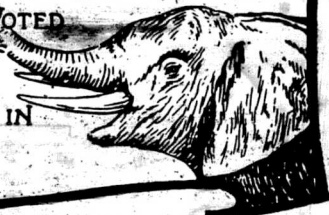


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A WEEKLY JOURNAL



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Official Organ in Great Britain

Convention of Associations of Kenya,

Convention of Associations of Nyasaland,

Associated Producers of East Africa,

Coffee Planters Union of Kenya and East Africa.

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RESTRICT PREFERENCE TO THE DESERVING.

THE suggestion was first made in our pages a fortnight ago that in return for the preference given to Empire-grown fibres by British Government Departments when placing orders for cordage and similar supplies, members of the East African Section of the London Chamber of Commerce engaged in the sisal-producing industry in Tanganyika Territory should, as a *quid pro quo*, make it a definite rule to purchase British machinery whenever possible, and to employ British personnel in every instance. To bind individuals to the voluntary fulfilment of such a patriotic and equitable course of conduct is impossible, for in the absence of sanctions some producers would assuredly ignore the reasonable standards set and kept by colleagues with a keener sense of their obligations.

That being evident, we hope that the British Government Departments concerned will be empowered to go a little farther in the exercise of the valuable voluntary preference which they have promised, by announcing that it will apply only in the case of East African estates with predominantly British capital (or, in the case of companies, to those registered in Great Britain and therefore paying British income tax), purchasing British machinery as far as possible, and employing British personnel. Our proposition, in other words, is that quasi-British and pseudo-patriotic estates and companies should be excluded from the benefit of the British Government preference, in which they have in equity no right to share. Those responsible for the policy of such semi-alien properties have chosen what they considered the better part in allying themselves with Continental finance, in making their main purchases of machinery abroad, in engaging considerable numbers of foreigners, and in exhibit-

ing a marked preference for the use of non-British shipping. They would therefore have no possible cause for complaint if the British Government were definitely to instruct the official purchasing departments to restrict the promised voluntary preference to sisal produced on all British estates.

For the smooth working of such a scheme it might be made known that the Army, Navy, and other Departments contemplated the establishment of a register of British sisal estate marks, and that to that register would be admitted only plantations able to show a certain minimum standard of commercial patriotism, Government purchases being made exclusively from estates on that register. Achievement would not be nearly as complicated as it sounds. Similar, and much more difficult, action has already been taken in the Empire for the precisely parallel purpose of ensuring that preferential tariff treatment shall be confined to those who have shown themselves worthy of it; if it can be done in such intricate matters as, say, the assessment of the percentage of British labour and material in a piece of manufactured steel entering Australia, it can be done with ease in the case of sisal.

There could be no complaint that such action would infringe the principle of the Congo Basin treaties and the Tanganyika Mandate, whereby non-British nationals and interests enjoy in East Africa identical privileges with British citizens and enterprises. That equality exists and would be maintained in East Africa; the preference in question would operate only outside East Africa. The Sisal Producers' and Importers' Sub-Section of the London Chamber of Commerce has raised the question. Its chairman and members ought therefore to be willing to urge its extension to the logical conclusion here outlined, and we suggest that the proposal is at least worthy of public debate.

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SIR DANIEL HALL ON KENYA.

SIR DANIEL HALL, who during his brief visit to East Africa was persuaded by the Kenya Government to act as Chairman of its Agricultural Commission, has contributed to *The Nineteenth Century* a most interesting article entitled "The Native Question in Kenya." The following passages will particularly interest East Africans:—

"The goat destroyed the fertility of Greece and other Mediterranean regions; denuding the hillsides and washing the soil into malarious swamps in the valley; this process is rapidly being repeated in East Africa. Some of the Wakamba chiefs are conscious of the ruin that is overtaking their country. They can recall districts where the grazing was good in their youth, but have now become desert; they agree as to the deterioration of the areas that are still carrying cultivation and stock. But they say that their people generally fail to recognise the inevitable end, and are by no means disposed to change their outlook. They will only reduce their stock under compulsion from the Government.

