

Our Newest Colony

being an account of British East Africa and its
possibilities as a new land for settlement.

A land where the out-crowded and
heavily burdened tax-payer of
the older civilization may
seek a more simple
and yet brighter
life.

RY

A. G. ANDERSON.

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PRINTER'S NOTE.

This book has been printed, bound and published within British East

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TO

SIR PERCY GIROUARD,

K.C.M.G., D.S.O., R.E.

(Governor of British East Africa.)

AS A TRIBUTE AND APPRECIATION

of His Excellency's unceasing efforts to bring prosper to the doors of the Colonists of our newest 'Colony

May 1910.

In publishing "Our Newest Colony" I hope to lessen my labours in replying to the very great number of enquiries for information which I have been receiving from all parts of the world during the past few years.

British East Africa, which I have—theoretically if not practically—wrongly termed a "Colony" has attracted a great deal of attention among intending Colonists, hence the numerous enquiries received.

I believe and hope the following chapters will give all that general information which any Reader, who is seeking a new Home, is desirous of obtaining before making a definite decision.

There have been many distinguished visitors
"Our Newest Colony" during the past few
ars and in this Introductory Note I propose
quote from the speeches made by some of
a most distinguished among them—speeches
made during one or another period of their
visits.

The Right Hon. Joseph Chamberlain, who visited British East Africa un-officially, when on his famous journey to South Africa after the Anglo-Boer war, said:

"I have learnt at school, and have always "thought that a tropical climate was associated "with a heavy hot atmosphere, where it was "very difficult for Europeans to even breathe, "but my visit here has dispelled that illusion. "When we reached the high level up-country "it was very difficult to realise that we were "not on the Sussex Downs in the height of a "prefect summer.

"The beautiful plains we saw, studded "here and there with coppices, were very "typical of the finest parklands of the "old country. It was a perfect climate. "We were very much struck by the bonny "English children we saw, who had been born "in this country, and I strongly recommend "Sir Charles* to gather a few of them together "and take them home and exhibit them, as it "would be the greatest and best advertisement "for this grand country.

Sir Charles Eliot, Commissioner of British East Africa 1900-1904.

"Then the game we saw is simply beyond "description. The enormous herds on the "plains are far too great to enumerate. "This country is a grand one in every way "and the possibilities of cultivation, We have seen and enjoyed "unlimited. "splendid English fruit vegetables and"grown here, and, seeing you have the "Railway, all that is necessary is a popula-"tion and traffic to ensure your future. This "country I have no hesitation in saying will "one day be one of the greatest and best "Colonies of the British Empire."

H. R. H. the Duke of Connaught, K. G., when replying to Settlers' Addresses said:

"The Settlers of this country I think have "a great future before them, but the beginning "is always the most difficult. I am greatly "taken with this country, which will, I think, "certainly go ahead, with good administration.

"In my all too short but interesting journey in this country to Lake Victoria Nyanza, "I have become convinced of the great possibilities of the Protectorate and truly realize that this country has become an emporium of trade between Nations and that

"there is a great future in front of you all."

The Right Hon. Winston Churchill, P. C., who has written an account of his visit in the "Strand" Magazine, spoke well of what he saw: to quote his words:

"When I think of the very small portion of "the territories which I have already been "able to visit: when I reflect upon the "magnificent country which stretches from "here northwards towards the great mountain "of Kenia; and when I think of the rich red "soil; of the abundant streams of running "water; of the coolness of the air; of the "fertility and verdure and beauty of the scene "which is exhibited to the eye of the traveller; "I am bound to say that there are not only "regions in this country which can be "compared with South Africa or with India, "but which challenge comparison with the "fairest regions of Europe, and with the most "prosperous and beautiful tracts on the whole "surface of the globe.

"I believe in this great region of East "Africa and Uganda—because united they "must for all time inevitably be; if not "administratively for the present.

"I believe that there is room for all, and I do
"not think that for a hundred years to come
"any question or difficulty of finding sufficient
"room upon the surface of the East Africa
"and Uganda Protectorates for those who
"wish honestly to live there and develop the
"natural resources, is likely to arise.

"We must not expect that Nature will will"ingly surrender the profligacy of chaos for the
"trammels of civilization. The work may be
"slow, and it will be painful, and although we
"may accelerate it—and we mean to accele"rate it by every means in our power—it
"would be a great mistake if we were rashly
"to attempt to crowd by artificial means in
"this country either a European or an Asiatic
"population for which at present the country
"is not ready.

"The East Africa Protectorate has been thrown open to British settlement, and the settlers who are here, who come under the law of the land, must ever be a dear and precious charge upon the responsibility of the administration of the country. It is the earnest desire of His Majesty's Government, I say it without hesitation, to help and support the settlers who are in this

"country grappling with the great difficulties which always are opposed to those who have to make the beginnings and starts in a new country. We must remember that the country is still in the pioneer stage. People who come here must expect to rough it. They cannot expect to have the luxuries of Downing Street and the comforts of Whitewhall.

"They must accept the proposition as it is; which is, that they have on hand, both officials and unofficials, the making of a great thing, and they must live in any shed or shanty—shamba is I believe the local term—which they may came across whilst they are engaged in that elevating work:—"

Mr. Cathcart Wason, M. P., himself at one time a successful Colonist, takes a great interest in "Our Newest Colony." He said at Nairobi during the present year:

"Perhaps some of you here may think that the progress of East Africa has not been sufficiently rapid, but to me, visiting after five years, but a moment of your history, the progress is wonderful, and it would be difficult to describe what has been done and

"what certainly will be done, without incur"ring the reproach of being a dreamer of
"dreams, and a dweller in fairy land, and
"historian of fairy tales. It seems indisput"able that in a few short years your export of
"sound Merino Wool will be considerable,
"that wheat growing is a sure success, and
"in addition to those great essentials you
"have luxuriant coffee, potatoes, maize, beans,
"fibre, rubber, ostriches and products too
"numerous to mention:—"

Col. Theodore Roosevelt, ex-President of the United States and expert Backwoodsman, was enchanted with the country. Speaking to a gathering of Colonists he expressed the opinion which is set forth on 'the cover of this book. He also said:

"Not only have I had a thoroughly good "time but I have been immensely interested "in this country and its possibilities as an abode "for white men. I think few people outside "of Africa realize that there is here in Africa "under the Equator a real whiteman's country. "Before I came, people told me that white "children would not do well here; but I have "visited the home of settler after settler, "especially of those from South Africa, both

"British and Dutch, where I saw large families of children of every age who had never been out of the country and were as sturdy as anyone could wish to see them.

"At Kijabe, among the missionaries, I saw children and young men and women who had grown up in Africa, not having left it for a decade, and who yet were as healthy as possible. The problem here, (Highlands) is wholly different from what it is in the coast regions or in the far interior, where the country must always be essentially a black or brown or yellow man's country, where the chief part played by the white man must primarily be one of supervision in the especial interest of the backward race.

"Here, where we are now, the greatest need is to help white settlement. Of course, the settlers must be of the right type. They must be of tough fibre they must achieve and conquer. The frontier is no place for weak and shiftless people, and the submerged tenth offers exactly the type of persons who cannot prosper in a new country. But the same kind of man who did well when he went to the Far West, to

"the Rocky Mountains and the Great Plains, "thirty years ago, can do well here. From sugar and cotton to wheat and wool, apples and strawberries, you grow almost everything, and I believe that one of the feats which in the future will be especially held to the credit of the white race during the last decade, is the building of the Uganda Railway. You have thereby made a permanent highway between fertile mid-Africa with its genuinely tropical character, and the ocean.

"I believe this country has a great agricul"tural and industrial future; and meanwhile,
"it occupies a unique position as the most
"attractive playground in the world, at least
"to people who possess the tastes of most of
"us here present. Your task is difficult of
"course, but the task of building up a new
"country is always difficult, and you are
"entitled to the heartiest support and
"encouragement.

"Most certainly there are excellent open-"ings for the capitalist here. Ample indu-"cement should be offered him to come, "you cannot expect him to come unless; "but you must not be horrified if he makes

"money. Steer clear of the corruptionist and do not promise too much. Do not make things out better than they are. Treat the Capitalist well for it is in your own interest —decency pays. Men of means can do invaluable work here; there can be no more useful citizen than a settler of means, as for example Lord Delamere,* who pioneers the way for the small farmers who cannot themselves make the experiments he makes, by which they will profit—"

"The founder of a good bank, the man "who starts an electric or mining or manufacturing plant, is a public benefactor, and his reward should be ample. Yet I hope you will always keep in mind that a real white man's country can only be built up by making the opportunities favourable for the actual home makers, the actual settlers, the multitude of men who do not expect to make great fortunes but who do expect, as the reward of hard work, to build comfortable homes for themselves and their families and to see their children grow up fit and able to inherit the land after them.

The Right Hon'ble Lord Delamere owns and farms large estates in the Njoro District.

"It is the home-maker, the actual settler, "not the speculator, who should be encouraged. "The prime need is for settlers who will make "this country their permanent home and "think of it as such; and it is on every "account desirable that the largest possible "proportion of these men should live on farms "which they themselves own, and make their "living from the soil:—"

With the words of these responsible and able men before me, surely I am justified in publishing this book, the object of which is to encourage our present Colonists and to guide those contemplating settling amongst us.

Mombasa, British East Africa.

THE AUTHOR.

PART I. GENERALLY DESCRIPTIVE.

CHAPTER I

As can be expected in a Country where the lands lie at such diverse elevations the climate is various. The greatest extremes are to be met with between Elburgon, where the blackberry ripens to prefection, and the Coast lands, where the mango tree bears its world famous fruits.

At Elburgon, on the Sotik, and the Uasin Gishu Highlands, the climate is admirable. Here the whiteman and his descendants may live without fear of deterioration—provided they always respect the sun, which beats somewhat fiercely at midday, even at elevations of 9,000 ft. above the sea. At night frost is not unknown and even during midsummer blankets are needed in the early hours of the morning.

From N'joro to Nairobi the climate leaves little to be desired; a change once a year to a lower elevation is desirable but not essential to health. From Nairobi to the Coast Hills is a somewhat trying area. The climate in

these regions excepting on the Machakos and Bura Hills is no better, if no worse, than in the neighbourhood of Rome in Southern Italy.

From the Coast Hills to the sea the climate improves again. During the summer months the temperature varies gradually from 89° Fahr. at midday (in the shade) to 70° Fahr. at midnight. Between June and October the thermometer rarely registers over 80° in the shade during the hottest part of the day, the evenings being cool; in favourably situated houses the night breezes are even cold.

There are no special precautions necessary for the whiteman to exercise in the Highlands. Properly helmeted he may be out and about in the open air the whole day, and every day. In the Lowlands, however, it is advisable to keep within shade during the midday hours. In no portion of the Country is sitting out in the open after sundown a sound practice. Spirits may be taken in moderation after six in the evening but malt liquors have generally an ill effect as they are apt to create a sluggish liver.

Up to the present time the White Colonist has enjoyed immunity from disease to a remarkable extent. The death rate is low, and

HEALTH

apart from a non-malignant type of Malaria; occasional cases of pneumonia and liver abscesses; the Health Authorities have little else to report. Pneumonia generally arises through the patient relaxing the ordinary precautions he would take in the climate to which he is accustomed; it is just as necessary in British East Africa to change clothing after a rain soaking as it is in other countries. Abscesses are frequently due either to carelessness in eating and drinking, or physical inactivity. Malaria, however, is an indigenous disease. definitely proved beyond possible dispute that Malaria is a disease introduced to the blood of animal life by a mosquito—the anopheles species being alone capable of causing infection. But Quinine taken internally, or injected, is a cure. In Mombasa the disease becomes less prevalent every year and it will be stamped out in the near future as effectually as the Yellow Fever—a much more serious ailment—has been stamped out of other countries. The mosquito breeds only in still water and some of the Colonists by clearing the bush and trees from the immediate neighbourhood of

their dwellings and by exercising careful vigilance over their servants have driven the noxious insect from their midst. It is a noteable fact that whereas one lowland Colonist finds a mosquito net at night an essential, his more careful neighbour, perhaps less than a mile away, can sleep unprotected without fear.

The expenses of living need be no greater than in Europe. Wines and Spirits, and Tobacco in all its forms, are as cheap as in England. Other manufactured imported articles (except those admitted Duty free) cost from twenty to thirty per cent. more than in London. This does not apply to clothing for white drill and khaki suits, made to measure, can be purchased in the towns at from ten to fifteen shillings a suit. Flannel suits average thirty shillings and a well-made tweed suit of good material seldom costs more than forty shillings. Native House servants' wages run to anything from six shillings to thirty shillings a month. A native cook generally asks twenty five shillings a month but will often be content with less.

There are at present outside of Township areas no rates and taxes other than the

HOMESTEADS

indirect taxes on the oversea goods which pass through the Customs.

The Housing problem is a simple one. In Mombasa, the houses are erected from the local coral rock and roofed with tiles or corrugated iron. The timber used is imported teak from India, or fir wood from Scandinavia. In Nairobi, the houses are built with local limestone, or with imported timber and corrugated iron.

In the country—on the Homesteads and the Plantations—the Colonists build largely to suit their own fancy. The most popular form at the Coast is the one which has been in use among the Arabs and Natives from time immemorial. The walls are first built up with a network of stout mangrove poles and then the intervening spaces are filled with clay. The roof is covered with the plaited leaves of the cocoanut palm which afford admirable protection from both sun and rain. It is customary to add the windows and doors,-made by native carpenters from local hard-woods-after the house is otherwise completed and the whole, when whitewashed inside and out, conveys a pleasant combination of solidity and comfort. The average price of

a five roomed house, forty two feet by thirty feet, built in this style, is from forty to fifty pounds. There is a wattle and daub style of building much favoured by the small farmer in the Highlands which is, while very inexpensive, very comfortable; the more wealthy Highland Farmer, however, generally builds in stone.

Educational facilities are receiving the attention of the Administration and sums are annually set aside to deal with this difficult The distance between families, problem. to-day, is a very formidable barrier but with the closer settlement of the future the problem will be more easily solved. are to be Schools at the Uasin Gishu, Nakuru, Nairobi and Mombasa, and the Catholic Fathers have established a Boarding establishment at the Convent on the Nairobi Hills at Kikuyu, the charges averaging about twentyfour pounds a year per child. In Mombasa the same Mission has erected handsome stone buildings to be utilized for educational purposes.

Christianity is spreading peaceful good tidings throughout the whole Colony. The Church Missionary Society, with its hundred

SOCIAL LIFE

workers under the Bishop of Mombasa; the Catholic Missions conducted by the Fathers and lay Brothers and Sisters, of the Roman Catholic Faith under the Bishop of Zanzibar; the Presbyterian, Wesleyan, Dutch Reformed and American Churches are all represented by their own people.

Where Settlers are more numerous there are Cathedrals, Churches and Chapels: Where Settlers are far distant, Priests and Ministers willingly visit them at their Homestead.

Social life differs but little from that found elsewhere in British Colonies. In the towns there are Social Clubs where membership is open generally to all who keep within the bounds of the proprieties and throughout the Country the unbounded hospitality, so pleasant a feature in Colonial life, is much in evidence—even in the remotest Districts.

Football, Cricket, Tennis, Hockey, Polo and Golf Clubs are established institutions in the larger towns and indeed, wherever half-adozen Colonists are gathered together, one or other of the many games which delight the Englishman's heart are enjoyed.

