surface is clothed with shrubs which assume a verdant mantle during the north-east monsoon. In the western district a few valleys opening towards the north coast are even ahaded by large trees, and some of the more sylvan tracts are compared by Wellsted to the parklands of England. "In its splendid vegetation," says Schweinfurth, "Sokotra presents a marked contrast to the neighbouring shores of Asia and Africa."

* Bayley Balfour, Botany of Sokotra.


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Thanks to the monsoons, und to $t$, e alternati brcezes ulong the coaspe ith climate of Sokotra is less sultry the that of adjacent Arabian senin sha But this alternating movement of the monsoons is less $\delta_{1 m}$ mble for signtion with the Red Sea than was recently supposed; and althoug aureo I'(l) spoke long ago of its extensive commerce, Sokotra hus in modern time reen mab to ncquire any great importunce as an advanced station for Aden on are route to India. In these waters the alternating atmospheric currents set on the one hand between the Somali and Arabian coasts, on tho other between the Gulf of Aden and the high seas. During the first half of the year the wind blows chiefly to the south-west, in the direction of Africa; during the remaining six months it vers round towards the Arabian peninsula, and to the north-east tewards the Persiun Gulf. The opposing currents thus prevail regularly first on one then on the other of the opposite seabourds. Hence Sokotra would be woll situated as a convenient station at the narrowest part of the channel between the two continents, at least if it possessed any sufficiently sheltered haven. But between such almost desert and lifeloss shotcs the traffic is necessarily insignificant. Sokotra is visited on each voyage by scurcely a dozen Arab vessels, plying with the monsoons between Museat and Zanzibar.

At present, the natives of the island require to import little from abroad beyond some dokhn (penicilaria typhoidex), when the date crop has been deficient, and their cattle, sheep, and camels have failed to yield a sufficient supply of milk for the local consumption. In return they export nothing but a little ghi, or clarified butter, and dragon's blood, the product of a peculiar species of plant, besides 3,000 or 4,000 pounds of aloes (aloes spicata), of the best quality known to the European phurmacopœia. The Socotran aloe grows on the slopes of the hills between the altitude of 500 and 3,000 fcet.

The inhabitants are almost exclusively a pastoral people, possessing numerous cattle, sbeep, goats, sure-footed asses, and camels nccustomed to traverse rugged and stony ground. The horses alluded to by old writers appear to be extinct, nor are there any cassowaries, notwithstanding the statement of Wellsted to the contrary. The local faina is, in fact, very poor, comprising no species of rapacious beasts, though reptiles. including some venomous snakes, are common enough. The birds belong exclusively to African species, whereas the molluscs for the most part represent Arabian types.

## Topography.

Tumarida, towards the middle of the north coast, is the chief village in the island. Kolrssea, at the north-west extremity, formerly did a little foreign trade, but is at present a mere convict station. On the south sido there at lone time stood a large Portuguese stronghold, the ruins of which have been visited and described by Hunter.

Till recently the inhabitants of Sokotra were free, independent alike of the

Sultan of Keshin and of England, and obeying no law except that of cuatom and traditional usages. But the sultanate of Keshin was lately divided between two brothers, one of whom reigns on the Arabian coast, while the other resides at Thmarida or in the neighbouring district, where he holds court and administers justice over the whole island. Such, however, is the peaceful and even gentle disposition of the nutives, that he is rarely called upon to exercise his judicial functions. Among them acts of violonee or robbery aro ulmost unknown, and they keep very fow slaves, although numerous runaway Negroes are settled on the constlands.

Tho small islunds following to the west of Sokotra in the direction of Cape Guardufui, also belong to the sultanate of Keshin. But of these none are inhabited except Bunder-Suleh (Sammeh), and Abd-el-Kuri, whero a few wild goats browse on the scauty vegetation of the rocky soil. The natives, who aro very poor, live muinly on the produce of their fisheries. $\Lambda$ few miles farther north stand some steep islets covered with guano, which attract the rare visita of the local Arab dhows.

## II.-Madagascar.

This great island of the Indian Ocean is one of the largest on the globe, yielding in extont only to Greenland, New Guinea, Borneo, and probıbly also the insular mass in the Antarctic waters. Lying at a relatively short distunce from the south-east coast of Africa, not more than 230 miles at the narrowest part of the intervening ehannel, Madagasear stretches in a straight line from the northern headlund of Cupe Amber, for about 1,000 miles to its southern extremity at Cape St. Mary. The mean breadth east and west, as indicated by a line drawn from Andovoranto on the east side through Tananarivo to the Va-Zimba coast, is about 300 miles; while the shore-line, excluding minor indentations and inlets such as the Diego-Suarez Buy, has a total development of over 3,000 miles, giving a superficiul area of 237,000 square miles, or one-sixth more than that of France.

Its general configuration is somewhat regular, in its outlines greatly resembling Sumatra, the first large island met by the seafarer on the opposite side of the Iudian Ocean. It presents the form of an elongated oval, disposed in a parallel line with the axis of the adjacent African seaboard. But the side facing seawards is nearly rectilineal for about half of its length, this formation being due to the equalising action of the waves, which have raised a false coastline of sands and mud across the bays and inlets indenting the primitive seaboard. The west side, facing the mainland, is of far more irregular outline, being much diversified by projecting headlands and numerous little gulfs and havens.

The present name of Madagascar seems to be due to a mistaken application or extension of the term originally attributed by Mareo Polo to the eity of Magdoshu (Magadoxo), on the Somali coast.* Nevertheless, by a curious coincidence, this appellation hears a tolerably close resemblance to that of Malagasy, the collective

> * Col. H. Yule, The Bnok of Ser Marco Polo.
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pplication or of Magdoshu cidence, this he collective
name of the inhabitants ; whily the Hova rulers of the ixland have under foreign influence adopted Madnynrear as its official designation. Thus this region has for them ceased to be the "Whole," us in the days before they were brought into contact with the outer world. Still older mative terms, such as Nossi-Dhmbo, or "Wild Boar Island," have also fullen into disuse, although the inhabitants of the surrounding islunds still speak of Madugasear ns the Turi-Br, or "Great lamul."

Although lying nearly altogether within the intertropical \%one ( $12^{\circ}-25^{\circ} 30^{\prime}$ south latitude), Madagasear belongs nevertheless to the temperate zone, thanks to the elevation of the plateaux which oecupy the greater part of the island. On these plateaux are some extensive fertile and salubrious tracts, at many points protected from foreign invasion by an intervening zone of malariwis consthunds. Iu some of the upland districts the population is tolerably dense, but the average for the whole islund searcely exceeds eight or ten per square mile, if, as seems probable, M. Grandidier's estimate of three millic'ns for the entire population approaches nearest to the truth.

## Historic Retrospect.

This population is moreover greatly divided both by descent and by hereditary animosities, so that the Europeans, although represented by a very small number of persons, have easily succeeded in getting a footing in the country by setting one siotien of the people against the other. The disasters which have at various times overtaken the intruders were often caused less by the hostility of the natives than by epidemics, the want of resources, and especially the dissensions prevailing amongst the colonists themselves. But after long intervals of inaction, European influences, represented by the zeal and enterprise of British missionaries aud traders, as well as by the military intervention of the French, have in recent times acquired a decided predominance. Moreover, politicul unity has been estublished, at least officially, to the advantage of the Hovas, the most powerful section of the nation. The treaties with the European powers have even placed under their rule independent communitics which they had never been able to reduce. But on the other hand, the dominant people itself hus been fain, in its relations with foreign states, to consent to be represented by the French Republic, thus virtually accepting the position of a protected state. A point on the west coast and some adjacent islands have even been surrendered to France.

The references made by the ancient writers to the islands of the Eryibrean Sea (Indian Ocean) are of too vague a character to decide the question whether the lund now bearing the name of Madagascar was ever known to the Greeks and Romans. No certain mention of it oscurs in the history of navigation before the period of the great diseoveries of the Arabs. In the twelfth century it is alluded to by Masudi under the designation of "Jafuna Land," and it was subsequently known by several other names.

It first became known to European mariners five centuries later, that is to say, two years after the voyage of Vasco de Gama, who himself passed in the neighbour-
hood of the great islund. After this first visit by Diego Dias in 1550, the island of São-Lourenço, as it was originally called by the Portuguese, received several other visits from explorers of the sume nation, such as Fernão Suares, Ruy Pereira, und Tristão du Cunha, "whose name," says Camoens, "will live cternally in all that purt of the ocean which washes the southern islands."

But finding neither geld ner silver in the new land, its discoverers soon abandoned it, attracted towards Indiu, the land of pearls, of diumonds, and costly stuffs. Not being numerous enough to hold possession of half the globe, the Portuguese were fain to relinquish the greater part of their conquests in order to concentrate their strength on those regions whence they derived most wealth. IIad their Mozambique settlements become the centre of a considerable colony, no doubt the neighbouring island of São-Lourenço would have been brought within the sphere of Portuguese enterprise, if not actually annexed to the empire. The first map on which the outlines of Madagascar are figured with some approach to uccuracy is that of Pilestrina, which bears the date of 1511.

## Early French Settlements.

After the discovery nearly a hundred and fifty years elapsed before any serious attempt was made by Europeans to obtain a footing in the island. Flacourt relates that in 1635 some Dutchmen lauded on the shores of Auton-Gil Bay. Then in 1642 a French society, beariag the name of " l'Orient," received from Richelieu the coneession of Madagasear and the neighbouring islands, "in order to found settlements and trade." The following year a few settless landed on the island, thus giving a first sunction to the "historic rights" over Madagasear claimed by the French Covernment in its subsequent discussions and negotiations with England.

One of the points at that time occupied was Anton-Gil (Antongil) Bay, a spacious harbour on the east coast. But the most important attempts at colonisation in the strict sense of the term were first made on the south side, that is, the side lying nearest to Europe, by the Cape of Good Hope, the only route yet known to navigators. The French at first selected the bay of Manafiafa, or Saint Lucia, situated at the south-east angle of Madagascar ; but they afterwards removed farther south to the peninsula of Taolanora, where they erected the stronghold of Fort Duuphin. The whole island even received the name of Dauphin, or East France.

By means of numerous foraging expeditions anc occasional help from Europe, the French maintained their ground for some time at this point. Their forces would undoubtedly have sufficed to extend their power over all the southern part of the island, had the colonists not taken advantage of their ascendancy over the natives in order to convert them to Christianity, and afterwards incite them to war against each other. Slave-hunting expeditious were even organised against some of the surrounding tribes, and the unfortunate captives sold to the Dutch planters of Mauritius. Thus all the territory round about Fort Dauphin was at

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## rom Europe,

 Their forces outhern part ncy over the cite them to ised against o the Dutch phin was atlast completely wasted. Hundreds of villages had been delivered to the flames, and the inhabitants who had escaped from the butcheries had been driven to seek refuge in other parts of the islund. The French garrison, surrounded by solitudes, had no longer even the resource of plunder, and had to draw their supplies of cattle and rice from great distances and at a heavy cost.

The settlement consequently began to dwindle, till the year 1672 , when the few survivors were brought away by a passing vessel. Nothing beyond a few half-castes remained in the country to keep alive the memory of the French occupation of Fort Dauphin. It was estimated that two-thirds of the troops and settlers were carried off by epidemics, war, and famine. 'The survivors served as a nucleus for the colony of Bourbon, which was destined two centuries later to become the base of operations in a fresh attempt at the conquest of Madagascar. One of the first gevernors of Bourbon was the historian De Flacourt, whose work* is the most
 frequently consulted on the islund and its inhabitants during the seventeenth century.

## English and French Rivalries.

After the abandonment of Madagascar, frequent royal ediets recalled tho fact that the "Crown " still maintained its prior rights of possession, although for fully a contury these purely formal assumptions were justified by no actual attempts at colonisation. During that period the only foreign visitors were corsairs or traders from the Mascarenhas Islands, who came to exchange woven goods and other

[^39]European wares for slaves. In 1750 tho French East India Company endeavoured to obtain $n$ monopoly of this commorce by occupying the island of Saint Mary, lying to the south of Anton-Gil Bay, and a few years later the French Government resumed possession of Fort Dauphin, without, however, securing uny permanent results. The ambitious viceregal establishment set up in 1774 on Anton-Gil Bay by the pompous Polish and Magyar magnate, Maurice Beniovski, had also to be abandoned two years afterwards; and all vestiges have now disappeared of the capital, Louisbourg, although some traces have becn detected of the route constructed north-east of Anton-Gil Bay towards Ngutsi by this adventurer, the ampaliassombé, or " emperor" of the Malagasy, as he called himself. After three centuries of trade and partial occupation nothing was known of the great island beyond the co.sstlands.

The first impulse to political and commercial expeditions on the inland plateaux was given by the rivalries of France and England. During the wars of the Empire, the English had seized the Isle of France (Mauritius), with the purpose of converting it into a naval station for the conquest of Madagascar. But after discussing the terms of the various treaties, they were compelled to relinquish the theory which regarded the great island as a political dependency of Mauritius. They consequently allowed the French again to occupy the stations on the coast, and restricted their action to the development of an alliance with some powerful native prince, in order thus indirectly to secure the expulsion of the representatives of the rival power.

Such an ally they expected to find in the sovereign of the Hovas, who both by the number of his subjects and his commanding position on the central plateau, seemed to have the fairent prospect of ono day becoming master of the whole island. Radama, hailed l'y the English as "King of Madagascar and its dependencies," soon obtained $p$ sssession of the port of Tamatave on the east coast, and the road to the interior was thus completely thrown open to the Euglish. In the year 1820 they availed themselves of this circumstance to send to the capital some traders, missionaries, officers, and diplomatists, for the purpose of securing a permanent footing in the more frequented seeports, and obtaining the practical cominand of the seaboard. Madagascar, the "Great Britain of Africa," as the missionary Ellis called it by anticipation, seemed at that time about to become an English colony, and it was expected that the forces of the Hovas would henceforth be at the disposition of the stranger in effecting the reduetion of the whole island.

But these hopes were doomed to disappointment. In 1828 the accession of a new king brought about a change of policy, followed by the expulsion of the English, the destruction of their factories, and a general persecution of the Protesłant converts. The Malagasy people, comprising all the razaha, or whites, in a common sentiment of hatred, endeavoured for a time to closs the country from them, and to keep a strict watch over the traders settled in the seaports. Nevertheless the eight years, from 1820 to 1828, during which the Europeans had enjoyed free access to the Hova kingdom, produced the inevitable results on the
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view taken on the route between andovoranto and tananarivo, madagascar.

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## MADAGASCAR.



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islanders, who were thus brought under forcign influences, and who became to some extent initiated in the arts and ideas of modern civilisution.

The system of political isolation adopted by the Hovas was enforced with the greutest rigour during the period from 1845 to 1852. After an unsuccessful attempt of the English and French squadrons to avenge the wrongs of the plundered traders settled in Tumatave, the relations were completely broken off between the Malagasy and the Europeans of all nations. But on the west side the French had established relations with the independent Sakalavas and other populations, and had also taken possession of a number of nossi, or " islands," near the coast, such as Nossi-Bé, Nossi-Komba, and Nossi-Mitsio. They even claimed to have acquired sovereign rights on the adjacent mainland, although these pretensions were always strenuously resisted by the Hovas, and even by the local Sakaluva chiefs.

When the Europeans were again admitted into the Hova kingdom, they soon again acquired considerable intluence. But

Fig. 131.-Cinef Routes of Explorers in Madaoascar.
Scale 1: 12,000,000.
 the international rivalries between the French and English were again revived, while the privilege which the whites claimed to establish themselves wherever they thought convenient, and to acquire absolute possession of real property, gave rise to endless discussions and bickerings. These troubles at last brought about the French war of 1883, which ended advantageously for France, without, however, securing for the subjects of the republic the right to purchase land. They can take it, however;
as leaseholders for an indefinite term, and are also henceforth permitted to reside and trude freely in every part of the Hova territory.

The neighbourhood of two rich and thickly peopled islands such as Mauritins and Réunion could not fail gradually to draw the inhabitants of Madagascar within the sphere of European intercourse. Thanks to their rich coloniul produce, the Masearenhas have necessarity beon brought into direct relations with tho western markets; but they also require to maintain a local traffic with the great island, on which they depend for tho supply of cattle and provisiens needed by the labourers on their plantations. From the economic standpoint, Madagascar and its two custern satellites thus form a mutually dependent commercial group. Hence the commercial, if not the political, annexation of one to the other had become inevitable, and the recent action of France should be judged in the light of these conditions. In fact, there can be no doubt that this historic event would have taken place at a much earlier date, had Mauritius and Réunion themselves not belonged to two rival powers, occupied throughout the present century in thwarting, each other's operations in this part of the Indian Ocean. But although Mauritius is a British colony, it was originally settled by the French, and its present French population co-operated even with armed volunteers in the expeditions which have secured the preponderance of Franee in Mulagascar. Sooner or later the political centre of gravity must inevitably be slifted from the small geographical group of the Mascarenhas to the almost continental island, abounding us it docs in still undevelcped treasures of all sorts.

## Exploration.

But meantime much of the interior still remains unexplored. More than half of the Sakalava territory is altogether unknown, while the southern regions, where the French made their first expeditions, between Fort Dauphin and tho Bara country, have never been scientifically surveyed. The best known districts are naturally those traversed by the traders between the east coast and the capital, Tanmarivo. The routes of explorers round about this central point also cross each other in all directions, so that in many places nothing remains to be dono except to fill up the minor details. In the work of general exploration, no traveller has been more successful than M. Grandidier, who was also the first to accurately determine the relief of the land. This naturalist has traversed the island from coast to coast, roughly surveyed a space some thousand square miles in extent, and fixed several hundred astronomical points, which with the surveys executed on the seaboard by the Europcan maritime states, offor a network of fundamental lines for all future cartographers. Thanka to the observations taken by Grandidier, supplemented by those of Mullens, Cameron, and Roblet, it has been found possible to effect a fairly correct triangulation of the central province, Imerina, of which we already possess more accurate charts than have yet been designed for certain European districts, especially in the Iberian and Balkan peninsulas. The bibliography of the island

Mauritias ladagasear al produce, s with the a the great nceded by Madagascar cial group. other had n the light vent would themselves century in it although ch, and its expeditions ner or later small geoabounding
than half of ions, where tra country, э naturally Canomarivo. ther in all fill up the been more ermine the st to coast, xed several eaboard by all future mented by зet a fairly dy possess 1 districts, the island
ulso comprises an extensive collection of over 1,000 books, pumphlets, mups, and documents of all sorts.

## Pifisical Features.

Madagascar lacks the regular uniformity of structure nttributed to it by the carly explorers. The funciful mountain range boldly traced by them from Auber Cape in the extreme north to Cape St. Mary in the extreme south, has no existenco. Iustead of a main range thas symmetrically disposed, tho island presents in its nothern and central parts varioue irregular mountain uasses resting on a common pediment of elevated tablelands, and falling towards the sea in far from unform slopes. Were the surrounding waters to encroach on the land in such a way as to encircle its mountainous parts, the island, thus reduced in size, would not present its outlinesus they actually exist. The western incline, facing the Mozambique Chunnel, slopes far more gently thun that of the opposite side, while in several distriets along its base stretch extensive plains but slightly raised above sea-level. Towards the southern extremity of the island also the ground falls to a low level, mountains and hills completely disappearing, or else replaced along the constlands by chains of shifting dunes. But on the cast side the slope is in general extremely precipitous, and is here continued by the submarine cliffs down to depths of over 10,000 feet.

According to Mullens,* the first lofty eminence met by the traveller advancing from the southern lowlands is the natural citadel of I vohibe, in the Bara country. Beyond this isolated crag the ground rises to a rugged plateau, flanked by horder ranges or escurpments. Towards the central region, but considerably nearer to the eust than to the west coast, rise the Ankaratra highlands, culminating point of Madagascar. This group of mountains, whose muin axis is disposed in the same direction as that of the islund itself, has several peaks over 8,000 feet high, the loftiest being the Tsiafa-Javona, or "Snowy Mountain," which according to Sibree attains an altitude of close upon 9,000 feet. To the south the other summits average only half this height; but towards the north several crests have been observed with an altitude of about 5,000 feet. Of all the mountains in Marlagascar, the Ambinivini, standing to the west of Anton-Gil Bay, presents perhaps the most imposing aspect. Its upper flanks rise like a rocky wall some 2,000 feet shecr above the road winding through the valley below.

Apart from the great mountain masses, the surface of the land has the appcarunce of an irregular steppe, stretching away in long billowy undulations of a red or greyish clay, interrupted here and there by abrupt masses of granite, gneiss, schists, or basalts cropping out in the form of towers and ramparts, or else piled up in chaotic heaps. The base of the highlands, some 3,000 feet high, is limited eastwards by escarpments and terraced slopes, which seen from the sea present the aspect of coast ranges with their promontories, headlands, and transverse gorges. These outer steppe-like walls of the plateaux are for the most part covered with forests.