"The droughts of the last two years have accelerated the destruction, and hit the Wakamba hard. So far they seem to have managed to purchase their necessities with their hoarded money, but they are described as irretrievably in debt to the Indian traders, in spite of the law that voids a debt of more than 200s. unless it has been registered before a District Officer. The Wakamba solution for their troubles is more land. They had previously been given one unoccupied area and are now overflowing into other reserves. But whatever land were available it would only afford a temporary relief; given the opportunity, in time the Wakamba would fill the whole of Africa with their stock. . . . Many people have looked to Africa as the potential source of meat for the world. The cattle are indeed there, even though Africa is the home of every known and unknown cattle disease, but they are unavailable for food purposes, and they are tending to destroy the land on which they live.

"The young Kikuyu in their zeal for 'nationalism' are reviving barbarous customs like female circumcision, frowned on alike by missions and the Administration. Recently they broke up the Communion service in a certain church, some members of which had been excluded because of their participation in a particularly cruel case of clitoridectomy that had come into the courts. The Kikuyu are experimenting a little in new religions, blends of Christianity and Muhammadism, but none of their sects has reached the importance of the Amalekites in Uganda.

"What is needed is the patient cultivation of co-operative societies among the Natives, which will ensure to them the current market price, less the necessary costs of grading, bulking, and transport. The co-operative organisation becomes at once an educational agency, because its interest is to inform its members what they ought to grow in order to secure a good sale. Further, the Native co-operatives can then associate themselves with the white co-operatives in order to obviate competition and ensure common marketing for export. Already one of the most successful of the Kenya co-operative societies, the Lumbwa Creamery, takes in Native members on the same terms as white.

"If the Natives can thus be led to develop economically we may see an end to the estrangement that threatens to develop between them and the white settlers. Un-

doubtedly there is a vocal, and possible dangerous, element among the Kikuyu, who are a politically-minded folk with an instinct for exploiting grievances. The young malcontents are well coached by the revolutionary section among the Indians, and have even managed to make touch with the Russian wellhead of discontent. Numerically, they are unimportant, and they are just as much a nuisance to their own chiefs as to the whites, for their quarrel is against all authority.

"But they are accorded an undeserved prominence by a certain section at Home, whose passion for 'justice' expresses itself in a profound distrust of their own people. In England, too, we have to reckon with the incurable romantics who want to see a noble savage preserved from the contagion of civilisation. Civilisation has, indeed, its ugly side, but it is idle to deny our birthright; man, even primitive man, will move along the lines of western development, and it is no more possible to keep the tribes unspotted from the world than to maintain Kenya as a game reserve. Meantime, these friends of the Native at Home are able to exert a paralysing influence upon government. By newspaper articles, by questions in the House, they can make the Colonial Office nervous, and needless legislation is hung up until the administrator on the spot, who has given years of anxious thought to the problem, becomes sick at heart."

Sir Daniel concludes with a reminder that Kenya's administrators and settlers are Englishmen known for a spirit of fair play, and that the breed does not change by transplantation from Europe to Africa.

QUEER "NEWS" FROM KENYA.

CAN anyone tell us what *The Catholic News* means by publishing the following? We give the note exactly as it appeared:—

"The other day a small paragraph appeared in the Press about the firing by British troops upon a crowd of Native women in this unhappy Colony (Kenya), now in British 'keeping.' It was said that a number were shot dead; more died of wounds; more still were forced into a river and drowned. The victims, dead and wounded, numbered some hundreds!!

"But where is the protest of *The Daily Herald*? Or of the Press generally? Not a word!—God help the poor, exploited Natives of Africa, of Australia, of India, and of the lands where the white man has taken up 'his burden.' That 'burden' simply means that he tries to carry off all he can carry, from those to whom he has gone to bring them 'the blessings of civilisation.'

"It is a horrible story, this massacre of women in Kenya, by British troops. Where is Winston Churchill, who was so furious with German 'baby killers'? These people were at war. They were bombarding camps, ammunition works, and so on. The Native women of Kenya foully massacred were not shot down by mistake, but deliberately. And the Labour Government and the Press and the nation has no word to say in condemnation. What hypocrites there are in high and in low places in this land!!"