On many of the greater plains the shooting

unequalled in the Empire-possibly is unequalled the world over. Royal Princes and Rulers have shot over these vast preserves; the latest Sportsmen to be attracted being ex-President Roosevelt, the leading sportsman on the American continent, and H. R. H. the Duke of Connaught. The Game Laws are The Colonist may shoot all game on his own land on payment of a £3 licence. On payment of £2, a licence can be obtained entitling the holder to a fortnight's shooting but a £10 licence, however, is demanded before, he is admitted to the delights of shooting at large throughout the year. shooting offers excellent sport no licence being necessary: snipe, guineafowl, partridge, bustards, pigeons, and doves abound. Nairobi, there is a Hunt, with kennels housing nine couples, and hunting the jackal is a favourite sport of those in the neighbourhood.

The Government of the 'Colony' is carried out on the usual lines pertaining in Crown Colonies. A Governor, under the direction of H. M. Secretary of State for the Colonies, is the Chief Officer. He is granted wide powers. He is advised by an Executive

GOVERNMENT

Council, a Board composed of several leading members of the local Civil Service. The Laws are, however, framed by a Legislative Council, a Legislative Body having as a majority Heads of Government Departments and as a minority, Colonists nominated by H. M. the King, on the advice of the Governor. All Bills passed by the Legislative Council are, however, subject to the approval of H. M's. Ministers before becoming Law.

The Government Departments are divided into those that deal with Finance, Justice, Health, Civil Administration and Agriculture. The latter Department is divided into three Divisions, a general Agricultural Division, a Livestock and Scientific Division and an Economic Plants Division. Each of these Divisions, which are under the direct guidance of an able and experienced Director, have been established solely to hold out a helping hand to the Colonist and advise him in his difficulties.

The Health Department controls the Hospitals and the Dispensaries which are located in different Districts, thus the majority of the Colonists have the benefit of Medical assistance which is in some cases

given free of any charge. The further extension of this Department rests solely on increased settlement.

CHAPTER II

Trade in 'Our Newest Colony' is on the increase. The bulk of our Imports come from the United Kingdom and the bulk of of our Exports go to America, France and Germany. The principal goods imported are for the use of the Natives-cotton cloth holding the field against all others: and glass beads, is a good second. The imported goods such as provisions, building material, agricultural implements, iron and steel, spirits, tobacco, boots and shoes and general merchandise are chiefly purchased from Great Britain: Cottons from America, Bombay and the United Kingdom: Rice is imported almost exclusively from India. Russia and Austria find the local markets holding out an increasing demand for Flour. In the near future it will be found that much of the cotton cloth, rice, flour and household soap, at present imported, will be supplanted by local production.

The leading exports at present are ivory,

hides and skins, the greater portion of which eventually reach America, although, both Bombay and London take ivory in substantial quantity.

Chillies, groundnuts, sim-sim, rubber and copra (dried cocoanut) are chiefly bought in the Continental Markets, but all markets compete for the local beeswax and mangrove bark, both of which articles are affording an increasing trade. The exports of the immediate are: rubber, cotton, wool, ostrich feathers, oil seeds, maize, wheat, coffee, sisal hemp, bacon and cheese. Frozen meat, on a moderate scale, is also a hopeful export for the future.

Other important enterprises are also within the range of practical probabilities. The building of feeder lines to the main trunk of the Uganda Railway will follow with the ordinary march of events. The mosth favoured enterprise in this connection, to-day, is the proposal to link up the thickly populated Districts around Fort Hall. Fort Hall is the chief Government Station for the Province of Kenia, a Province named after the great mountain 'Kenia' (18,000 feet high, on the slopes of which, according to a

RAILWAY EXTENSION

Government Forestry expert, fourteen millions pounds sterling worth of timber awaits exportation.

It is possible it will be found that this feeder line will be better served by electrical power than by steam, as a great force for the production of electricity is lying dormant at the Rureta water-falls, falls now under lease to the Electrical Power Company of Nairobi.

A Branch line to mount Kilimanjaro (22,160 ft.) is also under consideration, and more than one engineering scheme has been put forward to connect up the cotton growing Districts around the Sabaki River with the fine harbour at Kilifi.

The enterprise, however, which would have a more direct beneficial influence on "Our Newest Colony" than any other proposed undertaking is the suggested extension of the Uganda Railway yet another 200 miles to Lake Albert Nyanza. The proposed Railway would not be continuous. It would commence at Entebbe, the capital of Uganda. This Port is connected with Port Florence, the present Railway terminus, by several modern

twin screw electrically lighted cargo and passenger steamers. After leaving Entebbe the rails would proceed to Lake Chioga a distance of seventy miles. Chioga provides a navigable waterway to Karu-. ma from which place to the Murchison Falls fifty further miles of rails would be necessary to connect up with that point on the river Nile which allows a continuous navigable water way to Nimule. Another 100 miles of rails and Gondokoro is brought into rapid communication at the one end with Mombasa harbour on the Indian Ocean, and at the other with the Mediterranean Sea. is estimated that £4,000 a mile—half the mileage cost of the Uganda Railway-would cover the expenses of the whole undertaking. Experts are of the opinion that if this undertaking is carried through the present traffic receipts of the Uganda Railway would be doubled and the proportionate working expenses about halved.

Commerce is largely divided up, as in other countries, among the Wholesale and Retail business houses. As each year goes by the wholesale and retail Traders are sticking more closely to their respective legitimate

TRADE

businesses, interfering with each other as little as possible. Wholesale Houses do not at present hold stocks, the system of business adopted by them is chiefly confined to purchasing for the Retailer at ninety days credit, on an agreed commission. With the increased trade which is certainly assured, as the Colony becomes more and more under civilized control, wholesale Merchants will find it both necessary and desirable to carry stocks.

The Import Houses are invariably also Export Houses at one and the same time. Much of the present wholesale trade is in the hands of German trading firms although British, French and Italian merchants offer very keen competition. The German trader is quite as ready to accept a customer's order necessitating the purchase of Foreign goods as to accept an order entailing purchases being made from his own country; the Germans have established themselves in "Our Newest Colony" to trade, and outside considerations are not allowed to over-rule their business instincts.

The Retail Trade is largely in the hands of British Indian traders, except in the larger

towns where European and Goanese shopkeepers carry larger stocks. It is only within quite recent years any Retail shop-keeper has confined himself to one line of business. All shop-keepers in the past have considered it advisable to be 'Jacks of all Trades.' At Nairobi, however, several store-keepers have recently established themselves in special lines; Boot and Shoe stores, Ironmongery stores, Chemists and Druggists, Grocers, wine and spirit Merchants, Tobacconists, Haberdashery and Gentlemen's and Ladies' outfitting Establishments are now common features in the Retail trade. Mombasa traders are also just beginning to realize the benefit of specializing.

Factories are few and far between and those which do exist are chiefly confined to the manufacture of oils, cotton ginning, grain milling, and to the making of boot and shoes. The day is not far distant when leather tanning, cotton spinning, fruit and fish canning, match making and other industries will be established. Electricity Companies are established at Nairobi and at Mombasa and electrical Power is to hand and only awaits

PROSPECTING

opportunities of being further brought into active utility.

Minerals have been discovered, but no actual development has been yet undertaken. Silver lead, copper and soda deposits, manganese and iron ores, have been reported on but await the Capitalist who is willing to take the risks of ascertaining the payable value (or otherwise) of the discoveries.

A new Act to make provision for the better carrying on of prospecting and mining operations, is before the Authorities and it is hoped, through the generous conditions of its clauses, further attention will be attracted towards the mineral deposits of the Colony.

Irrigation enterprises are being freely discussed in connection with the local agricultural prospects; these prospective enterprises include the fertilizing of the plains around Maungu and the control of Tana and Juba Rivers with the view of making them still more serviceable to the needs of mankind.

CHAPTER III.

As already stated in Chapter II the three principal markets of the world with which our Newest Colony is in close touch are the markets of Europe, India and America. With India and Europe a general exchange of commodities produced or manufactured by these countries, and by British East Africa, is continually taking place and in ever increasing volume. The European Market is communicated with through several Steamship Companies; two British Companies—the British Indian Steam Navigation Company and the Union-Castle Line-a German Company—the German East African Line, familiarly known as the D.O.A.L. and a French Company—the Messageries Mari-These lines terminate at London. times. Hamburg and Marseilles respectively. D.O.A.L. and Union-Castle carry on periodical sailings round the cape. The Indian ocean transport service combines steamships of the British and German Companies and a

COAST PORTS

flotilla of sailing ships of the large Dhow type, which also keep up a local connection with the Persian Gulf and Zanzibar. reach the American market transhipment at Aden or at one or another Mediterranean Port is necessary. There are other markets with which business is done but on a lesser scale. Norway and Sweden send sailing vessels with timber and the South African markets are open through the facilities offered by the German Shipping Company—which Company sends ships right around the African Continent varying the course of the journey via the Suez Canal and via the Atlantic, alternately—and by the Union-Castle Line.

With three or four navigable Ports along the Coast, provision is also being made for a sea-service transport. The coasting vessel, the property of the Administration which kept up, at more or less regular intervals, communication between the Ports of Shimoni, Mombasa, Kilifi, Malindi, Lamu and Kismayu, has been sold. This service is consequently temporarily suspended pending the purchase by the Government of a suitable vessel.

As regards sea freights the future tendency

will be towards reduction, even at the present time the Companies are all open to enter into negotiations for reduction of freight on large quantities. To and from India the freights are comparatively low and therefore are not likely to be much reduced for some years to come.

Railway transport is, except in few instances, by no means unreasonable. The downward freights from the great Lake to the ports of Kilindini and Mombasa compare most favourably with similar rates in any other part of the world.

Country grown produce is especially well-favoured; for instance Potatoes in bulk—ten tons—can be railed from Kikuyu to Mombasa for about 7 shillings and six pence per ton and the distance covered is 342 miles. Ground-nuts and alike produce can be railed from Port Florence, the chief Port on the Lake Victoria Nyanza, to Mombasa (584 miles) for £2-5-4 per ton. Grain can be railed at even a cheaper rate. From Njoro, the most promising grain centre, to Kilindini or Mombasa the charge for a ten ton waggon load is only £9-10, equivalent to nineteen shillings a ton or about a half-penny per ton

RAILWAY RATES

per mile. Raw cotton and ginned and baled cotton is also carried at special rates. These rates are likely to be still further reduced in the immediate future.

Traffic from the Coast upwards, however, is on a much higher scale. To convey a case of whisky for example, which is booked at a special rate, costs from Mombasa to Nairobi, a distance of 327 miles, about five shillings. Groceries the same distance nearly £12 per ton. On the other hand agricultural Implements such as ploughs, cultivators, harrows, reapers, rakes, thrashers, balers, dairy utensils, incubators, bee-hives and the like are carried to Nairobi from the Coast for £1-7-2 per ton weight.

On a recent occasion several thousand valuable imported sheep were railed 400 miles for about five shillings per head, but even on this difficult traffic an almost immediate reduction of fifty per cent. is not improbable.

Off the Railway areas transport is chiefly conducted by Porters, each Porter carrying about 60 lbs. a distance from twelve to fifteen miles a day and at an average cost of 4d. Porters engaged at say seven shillings a month,

will transport one ton of goods fifteen miles at a cost of a few shillings and this after allowing for an overseer in charge of the party. At the Coast this figure must be doubled when calculating the cost of human transport. Waggon and motor waggon transport is gradually finding openings and in the course of time this system of transport will entirely supersede the present method of human load carrying.

Taken as a whole the passenger transport on the Uganda Railway is on a satisfactory footing. Several eight-wheel bogie passenger carriages have been recently added to the rolling stock. These carriages, which run quite smoothly despite the metre gauge, are fitted up for use at night and are divided into compartments to sleep two, three or four persons; a lavatory is attached to each compartment. At various stations along the line the Railway have refreshment rooms where breakfast, luncheon, tea and dinner can be had at a moderate figure.

No Passenger need find the journey dull; the landscape from the train is at times without parrallel on any other railway. In addition to magnificent views of lakes,

TRANSPORT

mountains and valleys, veritable zoological gardens where gazelle, antelopes, zebras and all the other animals of the African plains can be seen in their natural habitat.

The fares on the Railway are based on so much a mile, according to class. First Class Passengers pay 3d. per mile. Second, Intermediate and Third class passengers 1½d; 1d.; and ½d. respectively: return Tickets in every class excepting the Third pay a fare and a half. Overweight luggage is charged extra but when despatched by goods train the tax is not a heavy one. There are several concessions made to travellers; for instance, an invalid seeking a change at a Hill station, or by the sea, travels a double journey for a single fare.

Incoming Settlers have several routes open to them. If they start from the near East they may travel to Aden by any of the numerous Steamship Companies which make this Port, a Port of call, and can tranship there to any of the East African Liners. From South African Ports several steamships a month sail to Mombasa and from London, Hamburg, Marseilles, or Naples from three to four Liners monthly. Most of the Liners are

fitted with twin screws and all are fitted up as becomes modern passenger vessels. Class fares from Europe to Mombasa average about forty pounds sterling. Second Class about thirty pounds and Third Class from sixteen to twenty pounds. Passengers wishing to round the Cape on one of the large Liners must pay a higher fare. The fares from South Africa to Mombasa average First, Second and Third Classes £19-5-0, £13-0-0 and £6-5-0 respectively and from Bombaythe transhipment Port for the Far East-the fares are £20-0-0. £11-0-0 and £3-6-8. Incomers meet with no difficulties on landing provided they are in a position to prove to the Port authorities that they are in possession of fifty pounds sterling and can thereby meet the conditions of the Immigration Act: an Act enacted to prevent the Colony becoming overloaded with persons of no visible means of support. This proof of ownership is not necessary if a Settler is landing in the Colony to take up an engagement previously secured.

Kilindini Harbour, which could accommodate H. M. Channel Fleet, is one of the finest harbours on the African Coast and considerable improvements are being effected providing

POSTAL

for further trade facilities. A sea-wall has been constructed along the outer face of the existing pier from which a number of powerful cranes operate import and export cargo from lighters alongside. As trade progresses this sea-wall will be extended another forty feet or so when ships, even those of deep draught, will be able to moor alongside instead of lying out in mid-stream.

Our Newest Colony is quite up-to-date in its Postal arrangements; on the whole there is little to complain of and when complaints are justifiable it is generally found the fault complained of is due to the ignorance, rather than the wilfulness, of one or another of the lower-scale clerks. The very large majority of Postal servants are Indians there being much Indian correspondence to deal with and to replace these servants with more experienced men would mean no doubt a better service but one very much curtailed in its ramifications. In a new country of scattered settlement not yet out of its swaddling clothes finance plays a very large part in Service matters and it is considered the Public is better served by a large number of branch Post Offices, fairly well conducted, than by a

comparatively small number free from complaint. There are altogether about forty-five Post Offices and at thirty six of those Offices telegraphic facilities are open to the Public. The rates for telegrams are two pence per word. A Parcel Post service is also open at the majority of the Post Offices, and a three pound avoirdupois weight parcel can be despatched from one end of the country to the other for one shilling. Parcels weighing up to eleven pounds are accepted and there are special rules for parcels sent oversea. An Inland Money Order service has also been instituted and arrangements have been completed by which the Post Master General can carry on this side of postal business with many foreign countries.