[^40]On the west side the uplands are also skirted by similar terraced formations and escarpments lisposed in the direction from north to south in a line with the muin axis of the island. As many ns three of these parallel ramparts follow in succession between the plateanx and the sea, themselves merging in secondary plateaux, wherever they are not separuted one from the other by intervening fluvial valleys, plains denuded by erosion, or lacustrine tracts that have been gradually filled up by alluvial deposits. Unlike the central mountain masses, the outer ridges are not of granitic formation, but consist mostly of secondary rocks. Here Grandidier, Richardson, and Hildebrandt have fuund fussil remains ranging betwoen the oolitio and the chalk periods, as well as the fossil bones of large animals now extinct. Some seattered boulders occurring at the foot of the mountains in various parts of the country are believed by Sibree to be erratic, so that Madagascar would also appear to have had its glacial epoch.

## Volcanic Aarncies.

But howerer this be, the island has certainly had its period of volcanic activity, dating from times long antecedent to all historic records. Near the edge of the eastern escurpments explorers have discovered hundreds of cones whence were formerly discharged copious lava streams. Several craters almo occur near the granite formations in the centrul mass of Ankaratra, and the higher summits themselves, culminating points of the island, are also igneous cones, the centres of former volcanic activity. From them lavas have been diseharged in all direetions, but especiully towards the zonth. One of the etreams on this side is no loss than 24 miles long, the lavas ramifying far into the plains, where their dark colour presents a sharp contrast with the bright red tint of the surrounding argillaceous formations.

Around the shores of Lake Itasy, towards the north-west, Mullens reckoned us many as forty cones of all sizes, some still perfect, others with breached craters, some isolated, others clustered in separate groups. To their overflow was due the creation of the lake itself, whose waters were gradually collected in a single reservoir behind this obstruction to the natural outflow. Farther sonth a whole plain, resembling that of the "Phlegrean Fields" in Italy, is thickly studded with mounds and hillocks, the flues of a vast but now extinct furnace. According to a vegue local tradition, the:e underground fires were still smouldering since the occupation of the conatry by the ancestors of the present inhabitants.

Since the time of Mullens, the volcanic region grouped round Lake Itasy was again visited in 1885 by Mr. R. Baron, who gives a detailed account of the typical volcano of Amboditaimamo, on the north side of the lake, and towards the northern verge of this igneons district. "It possesses a breached crater turned towards the east; from this has issued a stream of lava which, following the direction of the lowest level of the ground, has swept through a small valley round the northern end of the meuntain, and spread out at its west foot. This sheet of lava, which is horribly rough on the surface, occupies but a small area of two or three square miles. plateaux, al valleys, led up by are not of randidier, the oolitic w extinct. 18 purts of rould also
o activity, lge of the pnce were near the its themof former tions, but sthan 21 rk colour gillaceous
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It has been arrested in its flow in front by the side of the low hills. It is cut through in one part by a stream, which in some places has worn a channel to the depth of 80 or 90 feet. Its surface, which is slightly cellular, is covered by some hundreds of mammiform hillocks, which must have been formed during the cooling of the liquid mass. The hillocks are mostly from 20 to 30 feet high, and apparently are heaped up musses of lava, and not hollow blisters. The lava itself is black, heavy, and compact, being porphyritic, with somewhat large crystals of augite." *

The particulurs collected by this ubserver tend on the whole to show that the Lake Itasy volcanoes have been extinct for a longer period than had hitherto been supposed, and the channel 80 or 90 feet deep worn by fluvial action through some of the hard porphyritic eruptive rocks certainly points at very great antiquity.

In the northern part of the islund volcanoes are also very numerous. Northeust of Anton-Gil Bay rises one of these "burnt " mountains, whose crater is flooded by a turn teeming with fish, and whose outer slopes are formed by refuse, white at the base, and red round about the highest crest. Amber Cape, at the northernmost extremity of Madagascar, is itself a volcano, whose lava sheets still rise above the surrounding waters. The neighbouring insulur groups of Nossi-Bé, Mayotte, and Anjuan, are likewise of igneous origin, and in many parts of the mainland occur thermal springs and jets of eurbonic acid, fatal to iusects and small animals. Earthquakes are also frequent in several districts.

## Rivers.

Eeing well oxposed to the moist trade vinds from tho Iudian Ocean, Madagascar everywhere abounds in running waters, except towards the extreme south, which is at times swept by the dry atmospheric currents from the South African mainland. The eastern slope of the island receives the heaviest rainfall, although the largest fluvial systems are not developed on this side. Here the precipitous slope of the hills, combined with their proximity to the coast, prevents the streams from acquiring any great size before reaching the sea. Most of them are in fact mere torrents less than sixty miles in length. One of the most copious is the Tengteng, or Manompa, which riscs in a longitudinal valley between two parallel chains, one of which it pierces through a deep rocky gorge on its course to the sea, which it reaches opposite tt: island of St. Mary.

The Maningori also collects its head-waters on an upland plain between the main range and the barrier formed by the edge of the sustaining plateau. Its waters being hemmed in by this barrier, at first spread out in marshes, and are then collected in the broad but shallow basin of Lake Alaotra. This fiooded depression extends for some 15 miles along the longitudinal valley before it finds an outlet in a deep rocky channel, through which its overflow finds its way to the outer slope and thence to the coast near Fenoarivo.

Formerly Lake Alaotra formed a great inlund sea no less than 200 miles long,

[^41]disposed parallel with the main range and the seabourd. Old terraced beaches encircling the upland Sihnaka and Ankai valleys clearly whow that the lucustrine waters at one time stopd fally 1,100 feet nhove their present level. South of Tamutave and Andovoranto the most copious streamion the east alope of the islund is the Onibé River, which ulao re-

Fig. 132.-Lagoons on the Eabt Coaft of Madagaboar. Boala 1: 2,700,000.
 ceives some contributions from the longitudinal valleys, but which is chiefly fed by the torrents descending from the great central mass of the Ankaratra highlands. Further south, in the Betsileo territory, rises the Matitanana, or "Dead hand," a sacred streain smaller than the Onibé, and with a more obstructed course. One of its cataracts at the issue of the mountains is no less than 600 foet high, and near it rises au abundant thermal spring.

Although the rivers flowing eastwards to the Indian Ocean are closed to navigation alove iheir estuaries, thene estuaries themselves, ramifying inlund and connected together by lateral channels, present a great extent of navigable waters along the coastlands. A few cuttings made here and there across the sunds and coral banks would enable small steamers to ply in smooth water all the way from Ivondra, near Tamatave, to the mouth of the Matitananathat is to say, for a distance of over 300 miles, reckoning ail the windings of the channel. Already, in 1864, Captain Rooke had thoroughly surveyed this water highway, which is here and there obstructed by mud banks and the stakes of the fishermen set all in a row. The ampanalana, or portages, occurring at various points of the future canal, which King Radama I. had already began to construct, have at high water a collective length of about 28 miles.

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 lacustrine of Tumuland is the F. ulso retions from alleys, but od by the from the of the An. Further $o$ territory, , or " Dead am smaller ad with a arse. One he issue of o less than ear it rises 1 spring. ivers flowhe Indian navigation :ies, thene s, ramifynected tochannels, nt of navithe coastings mude the sunds ald enable in smooth rom Ivon$e$, to the itunanalistance of koning ail , channel. highway, fishermen nts of the re at highThus the eastern senboard presents a double constline : the outer shore, exposed to the fury of the surf; and the inner beach, washod by the still witers of the muddy winding channel, mostly fringed with mangroves. 'These eatuaries, which receive about fifty small streams from tho interior, und which communicute with the open sea by a few ousily accessible passages, present the upparance of a long chain of laker or lagoons, lining the coant for hundreds of miles. In muny places they merge in an inextricable system of tortuous chunncls, which ure somotimes quite dry in sumnier, and which are known only to a few pilots.

The outer line separating these lagoons from the oceun consists in many places of coral reefs covered by the action of the waves with sunds and shells, and thus gradually trunsformed to a continuous dyke or embunkment, which presents un effectual barrier against the encroachments of the sea. Forest trees have here struck root, affording a grateful shade to the numerous villuges following continuously along the beach. Under the action of the marine current, which here flows close in-shore, the coastline has acquired a surpripingly regular form. From the inlet of Fort Dauphin, at the south-east corner of the island, for a distance of 540 miles northwards to Marofototra, the seabourd is almost perfectly rectilinear, and vessels frequenting these waters usually keep well off the coast in order to avoid the neighbouring reefs

North of Marofototra the beach no longer presents the same uniformity, and at Anton-Gil Bay even develops à deep inlet under the shelter of a bold volcanic promontory. But the island of St. Mary (Nossi . Beraha), which stretehes like u spear-head in front of Tengteng Bay, appears to be the surviving fragment of an outer coastline, which formed a northern contiuuation of tho southern rectilinear wall, and connected Marofototra with Cape Maseula. The ramifying bay of Diego Su,rez at the northern extremity of Madagascar owes its existence to the volcanic headland of Amber Cape, which here encloses an extensive body of marine waters.

On the west slope facing the Mozambique Channel some of the rivers, which have their sources on the eastern highlands near the Indian Ocean, develop fluvial basins of considerable extent. South of the Betsileo territory the Mangoka, or St. Vincent, drains a superficial area of not less than 20,000 square miles. Farther north the Tsijobenina is fed by the numerous streams descending from the Ankaratra volcanoes and from all the surrounding igneous districts. To this fluvial system also belongs the lacustrine depression of Lake Itasy, which finds an escape in this direction for its pent-up waters.

The Ikopa, largest of all the rivers of Madagascar, sends to the Bay of Bombetok all the drainage of the province of Imerina, in which is situated the capital of the Hova kingdom. With its great tributary, the Betsiboka, it has a total length of not less than 500 miles, and according to Sibree, a steamer of light draught might ascend the Betsiboka branch for a distance of 90 miles from the sea. In the north-west part of the island all the more important streams discharge their waters into winding and ramifying marine inlets, which present a remote resemblance to the Scandinavian fjords, but which might be more correctly compared with the indentations on the coast of Brittany. They are probably due to an analogous cause, that is to say, the gradual disintegration of the granitic and other rocks along the lines of fracture or least resistance.

Numerous islets, surviving fragments of the mainland, obstruct the entrance of the inlets, or continue the headlands seawards. One of these islands is Nossi-Bé, evidently a geographical dependence of Madagascar, and famous for its groups of volcanic cones, some of whose extinct craters are now flooded by little lakes. According to Grandidier, the east coust, continually eroded by the marine currents, is gradually receding, except at the points where, as at Tamatave and Foulepointe (Marofototra), the beach is protected by banks of coral reefs. But the opposite process seems to be at work on the west side of the island, where the-land, through the action of the polyps, appears to be steadily gaining on the marine waters. Thus several bays have already been enclused by the encroachments of the shore-line and transformed to lakes.

## Chimate.

Madagascar, which according to latitude belongs to the torrid zone, enjoys a temperate climate, thanks to the great mean elevation of the land. From the seaboard to the uplands of the interior, observers have recorded a normal decrease of temperature, while the summits of Ankaratra and of the nther highiands, penetrate into the frigid zone, the surface of the lakes and tarns heing here frequently icebound. But thanks to the surrowading marine waters, whose normal temperature is maintained by the warm currents, Madagascar enjoys on the whole a very equable climate, presenting no sudden transitions from heat to cold. At Tananarivo, on the elevated inland plateaux, the glass never falls in winter below
ivers, which velop fluvial e Mangoka, quare miles. ending from ts. To this fich finds an

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diego-starbz bay-view taken at antsirana.

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$21^{\circ}$ F., while at Tamatave, on the sea-coast, it never rises in summer above $93^{\circ}$, and at the island of St. Mary, farther north, above $98^{\circ}$ or $100^{\circ} \mathrm{F}$.*

Madagasoar is entirely comprised within the zone of the south-eastern trade winds; but, owing to the heating of the ground, these winds are generally deflected from their normal course, and usually set in the direction from east to west. Brault's charts, which embody many thousand meteorological observations, show that the atmospheric system is most regular during the dry season, that is to say, when the sun stands vertically above ihe north tropical zone, from April to September. But when it returns to the south, accompanied by its attendant rain-bearing clouds and vapours, the winds often change their direction and character. On the coasts of Madagascar they take the form of monsoons, chiefly in the north-west, during the hot, wet seasons from October to March. This is also the period of storms and hurricanes, although the true cyclones, so dangerous in the waters of the Mascarenhas Archipelago, seldom visit the great island. They occasionally, however, reach these latitudes, and in the beginning of 1888 a fierce gale wrecked eleven vessels on the coast of Tamatave. $\dagger$

The summer heats coinciding with the wet season, render a residence on the low-lying east coast extremely dangerous, more especially as this side of the island is more exposed to the vapour-charged clouds rolling up from the Indian Ocean. The ominous title of "graveyard of the Europeans," given to the eastern seaboard of Madagascar, is more particularly justified in the months of January and February, when the sky is overcast with heavy grey fogs. The intermingling of the fresh and salt waters in the estuaries, which receive the discharge of the swollen rivers from the interior, results in a great mortality of the organiams belonging to the two different mediums. The atmosphere, from this and other causes, becomes charged with dangerous exhalations, and to avoid the fevers here endemic, both Europeans and natives hasten to withdraw to the breezy and salubrious uplands of the interior. But many a traveller has sacrificed his life to his love of science by lingering in the fever-stricken lowland districts.

## Flora.

Like the climatic phenomena, the vegetation is imperceptibly modified with the relief of the land, the different species changing simultaneously with the generul aepect of the indigenous flora. The splendour of the dense tropical vegetation observed by travellers on the well-watered eastern seaboard has led them to suppose that the whole island everywhere possesses a rich soil, clothed with a gorgeous array of verdure. But such is far from being the case. The granitic

|  | Weat Conat. (Tolia or Tuilear, $25^{\circ} 24^{\prime}$ S. Lat ) | Plateaux. <br> (Tananarivo, $18^{\circ}$ S5' S. Lat., 4,800 feet high.) | Fast Coant. (Tamatave, $18^{\circ} 10^{\circ}$ 8. Lat.) |
| :---: | :---: | :---: | :---: |
| Lowest temperature . | $50^{\circ} \mathrm{F}$. (July) | $42^{\circ} \mathrm{F}$ (June-August) | $69^{\circ} \mathrm{F}$. (July) |
| Highest temperature | $75^{\circ} \mathrm{F}$. (Junuary) | $83^{\circ} \mathrm{F}$. (November) | $93^{\circ} \mathrm{F}$. (Dec., January) |
| Difference*: | $25^{\circ} \mathrm{F}$. | $41^{\circ} \mathrm{F}$. | $84^{7} \mathrm{~F}$. |

$\dagger$ Mean rainfall at Tananarivo (1881--84), 62 inohes. 125-A7
rocks of the interior, as well as the plains of Tertiary formation, are for the most part unproductive, while vast tracts are entirely destitute of trees, and oven of scrub. Boundless spaces occur in which nothing grows except coarse herbuceous plants.

But in the central regions of the plateau there are also some rich and fertile valleys, where tine vegetable

Fig. 134.-Clroular Foregt Zone, Madagaboar. Beale 1: 13,200,000.
 soil washed down by the running waters has been deposited in thick layers, and where the peasant receives a tenfold return for his labour. The geological constitution of Madagascar is revealed, so to say, by the distribution of its woodlunds, which are disposed in a continuous belt round the periphery of the island, either on the low-lying coastlands or in the zone of the outer escarpments. On ,the east side the belt of forests is twofold, divided by an intermediate depression. On the west side there occurs a broad gap on the uninhabited plains which stretch to the west of the Ikopa River. Some wooded tracts of varying size are also scattered over the surface within the outer forest zone.

The Madugascar flora, which is better known than that of the opposite regions on the African mainland, presents several features of an original character. There are probably altogether about four thousand five hundred species, of which two thousand five hundred have alreidy been studied and classified. Of these some have their analogies in the African and others in the South American vegetable world; but in their general physiognomy they approach nearest to the Asiatic kingdom. The vegetation is also most varied and exuberant on the eastern seaboard, that is, on the side facing the Asiatic continent. The southern and
for the most and oven of se herbaceous
$a$ and fertile ne vegetable by the runs been delayers, and it receives a r his labour. nstitution of pealed, so to stribution of hich are distinuous belt hery of the the low-lying the zone of pments. On belt of forests ed by an inession. On ere occurs a a uninhabited retch to the kopa River. cets of varyscattered over in the outer
ascar flora, known than ite regions on land, presents of original are probably four thousand ies, of which d. Of these lerican vegeearest to the n the eastern southern and
western slopes, with a dryer climate and more arid soil, have a correspondingly poorer vegetation. The plants of these regions, being subject to longer periods of drought and exposed to the hot winds from the neighbouring continent, have a harder foliage and thicker roots. Nevertheless, thorny plants, such as abound in the badly watered parts of Africa, are nowhere met with in the districts of Madagascar possessing a similar climate; nor are acacias anywhere seen.

One of the most remarkable members of the insular flora is a species of baobab, first described by Grandidier. Without acquiring the colossal dimensions of its African congener, it excels in the grace and majesty of its outlines. The tamarind also is a very noble tree, but it occurs only on the west slope of the island, where the Sakalava chiefs usually construct their dwellings beneath the shade of its wide-spreading branches. The cocoanut-palm, which flourishes in all the maritime districts, is believed to be of exotic origin. According to some authorities, it was introduced, together with the bread-tree, by the Mulays, from the Eastern Archipelago. But Madagascar also possesses some indigenous species of palms, amongst others the sago-tree, a variety of the hyphaenn akin to the dum-palm of the Nilotic regions, and the raphia, noted for its large, thickset trunk, its masses of minute foliuge, and enormous bunches of fruit, weighing as much as three hundred pounds and upwards.

The pandanus (rakoa), with its spiral sword-shaped leaves, thives on the more arid tracts along the seaboard, while the muddy estuaries and coast lagoons are everywhere overgrown with the widely diffused mangrove. The brushwood and herbaceous vegetation of the depressions, and occasionally of the hill slopes, is overshadowed by a magnificent species of cannacoru4, remarkable for the perfect regularity of its broad fern-like leaves. This is the ravenala, or urania speciosa, more commonly known as the traveller's tree, because its foliage, collects the rain-water in sufficient quantity to slake the thirst of passing wayfarers. But it occurs chiefly in well-irrigated regions where water is abundant, and its chief advantage is derived from the excellent building materiul which it supplies to the inhabitants of the rural districts. The trunk is used for the framework of their houses, the larger branches for beams and rafters, the fuliuge for thatching the roofs.

The endemic flora of Madagascar is represented by many other remarkable forms, such as the ovirandrona (uvirandra fenestralis), an equatic plant whose oval leaves are variegated like pieces of lace; the filso, or "club-tree" (cusuarina laterifolia), whose enormous roots serve to bind the shifting sands along some parts of the seaboard; the brehmia spinosa, which, although a member of the poisonous strychnos family, neverthelgss yields an edible fruit; the angracum sesquippdale, a gigantic orchid which clathes with a mantle of verdure the huge stems of old forest trees; she nepenthe, or pitcher-plant, whose large flowers affect the form of pendar.t vessels, and contain a considerable supply of water. Trees yielding useful timber materials, as well as fine cabinet-woods, are very numerous, including such valuable varieties as teak, ebony, matwood, violet ebony, and rosewood. Unfortunately; the process of disafforesting is carried on without interruption. It is
related by an English traveller that, in order to clear a passage for a large tombstone, as many as twenty-five thousand trees were felled in a forest in the Betsileo territory.*

## Fauna.

The Malagasy fauna, no less if not more original than the flora, excites the wonder of all naturalists, and causes them to indulge in all manner of speculations on the geological history of the island. The species peculiar to this insular region has given rise to the hypothesis, at first suggested by Geoffrey Saint-Hilaire, and afterwards more fully elaborated by the English naturalist Sclater, that Madagascar must be the remains of a continent which filled a part at least of the space now flooded by the waters of the Indian Ocean. This hypothetical continent even received the name of Lemuria, from the characteristio members of the ape-like lemurian family, which is represented in Mudagascar by a larger number of distinct species than in Africa or the Eastern Archipelago.

Several men of science have accepted this suggestion in a more or less modified form, and Heckel himself at one time went so far as to ask whether this Lemuria, which has long ccased to exist, should not be regarded as the cradle and centre of dispersion of the various races of mankind. . But Alfred Russell Wallace, after having for some time warmly upheld the theory that the Madagascar fauna attests the former existence of a vast Lemurian oontinent, now no longer believes in such enormous changes in the distribution of land and water on the surface of the globe. Nevertheless this writer must still feel compelled to admit that very considerable modifications have certainly taken place in the relative positions of the continents and oceanic basins.

In order to explain the presence of the Africun species which are also found in the island of Madagascar, Wallace supposes that the two regions must formerly have been united, but that at that time Africa itself, still separated from the Mediterranean lands by a broad marine inlet, pr.ssessed none of the animal species such as the lion, rhinoceros, elephant, giraffe, and gazelle, which afterwards arrived from the northern regions. In the same way he endeavours to explain, by temporary isthmuses connecting continent with continent, or by seas separating them, the appearance in or the absence from Madagascar of diverse Aaiatic, Malayan, Australian, or American animal types. $\dagger$ It is. thus evident that even those naturalists who most strenuously maintain the long stability of the centinental masses are themselves cempelled to adinit that the dry land has been profoundly modified during the course of ages.