And what a gullible, reckless journal *The Catholic News* must be! The whole note is a farrago of nonsense, devoid of the slightest foundation. Will the paper in question deign to say on what it bases such an unworthy tirade?

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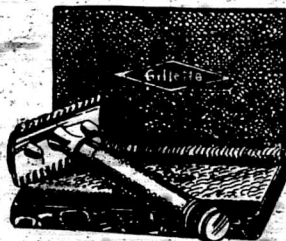
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"EAST AFRICA'S" INFORMATION BUREAU.

"East Africa's" Information Bureau exists for the free service of subscribers and advertisers desiring the Editor's aid on any matter. One of its principal objects is to contribute to the development of British trade throughout East and Central Africa, and any information which readers are willing to give for that purpose will be cordially welcomed.

Manufacturers wishing to appoint agents, and agents seeking further representations, are invited to communicate with the Editor. No charge is made for the service rendered by this Journal in such matters.

The month of Ramadhan begins this year on January 30.

Messrs. Pendera and Sons, the well-known Lourenço Marques agents, are in voluntarily liquidation.

Mr. C. M. Murphy is at present touring East Africa as a special representative of the Goodyear Tyre Company of America.

Messrs. A. H. Wardle and Co., the well-known East African chemists, are to open a branch in Dar es Salaam within the next month or two.

A final dividend of sh. 2.27 has been declared in the matter of Shariff Fazal and Dulabji Pragji, trading as the Colonial General Stores, Nairobi.

The Kenya Government intends to maintain aerodromes and landing grounds at Kisumu, Londiani, Nakuru, Naivasha, Nairobi, Makiindu, Voi, and Mombasa.

The Kenya Farmers' Association is sincerely to be congratulated on having handled the maize of its members at a cost of less than 2% and wheat at less than 2.25%.

A right of occupancy of a plot of land of some 2,000 acres on the Buhingo Peninsula in Luchiri Bay, west of Mwanza, was recently offered for sale by public auction.

Kodak (East Africa) Ltd., which company incorporates Messrs. Howse and McGeorge Ltd., the well-known East African chemists and photographic dealers, have just opened a branch in Iringa.

For twenty-five years' service without a single adverse entry a Native police sergeant in Kenya has been awarded the Imperial Service Medal, being thus the first Native in the Colony to earn the award.

Presiding at last week's general meeting of Nyassa Plantations, Ltd., Mr. F. Stacey Hooker said that, given normal conditions in the copra market, the company should earn a good return on its capital.

The revenue from the sale of ivory and confiscated trophies in Kenya in 1928 amounted to the handsome sum of £13,310. This was very largely in excess of the estimate, and is a testimony to the success of the anti-smuggling campaign.

The area under tobacco in Southern Rhodesia this season is not likely to exceed, and may be less than, that of last year. A pleasing aspect of an unfortunate situation is the opening in Salisbury of tobacco factories, one of which is catering for the Australian market.

The partnership hitherto existing in Tanganyika Territory between Reginald Alfred Fawcus and Hugh O'Neill, under the name of Fawcus and O'Neill, has been dissolved by mutual consent. All assets and liabilities have been taken over by the first named, who will carry on the business.

Mr. C. E. Spencer, of Kampala, gives notice that he has entered into partnership with Mr. William Ker Tait, chartered accountant, and that the practice that has hitherto been carried on at Kampala and Jinja in the name of Spencer & King will in future be carried on in the name of Spenter & Tait.

The Arusha Planters' Association intends to issue for publication correspondence with the Government regarding a case in which Natives drove a herd of eland over a cliff 150 feet high. The Association protests strongly against the sentences, the highest being a fine of 15s. or fifteen days' imprisonment.

The annual general meeting of the trustees of the Gordon Memorial College (Khartoum) Fund was held in London last week under the chairmanship of Lord Revelstoke, who announced that Sir William Edgar Horne had given £500 to provide in perpetuity for the award of two annual prizes for proficiency in survey work.

The Uganda Government proposes to increase the staff of several Departments, the Medical Department receiving nine new European officials, the Education Department six, and the Agricultural, Veterinary, and Police Departments four each. The Public Works staff is to be increased by twelve Europeans, but on temporary engagements only.