The currency in force is chiefly a silver currency: the rupee with a fixed value of one shilling and four pence is the principal medium for exchange. The Rupee in divided into one hundred cents for the convenience of accounting. The English gold sovereign is also a current medium of exchange, the exchange value being fifteen rupees. The Government has recently issued Bearer paper Notes for five, ten, twenty, fifty, one hundred,

BANKING

five hundred and one thousand rupees value; these notes are proving a great convenience to trade generally. Banking facilities are provided in the two principal townships and Colonists can surely depend on financial assistance when the circumstances warrant. It is probable that before 1910 the Post Master General will have a Post Office Savings Bank in full working order, this will relieve the present Banks of many of their unprofitable small accounts and generally introduce thrift among the poorer classes.

CHAPTER IV.

The 'Civil Service' is governed by 'Rules' issued from time to time from H. M. Colonial Office, these are supplemented by local regulations authorised by the Governor. The leading official positions, including senior clerkships, are held by Britishers; artisanships and junior clerkships chiefly by British Indians and Portuguese Indians, respectively. The Administrative Department principally with the collection of Revenue from the outstations and the fulfilment of ordinary magisterial duties. Generally the Department is expected to step into any gap which may not be covered by any other Department of the Service. No particular qualifications are necessary to obtain an appointment, any average Britisher with a reasonably sound education at his back, and willing to turn his hand to whatever may turn up, has as good a chance of obtaining an appointment the next man. In the old days too little care was exercised in making appointments,

CIVIL SERVICE

not only to this particular Department but to all other Departments, with the result that the administration has here and there a very able conscientious official considerably hampered by a brother servant of somewhat meagre attainments. To avoid this, as far as possible, in the future a system of examination and instruction has been recently introduced which no doubt will be extended. When this extension has been reached the Civil Service in our Newest Colony will become the equal of our various other Colonial Services and keen competition will set in to secure appointments.

The present system of examination is as follows:—

Candidates selected for appointments to the Administrative, Native Affairs, Secretariat and Treasury Departments will be required to attend a course of instruction in England before embarkation. Three courses, each of three months' duration, will in future be held in London in the months of January, May and September of each year. The subjects in which instruction will be given include:— (1) Tropical hygiene and public health; (2) Criminal law, evidence and procedure (civil

and criminal); (3) Government accounts and accounting; (4) Tropical economic products, their occurrence, value and commercial uses, and the nature and uses of African minerals.

Selected candidates will further be supplied with a copy of the annual Blue-book report and with a list of other publications, official or otherwise, with which they will be advised to make themselves familiar before taking up their duties. At the conclusion of the course. a candidate will be required to satisfy the lecturer that he has given careful and intelligent attention to the instruction on the various subjects as a condition of his final selection for appointment. During their attendance at the course, selected candidates will receive an inclusive allowance at the rate of £150 per annum, out of which they will be required to defray their personal expenses and the cost of such text books and materials as may be necessary.

The first position which a young applicant can obtain in the Civil Administrative Department is that of an Assistant District Officer. The salary begins at £250 per annum, plus quarters, and by diligence and careful attention to his duties he may rise—more

APPOINTMENTS

particularly if he shows any aptitude for organisation—to the position of Senior Commissioner who draws £700 per annum. At the Treasury a clerk also begins at £250 and in the course of time he may reach the top of the 'tree,' becoming Treasurer, a post carrying an annual increment of £700. For the Customs Department only applicants who have some practical experience are accepted. An Inspector begins at £200 per annum; The Chief and Deputy Chief draw £700 and £400 respectively.

On the Uganda Railway only trained Railway men are employed. White permanent-way Inspectors begin at £240: Assistant Engineers and Assistant Traffic Managers at £350: The Traffic Manager, Locomotive Superintendent and General Manager receive £850, £900 and £2,000 respectively. On the Lake Steamers twelve Marine Officers are at present employed whose pay varies from £240 a year to £600.

The Medical Department offers positions ranging from dispensers to specialists. A dispenser receives £200, a medical Officer begins at £400 and reaches £500 after five years service. A Medical Officer is permitted

to take up private practice, which, however, excepting within the principal townships, is inconsiderable. A medical man holding a Diploma of Public Health, in addition to his other qualifications, generally receives special consideration. Nurses trained in European Hospitals are well paid. They receive £150 a year with a uniform allowance of £10 per annum and free Board and Lodging. Their work is at present light.

The Post Office Department has openings for young postal clerks and telegraphists, with salaries commencing at £160 per annum rising by £8 to £200. European Post Masters start at £200 and stop at £360. The salaries of the Superintendent of Telegraphs and the Post-Master General are £600, and £650, a year.

There are not many posts in the Agricultural Department, but those, which are open, are open to whitemen. In the Department of Forests, Rangers begin with salaries of about £150 a year each: Assistant Conservators of Forests receive £300 and the Chief Conservator £800 annually, rising by £50 to £1,000. The Survey Department has occasionally openings for Land Surveyors. Junior Staff Surveyors

APPOINTMENTS

receive £250—£280: Senior Staff Surveyors £300—340: District Surveyors £360 to £400 and the Director of Surveys £800 per annum. The Public Works Department is a large Department and offers a good field to the professional Engineer. White overseers receive £200: The Assistant Engineers £250—£300: Executive Engineers £350—£400 and the Commissioner £1,000 per annum.

Positions in the Legal Department are open to qualified Solicitors or Barristers. lowest position is that of a Deputy Registrar of the High Court who receives £250, rising by £15 per annum to £350. A Magistrate is paid £400, a junior Judge £600, and the Principal Judge £900. The present Principal Judge entered the Service as a Registrar thus any official of this Department can look forward, with some expectation, of eventually reaching a judgeship. It may be reasonably expected, however, that the salary of the judges will be raised in due proportion to the responsibility of their position and when this expectation is fulfilled it is probable the leading experienced practicising members of the local Bar will accept seats on the Bench.

The Police Force offers a field of employment

for experienced officers. It will be many years before untrained men will be accepted. White Constables and Troopers receive £120 a year, Inspectors, £180 rising by £10 to £250, Assistant District Superintendents £250, rising by £15 to £400; The Inspector General's salary is fixed at £600 a year.

It must be understood in calculating the relative values of these salaries free quarters, or an allowance in lieu thereof, is additional, and a long leave with oversea passenger money is granted every twenty-four months.

Before making application to the Colonial Office for service in our 'Newest Colony' applicants should bear in mind that in many Departments Officials have to occupy outstations, in a few instances not too healthy, and in many instances they are cut off from civilized intercourse for many months together. The Service cannot be recommended to any young man whose character is not yet formed; or if formed, it is found to be of a weak moral nature.

A member of the Service is debarred from holding any direct or indirect interest in the Colony beyond that of his own position, he

CONDITIONS

therefore cannot invest his savings in the country of his adoption. This harsh rule, is modified by the single exception that an official is permitted to hold as much as three acres of land in the township in which he is stationed and he may build a residence thereon for his own use. Even this privilege is denied if the official is at the time occupying Government quarters.

CHAPTER V.

The Natives of our 'Newest Colony' are much the same as other Natives of the African Continent and their domestic customs vary but little in general principle. Women folk are regarded as the personal property of the men folk; some tribes value them a little higher than their ordinary chattles, others again at a little less. The Married Woman's Property Act suddenly applied to the East African Natives would mean a complete revolution of the social structure. Generally all tribes recognize the personal individual value of their women, both in the marriage and labour markets. purchase price paid by the intended husband for a wife fluctuates in accordance with supply and demand. In some instances a young girl can be purchased for a couple of goats in other instances fifty goats with two or three heifers thrown in, would fail to clinch the bargain. Purchased from a business point of view, as opposed to the sentimental, the price paid depends on the local value of manual

NATIVE CUSTOMS

labour. Polygamy is almost universal; Polyandry exists, but only among one or two small tribes.

Woman being regarded in this light accounts for the rather peculiar criminal codes prevailing in force among the majority of the Native tribes. A husband, who has purchased a wife from sentimental reasons, considers her being tampered with by a tribal brother as a very grave crime only to be condoned by the offending party paying him in compensation more than what he originally bought her for. The gravity of the crime of murder depends largely on the individual value of the victim. The murderer must make up the loss of the victim to the victim's family or nearest relations, i.e., in addition to any other punishment which may be meted out by those in authority.

Personal injury, whether done accidentally or wilfully, always carries with it an obligation on the 'doer' of the injury to pay compensation to the injured's family—the loss of any limb which reduces the injured's capacity for manual labour needs to be heavily compensated. In some cases if the injurer has not the necessary wherewithal to

pay the damage it is incumbent upon him to work it out under the instructions of the head of the family of the person injured.

All natives, following one or another religious faith, realize the certainty of a Supreme Being whom they worship in divers and strange fashions. The great majority believe in evil spirits. Some tribes suspect trees as harbourers of devils others again certain wild animals, the hyena in particular. Even those natives who have come into quite close contact with the whiteman still keep up their fear for the evil spirits. They will build themselves little 'josses,' or sacrifice a white or black fowl, in order to drive evil spirits away.

They do not overburden themselves with clothes. In many parts of the Lake lands they dispense with clothing altogether and strangely enough the folk who dress the least are the most moral. A native who dresses up to the latest fashions is frequently one of doubtful character. Moderation in dress is sought after by the great majority and in this they are encouraged by all well wishers.

Taken as a whole all East African natives show a lack of energy and unreliability and

SERVANTS

consequently need very considerable consideration from the Whiteman. There are occasional exceptions to this general character: intelligent, truthful, energetic and faithful natives exist—a fact in itself a hopeful sign for the future of the race.

It is hoped by many that the African native will in course of centuries develop almost to the equal of the whiteman. Some think it chiefly depends on the governing races as to how far this hope may be realized.

Female house servants are unknown with the exception of one or two here and there who take on the duties of nurses to children. In South Africa, where the power of Islam is very much less than in Central Africa, white capped and muslin aproned native women are a feature of the European household. The Islamic teaching tends to place the male on a very much higher social scale than his sister. The majority of Mohammedans prefer to keep their women folk in places apart, where the ordinary male stranger has no entry and when the wives of such Mohammedans take an airing they are expected to hide their features from

the "rude" gaze of the general public. It is, however, only a question of time when female house servants will be the rule and male house-boys the exception: A condition of things in every possible way desirable.

The wages of House Servants run from ten shillings to eighteen shillings a month, without board and lodging.

As an agricultural labourer the East African Native is, at present, worthy of his hire. asks and receives a fair wage. In the Highlands the wages paid to labourers average from four shillings to five shillings per month, at the Coast from ten shillings to fifteen shillings per month and in the Lake District from three to four shillings. Masai and Nandi make very fair shepherds, being members of pastoral tribes: the Wakavirondo are good agriculturists, indeed, it may be accepted as a maxim that three East African natives, after a few months tuition, can do an amount of work equal to that of one white labourer in Europe: possibly two Wanyamwezi would run the European closely. Asour 'Newest Colony' becomes more generally colonized, the less known tribes, such as the Embu, Wateita, Waboni and Galla will enter

LABOUR

the labour market; this will tend to keep the price of labour at a fair level. On the Coastlands it is probable coolie labour from abroad will compete with the local supply.

With the exception of the Wanyamwezi, the male native is not addicted to really hard anything labour, he prefers to leave approaching hard work to his womenfolk. He sees no wrong in following this inclination: he has purchased his women in the open market; he is prepared to fight for them if occasion necessitates and he sees strength in the argument that more expected of him. A methodical system of Administration, and other influences, are at work which will in the course of time automatically force a change of view. Petty warfares and family feuds are dying out and as a result the male population is keeping pace with the ordinary local average of human increase. Within the course of a very few years there will not be enough women, on the present basis of polygamous living, to go round: the price of wives will rise to a comparatively high figure and even provided the necessary property was forthcoming without the male working to obtain it, he will not be able to

purchase sufficient number of working wives to feed himself, themselves and their progeny.

Thus the law of averages, taking no account of the spreading influence of Christianity, will be alone sufficient to force the male into the fields of manual labour.

The successful direction of native labour is one of the most important arts which the new Colonist has to learn. Few men are born with the natural gift of being able to direct their fellow men, but many can learn from experience a reasonably skilful way of doing To be successful with native labour a master must take into consideration the natural defects from which the native suffers. he must bear in mind his inclinations, and his disinclinations, and he must never vary from the path of straight forwardness by the smallest breadth. A native will forgive harshness in his master but he will never forget what he believes to be a breach of faith. He does not quite understand generosity in the ordinary acceptance of the word, he is apt to regard it as a weakness and a weakness in a whiteman appears to him as contemptible, however, he quite understands straight dealing and looks for it even if it at times bears the

LABOUR

complexion of severity. With experience any Britisher can work his labourers successfully; there are possibilities in this respect even with the man, who before he starts to learn, regards the native as "a useless beast;" such a master learns by degrees that the 'beast' is only useless when uselessly handled.

CHAPTER VI.

The Lands of our newest 'Colony' have been divided for administrative purposes into two groups, the Lowlands—comprising land situated at elevations commencing from the sea shore to four thousand feet elevation—and the Highlands—commencing from four thousand feet and reaching to nine thousand feet above the sea level. For descriptive purposes, as will be seen hereafter, such a division is totally inadequate.

The Coastlands proper which in area perhaps form a comparatively small proportion of the Lowland group have given rise to the title 'a Planter's Paradise.' It is, however, but a comparatively moderate proportion again of these lands which justly deserve so striking a description. It is those lands only which are bounded by the Coast Hills on the West, the Sabaki River on the North, the Umba River on the South and on the East by the sea, comprising a total area of about one million acres of which less

COAST LANDS

than one eighth are at present cultivated.

The soils adjoining the sea-border are mainly composed of alluvial sands enriched with decayed vegetable matter pocketed amongst coral rag. Here the cocoanut. unfertilized, and often much neglected, by native cultivators, flourishes to a degree unequalled in any other portion of the. British Empire. From this region of coral rag to the foot of the Coast Hills the soils are deep and rich and include black soils and sandy loams with clays beneath. Here all the tropical fruits, cereals, oil seeds and rubbers luxuriate. On the Coast Hills again is found a combination of the vegetation of the two other divisions; in addition, goats and cattle multiply under the influence of the more equitable temperature, moderated during the day by the regular trade winds from the sea, and at night by the land breezes from the plains below.

These wonderful Coastlands from the very earliest days have created in the heart of man an extraordinary desire for possession. Long before the Coming of Christ, and probably ever since the Creation, those who have looked upon its prospective wealth have

sought possession. The Phænicians gathered on the Hills the indigenous indigo, for which dye they were famous three thousand years Ptolemy, the ancient geographer, recorded the wealth of the land's produce in his life's work written one hundred and fifty years before the birth of Christianity. From this time onward, indeed, until the coming of the Anglo-Saxon, written and traditional histories—supported by the evidences disclosed among the ancient monuments still standing here and there along the Coast line-speak of the depths of wickedness of which man has been guilty in his unsuccessful endeavours to satisfy his desires for ownership: The Persian, the Arab, and Portuguese histories tell of the fights, the massacres, the cruel intrigues of the past centuries during which the land passed from one conqueror to another.

To-day this is all changed, this land of former strife has become, under the ægis of British Rule, a land of peace and plenty where the white man with his civilizing influence and unconquerable energy may enjoy, together with such few of the aboriginal natives who have escaped from the ravages of

LAKE LANDS

the slave raiders, the abundant fruits of their labours.