While the oceanic islands are in general extremely poor in mammalians, Madagascar on the contrary possesses as many as sixty-six species of this order, a sufficient proof that this island must at one time have formed part of a much larger region. These mammals, however, are grouped in such a manner as to constitute

[^42]large tombthe Betsileo

1, excites the speculations nsular region Hilaire, and , that Madaof the space pntinent even the ape-like $r$ number of less modified this Lemuria, and centre of Vallace, after fauna attests lieves in such of the globe. considerable he continents
also found in nust formerly ted from the animal species wards arrived in, by tempoarating them, atic, Malayan, at even those te continental en profoundly mammalians, this order, a a much larger s to constitute
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an essentially original fauna. Thus half of the insular species consists of lemurians, makis, and others, which ure distinguished by their babits, resembling those of squirrels, their long tails, their enormous hands, their piercing cries and shrieks, like those of human beings; and lastly, their way of bounding along like kangaroos. There is a propitheoan, a member of the indris family, which when closely pursued by the hunter can clear thirty-two or thirty-three feet at a single spring. Thanks to its branchial membrane, forming a kind of parachute or bat's wing, it seems rather to fly than to jump from tree to tree (Grandidier).

All these species, each of which occupies a well-defined range, are casily tamed, and one of them, the babakoto (lichnnotus Iudr/s), is even trained to catch birds, like the hawks and falcons of medimval times." The aye-aye (cheiromys), best known of all these lemurians, remains dormant throughout the dry season, and builds itself a real nest; while the catta inhabits rocky districts.

The tendreks (tanrecs), or centetes, another family of mammals allied to our hedgehogs, and who sleep through the summer, are represented by several species whose congeners are found nowhere else nearer than Cuba and Haiti in the West Indies. The pintsala, or cryptorirocta ferox, a feline unknown elsewhere, a ${ }^{\prime}$ d a few oivet cats, are the only carnivorous mammals in the island, whose fauna also includes some rats, mice, and the potamochoerus lnveatus, or "masked" water-hog. The oxen and wild dogs often met in the forests or on the grassy steppes appear to be the descendants of domestic animals which have reverted to the savage state, and some naturalists include a species of cat in the same category. The European rats, which accompany the Western peoples in all their migrations, have also alroady invaded Madagascar.

More than half the species of birds are entirely peculiar to the great island, in their general physiognomy resembling the Malayan much more than the African forms. Till recent times-that is to say, within, perhaps, the last two or three centuries-there still survived the apyornis maximus, a gigantic member of the ostrich family, which was known to the Arab travellers of the Middle Ages, and which figures in some of the marvellous tales of the "Thousand and One Nights." This is the legendary roc, or griffon of Marco Polo, which was said to seize elephants in its talons and carry them off to the summits of lofty mountains. Some of the eggs of the æpyornis have been found embedded in the alluvial soil and elsewhere, the largest of which, measuring nearly thirteen inches in length, was calculated to have a capacity of ten quarts and an eighth, or about as much as six eggs of the ostrich, sixteen of the cassowary, and a hundred and fortyeight of the common hen. . From the dimensions of the bones it is supposed that this gigantic bird must have been at least double the size of the largest ostrich.

Grandidier, who first discovered the remains of the æpyornis, has also brought to light the skeletons of a huge turtle and of a variety of the hippopotamus. The crocodile of Madagasear, which swarms in the rivers on both slopes of the island, appears to constitute an independent species, as does also a gigantic boa constrictor, which, according to the local legends, formerly attacked both men and cattle.

[^43]Several other ophidians aro included in the Madagascar fauna, but according to most naturalists, none of these snakes appear to be poisonous, although this statement is doubted by Houlder ${ }^{*}$ and some other travellers.

On the other hand, the natives stand in much dread of two species of spiders, whose bite is even said to be fatal. The world of insects and smaller animuls is extremely varied, and like that of the mammals, includes types presenting striking analogies with those of all the other continents, from Africa to Australia and South America. No uaturalist has thrown more light on this insular fauna than M. Grandidier, our knowledge of which he has enlarged by the discovery of sixteen mammalians, ton birds, twenty-five reptiles, and eighteen saurians, besides numerous insects and other small animals.

## Inhabitants.

No stone weapons or implements have been discovered in Madagascar, $\dagger$ a fact which seems to justify the supposition that the island remained uninhabited till the arrival of already half-civilised settlers. Like the indigenous fauna, the human inhabitants of this regi n are of diverse origin, and through these various elements it is connected with the vast semicircle of lunds which sweep round the Indian Oceun from Africa and Southern Asia to the Malayo-Polynesiun archipelagoes. But although immigrants have certainly arrived from the west, north, and east; there can be no duubt that the dominant influence, if not in numbers at all events in their relative higher culture, belongs to the peoples of Mulayan or Oceanic origin.

A convincing proof of this is afforded by the language whioh is current amongst all the tribes, of whatever race, from one end of the island to the other. Whether they be of Negro, Arub, Indian, or Malay descent, all the Malagasy peoples spcak a pliant, poetic, and melodious tongue, which careful philological research bas cleurly shown to be related to the great linguistic family spread over the whole of the Eastern Archipelago and the Polynesian islands. Their very collective name of Malagasy has even been connected by Vinson, De Froberville, and others with that of Malacea, in the Indo-Chinese peninsula. Numerous vocabularies, the earliest of which were a Dutch collection of 1604 and that of Arthusius, dating from 1613, had already rendered this relationship more than probable, while more recent systematic grammars and complete dictionaries have placed beyond all doubt the hypothesis of the first scientific explorers.

Of a hundred and twenty familiar terms in Malagasy, nearly one hundred are clearly of Mulay origin, the rest being derived from Arabic, Swaheli, or some other Bantu dialect. According to Mullens, the most striking resemblances and analogies are found between the dialect of the Betsimisarakas of the east coast and the Malays of the Indo-Chinese peninsula. All those agglutinated geographical names which occur on the map of Madagascar, and which are often of such

[^44]ccording to h this state$s$ of spiders, $r$ animals is ing striking astralia and fauma than very of sixlans, besides
scar, $\dagger$ a fact habited till , the human ous elements the Indian chipelagoes. h, and east, at all events or Oceanio is current o the other. te Malagasy philological spread over Their very Froberville, nerous vocaat of Arthuan probable, have placed
hundred are eli, or some blances and ust coast and zeographical ten of such
astonishing length, are for the most part extremely felicitous compound forms, describing with graphic terseness the sulicut features of the locality.
'Ihe arrival of the Malayo-Polynesian immigrants must obviously be referred buck to a somowhat remote period. When the Fronch settlers first made their appearance on the south-east coust about two hundred and fifty years ago, Madagascar was already occupied by numerous independent states and tribal communities, without any politucal cohesion with each other or any elements of a common

Fig. 135 - Ravonimatitraniorivo, Hova Minigter.

civilisation except their Malay speech. The original racial or national unity, to which they were indebted for their common language, had long ceased to exist. No ethnical groups in the island were at that time distinguished above the others by any marked superiority of culture, except the small Arab population, belonging to a totally different race from the Malays.

But this Arab element, which had already been introduced in the very first century of the Hegira, was not strong enough to assimilate the indigenous populations, who had been brought earlier under more powerful iufluences. In the
thirteenth century an Arab writer speaks of the islanders as "brothers of the Chinese," and gives the name of "Malay" to ono of their eitioe, and in the following century allusion is made to the same city by the historian Edrisi.

No authentic historical records can be appealed to in support of the various views eutertuined on the subjeet of tho period when the first immigrants reached the island und on the particular region whenee they came. It is no longer possible to say with confidence what precise route they followed, although it would be difficult to suggest any other probable highway besides that of the marine currents, which, under the action of the trade winds, set regularly in the direction from north-eust to meuth-west across the Indiun Ocean. These, currents, which in the year 1885 brought all the way from Juva the p sice ojected by the tremendous eruption of Krakatau in August, 1883, muy also have easily enabled the native praus or light eraft to reach Mudagascar from the Sunda Islands. Such distant expeditions were even in remote times made by the Malay chiefs in the Eastern Arehipelago, so that they were fully justified in assuming the proud title of "masters of the castern and western winds and waters."*

Possibly the Chagos coralline archipelago, which, according to Darwin, has subsided in comparatively recent times, may formerly have sorved as a convenient station between the two regions. But in order to adapt themselves to their new surroundings, the immigrants from the east had to change their manner of life, and it thus happened that these roving seafarers gradually became settled tillers of the land in the great island. Penctrating inland from the malarious districts round the coast, they traversed the low-lying forest belt and climbed the slopes of the central plateau, where their descendants still hold their ground. The "silver canoe"-that is, the tomb in which the sovereign of the Hova nation is always buried-recalls the time when the dead were really interred in a boat, as is still the custom amongst the Betsimisarakas of the east coast, as well as amongat numerous Malayan communities. $\dagger$ So long have the Hovas been settled on the elevated tablelands of the interior that they are no more able than Europeans themselves to endure the deadly elimate of the coastlands. Leprosy and other cutaneous diseases are prevalent amongst them.

Viewed as a whole, Madagascar presents a considerable mixture of diverse populations, none of which have preserved the primitive types in an absolutely pure state. In some of the insular groups, notably those of the west coast, the Negro element is predominant, and here are met many individuals differing little from the true African, with robust frames, black or deep brown complexion, flat features, and crisp or woolly hair. In the central provinces most of the triles approaeh the ordinary Malay type, being distinguished by a coppery colour, black lank hair, and beautiful white teeth. At the tivo opposite extremities of the island, that is to say; on the north-west and south-east sides, occurs the so-called "white," that is, the Arab type. According to Grandidier, the Indisns of Malabar have also left numerous traces of their residence on the west coast, where several families

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of the various rants reached onger possible 1 it would be rine currents, irection from which in the he tremendous ed the native Such distant 1 the Eastern le of " masters

Darwin, has s a convenient $s$ to their new aer of life, and 1 tillers of the districts round slopes of the The "silver tion is always $t$, as is atill the gast numerous elevated tablethemselves to tneous diseases Ire of diverse an ubsolutely west coast, the differing little omplexion, flat of the tribes y colour, black $s$ of the island, salled "white," labar have also everal families
of chiefs claim this Hindu descent. In many tribes the casto system prevails, and amongst these communities the physical appearance of the people differs no less than the social conditions. The rulers evidently belong to a different race from their suljects.

The Hovas.
The Hovas, who are at present the most powerful and, politically, the dominant people, appear to have preserved the original Malay type, at least amongst the

Fig. 136.-Betsilmo Woman.

chiefs and higher circles. By some writers they are connocted either with the Battas of North Sumatra and the neighbouring island of Nias, with the natives of Java and Bali, or with the Tagalas of the Philippine Archipelago.* Resemblances have also been pointed out between the Hovas and the Siamese, the Samoans, the Tonga Islanders, and even the Japanese. Thus the various views held by obeervers

- Marsden, Histny of Swnaira; W. von Humboldt, The Kavo Langwage; Crawfurd, Grammar of the Malay Language, Introduction.
themaelves would seem to indirate a divorse origin of the Hovag, due no doubt to repeated arrivals from the East. At the same time all these eastern invaders, whether Sundanese, Samouns, Siamose, or Japunese, may be regarded as helonging to the anme family of mankind, at least when compured with the immigrants from Afriea.

In the middle of the seventeenth contury, when the islund was first described by Flacourt, the Hovas were still unknown as a separate nationality, or else confounded, under other names, with the neighbouring tribes. In fact the "Oves" do not make their appearance in history till the secoud hulf of the eighteenth century, when they regained their independence from the Sakulavas, and when the present Hova kingdom was founded by their chief, the "Lord who lives in the heart of Imerina." At that time the natives of the plateanx called themselven Ambanilanitra, that is to say, "People living under the heavens," or else Ambramiandro, that is "Peoplo living under the light of day." These names they had adopted either because their country, Imerina, was for them the whole world, or becuuse it occupied the elevated upland regions above the surrounding low-lying coastlands. Even still the term Hova is applied only to the middle classes, the nobles taking the designation of Audriama, while the slaves are collectively known either as Mainti or Andevo. But at present the varions conquered peoplos affect the name of "Hovas," in order thus to identify themselves with the dominant races; while the still unreduced tribes scornfully attribute to the inhabitants of Imerina the opprobrious epithet of Amboalambo, or "Swine-dogs," which, however, is said to have been formerly taken in a complimentary sense.

Thus the populations collectively grouped as Hovas increase both by the continual reduction of neighbouring tribes and by the natural excess of births over deaths, which is considerable in those mountainous regions, where the women are very prolific. Owing to this inerease, colonies of Hovas are constantly being founded in various parte of the island at great distances from their native plateau, but especially in the region north of Lake Alaotra.

Travellers, for the most part English and French, differ greatly in their estimate of the Hova character, a circumstance which must be attributed not only to the prejudices of political rivalry, but also to the differences in the social classes themselves with whom they have come in contact. Naturally the greatest contrasts are found to exist between the inhabitants of the large towns, and especially of the capital, and those of the rural distriets. The former have to live in an atmosphere of court intrigues, to temporize and tack about, so as to avoid giving offence to any of the rival parties, and thus preserve their influence, and even their lives. They thus become astute diplomatists, past-masters in the arts of decoit and cajolery ; while the latter, peaceful tillers of the land, have preserved the national virtues of courtesy, friendliness, and hospitality. The peasantry are as a rule very industrious, kind to their wives and children, and much attached to "the land of their forefathers." They are no doubt accused by the foreign traders of being eager for gain, and inclined to drive hard bargains; but this is a oharge which the natives may justly fling back on their accusers.
no doubt to rn invaders, as belonging igrants from rst described , or else conthe "Oves" o eighteenth nd when the lives in the d themselves or else Ambames they had ole world, or ng low-lying le classes, the tively known peoples affect the dominant nhabitants of ich, however,
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atly in their utod not only in the social $y$ the greatest ns, and espelave to live in , avoid giving nce, and even n the arts of preserved the lantry are as a h attached to oreign traders is is a charge

According to Grandidier the Hovas, taking the term in the widest sense, so as to include all the tribes of the central regions who have adopted the name of the victorious nation, number altogether about one million souls, or, say, one-third of the whole population of the island. Thanks to the greater relative density of the inhabitants in their territory, as well as to the commanding position occupied by them in the centre of the island, they have naturally acquired a decided superiority ovor the discordant tribal groups scattered over the lowlying coastlands. Effect has been given to this natural superiority by their better organised administration, supported by troops trained to European methods of warfare by English and other foreign officers.
$\Lambda$ vast part of the territory enciroling the central province of Imerina is still almost uninhabited, especially in the western districts. In this direction stretch extensive wildernesses, where the traveller may journey for days together without mer. $\mathrm{i}-\mathrm{a}_{8}$ a single group of haisisutions. To these frontier tracts th English explorers 'deive given the name of No Man's Land; according to Grandidier they neither are nor can be inhatitud.

## The Sakatavas.

During the last century the military preponderance belonged to the people of
the west coast, collectively known as Sakalavas, or "Men of the Long Plains." * These Sikalavas, who were weakened by being divided into two independent kingdoms, besides several autonomous chieftaincies, are at present, if not actually reduced by the Hovas, at least officially abandoned by their furmer French allies to the generosity of the dominant race. The stations already occupied by the Hovas at all the strategical points in the Sakalava territory render the future conquest of the whole country a mere question of time.

The Mahufali of the south-western regions, the Anti-Fiherenanas, Anti-Manas, Anti-Mahilakas, Anti-Bueni, and other tribes, all belong to the Sukalava family, which numbers altogether about half a million of souls. $\dagger$ Amongst these Malagasy peoples the Negro seems on the whole to prevail over the Malay type. The hair is neither straight, as in the latter, nor yet woolly, as in the former, but undulating aud kinky; the nose broad and flat, the mouth protruding, with somewhat thick and pouting lips. The calf is well developed and the foot of remarkably shapely form, and the people are generally nimble, active, and of robust constitution, leprosy, so common amongst the Hovas, rarely occurring amongst them.

The purest branch of the Sakalava race are the Mashicores, who dwell in the interior, but in many of the seaboard districts they have become crossed with Arabs. The Vezos, that is to say "swimmers," or inhabitants of the sea-shore, in the still independent Sakalava kingdoms of Fiherenana and Kitombo, on the southwest coast, are of almost white complexion. They even claim to be whites, on the ground of their repeated interminglings with the Hindu immigrants, the English and French corsairs of the last two centuries, and the inhabitants of Réunion who come to trade in all the ports along the coast. $\ddagger$ Notwithstanding the abundant evidence of black blood, the Sakalavas are connected by no direct reoords with any of the populations on the opposite mair!aud ; nor is it possible now to determine with any accuracy the precise time when the Negroes began to pass over to the great island either in a body, or, as is more probable, in successive expeditions spread over long periods. The inhabitants of the coastlands, however, still possess little flotillas of outriggers, with which fishermen and traders undertake long voyages, and with which, till recently, the corsairs paid yearly piratical expeditions to the Comoro Islands. In the year 1805 these Sakalava rovers even captured a Portuguese corvette near the port of Ibo, on the Mozambique coast.

At the same time these Negroid Malagasy peoples may readily be distinguished from the pure Negro slaves introduced from time to time by the Arabs into the ports along the Sakalava seaboard. These slaves belong for the most part to the Makua (Ma-Kua) nation, a numerous Mozambique people whose tribal communities are scattered over the extensive region between the Zambeze and the Rovuma basins. According to Baron, they call themselves by the collective name of Zaza-Marga.

- This etymology, however, although given by the Sakalavas themselves, has been questioned. According to some authorities the word really means "Long cats," and was attributed to them in an offonsive sense.
+ The prefix Anti, Anta, Anté, before ethnical names, has the meaning of hore, poople of herv, that is, indigenous inhabitants.
$\ddagger$ Sibree, The Erreat African Island.

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## The Betsileo, Bara, and Neighbouring Tribes.

The Betsileo, that is to say "Invincible," who dwell to the number of about "three hundred thousand in the mountainous region bordering northwards on Imerina, no longer deserve this national designation. They are at present, for the most part, peaceful agriculturists, amongst whom the black seems greatly to prevail over the Malay element. According to Sibree they are the tallest of all the Malagasy people, with average stature about six feet.

Their neighbours the Baras, that is "Barbarians," who occupy the plateau farther south, are in appearance more like the Sakalava people, and like them also have partly preserved their political independence. The section of the nation who have taken refuge on the banks of the lake which floods the highest depression on Mount Ivohibe, are able from that vantage-ground to defy the attempts of their assailants.

Farther south, the Ant' Androi, who occupy the southern extremity of Madagascar, are also still unreduced. Like their western neighbours, the Mabafali, they keep carefully aloof from all strangers, and these two tribes are regarded as the rudest of all the Malagasy peoples. The Ant' Anossi, or "People of the Islands," or "Coastlands," with whom the early French settlers at Saint-Lucia and Fort Dauphin first came in contact, and whom they oppressed so cruelly, are now subject to the Hova rule.

The Ant' Aissaka tribe, which follows northward on the east side of the island, closely resembles the Sakalavas, and has probubly been crossed by the same Negro elements. The tribal name means "Hand Fishers," in allusion to their former primitive way of capturing fish. Conterminous with them, still going northwards, are the Ant' Aïmoro, or "Moors," another coast people on the east side, who claim to be descended from the Arabs of Mecca. In support of this claim they show some ancient documents written in Arabic characters, which, however, cannot explain away the unmistakable evidence of intermixture.

Above the Aut' Aïmoro and Ant' Ambaboaka peoples the wooded upland valleys are occupied by the Ant' Anala or "Forest People," who have for the most part been able to maintain their independence, thanks to the inaccessible position of the natural fastnesses where they have their camping-grounds. One of these strongholds, Mount Ikiongo or Ikongo, which towers 1,600 feet above the surrounding lands, presents even more precipitous flanks than Ivohibé: It terminates in almost sheer rocky walls on all sides, except at one point scaled by a narrow path which might be easily defended by a handful of resolute men. Guard-houses or watchtowers have been erected at intervals round about the crest of the mountain; while five hamlets, surrounded by fields and limpid brooks, are scattered over the upper plateau, which is eight miles long by four broad.

The independent branch of the Ant' Anala tribe, who in time of war take refuge on the Ikongo heights, are commonly designated by the name of the mountain itself.

Throughout the whole of the south-eastern part of Madagascar the populations
appear to have been at some time much subject to Arab influences. The ZafeRaminia, or "Whites," mentioned by Flacourt and other contemporary writers, were certainly either Arabs or Hindus professing the Mohammedan religion. Numerous chiefé amongst all the local tribes claim Arab descent, while the onbiay or priests, corresponding to the omassi of the Sakalavas, disseminate usages and ceremonios which are undoubtedly derived from the precepts of Islam.*

## The Betsimisarakas and Sihanakas.

Of all the nations on the eustern seaboard, the most numerous are the now reduced Betsimisarakas or "United People," well known to travellers, who have to cross their territory on the route from Tamatave to Tananarivo, capital of Madagascar. Both the Betsimisarakas and their neighbours, the Betanimenas, or "People of the Red Land," who claim to be descended from the Babakoto Indris, are tall and robust, but of a gentle, patient disposition, in other respects differing little from their Hova rulers. They number collectively about three hundred thousand souls.