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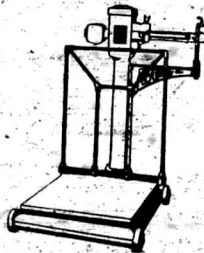
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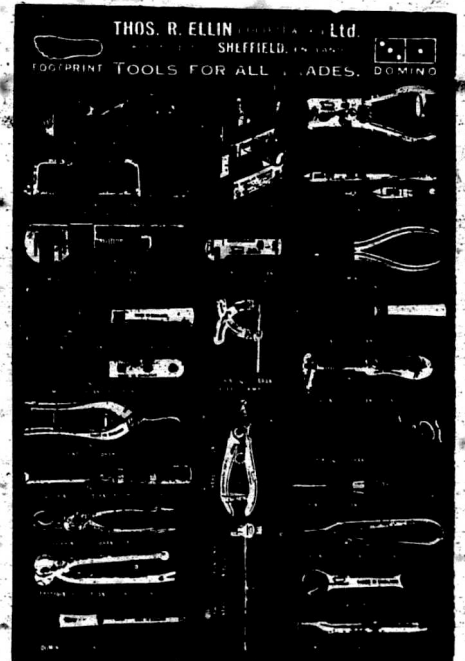
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"C" "	51s. od. to 90s. od.
Peaberry	86s. od. to 161s. od.
London graded:—	
First sizes	125s. od. to 148s. od.
Second sizes	101s. od. to 136s. od.
Third sizes	72s. 6d. to 82s. od.
Peaberry	144s. od.
Ungraded and mixed	35s. od. to 109s. od.

Uganda—

"A" sizes palish	65s. od.
"B" "	49s. od.
"C" "	45s. 6d.
London cleaned:—	
First sizes	70s. od.
Second sizes	50s. od.
Third sizes	36s. od. to 46s. 6d.
Peaberry	od. to 78s. od.
Toro —	
Dutlish	64s. 6d. to 65s. 6d.

Tanganyika—

London cleaned:—	
First sizes	422s. 6d.
Second sizes	88s. 6d.
Third sizes	49s. od. to 58s. od.
Peaberry	96s. od. to 101s. 6d.

Arusha—

London cleaned:—	
First sizes	87s. 6d. to 140s. 6d.
Second sizes	78s. od. to 95s. od.
Third sizes	41s. od. to 65s. od.
Peaberry	95s. od. to 142s. od.

Kilimanjaro—

London cleaned:—	
First sizes	98s. od. to 124s. od.
Second sizes	74s. od. to 89s. od.
Third sizes	57s. od. to 70s. od.
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First sizes	122s. od.
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London stocks of East African coffees on January 15 totalled 32,185 bags, as compared with 29,138 bags on the corresponding date last year.

OTHER PRODUCE.

Beeswax.—The market is easier, and the spot value of fair block 140s. per cwt.

Castor Seed.—Prices have declined to about £15 5s. per ton c.i.f. to Hull and £15 per ton c.i.f. to Antwerp for prompt shipment.

Chillies.—The market is unchanged, with sellers of spot East African at 70s. per cwt.

Cloves.—The market is again lower, with sellers of January-March shipments at 8 1/2d., and spot at 10d. per lb.

Copra.—Prices have declined and the market is quiet, but an upward tendency is expected. Tanga sun-dried No. 1 is quoted around £22 5s.

Cotton.—Roller-ginned Uganda has sold at from 11s to 140 points on, and saw-ginned from 140 to 160, but Tanganyika saw-ginned has been from 110 to 140 on American Middling.

Cotton Seed.—There are buyers of East African at £7 2s. 6d. to £7 5s. per ton on ship.

Groundnuts.—The market is steadier, with January-February shipments quoted around £17 5s.

Maize.—East African K6 has been unsuccessfully offered at 28s. 6d. K2 is nominally 1s. higher per 480 lb. c.i.f. U.K. or Continent.

Rubber.—The nominal values are Nyasaland, 4d. to 4 1/2d.; Uganda, 4d.; East African Manihot, 4d. to 6 1/2d.; and East African Plantation, 5d. to 7 1/2d., all spot.