The lands north of the Sabaki River appeal more to the great corporations than to the individual planter. Here large capitals are needed to harness in the magnificent Juba River and its less voluminous sister, the Tana. Money directed by science is all that is needed to spread over vast unproductive plains the fertilizing soils, which to-day, are being unceasingly and wastefully swept away into the bed of the Indian Ocean.

The Lake lands are again a distinctive feature of the Lowland Group. These lands are productive, possibly as productive as the Coastlands, but the breezes from Lake Victoria Nyanza do not supply the same atmospheric constituents as the sea breezes of the Coast; consequently the variety of cultivable products is more limited in this area. It is indeed doubtful if the white agriculturist will ever settle on Lake lands but it is an area where natives dwell in comfort and easily find a sufficiency.

The remaining lands of the lowland group—the lower hinterlands—comprise many

million acres. Under irrigation tropical cereals and the fibres of commerce find a congenial hearth and of the land within our newest 'Colony' none are so surely destined in the future to provide for the world's market a great export trade than these at present neglected areas.

The Highlands group embraces all those elevated plateaux and valleys lying between Kiu and Fort Ternan. In these zones the whiteman can make a home for himself and his descendants and if he so choose be independent of export, and largely independent of import. Many parts provide all those essentials which perfectly satisfy land hunger. In the Districts surrounding Kikuyu and Limuru all the ordinary occupations connected with mixed farming, as understood in Europe, can be followed, not only with equal success, but with greater profit and with less anxiety. Around the lakes of Naivasha. Elementeita and Nakuru and in the Rift Valley, wool growing, cattle ranching, ostrich and pig farming are being proved remunerative, and this notwithstanding the industries locally are still in their infancy. On the Sotik, Uasin Gishu Plateaux, and on the Njoro

HIGH LANDS

Plains wheat may be safely regarded as an industry of the future.

It is only natural a Colony possessing such wide diversity in the character of its land must lock afar for its Colonists. In the Highlands are found Englishmen of the stamp of the country gentlemen; the tenant farmer from Australia, New Zealand, Canada and Europe; the Boers from South Africa with their large families and trek waggons, and among the Lowlands white Planters of many nationalities—men of substance, patient and persistent.

It must not be thought that all classes of would-be Colonists can take up land with sure success. Colonists, who would leave the older civilization with its bitter competition and its ever increasing burden of taxation for the newer civilization of British East Africa, must bear in mind that the possession of some capital is an essential.

A Colonist, who would take up land in the higher altitudes, in order to succeed needs some practical farming experience, and not less than £350 in cash, before commencing operations: If he wishes to gain his practical experience within the Colony then his

minimum capital should be least £100 more.

On the other hand to the Colonist, who would become a Planter in the low country practical experience is by no means a necessity. He must, however, be armed with commonsense, a good constitution and have at least £800 at his command. The town worker of the great cities, who has by slaving at his desk saved a few hundred pounds, may well hope to succeed. Such a man will find no room for discontent while patiently watching his plantation grow under his care. He can look forward to the time when he may surely be in a position to retire to his former home ending his life in restful ease.

Great flooding rains such as visit Ceylon and the South Seas are unknown and of really serious drought there is no record. Strong winds, cyclones, hurricanes and typhoons, which each in their turn, have, ruined many planters in the East, have no terrors to the planter of British East Africa. Such strong winds as do occasionally visit this region of the Indian Ocean have spent their greater force on the neighbouring Island of Zanzibar.

LAND CLASSIFICATION

With the exception of Native Reserves and about six hundred thousand acres of privately owned land at the Coast belt, the Lands of British East Africa are invested in the Crown. An approximate estimate of the acreage still untilled and which the Crown is prepared to offer to tenants may be put down at twenty million acres of which five million are finally reserved solely for white settlement. The balance of the land available is open to Asiatic settlement although the Crown only permits Asiatic settlement in recognized areas and European applicants for land have invariably the most favourable consideration. All Crown lands are classed in four groups the classification being fixed bv Commissioner of Crown Lands after consulting with the Land Board. The Land Board is a consultive Body consisting of such official and un-official members as the Secretary of State for the Colonies may from time to time appoint. Re-appointments are made every year.

The Rental per acre at which the Crown grants leases is fixed at 3d. 2d., 1d., and ½d. for first, second, third and fourth class land respectively. It is within

the power of the Commissioner of Crown Lands to reduce these rents but not to The total length of the increase them. leases granted are for 99 years. It has been suggested, when new Land Laws are promulgated, that at the 33rd year of the 99 years the rental shall be revisable on a basis of five per cent of the unimproved value of the land held, and again revisable at the 65th year on the same basis. In accounting the value of the land under this suggested method of leasing, the improvements effected by tenants would not be taken into consideration, the tenant therefore would not be called upon to pay a large rent merely because of the beneficial results of his individual industry.

There is no difficulty in deciding what is understood by improvements. At present the following are classified as improvements:—Farm buildings of all descriptions, fencing, furrows, planting trees or live hedges, walls, wells, draining land or reclamation of swamps, road-making, bridges, clearing of land for agricultural purposes, laying out and cultivating gardens and nurseries, water-boring, waterraces, sheep or cattle dips, embankments or

RENTAL REVISIONS

protective works of any kind, planting or long-lived crops, water tanks, irrigation works, fixed machinery.

No one of these classified improvements can be deleted by the lessor but other details may be added hereafter:—

If the revision of rents come under consideration the Land Board suggests that no land outside the area of Townships shall be subjected to a higher rental than 9d. per acre at the 33rd, year, or more than 2s. 3d., at the 65th year.

As much as 340 acres of land may be purchased freehold on payment of twenty times the fix rental. Thus if a Tenant holds a lease of 640 acres, 340 acres may be freeholded, the remaining acres, viz., 300 revert to the Crown at the end of the period of the lease. The Crown pays compensation to the outgoing tenant according to the value of the improvements effected during the period of the leasehold. In paying compensation the unimproved value of the land is not taken into consideration.

The tenant must earn his 'Title,' which is not a difficult task. At any time after he

has been in occupation of his land for a period of three years up to a period of 33 years he may apply for a title, which may be considered a mortgageable title, that is to say, a title which is acceptable by a Bank as security for advances made to a tenant. The tenant cannot be refused a title to his lands if he has spent on any of the improvements already mentioned a sum equal to 40 times the amount of his annual rent.

A simple example of a Colonist's position in relation to Crown lands on the 33, 65 and 99 years leasing principle may be easily understood by the following example:—

On January 1st, 1909, Mr. Jones, an incoming Colonist is granted occupation of 600 acres. The land is classed as second class land and is therefore subject to an annual rental of 2d. per acre.

By January 1st, 1912, Mr. Jones has spent £200 on improvements (40 x 640 x 2d.) and he applies for his Title Deeds which are then granted. At the end of 1941 or at any time between 1912 and 1941 Mr. Jones decides to freehold 340 acres. He pays to the Crown £56-13-4 (20 times his annual rent on 340 acres) and these acres become his personal

COST OF SURVEY

property. If in 1940 Mr. Jones decides to keep only his 340 acres, the balance of his holding, namely, 260 acres reverts to the Crown, Mr. Jones receiving compensation for all the improvements he has effected on this particular parcel of land.

Should Mr. Jones decide to continue leasing his holding, whether it is 260 acres or the whole 600 acres unfreeholded he may do so but his rent may be revised.

Before Title Deeds can be obtained a Survey of the occupier's Land must be made at the occupier's expense. It is not necessary for him to wait until the Crown makes the survey he can instruct a private Surveyor—provided such Surveyor is a duly licenced Surveyor of the Colony—to carry out the work, and the Crown meets the cost from the monies which the occupier has previously deposited with a special fund. This special fund is set aside by the Crown to receive all deposits for survey expenses and forms no part of the Colony's general revenue. The fees fixed by the Crown for surveying are reasonable. The cost of surveying, under ordinary conditions, say of a plot of 640 acres, works out at about £12 sterling.

In time to come a graduated land tax may be put in force which will be payable in addition to the annual rentals and the sums raised will be devoted to the improvement of the Colony generally, including communications between Crown lands. This land tax is not likely to effect the smaller landholder as the object of its introduction will be to minimise excessively extensive holdings. It is also highly probable that before 33 years have gone by our newest 'Colony' will have become self-governing which means that the whole questions of Land ownership will be reconsidered and still more generous rules with regard to freehold probably put into force; even to-day the tendency is for the Crown in new and undeveloped Crown Colonies to give most encouraging terms to tenants seeking land.

PART II. COLONISTS' OPPORTUNITIES

CHAPTER VII.

The pioneer colonists of our newest "Colony," or more correctly perhaps the present day Colonists, if taken as a Body, are of a very good stamp; the majority keen, and well bred—breeding always plays an important part in colonizing efforts—and speaking generally, lovers of the country of their adoption. For the purposes of description they may be divided into five classes: Farmers, Planters, Traders, Missionaries and Civil Servants.

The farming class includes the Highland Settlers; and the planting class the Coast and Lowland Settlers.

The Highland settler has many branches of agriculture open to him. He may take up mixed farming, grain or pulse farming, ostrich farming, wool or mohair growing or cattle ranching, and prove successful in one or all of these branches. The Lowland settler can select rubber cultivation or cocoanut farming as a staple industry,

utilizing maize, cotton, guinea corn, simsim, ground-nuts and allied products for catch crops. Pineapples, and other fruits equally suitable for canning, also afford an opportunity to the planter.

To the farmer with his capital ranging from £350 to £600, mixed farming will naturally appeal, for in this branch of agriculture, more so than in any other industry, close personal overseeing is in itself capital.

There are many parts of the Colony suitable for mixed farming but at present Kikuyuland is the ideal. On the slopes of the Kikuyu escarpment are deep rich red soils, clothed here and there with verdant woods and where valley follows valley in which rivulets and perennial streams of sweet water invite the careful hand of the irrigator. The rainfall here, as elsewhere, is divided into two seasons, a heavy fall and a lighter fall, both equally suitable for the cultivator's purposes. The annual average rainfall is from 45 to 50 inches.

In this District the small cultivator has many opportunities. A holding of two hundred and fifty acres is ample for his purposes, indeed it is doubtful if a larger

A MIXED FARM

holding would be as prosperous in the same ratio as the smaller holding. There is a danger of a farmer over reaching himself, when he attempts to cultivate a greater holding on mixed farming principles. The cultivate of a comparatively small area has an advantage over the cultivator of large areas in that he is more easily able to pull through to a favourable market during an unfavourable season. There is a greater profit in a few acres harvested in good condition that in hundreds of acres partly tilled and badly harvested.

It is always a difficult task to estimate the costs of establishing a farmer, whether he commences his industry on a large or small scale: so much depends on the man himself, and in considering the figures given below allowance should be made for this fact.

The following is a conservative estimate for starting a small mixed farm, situated within a few miles of the Railway:—

•	£	s.	d.
Clearing 40 acres at 30/	60	0	0
Sub-division and Fencing 25 acres 10/-	12	10	0
Twice Ploughing 20 acres for wheat for			
maize) by contract; say	20	0	0
Twice Ploughing 15 acres for Beans	15	0	0

	£	s.	d.
Ploughing 5 acres for Fruit Trees	2	10	0
Twice Planting 20 acres with wheat (or			
maize) seed and labour	9	0	0
Twice Planting 15 acres with beans	7	0	0
Planting Fruit trees (500 at average			
of 1/-)	25	0	0
Vegetables seeds to grow in orchard un-			
til bearing including potatoes	1	10	0
Tools, etc	6	0	0
Fowls and Turkeys, houses and pens	7	0	0
Two sows	3	10	0
Dwelling-house and Furnitures, out-			
buildings and incidentals	80	0	0
First year's fees and rent, say	7	10	0
		. 10	_
One come in calf or nomin calmed (if	£256) 10	0
One cow in calf or newly calved (if	0	Λ	0
fenced area is suitable for grazing)	8	0	0
One churn	1	5	0
	£265	15	0

A man with £350 has thus only left £84-5 to maintain himself and his labourers until his returns come in, but the vegetables, fowls, etc., produced should be sufficient to keep his household together.

At the end of one year, provided the farmer started in time to catch either of the grain seasons, his total outlay would be:—

SOME FIGURES

As per list	•	£	s.	d
Wages—five Native labourers Living expenses (additional) 50 0 0 £340 10 0 The estimated return for these twelve months may reasonably be put down at: Wheat—with a yield of say 16 bushels £ s. d. per acre for 16 acres—4 acres being left for hay—two crops for the year equals—512 bushels of which 80 bushels are kept for producing pork and eggs and 432 bushels sold at the present price of say 5/4 per bushel on the farm. 432 × 5s. 4d 115 0 0 (a twenty per cent lower estimate must be allowed for if maize is cultivated) Beans—2 crops—10 tons at £8 per ton on farm 80 0 0 Bacon Pigs (12) 80 0 0 Sale of Vegetables including sweet potatoes, pumpkins 15 0 0 Incidentals; probably Butter and Honey. 8 0 0	As per list	. 265	15	0
Living expenses (additional) 50 0 0 £340 10 0 The estimated return for these twelve months may reasonably be put down at: Wheat=with a yield of say 16 bushels £ s. d. per acre for 16 acres—4 acres being left for hay—two crops for the year equals=512 bushels of which 80 bushels are kept for producing pork and eggs and 432 bushels sold at the present price of say 5/4 per bushel on the farm. 432 × 5s. 4d 115 0 0 (a twenty per cent lower estimate must be allowed for if maize is cultivated) Beans=2 crops=10 tons at £8 per ton on farm 80 0 0 Bacon Pigs (12) 12 0 0 Sale of Vegetables including sweet potatoes, pumpkins 10 0 0 Potatoes, say 5 tons, at £3 15 0 0 Incidentals; probably Butter and Honey. 8 0 0		. 24	15	0
The estimated return for these twelve months may reasonably be put down at: Wheat—with a yield of say 16 bushels £ s. d. per acre for 16 acres—4 acres being left for hay—two crops for the year equals—512 bushels of which 80 bushels are kept for producing pork and eggs and 432 bushels sold at the present price of say 5/4 per bushel on the farm. 432 × 5s. 4d 115 0 0 (a twenty per cent lower estimate must be allowed for if maize is cultivated) Beans—2 crops—10 tons at £8 per ton on farm 80 0 0 Bacon Pigs (12) 12 0 0 Sale of Vegetables including sweet potatoes, pumpkins 15 0 0 Incidentals; probably Butter and Honey. 8 0 0		. 50	0	0
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Wheat—with a yield of say 16 bushels per acre for 16 acres—4 acres being left for hay—two crops for the year equals—512 bushels of which 80 bushels are kept for producing pork and eggs and 432 bushels sold at the present price of say 5/4 per bushel on the farm. 432 × 5s. 4d 115 0 0 (a twenty per cent lower estimate must be allowed for if maize is cultivated) Beans—2 crops—10 tons at £8 per ton on farm 80 0 0 Bacon Pigs (12) 12 0 0 Sale of Vegetables including sweet potatoes, pumpkins 15 0 0 Incidentals; probably Butter and Honey. 8 0 0	The estimated return for t	hese	tw	elve
per acre for 16 acres—4 acres being left for hay—two crops for the year equals—512 bushels of which 80 bushels are kept for producing pork and eggs and 432 bushels sold at the present price of say 5/4 per bushel on the farm. 432 × 5s. 4d 115 0 0 (a twenty per cent lower estimate must be allowed for if maize is cultivated) Beans—2 crops—10 tons at £8 per ton on farm 80 0 0 Bacon Pigs (12) 12 0 0 Sale of Vegetables including sweet potatoes, pumpkins 10 0 0 Potatoes, say 5 tons, at £3 15 0 0 Incidentals; probably Butter and Honey. 8 0 0	months may reasonably be put do	own a	t :	•
left for hay—two crops for the year equals=512 bushels of which 80 bushels are kept for producing pork and eggs and 432 bushels sold at the present price of say 5/4 per bushel on the farm. 432 × 5s. 4d 115 0 0 (a twenty per cent lower estimate must be allowed for if maize is cultivated) Beans=2 crops=10 tons at £8 per ton on farm 80 0 0 Bacon Pigs (12) 12 0 0 Sale of Vegetables including sweet potatoes, pumpkins 10 0 0 Potatoes, say 5 tons, at £3 15 0 0 Incidentals; probably Butter and Honey. 8 0 0	Wheat-with a yield of say 16 bushels	s £	s	d.
equals=512 bushels of which 80 bushels are kept for producing pork and eggs and 432 bushels sold at the present price of say 5/4 per bushel on the farm. 432 × 5s. 4d 115 0 0 (a twenty per cent lower estimate must be allowed for if maize is cultivated) Beans=2 crops=10 tons at £8 per ton on farm 80 0 0 Bacon Pigs (12) 12 0 0 Sale of Vegetables including sweet potatoes, pumpkins 10 0 0 Potatoes, say 5 tons, at £3 15 0 0 Incidentals; probably Butter and Honey. 8 0 0		-		
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Sale of Vegetables including sweet potatoes, pumpkins 10 0 0 Potatoes, say 5 tons, at £3 15 0 0 Incidentals; probably Butter and Honey. 8 0 0			_	0
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Potatoes, say 5 tons, at £3 15 0 0 Incidentals; probably Butter and Honey. 8 0 0				
Incidentals; probably Butter and Honey. 8 0 0			_	-
			_	_
£240 0 0	Incidentals; probably Butter and Hone	y8	0	0
		£240	0	0

For the second year his expenditure will be considerably less than for the first year unless he should get ready an increased acreage and his returns should be greater in bacon pigs,

and in honey, if bees are kept, and in dairy produce should another cow be added. £260 is a fair estimate for the second year's revenue.