Prominent amongst the other peoples of the eastern seaboard cre the Ant' Ankaï, or "Gladesmen," and the Bezanozano, or "Bushmen" (P) $\dagger$ who occupy the long narrow Ankuï Valley between two parallel ranges of forest-clad mountains. These tribes have become intermediary agents, a sort of middlemen, for the trade between the Hovas of the plateau and the Betsinisaraka coastlanders. Nearly all the merchandise is transported by them over the difficult mountain tracks and passes, and their habit of carrying heavy loads on the bare shoulders has gradually developed fleshy welis which protect the shoulder-blade from sudden shocks. The children are all born furnished with these protecting excrescences. $\ddagger$

Farther north, in the depression now flooded by Lake Aloatra, dwell the Ant' Sihanakas, that is, the "Lake People," or according to William Ellis, the "Independent," fishers and shepherds, who tend the herds of their Hova masters. Nearly ull the utensils used by this tribe are made of reeds. During the rainy season the inhabitants of some of the riverain and lacustrine villages do not take the trouble to retire te the higher grounds rising above the level of the inundations. They simply embark, with their household goods and matting, on stout rafts also made of reeds, ar d thus drift about with the current till the waters subside.

The sihanakas belong to the same tribal group as the Betsimisarakas; but farther on, the northern extremity of Madagascar is occupied by quite a different people, the Ant' Ankuras, that is, either "Men of the North" or "Men of the Rocks," who are distinguished from all the other inhabitants of the island by their distinctly Kafir-like appearance, with woolly hair and thick lips. Of all the

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Malagasy nations they have also heen brought most under the influence of the teachings of Islam. During the late political complications the Ant' Ankarus sided with the French against the Hovas, and have in return reaped the same reward as their Sakalava neighbours. They have been deserted by their foreign allies and handed over to the tender mercies of their hereditary enemies, the present masters of the island. Such at least is the practical result of the treaty of 1885, which, while nominally reducing the Hovas to the position of vassals, really strengthens their claims to the political supremacy over all the Malagasy peoples.

## The Kimos and other Aborigines.

Besides those of the chief nations that divide the Madagascar territory between them, many other tribal names figure on the maps, which must be regarded either as the designations of mere clans, castes, and other smaller sub-divisions, or else synonymous with the better-known appellations. But mention is also made of certain dwarfish peoples, such as the Kimos, who are said to dwell amongst the Baras in the southern parts of the ieland. The early French travellers who refer to them-the naturalist Commerson, and De Modave, Governor of Fort Dauphindescribe these pigmies as blacks with large head, crisp hair, long arms, very brave, and skilful in the use of bow and arrow. But during the course of the present century no trace has been discovered of their existence by any European explorer.

Flacourt also believed in the existence of a cannibal tribe, the Ontaysatroihas, who were said to devour their sick and aged relatives. Amongst these Malagasy natives, possibly kinsmen of the Sumatren Battas, "the only graves of the fathers and mothers are their children." *

Allusion is also made to the Behosi, said to dwell in the woodlands of the western slope about the uninhabited borderlands, and described as a black people, springing like monkeys from branch to branch and living on fruits, roots, and lemurs taken by snares and then "fattened for the market." But nothing beyond a vagne tradition would appear to survive of this tribe, as well as of the ancient Va-Zimba Negroes, who were said to be the true aborigines of Madagascar, and who would seem to have been unacquainted even with the use of fire. Who were these Va-Zimbas, «hose very name suggests their Bant" origin? A small tribe south of Majunga in the Sukalava territory is still known by the same designation, and may possibly belong to the same race. This at least is rendered probable by the fact that they are regarded as having a sort of pre-eminent right to the land, and that on their journeys they are entitled to help themselves without payment to the produce of the soil, as if they were envoys of the sovereign.

The Va-Zimbas may perhaps be kinsmen of the Ba-Simba or Cimbeba people on the west coast of Africs, about the Cunene basin. Their graves, stones heaped up like cairns or else disposed in circles, are scattered over various districts of the central plateau, and are approached by the present Malagasy inhabitantc with fear

[^47]and trembling. Here sacrifices are even occasionally offered in order to conjure the evil spirits hovoring aboat these ill-omened sites.

## Soctal Condition.

In a country like Madagascar, which is passing through a period of rapid transformation, and almnst of revolution, the social condition necessarily presents the greatest discrepancies, according as the various tribes and castes take part in or still hold aloof from the onward national movement. The influence of the whites is predominant in the high places, and amongst a large number of tribal communities the leading families boust of their descent from Europeans, just as their predecessors plumed themselves on their Arab blood. Like the Japanese-and herein may be noticed another point of resemblance between the two races-they have plunged with a sort of frenzy into the broad stream of European culture. Dress, ornaments, furniture, style of dwellings, ceremonies, military parades, polite phraseology, religions themselves : all has been eagerly adopted from their English or French visitors, and the work of assimilation thus gradually spreads in ever widening circles from the capital to the remotest extremities of the empire.

Even during the interval of reaction, when all foreigners were expelled, the movement still continued, and those who were temporarily banished from Tananarivo were surprised on their return after the war to find a large increase in the number of buildings constructed in the European style of architecture. At present the whites, whether traders or missionaries, freely traverse the island from end to end, and hundreds especially of the dealers from Mauritius and Réunion, are hospitably welcomed by the still independent people on the seaboard und central plateaux.

Under all these influences schools have been multiplied in the towns and villages. The Hova language, henceforth fixed by the adoption of the Roman writing system, has become a literary tongue, and possesses a yearly increasing number of printed books and periodicals.* English, French, and Portuguese terms are freely borrowed, although in a greatly modified form to suit the phonetic system and structure of the national speech. Christianity, represented by four different Protestant sects and the Roman Catholic form, has been the State religion since the year 1869, and the Queen now bears the title of "Head of the Assembly of Believers."

Madagascar has also its learned sooieties. Radama II., who on ascending the throne in 1861, began by declaring in a great kubari, or national council, that henceforth all the whites "formed part of his family," had even the intention of founding an Academy of Sciences. He fancied, like so many other sovereigns, that he could thus oreate genius.

But beyond the influence of the ruling class the peoples of the more secluded

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districts of the empire have still partly preserved the primitive usages and customs inherited from their Malay or Bantu ancestors, as well as the religious rites and ceremonies of the olden times The Malagasy who have not yet adopted in part or altogether the European dress, or the long white cotton robes introduced by the missionaries, wear nothing but the lamba, a sort of skirt which amongst the populations of the interior is made of bast pounded with the hammer.

## Malagasy Customs.

The natives of many districts also still tattoo the face or raise scars or welts on the body, like their African or Polynesian ancestors, or dress the hair with clay and grease, like most of the tribes along the Upper Congo. Thus the Baras fashion the hair in the form of a great ball by means of wax and fat kneaded into a sort of yellowish pigment. The dwellings of the uncivilised natives are merely wretched hovels made of beaten earth, reeds, and the foliage of the ravenala plant. Amongst some communities firearms are still unknown, the warriors using nothing but their primitive spears, bows and arrows, or else the still more primitive blowpipe.

The rite of circumcision is universally practised amongst all the populations not yet converted to Christianity. In the Sakulava communities the operation is performed at the age of six or seven, after which the victim is henceforth considered as a man. On this occasion he fires his first shot, and is also knocked about and well shaken by the assistants, to give him a forecast of the arduous lifestruggles for which he must now prepare himself. In general the Malagasy children enjoy a considerable degree of freedom, and in most of the tribes the young men and women are allowed to contract temporary unions without exposing themselves to censure. They come together on trial before making up their minds to a permanent alliance.

Until he is married the Malagasy remains a minor, incapable of inheriting property. The marriage itself usually takes the form of a purchase, and, as in so many other countries, is accompanied by a show of abduction. In some districts the purchaser is not allowed to carry off his prize until he has gallantly.fought for her, and made a sufficient display of tact and bravery against the yo:- $\quad$ men of the neighbourhood. Amongst the Sakalavas the alliance cannot be settled by the parents without the cousent of their children; but they always take precedence at the wedding feast. At this festive gathering bride and bridegroom eat out of the same dish, after which they dip their finger in a vessel containing the blood of an ox slaughtered in honour of the occasion, and then smear the breast of the guests with the blood.

The Sakalava unions are as a rule much respected, and divorces, euphemistically called " thanksgivings," are of rare occurrence. Cases are also said to be common enough of the survivor committing suicide through grief at the death of his or her companion in life. But amongst the Mahafali, the women are on the contrary universally regarded as inferior beings, bound to serve man in all things and

[^49]enjoying no persoual rights of any sort. They are not even allowed to eat with him, or to be present at his meals When ill they must keep carefully secluded, and after death the remains of the wife are never deposited in the sacred place reserved for her husband. The adulteress is often put to death, gven by her own kinsfolk, while amongst the Sihanakas the widow is subjected to real tortures. Clothed in her most sumptuous robe and decked in all her finery, the wretched woman awaits in the mortuary house the return of the solemn funeral procession. After the ceremony, friends and relatives fall upon her, tearing off her jewels, rending her garments, unbinding her hair, hurling at her some broken vessel and damaged or soiled clothes, and the like, all the time heaping curses on her as the cause of the calamity. She is forbidden to utter a word; all are free to buffet or beat ber at pleasure, and this period of " mourning" lasts for months, occasionally even for a whole year. It ends with a formal divorce pronounced by the relatives of the dead, in order to sever all ties with the remains of her departed husband.

The brotherhood of blood, known by diverse names amongst the several tribes, is a custom still commonly observed all over the island, and most European travellers have by this means acquired several "brothers," who have aided them in the work of exploration. The two friends inflict a slight wound on each other and mix the blood flowing from the cut. But amongst the Ant' Anossi, the practice is to prepare a drink with the blood of an ox mingled with some "holy water," in which are thrown divers articles, such as a leaden bullet and a gold bracelet.

Triuls by ordeal also still survive in the unreduced parts of the country, and till recently these "judgments of God" were nowhere more terrible in their effect than amongst the Hovas. The yearly victims of the procedure were reckoned by the thousand. The most usual trial is that of boiling water, into which the accused are compelled to plunge their hand. Sometimes a bar of red-hot iron is placed on the victin's tongue; or else he is made to drink the poison prepared from the fruit of the tanghin (Tanghinia venenifera), or perhaps he is compelled to swim across some crocodile-infested stream. In this case the wizard strikes the water thrice, and then addresses the terrible saurians ir solemn language: "It is for you, 0 crocodiles, to decide whether this man be guilty or innocent!"

The liliu draza, that is, the common law or custom, as it is called by the Sakalavas, is everywhere scrupulously observed in the provinces not yet subjected to the Hova government. This law is vrry severe, especially where it rests on no moral sanction beyond the mere fear of the unknown. The Sakalava code includes as many things said to be fadi, or forbidden, as there are tabooed according to Polynesian usage. All Sakalavas are forbidden to sleep with the head turned in the direction of the south, to lie on the wrong side of a mat, to sweep the house on the north side, to peel a banana with the teeth, to eat cels or a cook, to leave a mirror in the hands of a child, to spit in the fire, and to do a thousand other thinge which to those not swayed by the fear of wizards or evil spirits must seem perfectly indifferent acts.

Each tribe, each clan, each family has its special "fad," which must be
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attended to under peril of some dire mishap. Such and such places are unlucky, and must be carefully avoided by everybody. Such and such dutes are similarly declared to be unpropitious, and on those days all work must be stopped, all undertakings postponed. No one would dare to start on any adventure without first calling in the magicians to consult the fates by the game of hazard known as sikili, which Grandidier believes to have been introduced by the persecuted Jews, refugees from Arubia. "The day of the month is a lottery," says a Malagasy proverb; and there are certain terrible days in the Ant' Anossi and Ant' Anala community when the new-born babe must be delivered to the crocodiles or buried alive. In order to enlarge his colony the adventurer Beniovski made the people surrender to him all those who were doomed by their supposed destiny to some misfortune. Amongst the Veze branch of the Sakalavas the families, while outwardly observing the custom, come to a mutual understanding to save their offspring from its consequences. The little victims are duly taken to the woods, but no sooner are they deposited on the ground than some kinsman steps forward to rescue them from certain death.

Recourse is frequently had to sacrifices in order to propitiate the evil spirits. All the manifestations of nature, such as thunder, rain, and the winds, are personified by minor genii, children of Zanahar-bé, a superior being who cannot be directly invoked, so far is he removed above mortals. The hills, the rocks, and great trees are also venerated spirits, and certain gigantic baobabs or tamarinds, towering high above the plain, are covered with scraps of cloth, adorned with animals' heads, or coated with coloured clays, attesting the veneration and homage of the faithful.

But the evil spirits, still more numerous than the beneficent geni, hover in the air, ever whirling round and round in search of their victims. They it is that kindle the conflagration, destroy the crops, sweep away man and beast.

> "The ox hath therefore stretched his yoke in vain,
> The ploughman lost his sweat, and the green corn
> Hath rotted ere his youth attained a beard;
> The fold stands empty in the drowned field, And crows are fatted with the murrain flook."

Hence, when he builds himself a dwelling or sows his field, the peasant, surrounded by all his family, invokes one by one the genii of his kinsfolk, imploring them to scare away their invisible foes. Against these adversaries song is the most potent weapon. To heal the ailing the women and young girls gather round their couch, singing and dancing and beating their hands at dawn and, sunset. But should the spell fail and the patient die, it is because the demons have triumphod. Forthwith everything nust be cleansed, and the very abode of the dead is left to the evil ones. The Ant' Anossi forsake the land itself, while most of the Sakalava tribes endeavour at least to baffle the fiends by changing their name. They thus hope that all trace of their wanderings may be lust. Amongst the Sakalavas it is also usual to hide away the sick in the woodlands, not more than two or three persons being in the seoret of their whereabouts. If they thus succeed in concealing the sufferer from the demons he is sure to recover.

## Slavery.

Notwithstanding the introduction of foreign capital, agriculture can scarcely make much progross in a country where the soil is still cultivated by slave labour. Doubtless by concentrating all available hands on the development of colonial produce to the neglect of alimentary plants, certain great planters may produce a deceptive show of agricultural prosperity. But these are precisely the conditions under which the bulk of the population suffers most grievously. The large landowners on the east side of the island are all ardent ohampions of slavery, on the plea that the landed interests of the country will thus be best furthered. The first settlers at Fort Dauphin already began by selling the men captured from their own allies; then, during the two subsequent centuries, $\mathbf{M}_{n}{ }^{-1}$ ngascar became a great depôt where the slave-dealers came to procure servile labour for the pluntations in the Mascarenhas Ar hipelago, on the African coastlands, in Arabia, and Egypt. On the other hand, the Makuas, or Mojambikas, names collectively given to the slaves brought from Africa itself, were landed in thousands on the Sukalava coast. By the Frenoh planters in Mauritius these were commonly called "Marmites," from the native word Maromita, that is, "forders," in allusion to their passage from the mainland across the Mozambique Channel to the west side of Madagascar.

Since the year 1877 the importution of Negroes has been rigorously suppressed. But in the great island itself slavery still exists, and the servile olass is estimated at no less than two-thirds of the whole population, consequently about two millions altogether. The tribes conquered by the Hovas may also be said to be regarded by their political masters as mere gangs of slaves, and are constantly subjected to forced or statute labour ("corvée"). In every tribal community the hereditary slave element itself still attests the original struggle between two classes or hostile races. The orime of poverty is also punished by servitude, in so far as liabilities incurred by the Hova debtors constantly involve loss of personal freedom to the profit of their creditors.

According to Mullens; the average price of a slave in Madagascar is about forty shillings. Some of the grandees possess many thousands; the ecclesiastical dignitaries themselves purchase slaves like ordinary citizens. Hence in their sermons the shepherds of the flock are obliged carefully to avoid all reference to the delicate question of the equal right of all men to freedom.

## Material Proaress.

But notwithstanding all these drawbacks, Madagascar still remains an agricultural region of great value, as the chief source whence the neighbouring Mascarenhas group draws its supply of provisions. Rice is by far the most important cultivated plant, and although the portion of the soil under tillage cannot be estimated at a hundredth part of the total area, the annucl crop, after amply supplying the local demand, contributes a considerable item to the export trade of the country. In some remote provinces, and especially amongst the Ant' Anala people, the
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of some favourable spot are cleared by fire; then in the rainy season the ploughed ground is sown, and the harvest gathered in due courso. Next year this temporary camping-ground is abandoned, and the same rude system of clearance repeated in some neighbouring district.

Round about Tananarivo the irrigated lands laid out as rice-fields are prepared with great carc, and never sown until first well manured. Besides rice, the Malagasy cultivate most of the alimentary plants of the tropical and sub-tropical regions, such as m'mioc, sweet potatoes, yams, ground-nuts, and saonio, which is the same vegetable (arum esculentum) that, under the name of taro, is so widely diffused throughout the Oceunie world. The Europeans have also introduced into the central plateaux the cereals, fruits, and vegetables of the northern hemisphere. The tea shrub has made its appearance on the uplands of Imerina, and for some years planters on the scaboard have turned their attention to the cultivation of cotton, coffee, and sugar.

The central plateaux of Madagascar, being destitute of forests and mostly covered with herbage, are amongst the regions best suited for stock-breeding. There are two species of oxen, the South African, and the zebu, or Indian buffalo, introduced from the East at some unknown opoch, and now numbering many hundred thousands, if not over a million head. The ox is the most attached companion of the Sakalava; no cercmony takes place from which he is excluded, no legend is related in whioh he does not play his part. The Malagasy sheep belongs to the fat-tailed flecey variety. But nearly all the European live-stock thrives equally well on the Madagascar plains, except the horse, which for some unknown reason frequently perishes. The hardy equine breed introduced from Burmah succeeds best. The pig, formerly loathed as an impure animal, is gradually spreading over the whole of the Hova territory, but has not yet penetrated into the Sakalava country, where the people are still slightly affected by Mohammedan influences.

All the European farmyard poultry have already become thoroughly acclimatised amongst the Hovas. Some rising agricultural establishments have begun to cultivate tho Chinese variety of the silkworm, which is fed, as in Europe, on the mulberry-leaf. Some of the indigenous species also yield a stout silken thread.

Under the influence of their European teachers, the Malagasy have already greatly modified the national industries, as shown by the dress of the people and the style of their domestio architecture. Nevertheless, most of the local crafts are still maintained on the old primitive lines. The native weavers make stout silken fabrics of bright colours, as well as cotton and linen stuffs which are used for the national costume. The fibre of the raphin palm is also employed in the preparation of garments, hats and sails. The mats exported from Madagascar, and woven of raphia, papyrus, or other kinds of reeds, are highly esteemed for their strength, durability, and brilliant colours.

The various factories established by Laburde and encouraged by Radama II.,
were all destroyed during the subsequent civil disorders, and the country lacks sufficient internal resources to replace them. The mineral deposits, which are described by the natives as very rich, but which have hitherto been only somewhat superficially surveyed by Europeans, have not yet acquired any ceonomic importance, mining operations having long been severely suppressed by the Hova Government.

Guillermin's researches have shown that Madagascar possesses a coal basin lying on the north-west coast over against Nossi-Bé, and very rich, especially in the Ambodimadiro district on the shores of Passandava Bay. But accurate details are still lacking on the uctual extent of this bisin, on its probable contents and the facilities for working it to advantage. The sands of the Ikopa River are auriferous, and a few gold and copper mines are now being worked for the benefit of the Government.

The Hova Government watches jealously over the commercial interests of the country, maintaining an effective system of custom-houses at all important stations round the coast, and even in the distriets ocoupied by still independent populations. An impost of from 8 to 10 per cent. is levied on all articles of the import and export trade, with the exception of books, stationery, and school furniture, which are admitted freely. A large part of the traffic, especially on the east coast, is carried on with Mauritius and Réunion, which islands require cattle, rice, maize, and provisions of all sorts for the hands employed on the plantations.

The direct trade with Europe is concentrated in the hands of a few wholesale dealers, who introduce woven goods, draperies, hardware, rifles, and other arms, taking in return hides, suet, wax, caoutchoue, copal, which they obtain from the agents stationed in all the seaports round the const and in the large villages of the interior. The United States also takes a large share in the foreign commerce of the island, which is estimated at about $£ 1,200,000$ a year. The French five-frane piece, which here takes the name of "dollar," is the only current coin. It is cut into small fractions, which have to be carefully weighed, so that dealers always carry their scalos with them.

The development of commerce is much obstructed by the bad or deficient communications between the elevated plateaux and the seaports on the coast. Speculators have already proposed to construct railways along the seaboard ind thence inland to the central markets; but meantime the capital itself is connected only by rough tracks with Majanga and Tamatave, the two chief seaports, the former on the west, the latter on the east side of the island.

But the traditional policy of the state at last broke down nnder the pressure of growing trade, and even of the urgent requirements of the administration itself. Tananarivo is already connected by telegraph with its eastern port, Tamatave, while some of the narrow paths are being widened and otherwise improved. At present all merchandise is forwarded from Tananarivo to Tamatave and Majanga by means of Betsimisaraka and other porters, whose loads weigh on an average from a hundred to a hundred and ten pounds. But the transport charges increase enormously in the case of bulky objects, which cannot be reduced to con-
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venient size or weight. As a rulo, a carrier takes about ten days to cover the distance of two hundred miles between the capital and Tamatave, and receives for this journey from twelve to twenty shillinge.