Simsim.—Buyers have been taking advantage of forced sales from the East, and £17 10s. c.i.f. is about the present value of white and/or yellow, with 10s. less per ton for mixed.

Sisal.—Quiet and rather weaker.

Wattle Bark.—Offerings are small and the market is irregular. East African chopped being quoted about £9 and ground £9 9s. per ton c.i.f.

FORESTRY COURSES FOR MEN ON LEAVE.

The good work which is being done at the Imperial Forestry Institute, Oxford University, under the direction of Professor R. S. Trapp, F.R.S., is well summarised in a little brochure containing the fifth annual report (1928-29) and prospectus, published by the Holywell Press, Oxford. The scheme of instruction provides for the acceptance of forest officers on leave who wish to specialise or take a "refresher" course. During the year Mr. Bourne went to Northern Rhodesia to advise the Government on forestry matters, and in 1929 Dr. Burt Davy travelled through Northern Rhodesia and Nyasaland studying the vegetation and making extensive botanical collections, with the object of throwing further light on the systematy of the trees of those countries.

Tanganyika Territory contributed no fewer than 1,088 specimens to the herbarium during the year under review, Kenya 144, and Southern Rhodesia two. Two forest officers from Kenya and one from Tanganyika attended courses, while one post-graduate probationer for the Tanganyika service was in residence. Some of the publications emanating from the Institute, such as Bourne's Aerial Survey in Northern Rhodesia (already reviewed by *East Africa*), should be of interest to East Africans.

Northern Rhodesia, the *Bristol Evening World* has solemnly assured its readers, was known before the War as "German East." At the same time, no doubt, as Bristol was known as Bremen.

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BRANCHES AND AGENCIES
THROUGHOUT THE WORLD

PASSENGERS FOR EAST AFRICA.

THE British-India liner "Madura," which left London on January 17, and is due to sail from Marseilles on Saturday next, carries the following passengers:—