His financial position under these estimates would show at the end of the second year.

	E_{i}	rpended.		Received.		
		£ s.		£	s.	d.
First year	3	340 10	•••	240	0	0
Second year	•••	125 10	•••	260	0	0

Leaving a credit balance against insurance to meet a bad season. It will be seen that a farmer on a small mixed farm, with his original £350, has clothed, lodged and fed himself for two years and has property, taken at its lowest value as under:—

	£	s.	d.
Cleared land in state of cultivation			
worth say £3 an acre 40 acres =	120	0	0
Improvements, fencing, water furrows	12	0	0
Buildings, sheds, etc., value =	7 5	0	0
Livestock =	12	0	0
Orchard 5 acres, 2 year old , =	50	0	0
Hay stock =	10	0	0
Stock of grain, seeds, bees, etc =	15	0	0
Cash on hand out of original capital			
and Insurance Reserve =	38	0	0
	 £332	0	0

In the third year the expenses will be less

A BRIGHT FUTURE

again, unless manure is required or new ground is broken up instead of manuring the area already cultivated. Nothing but dire misfortune can prevent a settler—who personally superintends his mixed farm on the scale set out—from being in a sound position with a bright future at the end of his third year.

CHAPTER VIII.

Small Farmers, who do not care to give their ploughing out to contract, either hand hoe their fields, engaging irregular native labour for that purpose, or do their own ploughing with trained local oxen. The local oxen are small but hardy and do a fair day's work when properly cared for and partly stall fed. As each season goes by trained oxen are being brought more frequently to the sale yards. The present average price, about £5-0, is a high average for a native bred animal.

It will be seen wheat, maize, and beans have been taken in the estimates given in the last chapter as main crops: the wheat for sale to the local consumer, the beans for export; the maize for both. In the course of time the local supply of wheat will equal the local demand and the farmer will be then called upon to compete with the world's wheat fields. This means an immediate drop in his revenue. The average market prices, however, should still leave him a margin of profit. The

WHEAT

yield of 16 bushels per acre given under revenue in the foregoing figures is less than the average local yield so far obtained. The Gluyas variety of wheat, a more or less but not entirely self-rust resisting variety, has frequently averaged twenty bushels of dry grain, and that in localities not particularly suited to wheat cultivation. Local wheat is generally harvested during the months of February-March, and September-October, and sown during November and May. There are steam threshing machines in the Country but threshing and winnowing hand-machines meet the small growers requirements. Flour Mill has been erected at Nairobi and in the course of time Mills will be established in other centres to deal with locally produced grain.

There are districts in the Highlands in which mixed farming is being successfully carried on where neither wheat or beans are suitable crops. In these districts other grains are cultivated, for example:—maize, oats, and millet The prices obtainable on the farm for these grains average throughout the year as follows:—Maize, £5-0 to £5-10 per ton: millet £5-10 to £6-10 per ton and

oats £8-10 to £9-10 per ton. Of these millet is the most suitable for the small farmer. The average yield in districts where it is hot and dry exceeds fifty bushels of clean corn which can be exported abroad to good open markets.

Even the comparatively inexperienced farmer finds no trouble with millet cultivation: the native labourers thoroughly understand the plant: it has few enemies and flourishes with two weedings per season.

In Italy, America and in some parts of India, the broom corn millet is cultivated, the panicles of which are used to make the domestic whisk broom.

The value of the panicles, is not as yet known to the African native and even if it was known to them they would be helpless without a baling press and a scraper, the latter superseding the flail, ox treading, or hand picking, methods of extraction. The cost of these two machines is about £50 sterling, delivered in the Highlands, a rather heavy item for the smaller farmer by himself but when divided up amongst four or five neighbours on the co-operative system it is not a great tax on

WATTLE

his capital. The local value of the broom corn panicles—delivered at a Highland's railway station of good average colour and quality and pressed into 400 lbs. bales—is £4 to £5-10 per ton.

Similarly to the fact that wheat and beans are both found unsuitable products for some Districts, so are fruit trees. In such Districts the area usually devoted to orchards is very often planted up with the Wattle tree. variety generally selected is the Black Wattle; this variety grows remarkably well reaching thirty to forty feet within four years. tree can be stripped of its bark at the sixth special stripping machine having been invented for this purpose; here again, in the purchasing of this machine. multiple ownership can be brought into usefulness. Putting aside the cultivation of the Black Wattle for its tanning bark (value about £5 per ton on the farm) it is a tree which appeals to the "Mixed" farmer. It is an admirable shade tree for any purpose, and its timber is always in demand for building poles especially for the construction of outbuildings, store houses, etc. The poles are straight and of great tensile strength. When grown near the

Railway the tree is well worth cultivating for fuel purposes. For the first three years during the cultivation of wattle various catch crops will be found to thrive well between its rows, maize has been noticed to do better in these circumstances than when cultivated in the open.

Pigs do well in most parts of the Highlands; the Warthog and Bush pig varieties are in fact indigenous. These wild pigs are quite useless for breeding or for any other purpose and are harmful to the Farmer but in spite of their multiplying enormously they are being driven further and further away with the advance of civilization. The breed of pigs which thrive best locally are the long Black Berkshire and large White Yorkshire. Even before these pigs become acclimatized a healthy litter of ten is not unusual. On some mixed farms it may be found necessary to cultivate a small area of lucerne for pig feeding purposes, i. e., in addition to the grain or beans, etc., kept back from the market for the purpose.

Lucerne is suited to the Colony and can be successfully grown both in the Highlands and in part of the Lowlands: It gives four crops a year under ordinary circumstances

PIGS

and a very small area only would be needed for pig feeding purposes. Bananas are indigenous and prolific; it is not unlikely this fruit also can be cultivated profitably for pig food. Banana fed pork fetches top market prices. A Bacon and Ham Curing Factory which provides a market for farmers has been established at Lari.

foregoing chapter the export of beeswax was mentioned. This beeswax is collected from the wild bees which chiefly hive within the forests, and forest patches, gathering their honey and wax from the wild orchids, lilies, flowering shrubs, and acacias. The natives, who collect the bees' harvests, trade the wax and convert the honey into an intoxicating liquor for home consumption. The honey has a very perfect flavour comparable only to the honey collected in lands of the white heather. Beekeeping on scientific principles is proving a most profitable industry with all those who take advantage of their exceptionably favourable surroundings. The importation of Queen bees from Italian and other stocks is on the increase. local value of honey varies considerably with the demand one shilling for a filled wine

bottle is not out of the way: wax is worth one shilling a pound avoirdupois, and even more if carefully prepared for export.

No mention has been made of horse breeding when dealing with the mixed farming industry. Local horse breeding is still a little precarious and it is doubtful if a "mixed" Farmer on a small scale should yet incur the attendant risk. If he decides, however, to add this industry he will find a Somali, Basuto, or Cutch mare, a useful animal to commence with. A farmer has no difficulty in securing a suitable cross. There are several very excellent, privately owned, Arab and English thoroughbred stallions at Stud in addition to the Government stallions.

CHAPTER IX.

To attempt to grow wool on the Equator must at first sight appear to be fighting against nature, nevertheless several farmers in the Highlands have not only attempted to do so but are actually growing wool successfully. The Agricultural Department, and in addition several courageous Colonists, are now in a position to give proved figures and to advise incoming sheep farmers on—
'How to succeed as a wool grower.'

It must not be thought our newest 'Colony' has reached so enviable a position without many bitter sacrifices and without many failures. It has been a case of the survival of the fittest, the fittest in this instance being the Colonist who has ingrained within him the stamina required to continue experimenting after very serious losses. As an example of a serious loss it is only necessary to quote but one settler's experience viz. 3,895 young lambs dead out of 4,000 born. Since Colonists have realized the absolute necessity of fencing

grazing areas, heavy losses are now rare, while a large percentage of increase is the rule rather than the exception. The heavy loss quoted above was due to worm infected grazing, the worm being deposited by wild antelopes and gazelle.

Domestic sheep have been known to have grazed the plains of the Rift Valley—a great stretch of grass land practically dividing British East Africa through the centre—as far back as the memory of man reaches but these sheep are naturally of poor quality when considered from the stand point of the civilized world. The native has no great idea of the theory of breeding. He has contented himself with merely multiplying his stock rather than with the improvement of its individual size, hence the sheep, although fairly hardy, are small. The growing of wool has not in the past interested the native pastoralist. He would not have known what to do with the wool had he even by some accident discovered how to breed out the hair of his sheep and breed in the wool of commerce. It to these hairy and variously coloured sheep to which the Colonist native

WOOL

must look who would hope to become a sheep farmer on a large scale. Various attempts have been made to introduce Australian and British flocks by the importation of ewes as well as rams of recognized breed. Up to the present these ewe importations have not justified the expense and although in time to come this system of establishing a sheep run may prove more successful, the Colonist with limited resources must at present confine his attention to the improvement of the animals immediately to hand.

There are several theories established among the successful sheep farmers as to the quickest way in which the local native sheep may be brought up to a recognized standard. The Government experts are inclined to favour the principle of introducing to the native ewe such imported rams as will produce a breed of large frame, the progeny being thereafter improved by a woollier strain. For example, it is held by some breeders that the British Lincoln, Welsh Mountain and Welsh Border Rams produce a large framed animal which when secondly crossed with the Merino gains in wool crop over a second cross through the Merino alone.

Probably the larger number of breeders prefer to keep only merino rams. reasons are based on the facts that the merino ram gives more wool at the first cross, produces a hardier if smaller framed animal, and the further important fact that the Merino ram is the more easily obtained. Of the two theories the first is the more correct one, if farmers were breeding chiefly for the butcher but there is no great future at present in sight for the export of mutton and the demand of the local market is likely soon to become less than the supply—this even after the introduction of refrigerating cars on the Railway, and cold storage establishments at the Coast, are a fait accompli. It is possible, however, a frozen mutton market may be opened up with South Africa and India.

Clippings from pure merino stock bred in the country, have realized over one shilling a pound on the London wool market and have given 8 lbs. of wool a clip, which goes to prove that this strain does not deteriorate through local conditions. Other prices realized on the market at the same time have varied from 4d. a lb. for first cross Merino-Native and from $6\frac{1}{2}$ to $8\frac{1}{2}$ per lb. from second cross Merino-Native and second cross

PRICES OF SHEEP

Lincoln-Merino-Native and Welsh-Merino-Native. These prices are for unscoured wool.

The present price of native ewes averages from five shillings and sixpence to six shillings. Rams can be imported from England at from £3 a head, or from Australia (Merino) at £4-10 to £5 a head. Colonists attending the annual Government Stock sales are often able to pick up bargains. It is also possible to pick up very suitable rams at private stock sales.

Apart from worm diseases, for protection against which fencing is necessary, other diseases are but little more prevalent, if at all more prevalent, than in most parts of Australia and with an increased establishment on the Veterinary Staff, Colonists should have little to fear in this respect.

There are several peculiarities connected with the native sheep which the Colonist can overcome by being forewarned. For instance native ewes often neglect one of twin lambs thrown. The native grazier overcomes this difficulty by either killing one of the twins after birth or by giving one to a foster mother. Local peculiarities are seldom found to survive the third cross.

Below are given three years figures to act as a guide to a Colonist who is proposing to establish a sheep run. In the figures no allowance is made for the usual custom of running cattle or other livestock with the sheep, but allowance is made for the cultivation of such food stuffs as are absolutely necessary for home and farm consumption.

The estimate for establishing a sheep run is as follows:—

Capital Expenditure (First three years.)