Neither Tannatave nor any of the French stations round about the island are yet connected with the telegraph systems of the outer world. But two regular lines of steamers, corresponding with Mauritius und Réunion, touch at all the chief seaports on the coast.

## Topoorapiy.

The capital of the Hova kingdom, which no doubt is destined soon to become the metropolis of the whole island, has become a large city not so much because of ita central position for trade, as through the centralising tendencies of the Government, concontrating in one place large numbers of offieiuls, courtiers, troops, and slaves. Tananariro, or Antananarivo-that is, Ant' Ananarivo, or " Here the Thousand Villages "-consists in fact of a considerable numbrr of villages and hamleta grouped together within a compuratively smull area.

The population hud already iucreased from ten or twelve thousand in 1820, to double thut number in 1840, and according to the partial statistics prepared by some recent travellers and residents, the present population cannot be much less than a hundred thousand. Within the limita of the city are comprised over twenty thousand structures of all sorts, the houses being generally so small that every wealthy family occupies several.

The original site of Tananarivo crowned the summit of a hill 4,800 feet above sea-level, which atretches north and suuth at a height of about 500 feet above the valley of the lkopa. From this eminence the eye commands an extensive prospect of the river winding away to the west, and of a vast extent of gardens, riee-fields, and villages, dotted over the rolling plains. From the copious springs in the neighbourhood the inhabitants derive an abundant supply of good water.

The crest of the hill, on which stands the royal palace, terminates westwards in a precipitous bluff, which has been called the "Tarpeian Rock" of Tananarivo. From its summit were hurled all those who had the misfortune to incur the wrath of the sovereign. On the west side the slopes are too steep to afford space for the erection of many structures; hence the dwellings are chiefly grouped on the gentler incline of the eastern side of the hill, where all are disposed on artificially levelled terraces, rising tier above tier. Stone and brick are gradually replacing wood as the building materials of the houses, which are generally surmounted by lightning conductors. They all face westwards, either as a protection against the cold winds which set from the sonth-east, or more probably in virtue of some mythical traditions. But they are not disposed in regular lines of streeta or built on any particular plan. Nevertheless the oity is divided into a number of unequal quarters by a few avenues or thoroughfares, the largest of whioh, paved with granite flags, is the via sacra of the royal fumily.

Farther on the boulevard descends into the new town which has sprung up to the north of the ancient city. Beyond this quarter it stretches away betweon the rice-fields for some twelve miles across the plain to be tow: of Ambohimanga, one of the "twolve holy cities," and the most vencric. or all. Ambrhimanga stands on an isoluted gneise ominence which is shaded 1. arecis, and at the foot of

which rise some much-frequented thermal springs. Europeans seldom receive permission to penetrate into this city, cradle of the forefathers of the present dynasty ayd summer residence of the royal princes. Here the court takes up its abode every year for a short period, during which all affairs of state have to be suspended, the whole time being devoted to feasts, sacrifices, and supplications to the deities.
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But besides this "Versailles" of royalty, Tana"arive possesses several other public pleasure-grounds, picturesque villages, lakes, and country seats, surrounded by parks and gardens. At the very gates of the city the waters of the Ikopa are dammed up so as to form a lake encircling an islet which is laid out as a pleasant resort for the public. The river is here confined between strong embaukments which prevent it from overflowing, and which have been attributed to one of the first sovereigns of the Hova dynasty.

A carriage road, eighteen or twenty miles long, leads from Tananarivo to Mantassa, the group of industrial establishments founded by Laborde to the south-east of the capital. Before their destruction these factories turned out all manner of wares-woven goods, hardware, tiles, porcelain, sugar, soap, arms, guns, ammunition, and even electric conductors. The workshops were surrounded by an extensive garden of acclimatisation.

On the central plateau stands another city bearing the name of "capital." This is Fianarantsoa, the chief town of the Betsileo nation, nearly 180 miles due south of Tananarivo, and 4,300 feet above sea-level. It stands on a lofty hill on the western slope of the island, and in the distrist where rise the farthest headstreams of the Mangoka river. In rank, if not in the number of its inhabitants, Fianarantsoa is reckoned as the second city of the realm, and has been selected by the English missionaries as the centre of their operations for all the southern provinces of Madagascar. The little traffic carried on between this place and the sea is all directed towards the east coast, which is three times nearer than the opposite side, but of more difficult access, owing to the rugged character of the highlands and the impetuosity of the mountain torrents.

The chief station occupied by the Hovas in the Ant' Anala territory bears the same name as the holy city of the dominant race. But the fertile region round about this southern Ambohimanga is still far from being completely conquered. The king of the Bara nation, who has his residence on the natural stronghold of Mount Ivohibé, has even hitherto refused to receive the Hova envoys.

The southern harbours on the east coast facing the solitary waters of the Indian Ocean are but little frequented. The produce of this region available for export is not of sufficient value to induce skippers to venture amid the dangerous reefs of the southern waters. Fort Dauphin, which has resumed its ©d Malagasy name of Faradifai, is now nothing more than a military station held by the Hovas at the south-eastern extremity of the island.

Going northwards along the same seaboard, the traveller meets at long intervals a number of other little posts likewise occupied by the ruling people. Such are Ambahi, or Farafanga, in the Ant' Aimoro territory ; Ambohipeno, at the mouth of the Matitanana river, within the northern frontier of the same country ; Masindrano, or Tsiatosiki, on another coast stream flowing from the Betsileo plateau; Mahanoro, a Betsimisuraka town, on a headland which commands an estuary near the mouth of the Onibé, the most copious river on the east side of the island; Vatomandri, which during the blockade of Tamatave had become the port of entry for goods destined for the capitel.

Andovorant,, or the "Slave Market," former capital of the Betsimisaraka kingdom, stands on a tongue of sand amid a labyrinth of coast lagoons. Its position is the most important of any on this seaboard, being the point which

lies uearest to the capital. Hence travellers bound for Tananarivo follow the coast from Tamatave to Andovoranto, and then strike inland from a neighbouring estuary, whence they soon reach the escarpments of the central plateau. This would consequently be an excellent site for a great commercial or naval station, but for the dangerous charaoter of the neighbouring coastlands and the difficult

Betsimisaraka t lagoons. Its he point which
approaches, which render it quite inaccessible to vessels of heary draught. Yet a few Creole traders have already settled at Andovoranto, defying the pestiferous atmosphere of the surrounding swamps and stagnant waters.

Farther north follows a succession of sugar-cane plantations and cocoa-nut groves; but all attempts have been given up to cultivate the coffee shrub, which has been attacked and destroyed by hemileia vastatrix. Near the route leading from Andovoranto to Tananarivo is situated a far-famed and still much-frequented

Fig. 140.-Diego Suarez Bay.
Scale 1: 500,000.

thermal spring, where the Hovas fornerly assembled to perform sanguinary rites.

Tamatave, or Toamsina, the St. Thomas of the early Portuguese navigators, although 60 miles farther from the capital than Andovoranto, is the busiest seaport in the whole of Madagascar. At this spot the coast develops a narrow promontory projecting eastwards and terminating in a coral reef which forms the parting-line between a northern and a. southern bay. The former is further sheltered from the surf and breakers by another barrier reef, which stretches for
several miles seawards to a wooded islet known as the "Isle of Plums." The - largest vessels find commodious anchorage in the Tamatave roadstead, which can be easily reached without crossing any dangerous surf-beaten bars.

The town itself is a small place consisting of depôts, warehouses, cabins, and hovels inhabited by Betsimisarakas, blacks of various origin, and Creoles from the Mascarenhas. These dwellings are embowered in orange, lemon, mango, and cocoanut groves, while towards the west the "battery" and Hova village are masked by a curtain of tall trees. Formerly Tumatave was one of those " graves of Europeans" which are so frequently met in tropical regions. But the local climate has been considerably improved by the draining of some neighbouring marshes, which are now also planted with the fever-dispelling eucalyptus. Tamatave is the chiff outlet for the cattle, rice, and other provisions intended for the Mascarenhas Islands, and for the hides and caoutchouc exported to Europe. The total exchanges average about $£ 200,000$.

North of Tamatave the nearest station is the little-frequented seaport of Foulepointe. Mahavelo, its native name, means "Muci Health," but although salubrious enough for its Botsimisaraka inhabitants, the climate is nearly always fatal to Europeans. Farther north follows the port of Fenerife, or Fenoarico, where vessels come chiefly to take in cargoes of rice. Fenerife is the natural outlet for the produce of the fertile Sihanaka territory and the Maningori valley.

Towards the north-east stretches the long and narrow French island of St. Mary, ihe Nossi Boraha of the natives, which in 1883 had a population of 7,500. The early French writers also give it the name of Nossi Ibrahim, that is, Abraham's Island, and speak of a Jewish colony settled here. Nevertheless, there is nothing Semitic either in the carriage or the features of its present Betsimisaraka inhabitants, who are noted for their fine physical appearance. With its southern dependening, the sslet of Nattes, St. Mary is 30 miles long from south-east to north-west, but so narrow that the whole area scarcely exceeds 60 square miles. Not more than one-fifth of this space is under cultivation, the chief products being cloves an: vanilla. Over fifty thousand palms fringe the coast, on the west side of which stands the port, well-sheltered by the islet of Madame.

Tintingue (Teng-Teng) and the other post on this coast lately occupied by the French have been abandoned, while the older French town of Lonisbourg, founded by the adventurer Beciovski, has been replaced by a Malagasy fort near Maroantsetra. This is the ciief outlet for the caoutchouc of Madagascar, which is yielded by a vahea or liana different from that of the East African species.

On the north-east seaboard occur several ports, euch as Angotsi, or Ng gotsi, with a safe harbour and in a district. yielding the best rice in the whole island; Vohemar, like Angotsi protected by an islet, v. hich forms an excellent port doing a brisk trade in live-stook and other provisions for the Mascarenhas; Luques (Lokia), occupied by the English for a short time after the Napoleonic wars; lastly, at the northern extremity of Madagascar, the great inlet of Antomboka, or Diego Suares, one of those numerous landloeked basins which, like Rio de Jansiro,

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Port Jackson, or Queenstown, are described as "the finest harbour in the world."

By the treaty of 1885 , this inlet was ceded to France, which has made it a harbour of refuge and a victualling station for its navy. The whole basin, about two miles broad, is divided by the islet of Nossi Volane into two secondary harbours, upproached by a channel from 20 to 25 fathoms deep and ramifying in all directions for many miles inland. The south-western branch is no less than

Fig. 141.-Nossi BE.


27 miles long, and most of these creeks are deep and thoroughly sheltered. On the south side, neur the village of Antsiuana, stand the French establishments, completed by groups of hovels largely occupied by runaway slaves. This is tho capital of the French province of Madagascar, which also includes the two islands of St. Mary and Nossi Bé; and although it may never develop a large local trade, it occupies a magnificent strategic position, commanding at once both sides of the great island, as well as the Comoro and Mascarenhas groups. In 1888 steps were taken to found a health resort on one of the crests of Amber Cape,

3,780 feet above the level of the sea. The frontiers of the territory ceded to France round about Diego Suarez have not yet been officially determined.

On the deeply indented north-west coast, the most frequented port lies on the volcanic island of Nossi Bé, which has been occupied by a French garrison since 1841. Larger and more fertile than St. Mary, but now completely treeless, Nossi Bé was occupied by the French on account of the magnificent and perfectly sheltered roadstead at the south side, where it is protected on the east by the regular cone of Nossi Komba, on the south-eust by the Malagasy peninsula of Anfiki, on the west by a group of barrier reefs. The space thus enclosed affords room for the evolutions of hundreds of war-ships. On the north side stands Helloille, the capital, a picturesque little place, which unfortunately suffers from the vicinity of some malarious swamps. On the east side lies Antonoro, an older settlement, inhabited chiefly by half-caste Malagasies, crossed with Arabs and Comoro Islanders. The whites, mostly from the Mascarenhas, are chiefly engaged in superintending the sugar, clove, and vanilla plantations, on which were till recently employed Makua slaves from the African mainland.

The other inhabitants of Nossi Bé are Malagasies, namely, Sakalavas and Betsimisarakas, and the whole population, including the neighbouring islets, has varied from six thousand to sixteen thousand, according to the vicissitudes of wars and revolutions. The local trade, being free from custom house dues, is relatively considerable, averaging from $£ 320,000$ to $£ 350,000$ annually. Nossi Bé, which depends administratively on Diego Suarez, forms a commune with the adjucent islets of Snkatia, Nossi Komba, Nossi Fali, and the curiously compass-shaped Nossi Mitsio. The extinct craters to the north-west of Hellville are flooded with lakelets inhabited by voracious crocodiles.

South of Nossi Bé the busy market of Amhodimadiro occupies the southern extremity of the deep inlet of Passanduva, near the point where the Bavotabe coal mines have recently been opened. Farther south follow other deep and well-sheltered bays, the most frequented of which is the spacious inlet of Bombetok (Ampombitokana); at the entrance of which stands the important seaport of Mojanga (Majunga Madsanga, or "Health Restorer"). The trade of this place is scarcely inferior to that of Tamatave on the east coast, and although it lios at a greater distance from the capital it has the advantage of being situated in the same basin of the river Ikopa, which is navigable for steamers beyond the Betsiboka confluence, and much higher up for canoes. Before 1823, when it was still the capital of an independent Sakalava kingdom, Mojanga was a much larger place than at present, with a population of at least ten thousand, including many Arab traders.

Farther up on the banks of the Ikopa stands the flourishing town of Maroconi ("Crocodileville,") which was also formerly capital of a Sakalava state.: Above the Betsiboka confluence lies the village of Maratanana, in an auriferous alluvial district, which the Governmont has at last allowed to be worked.

Beyond Mojanga follow several other havens and inlets, which, however, are rarely visited by skippers. Here the natural division between the two sections
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of the eastern seaboard is indicated by the bold headland of Cape St. Andrew, beyond which stretches the little-known district of Menubé, fringed by coral reefs and desert islets. The south-west coust, although less provided with good harbours than that of the north-west, has nevertheless some frequented seaports. The most important is Tullear (Tolia or Ankatsanka), on a fine spacious and well-sheltered haven some 12 miles north of the mouth of the Saint Augustine river. The surrounding district, which is remarkably healthy and fertile, yields for export cereals, cattle, wax, and dye-woods; and nearly all the orchillu used in

Fig. 142.-North.Wrgt Coabt of Madagabonr.
Bcale 1 : 4, $800,000$.


France comes from this place. A French resident has recently been stationed at Nossi Be, a small island on the south side of the estuary of the St. Augustine, regularly visited by traders from the Mascarenhas Archipelago.

## Administration.

The Hova Government is practically an absolute despotism, tempered by revoln-. tions of the palace, and diaguised by some constitutional fictions. The sovereign is master, and to him belong the lives, fortunes, and substance of all his subjects.

Before the general acceptance of Christianity, he bore the title of "Visible God," but now he is content to cluim suprene porer " by the grace of God and the will of the people." Formerly he was the high priest of the nation, offered yearly sacrifices to secure the happiness of his people, and in return received from them the first-fruits of the soil. At his accession the courtiers took the "oath of the calf"-that is, after sacrificing one of these animals, they swore by the swords buried in its body that the same fate should overtake themselves whenever disloyal to their sovereign. His name, his image, all objects touched by him, are equally sacred; he alone has a right to the red umbrella, and, as in other Mulay languages, a special form of speech is reserved for tiae ruler. Terror precedes and follows him, and the highest in the land obey in silence at sight of the "silver assegai" held up by an attendant. Till recently officers doomed to death were invited to a banquet, where, after the feast, they drank the poisoned cup with acclamations, in honour of the sender. Condemned nobles received an iron rod, with orders to voluntarily impale themselves; others were required to plunge into quagmires, where they disappeared in the mud; while some were burnt alive. But except in the cuse of slaves and the lower orders, care was taken to shed no blood, as a convincing proof of the royal clemency.

Being omnipotent in principle, the king or the queen, overflowing with the "wisdom of the twelve kings"-that is, of all their ancestry-choose their own successors. Nevertheless, they do not escape from the court intrigues, and ut present the real authority resides in the Prime Minister, husband of the Queen, and a sort of mayor of the palace. Other ministers are named by him, and all have to obey his orders. Even the dignitaries assembled in the kabari, or "great council," do little more than listen to the speech from the throne and signify their approval. On grand occasions, when all the tribes with their chiefs are assembled according to the old feudal right, the minister addresses the multitude, which never fails to give its assent to his propositions.

The andriana, or baronial class, being stationed nearest to the palace and consequently more easily controlled than others, enjoy the least measure of freedom, und cannot even withdraw from the capital except on some special mission. But the old divisions into nobles, citizens, and slaves are being gradually replaced by the social classification according to "honours," which is at once civil and military. The "first hunour" is that of the simple soldier ; but from this it is possible to pass through all the intermediate grades up to the sixteenth, the highest rank in the social system.

The trade in spirits has by recent eaactments been prohibited throughout Imerina, and 4,500 officials have been appointed to enforce the royal decrees, to keep the civil registers, and conduct the regular transfer of property. A penal code, far less rigorous than the old "common law," has been proclaimed, and henceforth the sentence of death is rarely inflicted. The army of "a hundred thousand men," although really comprising not more than thirty thousand, is recruited by a sort of conscription, the men being disbanded after five years' service.

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With the exception of the school teachers, none of the Government officials, not

even the district judges, receive direct salaries. Hence 'they have to live on the 127-sp
revenue of the fiefs granted them by tho liberality of the Government, or on the perquisites derived from the exerci of their judicial functions. Suoh is tho consequent venulity in the adminis l ation of justice, that all verdicte may be said to be knocked down to the highest bidder. On being prosented to the sovereign all are expeeted to offer the hasinn-that is, the tribute of vassalage, generally a piece of gold or silver. His subjects are also held to personal service, and therefore linble to the finompoana, or statute labour.

The proluee of the tithes and poll-tax, as well as the oustoms dues, helong to the king, who is not required to acoount for their disposal. At present the customs in the six chief seaports are held in security for a first loan of $£ 600,000$ raised to pay off the indemnity elaimed by France after the late war., Tho eharges of the protectorat\%, however, represented by the resident at Tannarivo, the viee-resident of Tamatavo and other places, and the controllers of the s. 'toms are defrayed by the Freneh Government.

Christianity ic the official religion, no favour being shown to one seet over unothor. The besopy, or English episcopalian church, represented by the London Missionary Society, has the largest number of adherents, comprising in 1887 three hundred thousand members, four thousand one hundred and fifty preachers, and one thousand two hundred ohurehes. The Roman Catholies number about one hundred thousand. The aew religion was imposed upon the people; just as the enurtiers and inhahitants of the towns were ordered to adopt the Europern garb. They are required under certain penaltios to observe the Sabbath, to assi $\%$ at the services, and join in the prayers for the prosperity of the sovereign. But nciongat the independent populations conversions are rare, and several Sakalava chiefs still oall thes iselves Mohammedans. The pigan feast of the Fandroana, or Bath, celebrated by the wurt in the holy eity of Ambohimanga, has been gradually modified unti. : no little more than a week of general festivities.
$\because$ iontion is compulsory, and when choice is once made of a Protestant or Cundio sehool the pupils can never leave it for another. English and French are taught in the schools, and scientific works have already been translated into Malagasy. Thousands of copies are issued of the local periodicals, but no regular postal service has yet been established, except between the French residencies of Tananarivo and Tamatave.

The central provinces of Imerina, Betsileo, Ant' Ankai, and Ant' Sihanaka, completely subjected to the Hova government, are accurately defined and divided into administrative districts. But in the independent or partly-reduced regions, the districts expand or diminish according to the strength of the garrisons stationed in the military posts. At present the number of provinces is fixed at twenty-two.

## III.-The Comoro Islands.

Lying midway between Madagascar and the African mainland, the Comoro archipelago is equally separated from both by marine abysses some 500 fathoms deep. It comprises four islands with a few islets disposed like satellites round
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about, the whole forming an upheaved volcanic chain stretching about 150 miles in the direction from south-cast and north-west. The Comoros thus belong physically neither to Madagascar nor to Africa, but constitute a distinct group, with partly original flora and fauna, and inhabitants also presenting some distinct features. Ilere the primitive African and Malagasy elements have received their culture, their language and sccial usages mainly from later Arab intruders.

Politically the achipelago belongs to France, which occupied Mayotte in 1841, and the rest of the islunds so recently as 1886. Notwithstanding its small extent the group is of considerable strategic importance, owing to its position in the

Fig. 144.-The Comoro Islands.

middle of the Mozambique Channel and on the west flank of Madagascar. It has a total area of 800 square miles, with a population estimated at about fifty thousand.