- Mombasa.**
- Mrs. Allen
 - Miss Allen
 - Mr. and Mrs. W. G. Adams, two infants and nurse
 - Miss J. Briggs
 - Miss J. D. Bloomfield
 - Rev. P. J. Brazier
 - Miss M. E. Budd
 - Mrs. A. C. Bruce
 - Mr. H. B. Currie
 - Mr. and Mrs. C. T. Cogle and infant
 - Mr. and Mrs. H. A. Campbell and infant
 - *Mr. and Mrs. M. M. Crawford and maid
 - Dr. and Mrs. P. P. D. Conolly and two children
 - *Dr. J. H. H. Chataway
 - Mr. J. H. Coney
 - Miss N. H. Corby
 - Mr. John Coryndon
 - Mrs. Drakeley
 - Miss Drakeley
 - Miss F. J. Deed
 - Rev. H. G. Dillistone
 - Capt. O. Dixon
 - Mrs. E. H. M. Eames
 - Mr. and Mrs. D. Edwards
 - Mrs. D. Emley
 - Mr. F. Franks
 - Mr. A. Finlay
 - Mr. T. Fitzgerald
 - Mr. G. M. Flood
 - Mr. and Mrs. K. Gough and infant
 - Dr. (Miss) Grinling
 - Mrs. W. Humphrey Smith
 - Miss D. G. Humphrey
 - Master Humphrey Smith
 - *Mr. F. C. Harding
 - *Mr. and Mrs. Harrison
 - *Mrs. R. L. Hird
 - Mrs. Hodson and two children
 - Dr. G. S. Hale
 - Dr. and Mrs. A. J. Howell
 - Capt. and Mrs. Henshaw
 - Miss L. Hall
 - Mr. T. Hughes
 - Mr. and Mrs. A. J. Johnston
 - Mrs. S. Johnson
 - Miss N. Johnson
 - *Mr. and Mrs. E. H. Judge
 - Mr. J. O. Jameson
 - Major N. C. L. Lowth, M.C.
 - *Mr. and Mrs. H. W. Lane and child
 - Mrs. D. Lawford
 - Miss Lawford
 - *Miss R. Murray
 - Miss G. L. Meyler
 - Miss Walker Milnes
 - Mr. and Mrs. W. D. MacLeman
 - Miss S. C. McLeman
 - Mrs. D. L. Morgan
 - Mr. and Mrs. I. Morgan
 - *Mrs. Morrison
 - *Mr. D. L. Morgan
 - Mrs. D. Mitton and child
 - Rev. F. L. L. McClintock
 - *Mrs. A. McClure
 - *Miss McClure
 - Miss G. M. Marsden
 - Miss J. Norris
 - *Mr. J. R. E. Postlethwaite
 - Mrs. F. E. H. Rimington and two children
 - *Capt. G. B. Rimington, M.C.
 - Mr. F. A. Raitlon
 - Mr. J. Robson
 - Mrs. B. M. Skey
 - *Mr. L. C. Schwartzel
 - Miss C. J. Smythe
 - Mrs. G. E. Spencer
 - *Miss Spencer
 - *Mrs. E. M. Schwartzel
 - *Mr. and Mrs. W. A. M. Sim
 - Mr. W. Scufield
 - Mr. and Mrs. Seymour and two children
 - Turber
 - Miss P. M. Turton
 - *Mr. and Mrs. A. Walter and child
 - *Mr. P. J. Walter
 - *Mrs. E. Wayland
 - Mr. and Mrs. F. J. Woodcock and child
 - Sergt. F. E. Welch
- Tanga.**
- Mr. W. M. Holden
 - *Miss E. L. James
 - Miss J. D. Leighton
 - *Major C. L. Walsh
- Zanzibar.**
- *Mr. P. A. H. Pettman
- Dar es Salaam.**
- Mr. H. W. Bailey
 - Mrs. F. Bailey
 - Mr. and Mrs. B. T. Bailey
 - Mr. and Mrs. W. H. Butler, infant and child
 - *Mr. S. C. Chismon
 - Mr. A. E. Collins
 - *Mr. D. C. E. Clark
 - Mr. J. B. Charlesworth
 - Miss H. L. Case
 - Mr. C. Dewhurst
 - Mr. H. A. Lewis
 - Mr. S. J. W. McKone
 - Mrs. N. E. McKone and infant
 - Mr. A. A. Oldaker
 - *Mrs. T. H. Parry, infant child and nurse
 - Dr. C. H. Philips
 - *Mr. S. Rivers-Smith, O.B.E.
 - Mrs. S. Rivers-Smith
- Beira.**
- Mrs. Beaton
 - Mrs. J. G. Bowman
 - +Major and Mrs. H. A. Cooper
 - +Miss C. M. Cooper
 - *Mr. and Mrs. T. Henderson
 - Mrs. Holland
 - +Mr. and Mrs. F. R. C. Kearns
 - Miss C. V. MaChan
 - *Baron and Baroness Roff-Cedestrom
 - *Viscountess Rosamond Ridley, D.B.F.

Passengers marked * join at Marseilles.
Passengers marked + join at Port Said.

SOME STATEMENTS WORTH NOTING.

"Dr. Hale Carpenter, who has done such admirable work on sleeping sickness in Uganda, has just proceeded on leave prior to retirement. I feel sure that all members of the Legislative Council will join with me in feeling great regret at his decision to retire, and will endorse my expression of the great debt which this country owes to him, and of our regret that it will no longer have the benefit of his services."—*Sir William Gowers, Governor of Uganda.*

"Grind your coffee. Put it in the pot. Add cold water. Let it stand for a while—even overnight. Use a dash of egg or not, as you prefer. When ready, put pot on the fire. Watch pot. The instant she starts to boil up, snatch from fire. Let stand a moment. Serve. It is very simple. If you let it boil even a minute, you are simply driving off into the air a part of the aroma of your coffee; and besides you are extracting some of the bitterish tannin from the coffee."—*Dr. William Brady in "The Brooklyn Eagle."*

"The majority of settlers who took up land in Kenya had no previous experience of or training in agriculture; they had to acquire the routine common to all farming, as well as to find methods suitable to the novel conditions. It says much for their innate qualities of determination and improvisation, as well as for the natural fertility of the country, that such remarkable progress in production should have been attained. This progress has been rapid and continuous; even the droughts and locusts that have marked the last two years have not destroyed the annual increase in output."—*From the Report of the Kenya Agricultural Commission.*



ESTABLISHED over 80 YEARS.