### 1,500 native ewes at 6/	Capital Lapelit	mure (r	mat t	111 66	years	•	
38 Pure bred rams at £4-10 171 0 0 Dwelling House and Furniture 200 0 0 Kraal Sheds and outbuildings 80 0 0 Well sinking and incidental 60 0 0 Fencing 150 0 0 L1,111 0 0 Up-Keep (three years.) £ s. d. Living Expenses 240 0 0 Rent 75 0 0 Native shepherds and servants 150 0 0 Revenue (First Years.) £ s. d. Two clippings from 600 1/2 bred wethers					£	8.	d.
Dwelling House and Furniture 200 0 0 Kraal Sheds and outbuildings 80 0 0 Well sinking and incidental 60 0 0 Fencing 150 0 0 Up-Keep (three years.) Living Expenses 240 0 0 Rent 75 0 0 Native shepherds and servants 150 0 0 Revenue (First Years.) £ s. d. Two clippings from 600 1/2 bred wethers	1,500 native ewes at	6/-	•••	•••	450	0	0
Kraal Sheds and outbuildings 80 0 0 Well sinking and incidental 60 0 0 Fencing 150 0 0 £1,111 0 0 Living Expenses 240 0 0 Rent 75 0 0 Native shepherds and servants 150 0 0 Revenue (First Years.) £ s. d. Two clippings from 600 1/2 bred wethers	38 Pure bred rams a	t £4-10	•••	•••	171	0	0
Well sinking and incidental 60 0 0 Fencing 150 0 0 £1,111 0 0 Living Expenses 240 0 0 Rent 75 0 0 Native shepherds and servants 150 0 0 Revenue (First Years.) £ s. d. Two clippings from 600 1/2 bred wethers	Dwelling House an	d Furnit	ure	•••	200	0	0
Fencing 150 0 0 £1,111 0 0 Up-Keep (three years.) £ s. d. Living Expenses 240 0 0 Rent 75 0 0 Native shepherds and servants 150 0 0 Revenue (First Years.) £ s. d. Two clippings from 600 1/2 bred wethers	Kraal Sheds and o	utbuildin	gs	•••	80	0	0
### Living Expenses 240 0 0 Rent 75 0 0 Native shepherds and servants 150 0 0 Revenue (First Years.) ###################################	Well sinking and in	cidental	•••	•••	60	0	0
Up-Keep (three years.) ### s. d. Living Expenses 240 0 0 Rent 75 0 0 Native shepherds and servants 150 0 0 Revenue (First Years.) ###################################	Fencing	•••	•••	•••	150	0	0
Living Expenses $240 0 0$ Rent $75 0 0$ Native shepherds and servants $150 0 0$ Revenue (First Years.) Revenue (First Years.) £ s. d. Two clippings from $600 1/2$ bred wethers				£	1,111	0	0
Living Expenses 240 0 0 Rent 75 0 0 Native shepherds and servants 150 0 0 E465 0 0 Revenue (First Years.) £ s. d. Two clippings from 600 1/2 bred wethers	Up-Ke	ep (thre	e yea	rs.)			•
Rent 75 0 0 Native shepherds and servants 150 0 0 Revenue (First Years.) \pounds s. d. Two clippings from 600 1/2 bred wethers					£	8.	d.
Native shepherds and servants $150 \ 0 \ 0$ Revenue (First Years.) ### s. d. Two clippings from 600 1/2 bred wethers	Living Expenses	•••	•••	•••	240	0	0
Revenue (First Years.) \pounds s. d. Two clippings from 600 1/2 bred wethers	Rent	•••	•••	•••	7 5	0	0
Revenue (First Years.) \pounds s. d. Two clippings from 600 1/2 bred wethers	Native shepherds an	d servan	ts	•••	150	0	0
\pounds s. d. Two clippings from 600 1/2 bred wethers				•	£465	0	0
	Reven	ue (Firs	t Yea	rs.)	£	s.	d.
	Two clippings from 6	00 1/2 br	ed wet	thers			
				•••	22	10	0

AN ESTIMATE

	£	s.	đ.
From sale of 600 $\frac{1}{2}$ bred wethers at 8/	240	0	0
Two clippings from 600 ½ bred ewes for			
3lbs. at 3d per lb. on farm	22	10	0
One clipping from 400 3/4 bred shearl-			
ings for 4 lbs. at 5d per lb. on farm	33	6	8
Three clippings from 38 Pure bred Rams			
for 7lbs. per clipping at 9d per lb. on			
farm	29	18	6
•	£348	5	2
Three Years' Account.	本りその	J	4 ,
Debtor.	£	s.	d.
Original Capital Expenditure	1,111	0	0
Up-keep	465	0	0
Additional depreciation and self insur-			
ance at 10 per cent per annum on			
£ 1,111 0 0	333	0	0.
	1,909	- A	0
Creditor.	Tioon	U	
Revenue as per a/c	348	5	2
1,500 ewes at 6/	450		
38 rams at £4-10	171	0	0
Dwelling House, fencing, wells, etc	490	-	٥
600 twice sheared 1/2 bred ewes at 10/-	300	-	0
400 three quarter bred shearlings at 12/-	240	-	Õ
1,200 1/2 bred shearlings at 6/	360	_	0
1,200 1/2 bred lambs at 1/6	90	_	0
1,200 1/2 Ordu lamus at 1/2	90		
£	2,449	5	2

It will thus be seen that a sheep farmer, with ordinary good fortune at the end of three years possesses a property value of £540 in

excess of the capital with which he started business, he has paid his living expenses for three years, and in addition has gained invaluable experience.

This, however, is only the way an inexperienced sheep farmer would view the situation. An experienced farmer understands the future progressive value of his three year beginnings. He knows that he has three-quarter bred sheep which will shear wool some lbs. weight more than his half-bred and worth from thirty to one hundred per cent. per lb. more on the market. He knows his half-bred ewes will soon be giving him another flock of three quarter breds and so until the time comes when he is the proud and fortunate possessor of several flocks of practically pure bred sheep.

CHAPTER X.

Ostrich Farming in British East Africa is an industry which bids to become one of the most important occupations of the Highland farmer. As a commercial proposition Ostrich farming was unknown fifty years ago, to-day it is a great industry in one or two parts of the world, chiefly confined to Cape Colony which State exports annually over one million pounds worth of feathers.

It has been suggested that Ostrich Feathers may become like diamonds and rise and fall with the fashions: the suggestion has no solid foundation, the future of ostrich feathers is inestimable. Feathers have not been much influenced by fashion in later years nor is it at all likely the demand will be met by the supply during the next century: indeed the markets for feathers are only just beginning to be exploited. A year ago ostrich feathers were regarded in the Far East as strange novelties, to-day Japan with its millions of inhabitants has provided an

entirely new market which is already competing with the West and feather boas are being worn by the most distinguished of Japanese ladies. There is a strong tendency among European nations to legislate for the protection of existing wild birds, but ostriches, practically a domesticated species, are naturally exempted from all these laws, which, nevertheless, prohibit the sale of the feathers of the egret, marabou storks and many other, but smaller, feathered creatures.

Although ostrich feathers have not been before the civilized world any length of time they have been an article of barter for centuries among the wild native tribes of Africa, and particularly among the warlike Masai. The Masai are a native pastoral tribe dwelling in the region of the Rift Valley and the male members, when in their best 'bib and tucker,' encircle their faces with a framework around which the feathers are arranged.

Ostriches are indigenous to our newest 'Colony' and can be seen from the windows of the Railway train at almost any time of the day. A law is in force which regulates the capture of ostriches and also the trading in their feathers. For instance, a farmer of

CAPTURE

ostriches is registered and in return he is called upon to pay the nominal tax of six shillings and eight pence. payment of £3 annually he and his bona fide servants are entitled under certain reasonable restrictions to hunt for, and capture, wild birds and their eggs. hunter need not necessarily be a farmer, in several instances ostrich hunters are confining their attention of the capture of birds and eggs only with the ultimate view of selling their captures to the farmer. The birds captured are pretty sure to stay in the country as an export duty of £100 on each bird and £5 on each full egg is demanded by the Customs authorities before they can be exported; in time no doubt exportation will be totally prohibited.

Before the local feathers became better known they were considered as only equal in quality to the Somaliland feathers which are occasionally offered to passengers on board ships calling at Red Sea Ports. This myth is now entirely exploded. The feathers from the ostriches roaming the Rift Valley are equal to the average feathers placed on the Port Elizabeth Feather market, that great

market at which congregate the buyers of Europe and America, and now Japan. It is even held by experts that some feathers produced locally would stand a good chance of being noticed even among the prize plumes of famous Cape strains.

It is not to be expected that the first generation of birds, straight from the plains, will equal in quantity of output birds which have been bred by the most careful selection of practical breeders, but it is to be expected that a few years hence not only will the weight of the clippings be considerably increased but their quality also. With the wild bird already producing feathers comparing favourably with the feathers of selected breedings it is quite possible that when the wild strain has undergone the same theory of treatment as the now domestic strain of the Cape Colony, sharp rivalry will ensue for the highest place in feather commerce.

One of the very great advantages which much of the ostrich farming land in the Rift Valley may be proved to possess over rival areas is that lucerne cultivation may not prove a strict necessity. All the year round this great stretch of country has apparently

LUCERNE FEEDING

provided in the past ample food for the wild birds without their being compelled to travel very long distances in search. As far as present knowledge goes it is believed that on the majority of farms of from 2,000 to 5,000 acres in extent, one portion or another has kept green throughout the seasons. In the Cape Colony, many farmers cannot keep birds without lucerne indeed some have to feed the birds on irrigated lucerne alone and but few farmers are in a position to run the birds all the year round on what unaided nature has provided. It is held by some famous ostrich breeders that in any case it pays to grow lucerne for feeding purposes, even if birds are only so fed occasionally and the rest of the lucerne is made into hay, but this dictum is very open to argument, and further still to experiment. It is probable that a heavier clipping is obtained from lucerne fed birds but it is as yet an open question whether the heavier yield is worth the greater expense in a country where nature does her part so well.

Estimates and re-iterated facts for establishing industries in young countries are useful as a guide to intending Settlers—provided

they are based on unquestionable experience. In the instance of establishing an ostrich farm in our newest 'Colony' there is not yet sufficient individual experience, either of assured successes or unfortunate failures, to act as a guide; nevertheless, there are many known figures and facts which will prove both useful and instructive.

The first points to be considered are what capital expenditure is required to make a farm ready for the reception of ostriches. A warm shed, free from draughts, in which to house chicks at night is the first consideration. The older birds again need a yard, or kraal, the sides of which must be covered in with grass or some material so as to form a protection from the wind, and incidentally from small outside enemies. The height of these protecting walls need to be at least 10ft. from the ground. Full grown birds can be run at night within a strongly fenced paddock. The fence should be at least five feet high and of six strands of wire; the first four strands from the ground should be barbed and so closely set as to make it impossible for dangerous vermin to creep through: -7"-6"-7"-8" respectively are the

FENCING

usual distances adopted. These two remaining strands should not be barbed and should be set one foot distance from each other and one foot from the top strand of the barbed wire. The poles should be very strong and set about thirty feet apart with two, three or four loose dropper poles between, the object of this is to allow a certain amount of 'give' in case a bird should take it into its head to run violently against the fence and damage itself. The top wire is so situated as to catch any enterprising bird in the neck and thus prevents it from climbing over. A fence of this sort, of course, costs a good deal more than an ordinary fence and at least one hundred pounds sterling must be calculated for the local cost of a paddock, say 440 yards square.

The farming implements required depend on whether lucerne cultivation is to form part of the industry. For ordinary cultivation the settler manages very well without a mower, a horse rake, or even a wagon. If these articles are required a further sum of £60 is required for machinery exclusive of draught animals, but it must be presumed, if lucerne is grown, the farmer will also make and sell hay. Apart from a dwelling house, the cost

of which depends on the style selected, there only remains the birds. If these are to be purchased the farmer must decide whether he will purchase eggs for incubation (a not too satisfactory system) or purchase chicks, young and adult birds from licensed hunters. Eggs may cost him from four to ten shillings each: chicks from £2 to £3: young birds from £5 to £7 and grown birds from £10 to £15. Several farmers believe in taking out licences and capturing their own livestock for birds are snapped up as fast as they come into the market and the price keeps high in consequence.

As regards the local output, seven months old birds bred at Nakuru have provided clippings worth fifteen to twenty shillings—on the farm. In the Athi River district birds, clipped every eight to ten months, have produced in the first two years clippings worth up to £3 and thereafter up to £5 each clipping. In the Cape Colony fifty good ostriches (lucerne fed) provide an average annual income of £900—derived from feathers clipped, and chicks bred—whereas a Rift Valley or Athi Plains farmer does not look for a greater annual income during the first

COMPARISON

four or five generations than £600 from the same source. A comparison, however, of original expenditure puts the Cape Colony farmer in the back-ground. A large ostrich farm in the Cape Colony of three thousand acreage demands an annual interest on its capital value of certainly not less than £1,500. against £40 demanded for an Athi Plain farm of the same dimensions. The interest on the capital cost of fifty Cape birds, worth variously from £20 to £100 each, reckoned at ten to fifteen years life, is not less than £3 each as against the much smaller interest on the cost of capture or purchase in the open local market at, say, £15 to £20 each for nearly as good animals. In various other ways the Cape Colony farmer is at a distinct disadvantage, particularly so as regards annual recurrent expenses.

Experientia docet applies to ostrich farming but experience is by no means absolutely necessary to success—commonsense and occasional conversations with established farmers go a long way to help the inexperienced and success in ostrich farming means not only a handsome living earned under

delightful conditions but also, as proved in quite a number of instances, a handsome fortune in under ten years.

CHAPTER XI.

Two million head of cattle is a rough estimate which should cover the herds in the possession of Natives in our newest "Colony." Gradually these herds are being brought into the market and are becoming the property of the pastoral Taken as a whole they are not Colonists. very fine specimens of the bovine species but nevertheless they are proving to be excellent material for grading-up. Some of the herds are distinctly the superior in build, milk yielding quantities, and constitution, to other herds, but in-breeding for centuries has left its tell-tale mark on even the very best herds.

The average quantity of milk which can be expected from a native cow, when run in ordinary pasture, can be put down at two pints of milk, per diem, exclusive of that drawn by the calf: the milk, however, is of fair quality, especially from cows grazing in the Rift Valley.

The native cow has a bad habit which no

amount of patience or application of patent milking apparatus has been able to overcome, -she will not let down her milk unless her calf is by her side and should her calf die then she promptly goes dry. The same habit is found with native ewes but with sheep this habit can be overcome. If the skin of a ewe's dead lamb is placed over the body of another lamb-say for an instance on a lamb which has lost its mother—the ewe will suckle her youngster. A similar trick played on a native cow, rarely succeeds. It is found that half-bred cows begin to shake off the habit and it is likely with further cross breeding there will be no more difficulty in this respect.

The class of thorough bred imported Bulls proving most useful for breeding up the natives herds are the Hereford, Ayrshire, Shorthorn, Guernsey and Freisland. Some Pastoralists incline to the theory of sticking to a beef breed or using a beef breed as a first cross and a milk breed thereafter.

Dairymen generally incline to confining their attention to strains noted chiefly for their milk producing qualities.

Breeders at the present are breeding with

DAIRYING

the view of selling their stock to their neighbours, or incoming Settlers, and hoping when this market has reach its zenith a cold storage trade can be opened up with abroad. It will be some years before the local supply will meet the local demand: Butchers' requirements are increasing daily; agriculturalists are seeking working oxen of a better stamp than the native animal provides and are prepared to pay a much better price: pastoralists still to come must stock up their farms in order to meet the requirements set forth in the "beneficial occupation" clauses of their respective leases; and dairymen are in increasing need of good milch cows.

The dairy market in the Highlands is nearing its local level but a local market is waiting at the Coast when better conditions as to transport prevail.

The future of the dairymen lies in canning his butter for export. Here is a market which his joining will in no way adversely affect; it is not probable that the supplies of canned butter from our newest 'Colony' will disturb the prices ruling in the European markets. Co-operative butter factories are within measureable distance and success is certain.

The prices of native cattle are very variable and auction prices must be the guide: Native untrained oxen fetch from £2-5 to £3-15: Native trained oxen from £3-10 to £6: Native cows from £5 to £7-10: Native cows with calves from £7 to £12 (it may be noted here that native cows on occasion have given as much as 14 pints of milk per diem) Native cows with half-bred calves from pure bred bulls £7 to £16: Half bred Bulls up to £12: Pure Bred Bulls, born locally and two years old, are eagerly purchased at £25 a head.

It may be accepted that a native cow of ordinary qualities purchased at £6 may be sold with calf within the year for £10, provided the sire possesses a good pedigree and it will be some years before this price shows any tendency to reduction.