The agencies by which the islands have been raised to the surface appear to have been much more energetic in the northern than the southern part of the archipela ${ }_{\mathrm{G}} \mathrm{o}$. Mayotte in the south-east has no summits exceeding 2,000 feet, whereas Anjuan, which with Moheli occupies the centre, rises to a beight of 4,000 feet, and the active volcano of Kartal or Karadalla (Jungu-ja-Dsaha, or "Kettle of Fire "), in the north-western island of Great Comoro, to 8,500 feet. This imposing mountain, with its blackish escarpments towering above the blue waters and fringed with a green wreath of cocoanut palms, presents one of the grandest pic-
tures in the Indian Occan. Occasionally a column of smoke shoots up from the crater, a yawning chasm 500 feet deep and over a mile in eircumference. In 1858 copious lava streams flowed down the western slopes of Kartal, encircling like an island a village perehed on an older eruptive rock. Several other cones, some perfect, some breached, also produce a striking effect with their headlands termiuuting in columnar basalt cliffs.

But besides the ignerus rocks, there are also some granitic and sedimentary formations. In many places the beach, strewn with sandy or shingly lavas mingled with ferruginous ores, is of a bright black and reddish colour, forming a striking contrust with the dazzling white of the neighbouring coral reefs. These corulline masses present great differences of form in the different islands, in Great Comoro and Moheli lying close in shore, while at Mayotte they are disposed in an oval ring round the coast, with openings here and there giving access to shipping. At a certain height above the present sea-level, are seen layers of sand and of shells absolutely identical with those still inhabiting the surrounding waters, and consequently attesting upheaval in relatively recent times.

The seasons are better regulated in the Comoros than in Madagascar, the islands not being large enough greatly to modify the system of atmospheric currents. The dry season, lasting uniformly from May to October, is not very unhealthy for Europeans, thanks to the comparatively low temperature, which oscillates between $68^{\circ}$ and $84^{\circ} \mathrm{F}$. During this period the south-castern tradewinds prevail; daily, however, veering round with the sun to the south and southwest. In October begins the wet and hot season, when the glass ranges from $77^{\circ}$ to $95^{\circ} \mathrm{F}$. and when the north-west trades bring copious rains, causing a discharge of 120 inches and upwards on the slopes of the mountains. At times the currents from opposite quarters neutralise each other, producing either calms or cyelones, which, however, are never so violent as in the Mascarenhas waters.

Despite the excessive rainfall caused by the north-western monsoon, Great Comoro has not a single perennial stream, all the precipitated water disappearing rapidly in the thick deposits of volcanic ashes and scorim covering the surface. In the other islands a few rivulets wind through the verdant valleys.

Such is the fertility of the volcanic soil that, before they were inhabited, the islands were completely covered with a dense forest vegetation; but at present not more than one-sixth of the surface is clothed with large timber. A few forms appear to be indigenous, but the greater part have been introduced either directly by man (European vegetables), or by the marine currents and other natural agencies. During the southern monsoon a local counter-current occasionally causes the upper waters to flow back, generally towards the south, and in this way the seeds of many Malagasy plants have been brought to the archipelago.

From Madagascar also comes the greater part of the insular fauna. Most of the species in the two regions are identical, or at least belong to the same genera. Besides one species of lemur, the group possesses a bat (pteropus comorensis) which ranges thence eastwards to Australia, but is absent from Africa. There is also a species of black parrot allied to a form occurring in Malasia.
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inhabited, the but at present
A few forms either directly other natural it occasionally th, and in this rchipelago. una. Most of le same genera. horensis) which here is also a


The Comoro or Komr group, a name also at one time extended to Madagascar, has been known to the Arab navigators at least since the tenth century, and was also formerly visited by the Persians of Shiraz, who traded with Magdoshu and Kiloa on the African seaboard. During the eally days of Portuguese enterprise, mariners from Lisbon called at Great Comoro. But the first permanent settlers, mostly runaway slaves, came from Madagascar and East Africa, and even from Arabia, forming in the archipelago a mongrel race, which presents all the transitions from the almost pure Semite to the Malagasy and Bantu types. A few Banyan traders bave also been attracted from Bombay; but the bulk of the population, collectively called Ant'Aloch, represents a mixture of diverse African, Arab and Malagasy elements.

The Ant'Aloch islanders are mostly tall, with a yellowish complexion, thick but not pouting lips, high but narrow brow. The hair, naturally crisp or kinky, is usually shaven in the Mussulman fashion; the women also blacken their teeth with betel-ehewing, while many are tattooed and wear a metal button or flower on the nostril in the Hindu style. At Mayotte, where the Malagasy element prevails, the people are of darker colvur, but in the other islands of more Semitic appearance. The natives of Great Comoro are an exceptionally tall and stalwart race, and travel lers speak with admiration of these men, whose robust constitution and freedom from disease are attributed both to their cleanly habits and to the salubrity of the climate.

The Ant'Aloches and dominant Mahorri, or "Moors," are all Mohammedans of mixed descent, who endeavour in all things to conform to the usages and institutions of their Arab teachers. The Sultans draw up their decrees in Arubic although the current speeeh is a variety of Ki-Swaheli mixed with a few Malagasy and numerous South African elements, introduced by Makua and other slaves from the mainland. These slaves still constitute nearly half of the population, although the Sultans have undertaken to abolish slavery.

The French island of Mayotte (Mauté) is three times smaller, but commercially more important, than Great Comoro. The roadstead, protected eastwards by tho islet of Pamanzi, is very deep and spacious enough to accommodate whole fleets. But although it enjcys the advantage of free trade, Mayotte is too small to attract much traffic, and has failed to realise the hopes of those who expected it would become a great mart for Madagascar and the mainland. Besides cocoannts it yields coffee, cotton and especially vanilla, and the planters, chiefly from Mauritius and Réunion, have recently taken to the cultivation of sugar and distillation of rum.

The administration, at first established at Zaudzi, at the wostern extremity of Pamanzi, has been transferred to Mamutzu or Shon, facing it on the east side of Mayotte. But the largest place in the island is $\vec{M}$ Sapere, elose to the hill of like name over a mile farther inland. Since the French annexation the population of Mayotte has increased fourfold, having risen from three thousand three hundred in 1843 to about fourteen thousand in 1888.

Anjuan (Johanna, Nsuani) has always enjoyed a considerable trade as an intermediate station between the Cape and India. The British cruisers employed in the suppression of the slave trade maintained a provision and coaling station
on the ssland, which is the most fertilo of the Comoro group, yielding good crops, especially of sugar. Its Arab sultan resides at $M_{\text {st }}$ mudu, called ulso Anjuan, a sort of medieval fortified town sitnated on the north-west side, and with a population of nearly four thonsamd.

Moheli (Moali), smallest of the Comoros, is also very fertile and abundantly

watered. Its cocoanut, coffee, sugar, vanilla and clove plantations, chiefly owned by English capitulists, form a broad verdant zone round about the capital, Fomboni.

Great Comoro (Nyaziya), although the largest and most populous member of the archipelago, is little cultivated and seldom visited by traders, owing to the absence of water and good havens. The sultan resides at Muroni, a small place situated on a creek on the south west coast.
ing good crops, ulso Anjuan, a with a prpula-
nd abundantly

A geographical dependence of the Comoros ure the reefs running north-enst of Mayotte parullel with Madngasear, and terminating in the little group of unimhbited Giorieuse islets. About $1: 20$ miles finther north lies the coralline gromp of the Coxmoledus, also uninhabited, but elaimed by the English ns in dependency of Mauritius. Under the sumo latitude, but seventy miles to the west, is the larger island of Aldubra, a true atoll divided into several sccondary islets and recfs. Here a few Norwegiun fumilies, ehiofly from Bergen, founded a fishing station in 1879. Aldabra is visited by gigantie turtles and myriads of aquatie birds.

All these islets lying east and north of the Cumoros have a total extent of little over sixty square miles.

## IV.-The Amirantes and Seychellits.

North of Madagascar the main insular axis is continued over 120 miles seawards by a submarine plateau about 900 fathoms deep. Above this plateau rise a few seattered islets separated by a profound trough from the two archipelagoes of tho Amirantes and Seyehelles. All these insular groups belong politically to Great Britain as dependencies of Mauritius.

Frrquhar, the nearest to Madagasear, is not quite uninhabited, a few fishormen mostly from the Mascarenhas having established themselves on the western island of João de Nova. Farther north follow some dangerous recfs, and beyond them the numerous islets of the Amirantes, so named by the Portuguese in honour of the great "Admiral," Vasco de Gama, who discovered them in 1502. Of the whole group, some one hundred and fifty altogether, not more than six are inhabited by settlers from Mauritius and the Seychelles. They rise but a few yarls above sea-level, and are covered with cocoanut groves, and some grassy tracts affording pasturage to a few herds of zebus and shepp.

The Seychelles, or better Sechelles, so nnmed from Moreau de Sechelles, form a group of twenty-nine islets besides a number of insular reefs, nearly all bearing the names of French gentlemen of the eighteenth century. They are mostly disposed in circulur form, as if resting on a submerged atoll about 90 miles in circumference. Jut between the coral formations granit:s rocks identienl with those of Madagascar have cropped out here and there. Suc's are thoso of Mahé (3,200 feet), Praslin (3,000), and Silhouette (2,550). Nahe, the largest, has an area of 50 square miles, nearly half of the whole archipelugo.

Although lying within 300 miles of the equator, these islands are comparatively healthy even for Europeans, the stagnation of air and water being prevented by the alternating trade winds, while the equable temperature, never exceeding $84^{\circ}$ or falling below $78^{\circ} \mathrm{F}$., renders this one of the most delightful climates in the world. Although not entirely free from cyelones, as was at one time supposed, the Soychelles are nevertheless rarely visited by these atmospheric disturbances.

The local flora comprises altogether about three hundred and forty species, of which some sixty are endemic, including three varieties of the pandanus. But the archipelago is especially famous as the home of the celebrated fan-palm (lodoicea

## soutil and east arrica.

Srychellarum), whose fruit, however, ripens only in the two islunds of Iraslin and Curicuse. I'his fruit, consisting of two nuts in a single case, remuins fresh for months, and is thus often borne by the currents to tho coasts of India, and even

us far as Java and other Mulay islands, where it was gathered as a priceless treasure, and supposed to come from the depths of the ocean, hence the name of " sea cocoanut" given to it by seafarers. The wood of the lodoicca is so hard that objects made of it are almost indestructible.

The fauna of the Seychelles is extremely poor, comprising only one speates of mammal not introduced by man. The reptiles and amphibin, till recently including a crocodile, belong, to the same genera as those of Madagasear and the Mascareuhas. The same remark applies to the birds, of which there are fifteon species, and of these thirteen endemic. Insects also are surprisingly rure, but include a so-called "walking leaf" (phyllium siccifolium), so closely resembling a green lea£ that nuturalists spend woeks in hunting for a single specimen.

Fig. 147.-Subxarline Banks of Madioasoar and the Mascarenias.


Foreign plants and animals have mostly been introduced from Mauritius and Réunion, whence have also come the inhabitants of pure or mixed European descent. Hence, although the Seychelles belong to England, the current speech is the French creole patois of Mauritius modified by some English words and expressions. Negroes are also numerous, for the most part captives rescued by the British eruisers from the Arab dhows.

Sufficient tobacco, cacao, coffee, sugar, rico, and other produce are raised for
as a priceless e the name of ea is so hard
the local eonsumption. Gonts also thrive, and are alonost the only domestic minuls. The expmerts are mainly cocomuts muler the form of copruh, wind of late yeurs vanilla, besides tortoise-shell und cloves. This trude, which has lately suffered from a disense of the cocomnt pulm, is chiefly centred in Port Victoria, us the English have remmerl Mathe, on the nemth side of Muhé Island, so designated from the Governor of the Ile de France, who took possession of the Seychelles in 1iti3. Muhe is a port of call for whalers and for the steamers plying between Suez and Maurition.

The Seychelles are administerel from Mauritius, although distant aver 1,000 miles from that coluny. If they were ever geogruphically comected, the intervening lands or islands probably described a great curve south-east of the Seychelles, where the soundings have revealed extensive submarine banks, such as Suya de Mulha, Nuzareth nud others. Towards the sonthern extremity of Nazareth oceur the islets of Caryados or Garayos, called also St. Brendan, like the mysterious land associuted with the legend of the Irish suint of that nume.

The Cargados huve a total area of 13 square miles, and are covered with cocounuts belouging to the people of Muritius. About a dozen hauds are employed in collecting the nuts, preparing the coprab, and euring fish.

Within the vast semicirele of defp waters enclosed by Madagascar, the Amiruntes, the Seychelles, Nazareth, and the Mascarenhas, there also occur a few inlets representing the peaks of mountains rising to the surface from depths of 2,000 futhoms. South of the Seychelles, and beyond Plate Island, a mere clump of palns, follow at a distance of 420 miles the Galegus (Galega or Coifiry), which from their extensive cocoanut forests take the title of the "oil islunds" in common with the Cargados group. In Great Gulega, 12 square miles in extent, a little community of over two hundred Mauritian creoles is occupied in the prepuration of the oil from the cocoanut plantations.

Tromelin Iskuml, about midway between the Cargados and St. Mary of Madagascar, is a mere sundbank rising 15 or 16 feet above the surfuce. On this bank, not more than 150 acres in extent, a slaver was wrecked in 1761, and fifteen years afterwards a vessel, somewhat tardily sent to the rescue, found seven negresses still alive.
e only domentic suhl, und of late hich has lutely Port V'ictoria, "s al, so designuted ho Seycholles in plying between
stant over 1,000 ected, the inter-uth-enst of the o banks, such as n extremity of t. Brendun, like of that nume. re covered with lozen hauds are fish.
Madagascar, the also occur a few from dopths of dd, a mere clump - Cortiry), which nds" in common n extent, a little 1 the preparation
d St. Mury of he surface. On red in 1761, and cue, found seven


## APPENDIX.

## STATISTICAL TABLES.

## ANGOLA.

(PORTUGUESE WEST AFRICAN POSSESSIONS.)
Aren, 3:2,000 square miles ; population, 2,000,000 (?).

## ADMINISTRAIIVE DIVISIONS.

| Distrikts. | $\qquad$ |
| :---: | :---: |
| Zaire | S. Salvador, Mроно Baнin . . . . . . . . . . S. Salvador, pop. 7 io. <br> Kissanga and Noki Delegations, on the Congo. |
|  | Eneojé, Upper Lojé Basin . . . . . . . . . . Eneojé. |
|  | Aınbriz, Lower Lojé Basin . . . . . . . . . . Ambriz, pop. 2,450. <br>  |
|  | Barra do Dande. Lower Dande Basin . |
|  | Gohungo Alto, Upper Bougo Masiu. |
|  | Zenza do Golungo, Lower Beugo Basin |
|  | Loanda, Lower Cuanza Basin . . . . . . . . . Loanda, pop. 14,000 |
|  | Duque de Bragauça, Upper Lı-Calla Basin . . . . . Daque de Bra |
|  | Ambaca, Middle Liu-Calla Basin . . . . . . . Pamia |
| Loanda . | Cazengo, Lower La-Cala Basin . . . . . . . . . Cacullo. Thla Mogongo, Guanza and Kwango Wuterparting |
|  | Malangé, Upper Cuanza Basin . . . . . . . . . Malangé. |
|  | Pungo-Ndongo, right bank Middle Cuanza . . . . Pungo-Ndongo, p. 1,300. |
|  | Cambambe) (Dondo, pop. 2,800. |
|  | Massangano Lower Cuanza Basin . . . Massangano. |
|  | Mushima Lower Cuanza Basin . . . . . . . . M Mashima. |
|  | Calumbo ( Calumbo. |
|  | Cassanjé, Upper Kwango Basin . . . . . . . . Cassanjé. |
|  | Novo Redondo, seaboard south of the Cuvo . . . . . Novo Redondo. |
|  | Egito ${ }^{\text {cola }}$ ( Eyito. |
|  | Catumbella ${ }_{\text {Bonguella }}$ Coastlands . . . . . . . . . . Catumbella. |
| Benguella. | $\left.\begin{array}{l}\text { Bonguella } \\ \text { Dombe Grande }\end{array}\right) \quad\left\{\begin{array}{l}\text { Benguella, pop. 4,500. } \\ \text { Dombe Grande, p. 4,000. }\end{array}\right.$ |
|  | Quillengues, Upper Capororo Basin . . . . . . . . Quillengues. |
|  | Caconda, Upper Cunene Basin . . . . . . . . Caconda. |

Chief Towns. Mossamedes, pop. 5,600.


Loanda. Shipping (1887) : vessels entered and cleared, 722; tonnage, 96,000. Imports, $£ 240,000$; exports, £180,000. Total £420,000.

Ainbriz. Inıports and exports (1887), £190,000.
Mossamedes. Shipping (1884) : vcssels entered and cleared, 55 ; tonnage, 51,000.
Coffee exported from Angola (1883), $£ 118,000$.
Public instruction (1884): schools, 32 with professors, 8 without professors. Attendance 1,178 , of whom five-sixths males.

Postal returns (1883) : letters despatcher, 264,000. Telegrams (1884), 8,900.
Periodicals of all kinds (1886) : 19 (Brito-Aranha).
Electors (1884): 26,598; eligible, 3,260.
Number of officials in Angola (1882), 3,140.

TRIBAL GROUPS IN ANGOLA.


```
Chief Towns.
Capangombé.
Humpa.
Huilla.
Gambos.
Humbé.
du Corvo)
ts £470,000)
5,927
5,035
,,962
```

0. Imports, $£ 240,000$;
1,000.
Attendanee 1,178 , of

## DAMARA AND NAMAQUA LANDS.

german south-west african protectorate.
Area, 360,000 square milos; coastline, 900 miles; population, 236,000.

## MaIN tribal divisions.



## CAPE COLONY

Area, with Transkei, East Griquaiand, and Tembuland .
Population of Cape Colony proper (1885). 333,000 square miles.
" Transkei, East Griqualand, and Tembuland
919,513
332,834
Total . . . 1,252,347
POPULATIONS OF CAPE-COLONY PROPER ACCORDING TO RACES.
wango Basins.

Basin.
go Basin.
d Mossamedes

Provinces.
Midland

Fiscal and Magisterial Districta.
. Graaf-Reinet ; 2. Murrayaburg ; 3. Aberdeen; 4. Beaufort; 5. Prince Albert; 6. Willowmore; 7. Victoria West; 8. Prieska; 9. Fraserburg; 10. Sutherland; 11 Carnarvon; 12. Richmond; 13. Hopotown.
South-Eastern . 1. Albany; 2. Bathurst; 3. Vietoria East; 4. Peddie; 5. Uitonhage; 6. Jansenville; 7. Humanadorp ; 8. Alexandria; 0. Port Elizabeth.
North-Eastern . 1 Fort Beaufort; 2. Stockenstrom; 3. Albert; 4. Somerset Esst; 5. Bedford; 6. Cradock; 7. Steynsburg : 8. Colesherg; 9. Hanover; 10. Middelburg.

Eabtern . . . 1. King William's Town; 2. Stutterheim; 3. Komgha; 4. Eaat London; 5. Queen's Town ; 6. Cathcart ; 7. Tarka ; 8. Aliwaỉ North ; 9. Herschel ; 10. Wodehouse ; 11. Barkly East.

CHIEF TOWNS.


TRADE RETURNS.


SHIPPING.
Vessels entered (1886), 562; tonnage, 785,000. Coastwise 1,213; tonnage, 1,938,000.
Vessels cleared (1886), 565 ; tonnage, 770,000. Coastwise 1,215 ; tonnage, $1,954,000$.
Total shipping (1885), 5,447,000 tons, of which 5,140,000 were British. Fiohing smacks (1884), 335; crew, 1,800 ; oured fish exported, $£ 16,000$.

AGRICULTURAL RETURNS.
Cattle (1875) $1,112,000$.
Sheep ", $10,907,000$.
Goats $\quad 3,065,000$.
Farms ( 1881 ) $16,166,000$, comprising $83,900,000$ acres.
Titles issued ( 1886 ) 1,166 ; alienating $1,033,000$ acres.
Total land alienated to end of $1886,88,700,000$.
Land still undisposed of ( 1886 ), $46,292,000$ acres.
5. Prince Albert ; ; 10. Sutherland; onhage: 6. Jansen-

Esst ; 5. Bedford Middelburg. ondon ; $\overline{\text { on }}$. Queen's 1; 10. Wodehouse;

Total area under cultivation (1875) 580,000 acres
Wheat crop ( 188 i ) $3,554,000$ bushels.
Barley crop ", $1,041,000$ "
Oat crop $\quad, \quad 1,360,000$,
Maize crop ", 2,438,000
Oat-hay crop ,, 214,405, 000 lbs.
Vincyards (1875), 18,000 acres; yield, 4,485,000 gallons of wine.
Total value assessed property (1886), $£ 37,036.000$.
Cape Town. Shipping (1886): 1,400 vessels ( 000 steamers) ; tonnage, $1,076,000$. Total value of exchanges, $£ 2,400,000$.

Port Nolloth. Copper ore exported (1886), £560,000.
Aliwal South. Shipping-(1886) : vessels ontered and cleared, 374 ; tonnage, 656,000. Total value of exchanges, $£ 20,000$

Port Elizabeth. Shipping (1886) : vessels entered and cleared, 891 ; tonnage, 1,568,000. Total value of exchangea, $£ 2,748,000$. Wool exported (1886), 25,000,000 lbs.