The local cattle diseases are as prevalent as in other countries, possibly a little more so than in most countries owing to the general lack of fencing. The Government is assisting Colonists with fencing material and in some cases compulsory fencing a farm, allowing the farmer to repay the price of the fence erected by a system of periodical payments. Further native cattle are gradually being

NATIVE HERDSMEN

forced into the reserves specially set aside for their use and the irregular movement of cattle will be entirely prohibited. A Staff of Veterinary Officers are constantly employed by the Government to do their utmost to prevent diseases and they help Pastoralists without fee when the latter are in trouble. In addition to the Government Staff there are other experts who are employed by the wealthier pastoralists. The wealthier are always willing, and anxious, to allow their experts to assist fellow Colonists when asked to do so.

Native herdsmen, sons of generations of pastoralists, are open to employment and are if anything of a more reliable class of native than the average native servant. They possess an in-born affection for livestock which is found to be of great assistance when they are being taught up-to-day and scientific principles in stock breeding. Their wages run from seven shillings a month to fifteen shillings; as much as forty shillings is being earned by well tried, intelligent headmen.

The natives in some districts run goats and cattle together, particularly in the Kismayu District in the Lowlands. There is a distinct

future for the goat farmer and a wide range of area in which his operations can be successfully conducted. The native goat is small and its meat of coarse quality yet they still share with sheep the meat market.

From experiments already made it appears the Angora ram makes a very good impression on the progeny of the native ewe. Fair Angora rams can be imported for about £10. The native ewe goat averages eight shillings, is exceedingly hardy and well understood by the native generally. The Angora industry will undoubtedly soon take its proper place and Colonists will find the future of the Angora industry one which will rival wool growing.

There is a District in which the goat would probably thrive where other livestock would be less successful, a district within thirty miles of the Port of Kilindini and in the immediate neighbourhood of the Railway. This District has up to the present time escaped Colonists' attention. The land and pasture is equal to first class land but will most probably be classed as third or even fourth class land, which ensures a low rental. The one objection is the absence of water at certain seasons.

WATER BY RAIL

This difficulty can be got over by contracting for a water supply, with the Railway. The Railway will deliver a railway water truck containing over 2,000 gallons of water to any siding in the district for a few shillings. Two thousand gallons of drinking water go a long way in watering goats.

CHAPTER XII.

Sisal cultivation must be added to the list of industries which can lay claim to have taken firm root in British East Africa.

The industry began in a very small way but in the course of time, as more and more "bulbils" and "suckers"—those portions of the plant which are used in its propagation—came into the open market further plantations have been started.

It is not an industry for the small man nor will it be until a closer settlement of the land has been obtained but it is an industry for the Colonist of means and its local cultivation offers every opportunity to the limited Company. Its cultivation is not confined to the Highlands, indeed the Lowlands offer very much better opportunities, particularly the areas situated in the neighbourhood of the sea, where the sandy soil is interspersed with coral rock. The Sisal apparently regards such condition as ideal and in no way does it feel ill effects from rooting in scanty earth.

SISAL LAND

In selecting areas for the Plantation the water supply must receive the very first consideration. A running stream should receive preference but where this cannot be secured enquiries must be instituted in the immediate neighbourhood as to the likely quantity of the under ground water supply. There are but very few places along the Coast coral belt where water level cannot be reached at sixty feet. To sink a well eleven feet in diameter and fifty feet deep should not cost more than £40 and with proper pumping arrangements a daily supply of some thousands gallons may fairly be relied upon. A compressed air pump works very satisfactorily when the power is derived from the Machine house.

The rent for the land will be merely nominal. In most instances the land selected will not be valued higher than at ½d. per acre per annum, of which 340 acres can be freeholded after the first three years of occupation. The land must be well drained and moderately light. Rich soils tend to create pulp in the leaves rather than fibre.

The fibre extracted from Sisal leaves is used for making rope and harvesting twine.

It has the World for its market: America, Canada and Australia alone consume thousands of tons annually. Its value fluctuates very considerably, it has fallen as low as £20 per ton and has risen as high as £40 per ton: the average market price at the present time lies between £20 and £35-10 according to quality. The local fibre of the cultivated Sisal is worth not less than £27-10 to £30 per ton. The output of Manilla hemp, which rivals the Sisal fibre, is declining with the result that in Australia farmers finding a tightness in the supply of a material which is essential to the proper harvesting of their wheat and other grains. It can be confidently expected, however, that Sisal fibre will not depreciate to any serious extent for many years to come.

It is estimated that nearly half a million local sisal plants are now in actual bearing stage or rapidly approaching thereto, with the result that farmers who are taking no steps to keep back the poling of their plants are reaping or will shortly reap a good harvest from selling bulbils to their neighbours. The price of bulbils, when they can be purchased, is about £1 per 1,000, this price will drop as

PLANTING

each season goes by until 'ten to twelve shillings will be the average selling price. Both bulbils and suckers can be purchased abroad and many in the past have been purchased from a neighbouring Colony where Sisal plantations were established a few years ago and where many of the plantations have already returned in interest the total cost of their original establishment. A Colonist who would cultivate sisal need not be an expert either in fibre cultivation or in general agriculture: The process of planting, cutting, machining, drying and baling is not difficult. If several planters, with adjoining properties, co-operate, when decorticating, they can jointly employ a machine Superintendent with advantage.

After the ground has been cleared and the bulbils or suckers inserted the land needs little attention. Close and frequent hoeing is really quite unnecessary unless catch crops are included in the general scheme. The most virulent weed has a very hard struggle for existence in competition with the coarse and powerful growth of any of the Agave family.

Three years is a sound estimate for the

period lapsing between the day of actual planting and the cutting of the first leaves. At this time suckers have already thrust their way into the upper air from the plant's roots. These suckers are cut off and planted within the rows and midway between the adult plants thus ensuring a never ending harvest. From the fifth year the plants pole, that is send out a flowering spike, a tall stemlike growth reaching in many instances over 20 feet in height from the ground and it is from this pole the bulbils in their many hundreds are secured. By careful management the 'poling' may be put off for a year or more the plant being thus allowed to spend all its energy on putting forth the fibre-bearing leaves.

There are many methods of laying out a plantation, in the case of bulbils planting out from a nursery should be adopted but suckers can be holed out at once. There should be at least six feet between each plant and twelve feet between rows although quite a number of planters are satisfied with six feet between the plants and eight between every six rows and twelve feet between the sixth and seventh rows, reserving the twelve feet space for the occcasional laying down of light tramways—

TRANSPORT

an essential system of transport if the full profit from a plantation is to be obtained.

The initial expenses in establishing a Sisal plantation are somewhat heavy, during the waiting period (three years) the recurrent expenses are small, but thereafter expenses again become heavy. In estimating expenditure the figures given as a guide will serve the same purpose to an intending planter no matter whether he is established at the Coast or Highlands; the land selected will probably be of the lowest class in both instances and the labourers though receiving less pay in the Highlands, give a less output in working capacity. The extra cost of railway transport of the machinery and plants has some bearing on the total estimate. In the matter of revenue the Highland yield of fibre compares unfavourably with the Coast lands. It is estimated as the result of carefully made experiments seventeen highland grown sisal leaves are only equal to fourteen coast grown leaves.

The one great point to be always borne in mind by Sisal Planters is that it is useless to put down, say, one hundred acres one season and another hundred acres during another season. The whole first area to be planted

should be planted within one season so that the leaves are ready for harvesting more or less together and thus the decorticating machines are never idle.

The following figures are worthy of consideration:—

First Year.					
2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -		£	5.	d.	
Clearing 400 acres at a maximum	cost				
of £2-10 per acre	•••	1,000	0	0	
Preparing nursery including six mor	aths				
special labour	•••	60	0	0	
Purchasing bulbils 300,000 at 20 s	hil-				
lings including transport	•••	300	0	0	
Planting out 600 plants to the acre		80	0	0	
Laying down light portable tramv	ив				
including cost of plant	•••	300	0	0	
Tools	•••	20	0	0	
Dwelling House for Superintenden	t or				
Owner?	•••	80	0	0	
•	c	<u></u> 1,840		0	
	25	1,040	U	•	
Second Year.	20	1,040	U		
Second Year. General Estate Labour		200			
			0	0	
General Estate Labour	•••	200	0	0	
General Estate Labour	•••	200 92	0	0	
General Estate Labour Interest on £1,840 at 5%		200 92	0 0	0 0	
General Estate Labour Interest on £1,840 at 5% Third Year.	•••	200 92 <u>£292</u>	0 0	0 0 0	
General Estate Labour Interest on £1,840 at 5% Third Year. General Estate Labour	•••	200 92 £292 200	0 0	0 0 0	

COST OF ESTABLISHMENT

Machine House and complete machinery	£	s.	đ.
for decorticating	800	0	0
Baling and incidental Plant	80	0	0
(The two estimates immediately above	,		
can be reduced to 1/3rd through co-operation)	•		
			_

Total Cost £3,378-12

£1,246 12 0

Nett Revenue Fourth Year.

£ s. d.

Dry fibre at half ton per acre=200 tons output—value baled on Farmand after deducting cost of collecting, transporting, decorticating, washing, etc., for which labour 60% on value is estimated—no allowance being made for co-operation ...

... 1,600 0 0

Revenue Onwards.

Per annum after the 4th year

...£3,200 **0 0**

It will be noticed no allowance is made for weeding or owner's living expenses. It may be presumed catch crops such as maize, millet, or beans are cultivated during the first three years of establishment. Although the catch crops will not flourish in the poor sisal soils to the extent they can be expected to do on richer earths yet the yield therefrom should go far forwards covering the cost of personal maintenance and such weeding as is found to be absolutely essential. In a case where a

Superintendent is employed his salary should be added. A more or less trustworthy Baluchi or Arab can be engaged at from £30 a year at the Coast. In the Highlands, a European is an essential for the fulfilment of 'occupation' conditions and £200 a year must be ear-marked in this instance.

In time to come a system of imported indentured labour from abroad may be found necessary; under these conditions properly constructed lines for housing employees will have to be erected and furthermore the indentured labourers will be under direct Government supervision. Farmers — who employ this system of labour-will find it necessary to add at least £200 to their first years establishment expenditure but will reap in return a greater nett profit through the benefit of dealing with an intelligent class of labourer and what is equally important with Sisal plantations a continuity of trained labour, both features it is difficult to obtain through the employment of the local supply.

CHAPTER XIII.

Rubber is occupying the close attention of Lowland planters and is becoming a staple product. For many years rubber collected from vines found growing wild in the numerous Forests has made up a fair proportion of indigenous exports but it is only since 1906 rubber has been systematically cultivated locally.

Of the many varieties of Rubber trees which have appealed from time to time to rubber planters, Para comes a long way first, but in our newest 'Colony' Ceara is practically the only variety which has been taken up on a commercial scale. It is not easy to understand why a tree, which gives a considerably smaller annual yield in latex—the basis of rubber—and which latex when coagulated is of a lower market value than several other varieties, has been so universally appealed to locally. Many reasons are given why Ceara has become the established variety. Among the first reasons are:—It grows rapidly and

with exceptional vigour: it is simple to cultivate: it is easy to tap: it is ripe for operation in its second year: it does not suffer to any serious extent through prolonged droughts or during flooding rainy seasons. Para, on the other hand, requires seven years' growth to reach a tap-able stage; requires a regular and heavy rainfall: it inclines to a delicate growth, and more or less scientific methods must be adopted during the tapping process.

The comparative average yields of the two varieties are:—At the age of eight years—as one is to four: at the age of twelve years as—one is to three, while at the age of 20 years Para trees have frequently been known to give from 20 to 25 lbs. of dry rubber per tree per annum, but there is no record of any Ceara tree producing any latex at all at this age. In considering these records it must be remembered the capital cost of cultivating Ceara compares with the cost of cultivating Para—as one is to five, and there is always a risk in any country, where the rainfall may occasionally fall short, of losing a whole Para plantation.

The pioneer Ceara rubber planters have

CEARA SEED

started the industry under difficulties which later comers will escape. They have by experiment had to prove the best methods of planting in particular Districts and have also had to content themselves with growing seed which had no guarantee of quality. is a well known fact that although Ceara trees seed very early and very abundantly, every tree throws seeds of greater or lesser value. After 1910 planters will be able to purchase seeds systematically collected. pioneer planters of to-day are keeping records of the produce of every tree and the seeds from trees which produce, for instance, only one pound weight of dry rubber per annum will be thrown aside and only the seeds from trees producing above this average offered for sale.

The usual method adopt for cultivating Ceara is by planting out from a nursery or by planting out seed direct. The seeds, which are very hard, are sometimes filed on each side to hasten germination; some planters soak the seeds in water before planting others again sow the seeds in three inches of earth mixed with stable manure which is laid on sheets of corrugated iron and just above

these beds other sheets of iron are placed. This system causes quick germination if the earth is well watered. Seeds for nurseries should be planted from ten to fourteen inches apart in some selected corner protected as far as possible from the wind. After six months' nursery treatment they are from two to three feet high, in exceptional cases even six feet high, and are ready to plant out in the small holes previously made ready for them. The root of the Ceara is of a bulbous nature which enables it to withstand transplanting remarkably well, indeed very few plants fail although they invariably shed all their leaves within forty eight hours of their being placed out in the fields.

Catch crop growing occasionally forms a part of the general cultivation. The catch crops act as a shade and the trees are often found to grow more rapidly with catch crops than when planted alone. Maize, millet, and broom corn make very good catch crops and can be depended upon for a return even in the face of a bad season.

The enemies of the Ceara rubber tree are few of which monkeys and wild pigs are the most obnoxious. The pigs have a fancy for

TAPPING

the bulbous roots of the young tree.

At the end of the second year's cultivation under ordinary conditions, the trees will have reached twenty feet in height with stems of four inches and more in diameter. At this stage they can be tapped—experiments have proved that moderate tapping at this stage is beneficial to after growth. At five years of age the tree has become a veteran and can be 'milked' as many as eight to ten times a year for at least a further period of seven years.

Recent experiments prove that the simplest tapping process is the best and one which, with, an hour's practice, is readily understood by the rawest native labourer. Native collector, who is either paid by result or at a wage for the the latter method being preferable, can tap many trees per diem, allowing the early hours of the morning for his work. A simple system is to mark out a certain number of trees. The collector then proceeds to attack tree by tree by brushing one side of the tree's stem with a weak solution of acid and thereafter immediately making horizontal stabs with a specially constructed

knife. The stabs are made into the surface of that part of the tree stem where the branches commence downwards to within one foot of the ground. In many cases even the lower branches can also be profitably attacked. When the allotted number of trees are stabbed he returns to the first tree and finds the white milky latex, which has run from the various wounds, partially coagulated.

The collector then commences to wind up with his fingers the slightly sticky substance (commercial rubber) into a ball in the same way he would wind up a skein of wool. After removing all this stiffened latex he proceeds to the next tree and adds to the rubber ball by winding as before, usually working from the foot of the tree upwards. Having secured balls of the required size he brings them to the Homestead where they are laid on ordinary galvanised wire covered frames and hung to dry in a shed to which currents of air are accessible.

Another method is to wrap the coagulated latex around a sort of wooden rolling pin about 3 inches in diameter by 6 inches in length, excluding handles. When sufficient rubber is collected on this roller it is sliced down one

COST OF TAPPING

side and the rubber when removed has the appearance of a biscuit.

Dry Ceara rubber in this condition has realised from three shillings to six shillings and six pence per lb. in the European markets but as much as eleven shillings and more has been obtained for this rubber after if has been machine worked and cleaned.

On some plantations lime and sour orange trees are prolific and it sometimes pays to give out the citrus fruits to the native collectors who cut them in two and rub the juice directly on to the stem of the rubber tree thus doing away with the expense—even if slight—of using brushes and acid solutions.