Port Alfred. Shipping (1886) : vessels entered and cleared, 117 ; tonnage, 214,000 .
East London. Shipping (1886): vessels entered and cleared, 554 ; tonnage, $1,053,000$. Total value of exchanges, $£ 1,200,000$. Wool exported (1886), $1 \overline{0}, 900,000 \mathrm{lbs}$.

FINANCE.


Chief sources of revenue, customs and railways, each about one-third.
PUBLIC DEBT.


ARMY.


## PUBLIC INSICRUCTION

Aided schools (1886), 1,123. Daily average attendance, 41,600. Total enrolment, 77,000. Higher schools, 4. Students, 266.

Government expenditure for education (1887-8), £94,000. Local expenditure for education (1885), f112,000.

Attendance of whites (1885), 27,000 ; schools, 382 . Attendance of coloured races ( 1885 ), 48,500; sohools, 433.

RELIGION.


## RAILWAYS.

Total mileage of Government lines (1886), 1,599 miles.
private lines (1886), 176 milcs.
Capital expended on railways to 1887, £14,130,000.
Average cost per inile, $£ 8,837$.
Gross receipts ( 1886 ), $£ 1,049,000$; expenses, $£ 647,000$.
Passengers carried (1886), 2,238,000; goods, 313,000 tons.

## POSTAL AND TELEGRAPH SERVICES.

Post offices (1886), 714; revenue, $£ 126,000$; expenditure, $£ 183,000$.
Letters carried (1886), $0,530,000$; newspapers, \& © ., $3,152,000$.
Telegraph effices (1886), 217 ; lines, 4,330 miles.
Messages despatched (1886), 770,500.
Revenue (1886), $£ 48,500$; expenditure, $£ 50,000$.

## CHIEF TRIBAL GROUPS IN CAPE COLONY AND NEIGHBOURING DIS'IRICTS.

San, on Bubimen, north-western distriets, left bank of the Orunge, and in the Kalahari Desert.
Khor-Kiors, or Hettentots, chiefly in wentern parts of Cape Colony, Great and Little Namaqualand, and Griqualand West.

## Main branches of the hottentot race.

Had-Damop, i.e., "True Damas," or Hav-Khorv, i.c., "True Hettentots," called also Hill Damaras and Ova-Zorotu : Damaraland coast range east of the Herero (" Cattle Damara") territory.

Great Namaquas. Geikew, or "Red Men," Oerlam, hilly districta south-east of Walvisch Bay, Topnaar, Walvisch Bay territory.

Litile Namaquag. North-western districts of Cape Colony.
Koranas, preperly Koraqua, Middle and Upper Orange, Vaal and Modder rivers.
Griqua, so called "Bastaards," half-e este Hottentots and Dutch, chiefly in Grinualand Weast.
Gunaqua, or "Buraier Mien,"' towardus east frontier of Cape Colony; nearly extinet.

## GRIQUALAND WEST.

Area, 18,000 square miles ; population (eatimated), 60,000 .

## EIECTORAL AND ADMINISTRATIVE DIVISIONS.

1. Kimberley ; 2. Barkly West; 3. Herbert ; 4. Upper Hay, or Griqua Town. Chief towns: Kimberley (population about 20,000 ), Beacensfield, Griqua Town.

THE GRIQUAIAND DIAMOND FIELDS.

| Mines. |  |  | Extent. |  | Depth. | Diamonds ex'racted, 1870-1867. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kimberley | - | - |  | ares | 450 feet | £ $21,000,000$ |
| De Reers* |  |  | 15 | " | 540 , | £10,000,000 |
| Bultfontein |  |  | 28 | " | 320 " | $\mathbf{8 6 , 0 0 0 , 0 0 0}$ |
| Du Toit's Pan |  |  | 31 | , | 310 , | ¢6,200,000 |

Total yicld of the dry diggings ( $1870-1887$ ), $£ 50,000,000$. Miners (1883): 1, n7\% whites, 11,180 blacks and coloured.

## BECHUANALAND.

Total area of protectorate, 190 to 200,000 square miles. Population, 475,000 to 500,000.
A ea of part annexed, 162,000 square miles. Population (1886), 48,000.
Chief towh and centre of administration, Mafeking.
Estimated revenue (1885), $£ 20,000$; expenditure (made up by grant frem Imperial funds), $\mathbf{6 1 2 0 , 0 0 0}$.

- Deatrived by fre, July, 1888.


## APPENDIX.

## CHIEF TRIBAL DIVISIONS IN BECHUANALAND

Bamaritee, west of the Upper Limpopo, on the north-west frontier of Transvaal.
Batispi, i.e., "Fish People," in the hilly district north of Griqualand West.
Bamasawato, North Bechuanaland, and thence northwards towards the Zambeno ; most powerful of all the Bechuana nations. Capital, Shoshong

Batiano, southernmost of the Bechuana tribes, on north-west fronticr of Gri.jualand West; now mostly absorbed in the Batlapi group.

Bahalono, in the district eomprised between the Molopo River and the tributaries of the Kurunan. Bafatin, in the Gameohopa distriet, watered by a 1. estern affluent of the Limpopo. Bawanketst, in the district of Khanye, Upper Limpopo basin.
Baxwhen, Limpopo basin north of the Bawanketai territory.
Batoana, a branch of the Bamangwatos, on the plains stretching north of Lake Ngami.
Bachwapena, in the hilly distriot north-east of Shoshong.
Basiuxa, east of Shoshong, near the left bank of the Limpopo.
Barlahiari, or Balala, the Bechuanas of the Kalahari Desert.
Masanta, mixed Bechuana and Bushman tribes, Kalahari Desert, hitherto treated as slaves by the
lahari Desert. Little Namaqua-

## BASUTOLAND.

Area, 10,300 square miles. Population (1885), 180,000.
Total exports (188i), $£ 100,000$ : imports, $£ 200,000$
Revenue (1886), £26,550; expenditure, $£ 26,400$.
Schools (1886), 78 ; attendanee, 3,600.
Live-stock : cattle, 217,400 ; sheep, 290,000 ; horses, 35,000 ; swine, 15,000 .

## ADMINISTRATIVE DIVISIONS.



## KAFIRLAND AND PONDOLAND.

Area, 16,000 square miles. Population (1887), over 500,000 . Population of Kafirland (census, 1885), 333000.


## CHIEF TRIBAL DIVISIONS IN KAFIRLAND AND NEIGHBOURING DISTRICTS.

Ama-Kosa (Khosa, Xosa), the ehief Kafir nation, ehiefly in the Trans-Kei distriet.
Qaitras, betweon the Gieat Kui und Bashee Rivers.
Gairas, west of the Koi River ; extinct as an independent nation.
Ama-Finto, about tho Great Fith River, north of the Galeka territory.
Aba-Tembu, more commonly known ae "Tambukies," in Tembuland, north and east of the Fingo and Galeka territories.

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APPENDIX.


Ama-baka $\left.\begin{array}{c}\text { Ama-Xesibe } \\ \text { East Griqua. }\end{array}\right\}$


NATAL.
Area, 21,750 square miles. Population (1886), 442,700.
POPULATION ACCORDING TO RACES.


Total • ADMINISTRATIVE DIVISIONS.



POPULATION OF CHIEF TOWNS (1885).

| Durban | Europeans. $8,900$ | Natives. <br> 4,520 | Hindus and others. $3,710$ | Total. |
| :---: | :---: | :---: | :---: | :---: |
| Pieter Maritzburg . | 8,470 | 3,790 | 1,960 | 4,220 |

VITAL STATISTICS OF THE WHITE POPULATION (1884).
Marriagea . . . . . . . . . . . . 392

Excess of births over deaths . . . . . . . . . ${ }_{876}$

TRADE RETURNS.


## AGRICULTURAL RETURNS.



Sugar crop (1884), 18,770 tons; exported, 11,785 tona.
Tea arop (1885), 31,000 lbs. Tea plantations (1886), 400 acres.
Land under eultivation by natives (1887), about 305,000 acres.
Live Stook (1886) : Cattle, 179,000; sheep, 569,500 ; Angora goats, 89,000; horses, 24,000, owned by Europrans. Cattle, 450,000 ; sheep, 105,000 ; goats, 229,000 ; horses, 26,000 , owued by natives. Land under forest (1880), 166,000 acres.
Land under thorny scrub (1880), 1,842,000 acres.
FINANCE.


RAILWAYS.
Lines open (1887), 220 milea; (1885), 112 miles. Passengers oarried (1885), 565,827. Goods carriel (1885), 102,457 tons. Receipts, $£ 130,000$; expenditure, $£ 143,000$; deficit, $£ 7,000$.

## PUBLIC INSTRUCTION.

Primary and high achools, under Goverament inspection, 50; attendance (1886), 4,050. Native schools, 54 ; attendance, 3,000 .
Schools for Indians, 27 ; attendance, 664.
Public expenditure on sohools (1880), $£ 18,500$.

CHIEF TRIBAI, DIVISIONS IN NATAL AND ITS DEPENDENCIES.

Nots.-Chaka, who created the Zulu military power about the beginning of the present century, was neventh in descent through Kumede, Makeba, Punga, Ndaba, Yama, and Tezengakona, from Zulu, repated founder of the nation. After Chaka, the dynaaty was continued through Dingaan and Panda to Ketch wayo, last ruler of the Zulu empire.

## ZULU, SWAZI, AND TONGA LANDS.

| Area of British Zululand <br> Area of the "New Republic" now included in Transvaal | 8,500 square milea; estimated propulation |  |  |  | 120,000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2,000 | , | " |  | 10,000 |
| Area of Tongaland | 7,000 | " | " |  | 30,000 |
| Area of Swaziland | 2,500 | " | " |  | 80,000 |
|  | 20,000 |  |  |  | 240,000 |

Nore.-Of these debatable lands, the southern portion (British Zululand) is definitively annexed to the colony of Natal; tho so-called "New Republic" has been ceded to Transvaal; Swaziland atill maintains a precarions independence under a native ruler; while according to the latest information (May, 1888) Tongaland, or Amatongaland; has accepted the protection of Great Britain. The Governor of Natal is underatood to have revently concluded a treaty of friendship with Zambila, supreme chief of the Amatonga nation, securing to Great Britain the right of intervention in all the foreign relations of the country, and expressly forbidding the cession of any territory to any foreign power without the consent of England. The whole of Amatongaland would thus appear to be now placed under the suzerainty of Great Britain, notwithatanding the reported recognition of Portuguese supremacy by a queen of the Massuta people in the northern diatrict bordering on Delagoa Bay.

THE ORANGE FREE STATE.
Area, 41,500 quare miles. Population (1880), 133,500.
POPULATION ACCORDING TO RACES (1880).


POPULATION (WHITE) ACCORDING TO RELIGION (1880).


ADMINISTRATIVE DIVISIONS.


Add the Thaba N'Sho (Barolong) territory now annexed, with a population (1SSO) of about 10,000 .

FINANCE.


## TRADE RETURNS.

 Chif Exports ( 1886 ): Wool, 90,000 balea ; diamonds, 90,000 carats, value $£ 150,000$; hides, $£ 26,000$, ostrich feathers, $\mathrm{f10,000}$.

## AGRICULTURAL RETURNS

Number of farms (1881), 6,000, with a total of $23,592,400$ acres. Land under cultivation, 115,000 acres.

Live Stock: Merino sheep, $5,056,000$; goats, 674,000 ; osttle, 465,000; horses, 116,000 ; ostriches, 2,253.

## TRANSVAAL (SOUTH AFRICAN REPUBLIC).

Area (with the "New Republio"), 115,000 square miles. Population (1887), eatimated at from 360,000 to 400,000 and upwards.

APPROXIMATE POPULATION ACCORDING TO RACES (1888).
Boers and Dutch-apenking, nlout 40,000. British and English-speaking, about 30,000. Nativen, varionsly estimated at from 300,000 to $\mathbf{4 0 0 , 0 0 0}$ and upwards.

AiMINISTRATIVE DIV1SIONS.


CHIEF TOWNS WITH ESTIMATED POPULATION (1888).


TRADE RETURNS.
Total exports (1886), £000,000; imports, about $£ 780,000$. Total quantity of gold exported to the ond of $1886, £ 610,000$.
for the first six months of $1887, £ 80,000$.
Capital invested in the Transvaal and Swaziland gold mines (1887), £4,800,000.

CHIEF TRIBAI DIVISIONS IN TRANSVAAI AND BASUTOLAND.

[^50]Barmi, Fant Lydenburg, anuth of the Oliphant River. The Bapeeli arn better known an "Sicoemi's." from the name of the native chief who gave the Boers no much tronble before the Britinh annexation.

## GAZALAND.

(PORTUGUESE POSSESSIONS AND NATIVE TFRRITORY BETWEEN THE LIMPOPO AND ZAMBESE.)
Estimated area of the whole region between Mateheleland and the coast, 112,000 zquare miles.
Approximate population of Gazaland, 500,000 to 600,000 .
Inhambane, average yearly imports and exporta, $\mathbf{£ 6 0 , 0 0 0}$.

## CHIEF TRIBAL GROUPS.

Zulus, here called Umoons and Landins, the ruling nation, settled ehiefly in the hilly districts about the sources of the Buzi River.
$\left.\begin{array}{l}\text { Mandandas } \\ \text { Mandowa }\end{array}\right\}$ on the plains south and south-eant of the Zulua.
Tonoss, akin to the Basutos, the aborigines of Gazaland.
Chobr, or "Bowmen," along the left bank of the Lower Limpopo.
Minoomos, or Northorn Chob!, Inhambane dionrict.
Ma-Kwakwas, on the plains north-west of Inhambane.
Ma-Gwanzas, along the left bank of the Limpopo and its tributaries.
$\mathrm{Ma}_{\mathrm{A}}$-Lonowas, or Ma-Rongwis, north of the Ma-Gwanzas.
Bila-Kulu, towards the Sabi delta.
Hlengas, on the inland plains between the Limpopo and Sabi basins.

K•Tevi
Gwa-Tevi near the Manian Highlandn ; probably the Quiteve of the older writers.
Aba-Thyi)
Notk. -To all thewe triben the term Tonga in commonly applled in a collective sense.

## Zambese and ku-bango basins.

Fintimated area of the whole region, about 800,000 mquare miles.
Approximate population from $4,000,000$ to $\delta, 000,000$.
Entimated Area of the Barotse Empire, 100,000 to 110,000 equare miles.
Approximate population of tho Barotse Frmpire, abont $1,000,000$.
Area of the Zambene Basin
500,000 mquare milea ; probable population $4,000,000$
Ku-Bango and landlocked lakes $\quad 310,000 \quad n \quad n \quad \mathbf{B 0 0 , 0 0 0}$

TRADE OF QUELIMANE.


## CHIEF TRIBAL DIVISIONS.

Gangublas, akin to the Angolan Gunguellas, Upper Ku-Bango and Ku-Ito valleys. Lucnazé, Upper Kwando Basin.
Amhorleas, Ku-Banzo, Ku-Ito, and Kwando valleys.
Mu-Kashekené, Bushmen, Lower Ku-Bango.
Dabico
Ba.Viko
Murosbo
Ra-Najao
Ba-Tuana, a branoh of the Bamangwato Bechuanas, weat slde Lake Ngami.
$\mathrm{Ba}_{\mathrm{A}}-\mathrm{Y}_{\mathrm{kye}}$ or Ba-Kuba, the aborigines of the Lake Ng gami region.
Ba-Lunda, Lobalé and Upper Zambese valleys.
Makololo, a Basuto tribe, founders of the Barotse Empire, Middle Zambese. Extinot.
Bahotne (Uugengé, Lui, Luina), the present dominant race in the Barotse state.
Mamiunda
Mamhoz
Makalaka
Mananja
Mankoya
Masupia
Matunoa
Malaya
The chief nations in the Barotse Empi:e and the Chove Basin.
Mashurvlombine
Mashubia
Matutola
Balibale
Mapinoula
Maies
Madenareana
Matrbele, of mixed Zulu stock, the dominant nation in Matebeleland.
$\left.\begin{array}{l}\text { Makalaka } \\ \text { Mabhona }\end{array}\right\}$ On the waterparting between the Limpopo and the Zambene. Matebeleland.
hi bank of the Zambese, above the Kafukwe Confluence.
Ama-Ziri, low caste tribes (Bushmen?), Matebeleland.

## MOZambique.

Area of Portugueme possensions 80,000 aquare milen: population, finu, an
Area of the whole region, 140,000 squaro miles; population about $1,000,000$.

TRADE RETURNS (1884).
Port of Mozambique : Importa, $£ 124,000$; exports, $£ 08,000$; total, $£ 222,000$. Shipping, 346 vesncla of 45,500 tons. Caoutchouc exported, $\mathbf{£ 5 0 , 0 0 0}$. Population (1887), over 10,000

Pcrt of Ibo (1884) : Imports, $£ 10$,000 ; oxports, $£ 9,500$; total, $£ 24,500$.
FINANCE (1886).
Revenue, $£ 103,500$; expenditure, $£ 154,500$; deflicit, $£ 51,000$.
PUBLIC INSTRUCTION (1883).
Boys' schools, 13; girls' schools, 8 ; total attendanee, 385.
POSTAL RETURNS (1883).
Letters forwarded, 80,000 ; parcela, 38,000 ; telegrams, 26,000 .
ADMINISTRATIVE DIVISIONS OF ALI THE PORTUGUESE EAST AFRICAN POSSESSIONS.


Total area of all the Portuguese East African possessions, about 383,000 squaie mil
Approzitaale population East Airioan possessions, 1,250,000.

CHIEF TRIBAL DIVISIONS.

[^51]Magwanowara north-east ahores of Lake Nyasaa and headmaters of the Rovama.
Wanindi, so-called "Maviti," the region north of the Upper Rovuma.
Makua, the chief nation in the Mozambique territory, between the coast and the headwaters of the Lujenda.

Meno
Mifavant Chief subdivisions of the Makuas.
Mawa, cannibals, southern slopes of the Namuli highlands and along the banks of the Lukugu.
Lomwe, chiefly in the Luria basin, north and north-east of the Namuli highlands.
Yao, or Wa.Hiyao, called also AJawa, in tho region enclosed between the Rovuma and Lujenda.
Mavita, or Matiba, coast district south of the Lower Rovuma, probably akin to the Makonde ou the north side of the sanne river.

## ZANZIBAR.

## german east african protectorate.

Area of the region claimed by the German East African Society Area of the remaining torritory surrendered to German influence

28,000 sq. miles. 123,000

Total area of the future German East African Protectorate
Approximate population $\quad " \quad$. $\quad$. $\quad 151,000$
 " "Memba . . . . . . 365 "
Area of Sultan's territory on the mainland*
Total area of the Sultanate of Zanzibar .
$"$
$"$

210,000
40,000

15,000 (\%)

Capital, Zanzibar ; population (1887) over 100,000
Chicf tnwn on tho mainland, Bagamoyo; population (1887), over 10,000. Annual revenue of the Sultanate, about $£ 220,000$. Army, 1,200 regulars; 2,000 irregulars.

TRADE RETURNS.


Exports to Great Britain (1886), $£ 80,000$; imports from, $£ 126,000$.
Chief exports (1883) : ivory, $£ 215,000$; caoutchouc, $£ 153,000$; 'sesame seed, $£ 13,000$; oloves, $£ 11,000$; skins, $£ 11,000$; orchilla, $£ 10,000$.

Chief imports (1883) : raw and bleached cottons, $£ 46,000$; manufactured gooda, $£ 85,000$.
Shipping of Zanzibar ( 1895 : 124 vessels of 116,000 tons entered, of which 49 of 61,000 tone Rritish; and 1 of 8,000 tons German.

Clove crop of the island of Zanzibar (1884), £210,000.

CHIEF TRIBAL DIVISIONS.
Makonde, north side of tho Rovuma, akin to the Mavihas of the coast distriet.
Makua, Masasi district, akin to the Mozambique Makuas.
$Y_{\text {AO }}$
Wamuera North side of the Upper Rovuma basin.
Wangindo, or Wagindo, oalled also Wali-Huhu, north and north-west of the Makonde territory.
Mahenge, Rnfiji basin between Uranga and Ruaha.
Wanyakanyaka, serfs of the Mahenges.
Wandonde, or Wadondi, Rufiji basin. east of the Mahenge territory.
Wazaramo, powerful nation of mixed origin, between the Rufiji, the Kingani and the Swaheli coast.

* The administration of this territory was surrendered to the German East Afrioan Company in Angust, 1898.
$t$ and the headwaters of

Annual revenue of the

## Total.

£1,580,000
$1,800,000$
$2,020,000$
Q seed, $£ 13,000$; cloves, coods, $\mathbf{£ 8 5 , 0 0 0}$. 49 of 61,000 tans Rritish;
the Makonde territory.

Wakwere
$\left.\begin{array}{l}\text { Wakami } \\ \text { Wakhutu }\end{array}\right\}$ rude hill tribes akin to the Wazaramos, ohiefly about the headwaters of the Kingani. Wakhutu
$\left.\begin{array}{l}\text { Wazenura or Wazbouila Middle and Lower Wami basin. } \\ \text { Wanouru }\end{array}\right\}$
Wadoé, cannibals, formerly in the Wami basin, now scuttered in small groups northwards in the direction of Masailand.

Wasagara, the chief nation in the Usagara highlands.
Wanere, south of the Wasagaras, in the Ruha valley.
Wabena, berfa of the Wahchés.
Wameot
$\left.\begin{array}{l}\text { Wakuoury } \\ \text { Wageja }\end{array}\right\}$ north of the Wasagara territory, towards the frontier of Masailand.
Waoooo, widespread nation on the platean between the Usagara highlands and Unyamezi.
Swaheli (Wa-Swaheli), that is, "Coast People," the Mohammedans of Bantu speech, stretching along the seaboard from Malindi and Mombaz southwards to and beyond the Rufigi.

Wangunya, the Swahelis of the inland of Zanzibar. Their speech, accepted aa the literary standard is widely diffused thronghout East Central Africa.

## MASAILAND.

## (REGION BETWEEN ZANZIBAR AND LAKE VICTORIA NYANZA.)

Estimated area of the British Protectorate, hetween mountains Kenia and Kilima-Njaro, 55,000 square miles.

Approximate population, abont 2,000,000.

## CHIEF TRIBAL DIVISIONS.

Wabhenzi or Wabondri, about the lower course of the Pangani and adjacent eoastlands.
Wasambara, numerous nation, Usambara highlands, west and north of the Washenzi.
Wapare, the hilly distriet north-west of Usambara.
Wanvve, that is, "River People," ehiefly in the islands of the Lower Pangani.
Wataveta, in the wooded distriet between Lake Jipé and Kilima-Njaro.
Wachaos (Shiro, Kibonoto, Mashame, Uru, Kiboaho, Mpokomo, Moshi, Kirua, Kilema, Maranu, Mambe, Mwika, Nsai, Rombo, Useri, Kimangelia), weetern, southern, and eastern slopes of Monnt Kilima-Njaro; akin to the Wasambaras. Watrita, the hilly district east of the Taveta territory.
Wanvika, that is "Lowlanders," on the plains north of the Sambara hills.
Wanioo, a numerous branch of the Wanyikas, on the coast south of Mombaz.
Wadiuuma, akin to the Wanyikas, near the Mombaz district.
Bantu Stock
Dakalo, on the coast north of Mombaz, serfs of the Gullas.
Waboni, Wabanieit, along the shores of Formosa Bay, Bantus of Galla speech.
Waponomo, in the Pokomoni or Tana River basin; northerumost of the Bantu populations on the East African seaboard.
Wakamia or Warimanaao, numerous Bantu nation, on the plains south of Mount Kenia.
Wakikuyu, akin to the Wakambas, sonth and south-west of Mount Kenia.
Mar or Dhaicho, on the plains east and north-east of Kenia, known only by name ; believed to be the northernmost of all the Bantu peoples in this direction.
Wasbegu or Ala, an aboriginal tribe in the wooded distriets between the Usambara and Paré highlands.
Wasilicomo, that is "Dwarfs," an indigenous people said to roam to the west of Kilima-Njaro; not yet visited by any explorer.
Watutwa, Wakara, Wakori, Bantio peoples, along the south-eastern shores of Lake Viotoria Nyanza.

Wakwavi or Wakwafi. The agricultural and semi-civilized seetion of the Masai nation.

Wakwayi.
The Masai proper ( $\mathrm{IL}_{\text {- }}$ Otкон) unsottled and prodatory.
stretching north and west of Mount Kill
Galias of the

Enjemsé, Lake Baringo distrist.
Kosova, Lumbwa, near Kavirondo, cast side Victoria Nyanza.
Arusha, Meruw, Ruva, Nguru, about Mount Kilima-Njaro and thence southwards.

Wakamasia, Waelgeyo, in the Wel-Wei Basin, north-west of Lake Baringo.
Sigirari, Kisongo, Sogonoi, Ngiri, Laitokitok, mainly in the vicinity of Mount Kilimanjaro.
Matumbato, Kaputci, Kinangop, Dogilani, Enguaso, Engishu, in the districts stretching north and west of Mount Kilima-Njaro.

SOMALILAND AND EAST GALLALAND.
Total area of Somaliland and East Gullaland, ovor 400,000 square miles. Population : Somali, about $1,000,000$; East Gallas, 3,000,000 ; total, 4,000,000.

## BRITISH PROTECTORATE: BERBERA AND NORTH COAST.

Estimated area 80,000 square miles; population 30,000 . Exports and imports of Berbera and Bulhar (1885), $\mathbf{5 2 6 0 , 0 0 0}$.

## GERMAN PROTECTORATE: VITULAND.

Area, 5,200 square miles ; approximate population, $30,000(?)$
Stations held by the Sultan of Zanzibar on the Somali coast, Lamu, Kisinayu, Brava, Merka, Magdoshu, Warsheikh. Total area about 500 square miles; approximate population, $\mathbf{2 5 , 0 0 0}$.

CIIIEF DIVISIONS OF THE SOMALI RACE.


## CHIEF DIVISIONS OF THE EASTERN GALLAS.

and thence south

Jake Baringo. vicinity of Mount xu, in the districts by the Somali. tion : Somali, about

## COAST.

wrts of Berbera and

Brava, Merka, Mag;,000.
$\underset{\substack{\text { Estimated } \\ \text { population. }}}{ }$
population.

20,000
25,000

104,000

Jarso, north of the Harrar district.
Nole
$\left.\begin{array}{l}\text { Ala } \\ I_{\text {TTU }}\end{array}\right\}$ about the headstreams and along the upper course of the Webi.
lttu
Enniya, in the basin of the river Errer, main branoh of the Webi of Harrar.
$\left.\begin{array}{l}\text { Anvesi } \\ \text { Jidna }\end{array}\right\}$ south of the Enniya territory.
Arusia
Panianl
, about the head waters and upper course of the Juba.
Bohani or Vuohena $\left\{\begin{array}{c}\text { Ya, Yûl, in tho cxtreme south, reachiug in scattered groups as far as the } \\ \text { neighbourhood of Mount Kenia. }\end{array}\right.$

## SOKOTRA.

Area 1,100 equare miles ; population (1888), 12,000.
Chief towns, Tamarida,Kolessea, Temira.
TRIBAL DIVISIONS.
Saieni
Kishim $\}$ central uplands.
Moxi, eastern district: Kargilin, western district.

## MADAGASCAR.

Area with adjacent islets : 238,000 square miles.
Population variously estimated at from $2,500,000$ to $5,000,000$. Population, according to the most trustworthy estimates, $3,500,000$.

CHIEF TOWNS.

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Antananarivo, the capital |  |  |  |  |  |  |  |  |  |  |
| Population. |  |  |  |  |  |  |  |  |  |  |

## TRADE RETURNS.

Imports ( 1884 ), $£ 123,000$; exports, $£ 175,000$.
Total imports and exports before the war with France, $£ 800,000$.
Exports to Great Britain: 1878, £4, 300 ; 1883, £88,000, 1884, $£ 15,000 ; 1885, £ 10,000$; 1886. £7,000.

Imports from Great Britain : 1878, £22,000; 1880, £50,000; 1884, £1,400; 1885, £6,700; 1886, £52,000.

Conef exports, oaoutohouo, (1884) $£ 12,000$; hemp (1886), $£ 6,000$.
Chief imports ootton goods (1885), £5,000; (1886), £38,000.
Total shipping (1886), 1,200 ships of 260,000 tons burden
Shipping of Tamatave (1887), 200 ships of 60,000 tons.
Trade of Diego Suarez (1887), £52,000.

## RELIGION AND PUBLIC INSTRUCTION.

| Protestants (1886) |  | 350,000; | Roman Catholios | 35,000 |
| :---: | :---: | :---: | :---: | :---: |
| Schools opened (1886) |  | 1,167; | attendance | 151,000 |
| Schools of the London miswions |  | 818 ; | ", | 100,000 |
| Suhools of the Norwegian Missions |  | 117 | " | 28,000 |
| Romen Catholio sohools |  | 191 | ,' | 20,000 |

STANDING ARMY.
About 20,000 , armed with rifles.
CHIEF TRIBAL DIVISIONS.
Hova, the ruling people, province of Imerina.
Betsileo, central plateaux, south of the Hova.
Antanala, central plateaux, south of tho Betsileo.
Bara (Ibara)
Antanossi
Mahafali
Astandrol
Antatsaka
$\left.\begin{array}{l}\text { Antankara } \\ \text { Taiminety }\end{array}\right\}$ northern districts, north of the Hova.
Sakalata
Antifilenenana
Antimenabe Antimamlaka
Antimaraita
Antibueni
Brtsimibaraka
Antaimoro
Antambaboaka
Betanimena
Antanial
Antibilinaka
Taipasy
Taisaka
west coastlands.
$\left.{ }^{1}\right)^{\prime}$

east coastlande.

east coastiands.

## A FEW NOTES ON THE ETHNOLOGY AND DISTRIBUTION OF THE DHFFERENT I'RIBES INHABITING MADAGASCAR.

## Communicated by the Rev. James Siurree.

As little attention has hitherto been directed to this subject, it is diffeult to speak with muoh confidence as to the classification of the Malagany tribes. Our information is at present very fragmentary, so all that can be done as yet must be considered only as tentatire, pending more minute and scientific investigntion.

Broadly speaking, the various races inhabiting Madagasoar may be divided into three ohief gronps, inhabiting respectively the eastern, central, and western portions of the island. Of these, the Betsimisaraka may be taken as the type of the eastern races, the Hova of the central ones, and the Sakalava of the western tribes. Looking at colour and contour of face, hair, \&o., the Hovas certainly appear to be somewhat distinctly marked off from all the other tribes, and their dialect is also different, having a number of hard, firm consonantal sounds in certain words, whereas on the cosst (and also in the south-central provinces) these words cousist almost wholly of vowels. The Hovas alse add a final na, $k a$, and $t r a$, to numbers of words which are only diseyllables in the coast dialects, so that in Hova they are trisyllabie. From the information ro at present possess there seems a greater similarity between all
the coast dialects, east and west, than between any one of them and the Hova. While the dialectio differences ure considerable in various parts of the isiand, there seems no trace of another language from a distinctly different atock. Even in Sakalava, which is somewhat strongly marked off from the ceutral and eastern dialects, there does not appear to be a radical differeuce from the speech of the rest of the island. All round the coast they give a nasal sound to $n$, which is not given by the Hovas, and also a broader sound to the vowels. Thus, $a$, which in Hova is invariably proneunced as oo, has nearly the open sound of our English $o$ in most of the eosest dialects.

Sakalava is a word now used to denote generally all the tribes inhabiting the western side of the island. It is, however, rather a political than a tribal name, as now applied at least. The Sakulaves proper were a amall tribe from the south-west oonst, who made thenselves dominant over the whole of the western peoples. Sakalava therefore now includes, going sonthwards from the northern point of the island: Antanksia, Tsimihetz, Tiboina, Timilanja, Tsimafuna, Antimena, Tifiherensaa, Vezo, Mahafaly, Tandroy, extreme aouth. Besides these there are the Mainty or "black people," oonquered by the Hovas and settled by them in a district north of Imerina. The Mainty are divided into the Manendy, Manisotra, and Tsisrondaly.

Then in the centre are the Hovas. Strange to any, we know lese about their tribal divisions than of some other tribee, probably because the political divivions have acquirel more importance of late yeara. They have six political divisiona, but there are probably three main tribal divisions, viz., the people of Imerina proper, of Vonigongo, and of Imamo. These first have the following divisions: Voromahery, Tsimiamboholuhy, Tsinahafoty, Mandiavato, Marovatana, and prohably others.

South of these are the Betsileo, sometimes called the southern Hovas, but I fancy more nearly allied to the eastern coast tribes. There are tbree main divisions of thesc, the Isandra, Ilalangina, and Iarindrano.

Farther south still are the Bara, divided into numerous tribes. It is difficult to say whether they ought to be classed with the eastern or western races; possibly they are a link between the two.

Then on the east coast are numeroue tribes oommonly called Betsimisaraka. This, however, is hardly correct : the Betsimisaraka do not stretoh all al ng the east coast, and they have never conquered the rest, as did the Sakalava those on the west. Their name seems to have aoquired a prominence only because they live in the neighbourhood of Tamstave and other ports frequented by Europeane.

Going from the north to the south we have the Sihanaks between the two lines of eastorn forest, and to the west and north of them the Zana-tsihanaka, sonth of them the Tanhay or Begaoozano, and then south for several hundred miles numerous tribes of Tanala or forest people, inhabiting the great forest. There are the Tsimanompo, Taivonona, Taisonjo, Zafisoro, Ikongo, and many others among these Tanala.

Then on the coast are the Betsimisaraka, the Betanimena, the Taimoro, the Taifasy, the Tatsimaha, the Taifasy, Taniay, and others.

## NOSSI-BE.

Area, 75,000 acres. Pepulation (1886) 10,000 .
Chief town, Hellville.
JTION OF THE SCAR.
it to speak with muoh 3 at present very fragading more minute and
nto three ehtef groups, sland. Of these, the o central ones, and the o., the Hovas certainly dialect is also different, ne coast (and also in the vas alsc add a final na, s, so that in Hova they re similarity between all

COMORO ISLANDS.
AREA AND POPULA'fion (1887).

| Grest Comaro |  | Aren in m miles. | Population. |
| :---: | :---: | :---: | :---: |
| Moheli . | . | 90 | 20,000 6,000 |
| Anjuan . . . | . . | 150 | 12,000 |
| Mayotte and adjacent islets | . $\cdot$ | 140 | 0,000 |
|  | Total | 820 | 47,000 |

CRIEF TOWNS.
$\left.\begin{array}{l}\text { Mamutsu, in Mayotie. } \\ \text { Fomboni, in Moheli. } \\ \text { Johanna } \\ \text { Pomony } \\ \text { Kitanda in Anjuan. } \\ \text { Muroni }\end{array}\right\}$ in Great Coraoro.

CHIEF TRIBAL DIVISIONS.
Antaloch, the aborigines of the archipelago. Va-Noasiya, in Great Comoro. Mahorri, the dominant clarg.

SEYCHELLES.



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[^0]:    * "Vuyage au Congo et dans l'intérieur de l'Afrique équinoxiale."

[^1]:    $\ddagger$ Rainfall at San-Salvador in 1884, 63 days, with a total discharge of 36 inohes.

[^2]:    90-Ar

[^3]:    - Revenue of the Province of Angola in 1834 :-Sule of slaves, $£ 20,000$, or four-fifths of the whole; other revenues, $£ 4,000$, or one-fifth of the whole.

[^4]:    * Griesbach, Quarterly Journal of the Ceological Society, May, 1871.

[^5]:    - Through the Kalahari Desert, p. 417.

[^6]:    - Alexander, An Expedition of Discovery into the Interior of Africa.

[^7]:    - Alexander, An Expedition of Discovery into the Interior of Africa.

[^8]:    - Meeting of the Anthropological Institute, Februnry 14th, 1888.

[^9]:    *Léon Mechnikov, Manuscript Notes; Adolph Bastian, Ethnologische Forschungen.

[^10]:    - J. Carlyle, South Africa and its Missionary Fields.

[^11]:    - Von Hübner, Aoross the British Empire.

[^12]:    - Von Hubner, op. cit.

[^13]:    * Yield in France in the exceptionally good year 1875, 670 gallons per hectare of $2 \frac{1}{3}$ acres ; in the uverage year, 1883, 400 gallons; in the bai year, 1886, 310 gallons.
    $\dagger$ P. D. Hndi. John Noble's Cape of Good Hope.

[^14]:    *The Ba-Hlapi, Batlaping, Bachapin, Matohapees, Maatjaping of various writers.

[^15]:    * Livingotone, Last Jomrnals.

[^16]:    "John Sanderson, "Stone Implements of Natal," Anthropological Jourwal. .

[^17]:    - Anthony Trollope, South Africa.

[^18]:    * Charles Marvin, English Africa, p. 7.

[^19]:    * Marvin, np. cit., p. 17.

[^20]:    * Lrowne and O'Donnel, Scottish Geographical Magazine for November, 1887.

[^21]:    *Saint Vincent Erakine, Journal of the Royal Geographical Socieiy, 1875.

[^22]:    - J. Mackenzie, Scottish Geographical Magazine, June, 1887.

[^23]:    - From Benguella to the Territory of Lacea, vol. i., p. 93.

[^24]:    * Comparative areas of the great African lakes and of the largest lacustrine basins in other continents: Victoria Nyanza, 26,000 square miles: Tanganyika, 15,000; Nyassa, 12,000; Lake Superior (America), 33,000; Baikal (Asiu), 14,000; Ladoga (Europe), 7,000.

[^25]:    * Temperature at Bandawe, on the west side of Nyassa, $11^{\circ} 4^{\prime}$ S. latitude: mean for November, hottent month, $85^{\circ} \mathrm{F}$.; May, coldest month. $60^{\circ}$; extreme heat, $99^{\circ}$; extreme cold, $54^{\circ}$. Mean temperature at Tete, $16^{\circ} 10^{\prime}$ S. latitude, $62^{\circ}$ F.: mean for November hottest month, $83^{\circ}$; July, coldest month, $72^{\circ} \mathrm{F}$.

[^26]:    - Chapman, Travelo into the Interior of South Africa.

[^27]:    * W. M. Kerr, The Nar Interior, i. p. 104.

[^28]:    - Procoodinge of the Royal Geographioal Sociely, Maroh, 1888, p. 164.

[^29]:    * Towards the Mountaine of lhe Moon, p. 173.

[^30]:    - Temperature of the west coast of Africa, $72^{\circ} \mathrm{F}$. ; temperature of the east coast of Africa, $80^{\circ} \mathrm{F}$.

[^31]:    * Mean temperature of Zanzibar as recorded for four years, $82^{\circ} \mathrm{F}$.; for March (hottest month), $84^{\circ}$; for July (coldest mouth), $77^{\circ}$; number of rainy days, 120 ; total rainfall, 60 inches ; rainfall in 1859, 170 inches.

[^32]:    -The Kilima-Njaro Expedition, p. 38.

[^33]:    *Through Masailand, p 332.

[^34]:    *Through Masailand, p. 510.

[^35]:    - Wild Tribes of the Sudan, p. 90.

[^36]:    * 9,500 feet, according to Haggenmacker.

[^37]:    * November 28th, at night, $68^{\circ}$ F. April 2nd during the day, $88^{\circ}$ to $90^{\circ}$ F.

[^38]:    * Stature of the Somali according to Paulitschke's measurements: Habr Awal tribe, 6 feet 2 inches ; Issa tribe, 5 feet 11 inches; Gadibursi tribe, 5 feet 10 inches.
    $\dagger$ Proceedinge of the Royal Geographical Society, October, 1885.

[^39]:    - Histoire de la grande Ile de Madagascar.

[^40]:    * Jowrnal of the Royal Geographical Society, 1877.

[^41]:    - Nature, March 4, 1886.

[^42]:    - Baron, Antananarivn Annval, 1887.
    $\dagger$ Comparative Antiquity of Continents; Geographical Distribution of Animals; Island Lifo.

[^43]:    - Hartrmenna, Madagasoar wnd dio Insein Soychollen.

[^44]:    - North-east Madagascar.
    + Sibree, The Great African Island.

[^45]:    "Cook, $A$ Voyage to the Pacifce."

    + Rev. James Sibree, Antananarive Ann:al, 1887.

[^46]:    - Max Leclerc ; A. Walen, Antananarivo Annual, 1883.
    + So Jörgensen oxplains the word, whioh others interpret in the sense of "Anarchiste" or "Rebels."
    $\ddagger$ Memoire of the Anthropological Society, 1877.

[^47]:    - Flacourt, Histoire de Madagasoar.

[^48]:    - The Antananarieo Annual and Modagascar Magazine, a learned, soientifio, and literary publication, has regularly appeared for many years in the capital. It is written in English, chiefly by the members of the London Missionary Society, but entirely set up and printed by native craftsmen, on whose skill and intelligenee it reflects much credit. The first number was issued in 1875 under the editorship of the Rev, Jaines Sibret, by whom our knowledge of the ialaud and its inhabitants has been greatly onlarged. -Editor.

[^49]:    '126-A

[^50]:    Batlapi, south-west eomer of Transvaal.
    Barolono ), east frontier of Dechuanaland.
    Bakatla, West Transvaal, between Motueni and Marioo.
    Bahlokoa
    Bakialaka West Zoutpansberg and thence southwards.
    Bavenda
    Baboetla, East Zoutpansberg district.
    Baroka, on the plains beyond the Drakenberg range.
    Baromarulana, north of Zoutpansberg.
    Bapo
    Bapori Scattered tribes, generally along east bank of the Limpopo.
    Bapiki $\}$
    Batle
    Maowamba Bahranowr $^{\text {Man }}$ "The "Knobnoses" of the Dutch and English settlers; along both banks of the $\left.\begin{array}{l}\text { Bahienowr } \\ \text { Bahlukwa }\end{array}\right\}$ Middle Limpopo.

[^51]:    Matambere, right bank of the Rovuma and its inland.
    Manyanja, about the Fovuma and Lujenda oonflimence.