A Native rubber collector after the first few days practice can be depended upon to harvest at least one lb. of dry rubber a day. The daily pay of a rubber collector averages from 5d. to 8d. The most popular tapping season commences about the middle of June and is carried on until the end of November. Some planters tap for nine months in the year, others again for the two months directly after the heavier rainy season and two months after the lighter rainy season.

At any moment rubber planters may expect

to be in a position to be able to extract latex from their trees by a more scientific method than bleeding. As the demand for rubber as a raw material becomes more eager, Scientists are giving this subject greater attention and soon inventions are likely to succeed inventions some of which may do away with the somewhat crude methods of tapping at present adopted.

The following estimate will be found serviceable as a guide; the figures err perhaps in the comparatively low estimated profit compared with actual present experience:—

First Year Expenditure.

•		£.	s.	d.
Clearing 300 acres at £2 an acre	•••	600	0	0
Preparing and cultivating nursery	in-			
cluding cost of seed	•••	25	0	0
Planting out 300 trees to the acre	•••	160	0	0
Dwelling House	•••	80	0	0
Tools, etc.	•••	10	0	0
One year's living expenses (two pers	ons)	200	0	0
	£	1,075	0	0

Interest on £1,075-0-0 at 5%

... 53 15 0

REVENUE

One year's living expenses General Estate Labour, weeding and replacing failures from crop nursery		0	0
	£253	15	. 0
Third Year Revenue.			•
From ½ lb. of Rubber from 50,000 trees at two shillings and six pence a lb. on Plantation (value in 1910 six shillings a lb.) less one shilling and six pence cost of collection		0	0
cost of concesion			_
	£625	0	0
Sixth Year Revenue.			
From 1 lb. dry rubber from 55,000 trees at two shillings and six pence per lb. on Plantation (value in 1910 six shillings a lb.) less ten pence per lb. cost of collection		0	0
	£4583	0	0

CHAPTER XIV.

The cocoanut has been called the "Prince of Palms," a title which is in need of amendment, the "King of Trees" would more correctly define this most wonderful of all economic products. In our newest 'Colony' there are a million acres of land suitable for cultivating cocoanuts, and three-quarters of this area can be correctly described, without the least exaggeration, as ideal.

The country knows no hurricanes—a most destructive force to the willowy growth of the cocoanut and a force most feared by planters: the soil is either sandy, with nourishing springs beneath, or of alluvial loam, rich and of great depth: droughts of such duration as to cause death to even the newly planted seedlings are of the rarest occurrence and sea breezes blow continually throughout, the year—for six months in one direction and for the remainder of the year in another.

The estimated number of existing trees,

COCOANUT PLANTING

between the ages of five years and eighty years, is over seven million, but the export of copra—the white fleshy sun dried keruel of the nut—only averages seven hundred tons per annum or in other words an export return of less than one penny per tree. In the majority of cocoanut growing countries, for instance, the West Indies, South Sea Islands, Ceylon and India the export value per tree is many hundred per cent greater.

As a planter, who invests his money and labour in a cocoanut plantation has to depend upon the export market for his return he naturally seeks for reasons to account for the poor state of the local export trade.

The reasons are plainly evident: The plantations are chiefly the property of Natives and Arabs and Indian Immigrants. The areas held by the former classes are usually small, averaging less than three acres per owner, and the areas held by the Indians do not average more than ten acres, even when allowance is made for the larger areas owned by the richer Indian Merchants, who year after year add one or two acres at a time by purchasing from Native and Arab owners.

Small individually owned areas are not suitable for creating an export trade. It does not pay the owner of a few hundred trees to put down machinery to deal with the copra and the coir fibre won, but it does pay him either to sell his nuts in the market or sacrifice his fruit for the purpose of manufacturing the intoxicating 'toddy,' the curse of the local industry and one which unfortunately finds an enormous demand among the surrounding natives, who are willing to partially starve many months in the year provided they are able to occasionally purchase the evil liquor.

The planter on finding this state of affairs existing does not need to allow it to unduly influence him. He starts his industry on a different basis. He takes up virgin land and, following the well trodden pathways of Planters in other countries, succeeds. Having carefully selected his land the purchasing of seed nuts is one of the first difficulties he has to overcome. To provide his nurseries he needs to search the neighbouring plantations—accompanied by trustworthy native 'headmen'—for trees of not less than twenty years of age; trees which have at no time been tap-

SEED SELECTION

ped for 'toddy,' and which are good producers. If he proposes to plant up 200 acres, anything less being hardly worth his attention, he needs 16,000 seed nuts and it is on the careful selection of these nuts will depend his future. By care and patience he can secure seed equal to that produced by any country in the world, and seed which will return him In the course of time the a fortune. Government Agricultural Department and established successful European Planters, will be in a position to save him much of this very important labour of seed selection. A special market will be established at which guaranteed seed nuts will be procurable at slightly above the ordinary ruling market rates.

Having secured the 16,000 seeds to his satisfaction the Planter next pays all his attention to his nursery, in the preparation and cultivation of which even the novice will find no difficulty. This part of cocoanut cultivation is well known and can be capably conducted by the majority of the natives whom he will employ as labourers.

Before the time arrives for planting out from his nurseries he cleans his land and has

holes dug about three feet square, three feet deep, and 26 feet apart, this gives him 66 holes to the acre. At the commencement of the heavy rains he plants out each seedling into the holes prepared, fills in with earth leaving the crown of the young tree eighteen inches below the level of the ground. The space left gradually becomes filled in through the rains washing down the surrounding earth.

For the next two years the Planter must watch his young trees assiduously. He must keep the ground free of weeds either by running a light plough along the groves or by hand hoeing. The cost of weeding should be covered by cultivating catch crops. Ground nuts are particularly suitable for a catch crop as the leaves of this product make an admirable manure for the young coccanut trees when piled around the stem. The nuts can also be sold profitably provided the removal of the husk from the kernel is carried out with the use of a decorticating machine. If does not pay to cultivate ground nuts if the decorticating has to be done by hand.

During the third and fourth year but little catch crop growing can be undertaken and the fifth year the weeding becomes a general expense to the estate.

A GREAT REWARD

Weeding is not much indulge in by native planters hence the yield of their trees seldom reaches more than sixty nuts per annum whereas a tree of equal quality in the hands of a conscientious planter will yield from eighty to one hundred nuts and if scientific artificial manuring occupies part of the planter's attention, one hundred and fifty, even to two hundred nuts, can be obtained. No known product appreciates manures so thoroughly as the cocoanut.

At the sixth to seventh year the Planter begins to reap his reward. A reward which should satisfy the most avaricious. In his eight to ninth year he should be harvesting not less than eighty nuts a year per tree. In the tenth year the net income should be over £2,500 and the Planter will find little difficulty in disposing of his plantation at £60 an acre,—taken at the lowest computation.

Seven years is perhaps a long time to lock up capital without a return and although local Colonists have secured nuts from four year old trees this return should be regarded in the light of an extra and unexpected, but welcome, profit.

A successful cocoanut planter must necessarily be a man of a formed character which should include the virtues of patience and contentment; planters who do not possess these virtues will find the cultivation of other products more suitable to their temperament.

The fascination of cocoanut cultivation grows on the planter year by year and it must not be thought that because a year or two intervenes when no catch crop cultivation is possible the Planter is idle. He has insect enemies to fight, he has his vegetable garden, and possibly his cows and working oxen, to see to all of which keeps him sufficiently occupied.

The following estimates will be found useful when considering the establishment of a 200 acre plantation.

In these estimates it is presumed that first class Crown Land is under occupation and not freehold land which is worth variously from three pounds to fifty pounds sterling an acre.

1st Year Expenditure.			
201 2 001 222	£.	s.	d.
Residence and out-buildings	80	0	0
16,000 Seed-nuts, selected, at £4 per			
1,000 allowing for 2,000 failures	64	0	0

FIGURES

		•		
		£	3.	d.
Nursery cultivation	•••	20	0	0
Clearing 200 acres at £2-0-0	***	400	0	0
Holing, 13,200 holes at 6s. 8d	. per acre	66	13	4
Planting out-5s. per acre	•••	50	0	0
Tools, etc.		10	0	0
Night watching	•••	60	0	0
Weeding, renewing failur vegetable garden and gene	ral }	-	cat	ch
Estate Labour) crop	8		
Living expenses (two person	s)	200	0	0
		£950	13	4
2nd Yea	ar.			
Repairs to Buildings	•••	5	0	0
Roads	• • • •	25	0	0
Night watching	•••	60	0	0
Weeding, etc.	covered by	catch	cro	рв
Living expenses	•••	200	0	0
Interest on £950-13-4 at 5 p	er cent	47	12	0
		£337	12	<u>_</u>
3rd Y e	ar.			-
Repairs to Buildings	•••	5	0	0
Roads		30	_	-
Weeding etc.	•••	50	_	-
Living expenses		200	_	-
Interest		56	_	_
Tools	•••	10		_
		£351	4	_
			_	~

At this stage a Planter should be able to obtain a substantial loan on his property, if he so desires.

4th, 5th and 6th year.	£.		a
Taken at an average for 3 years at £280 per annum, plus a further capital expenditure of £300 on machinery, the construction of copra drying floors, and fibre extracting pits			
_	0 1 140		
Total cost of the Plantation at	€ 1,140	U	U
7th year—say	£2,750	0	0
Annual Revenue of Forty Years fol	lowing	: —	
4,000 ripe nuts per acre yielding 2,000 lbs. copra and 600 lbs. coir	£.	8.	d.
fibre: value on Plantation of copra in bulk at £26 per ton and coir baled (three qualities) at £17 per ton = Less a conservative estimate for cost of collecting, making and general Estate	5,570	0	0
1,5	£2,785	0	0
Annual net profit	£2,785	0	0

CHAPTER XV.

Coffee cultivation has found favour with some Highland settlers, the most successful cultivators being Colonists from France. The French Colonist is an admirable agriculturist. No matter whether he has been trained to a profession or trade, or whatever may have been his previous training, he is invariably successful on the land. This is largely due to his thrifty instinct and his power of directing his attention to those details which many people are too apt to overlook as of too little importance to warrant close attention. Among the successful coffee cultivators of the Highlands, to-day, the Frenchman stands easily first and he is likely to be well satisfied with his choice of products.

Successful coffee growing is by no means easy, the product is liable to strange and insiduous diseases which in many countries have swept over enormous areas and devastated whole plantations in a single season. If it were not so, coffee cultivation

in our newest "Colony" could not hope to compete at a profit in the World's markets. nevertheless, coffee is established as a local industry and that it is likely to be still further cultivated is most probable. It is an industry which appeals to Colonists because the average yield per acre varies but little and the market price of the berries remains steady. Before, however, an inexperienced would-be coffee grower opens up his virgin forest land he would do well, indeed very well, to put down a premium and secure a six to nine months sojourn on an established This premium will save him plantation. possibly from disaster, in any case from many pitfalls.

The variety of coffee cultivated in the Highlands is that known as Arabian. This variety succeeds only in the high altitudes of tropical countries whereas the more prolific variety the Liberian needs sheltered lowlands. It is somewhat remarkable that the latter variety which offers so little difficulty in harvesting and which gives five, six and seven times a greater yield than the former has not yet been given a serious trial in the Coast country.

COFFEE

Again in comparing the two varieties the picking of Arabian coffee cannot be extended over a long period for when the berry turns red and thus becomes ripe it must be gathered straightway, otherwise fungus makes its appearance and the crop is much damaged. Thus the planter is largely dependent on a labour supply which must of necessity be irregular as he cannot afford to keep his harvesters on throughout the year.

The small Arabian cultivators have no such labour difficulties for when harvesting they merely spread a cloth upon the ground and shake down only the ripe berries. European planter, cannot afford the labour for this slow but ideal method of harvesting; he has generally a large area under cultivation with many tons of berries to gather, and only a limited period of time to do it, in consequently his labourers must pick the berries from the trees and unripe and ripe beans promiscuously in the resulting crop, a fact which accounts for the difference in price realized by the original cultivators and that realized by the Colonist planter. It is true the planter on the larger scale certainly scores over the small man in the use of machinery. A

planter can afford to purchase the latest inventions in pulping and hulling machinery which enables him to come more closely into competition.

The coffee planter does not expect any return from his plantation for the first three years but in the following three years he should recover his capital and be in a position to retire from active work at the end of the tenth year—always provided he has been able to overcome his many insect enemies.

In addition to coffee, cotton has been receiving considerable attention at the Coast and the Lowlands generally. This is another product in which the inexperienced planter would do well to purchase his experience at the hands of one or another successful cultivator before he tills his own fields. Cotton, like coffee, has also many enemies not a few of which are of a most destructive nature and which, when once they obtain a strong footing, defy the efforts of the most scientific planters to eradicate. Cotton requires very regular seasons; a day or two of rain during the two to four months harvesting and the value of the crop is greatly deteriorated. A really bad season

SEA ISLAND COTTON

and the capital expended is totally lost.

Experience has proved that even the finest quality of cotton—Sea Island—can be locally successfully grown and strangely enough samples valued at the extraordinary price of one shilling and eight-pence a pound have been produced on the coral island of Mombasa. Abassi cotton to the extent of some hundreds of bales has been exported to Europe during the past two years and has averaged five pence to six pence a pound in Liverpool but notwithstanding these results the Colonist who risks his all in cotton cultivation is taking great liberties and must be prepared to fall should circumstances be in the least adverse.

The experience of to-day, points to two methods under which cotton may become locally a staple industry.

- (a) Individual planters utilizing the product as a catch crop.
- (b) Corporations with large capitals taking up extensive areas along the banks of the Juba and Tana Rivers and on the shores of the Lake.

Individual planters can profitably cultivate,

and have profitably cultivated, their ten to thirty acres of cotton on their cocoanut or rubber plantations, and on a number plantations at the Coast an area, if small area, can generally be found where soil and other conditions are suitable to the cotton plant. The planter has furthermore sufficient time to thoroughly oversee a small area even to the extent of watching each tree as it grows and thus protecting it from its His expenses on the smaller enemies. cultivation are not great and if he can realize £4 an acre from his crop he is very wellsatisfied. When large areas, however, are under cultivation the planter has very many difficulties. It is not to be expected an individual planter will be satisfied with a ten or fifteen per cent. profit on his capital yet he cannot hope to reap a greater return without taking too great a risk. He must employ experienced planters to assist him, he cannot depend on the un-tutored native labourer to protect the many acres which he, himself, cannot oversee; he cannot place too much dependence on the Entomologist Department of the Government, for the Staff though exceptionally energetic have many calls.

COTTON CORPORATIONS

With the great Corporations conditions are different, an interest of ten cent per annum is an attractive one to the shareholder. The shareholder does not begrudge great expenditure on Experts' salaries, powerful machinery, irrigation works and the many other items of expenditure which are beyond the reach of the individual, and all of which are necessary for the cultivation of cotton on a large scale.

Possibly in years to come when the Arabs and Natives are taught the mysteries of cotton cultivation and are willing to lend their experience to the individual planter at a reasonable interest, and possibly when more reliable data is recorded, plantations devoted solely to cotton cultivation may add their quota to the general prosperity but in the meantime this product should be regarded by the local Colonists either as one worthy of cultivating together with other catch crops, or as one on which large capitals can be expended with the reasonable prospects of obtaining a fair return.