Successfully withstands the climatic conditions of East Africa.

PERMANENT COLOURS.

EFFICIENT PROTECTION.

PRESERVATIVE and DURABLE

SPECIALLY PREPARED FOR GALVANIZED IRON.

One Quality-THE BEST

Indents through Merchants only.

Prices and Particulars from

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Works:—Brixham, Torbay, Devon, England.



EAST AFRICAN STEAMSHIP MOVEMENTS.

BRITISH-INDIA.

"Malda" left Kilindini homewards, January 18.
 "Madura" leaves Marseilles for East Africa, Jan. 25.
 "Modasa" arrived Kilindini, January 17.
 "Karoa" left Dar es Salaam for Bombay, January 21.
 "Karapara" arrived Bombay, January 18.
 "Khondalla" arrives Mombasa for Durban, Jan. 24.
 "Karagola" arrived Bombay, January 21.
 "Ellora" left Bombay for Mombasa, January 17.

CLAN-ELLERMAN-HARRISON.

"Governor" arrived Dar es Salaam, January 9.
 "City of Bath" left Aden for East Africa, January 13.
 "Haliartus" left Birmahood for East Africa, Jan. 11.

HOLLAND-INDIA.

"Meliskerk" arrived Lourenço Marques for Cape Ports, January 14.
 "Sumatra" left Antwerp for East Africa, January 12.
 "Ryperkerk" arrived Hamburg, January 12.
 "Alkaid" left Port Said homewards, January 13.
 "Nykerk" left Aden homewards, January 11.
 "Giekerk" left Dar es Salaam for further East African ports, January 12.
 "Jagersfontein" left Lourenço Marques for East Africa, January 13.
 "Klipfontein" left Cape Town for East Africa, January 13.
 "Heemskerk" arrived Antwerp outward bound, Jan. 14.

MESSAGERIES-MARITIMES.

"Aviateur Roland Garros" left Port Said for Marseilles, January 19.
 "General Duchesne" left Zanzibar for Marseilles, January 19.
 "Leconte de Lisle" left Réunion for Marseilles, January 17.
 "Bernardin de St. Pierre" left Marseilles for Mauritius, January 17.

UNION-CASTLE.

"Carlow Castle" left Genoa for East Africa, Jan. 15.
 "Durham Castle" left Cape Town for London, Jan. 16.
 "Garth Castle" left Tenerife for Beira, January 17.
 "Grantully Castle" left Las Palmas for London, January 18.
 "Guildford Castle" arrived Beira, January 18.
 "Llangibby Castle" arrived Cape Town, January 19.
 "Sandown Castle" arrived Natal for Beira, Jan. 19.

The Raleigh Cycle Company has received a contract for the supply of all cycles and motor-cycles required by the Hanley Police, this following similar contracts for Nottingham and other centres.

MUSTAD FISH-HOOKS

O. MUSTAD & SON,
OSLO - NORWAY



ESTABLISHED 1882

EAST AFRICAN MAILS.

Mails for Kenya, Uganda, Tanganyika, and Zanzibar close at the G.P.O., London, at 6 p.m. on:

January 23 per s.s. "Viceroy of India."
 " 29 " s.s. "Ville de Strasbourg."
 " 30 " s.s. "Rawalpindi."
 February 6 " s.s. "Kaiser-i-Hind."
 " 12 " s.s. "Aviateur Roland Garros."
 " 13 " s.s. "Narkanda."
 " 20 " s.s. "Ranpura."
 " 26 " s.s. "General Duchesne."

Mails for Nyasaland, the Rhodesias, and Portuguese East Africa close at the G.P.O., London, at 11.30 a.m. every Friday.

Inward mails from East Africa are expected in London on January 27 per the s.s. "Aviateur Roland Garros," on February 1 per the s.s. "Rajputana," and on February 6 per the s.s. "General Duchesne."

RAINS IN KENYA AND TANGANYIKA.

The heavy rains which have caused large wash-aways on the Central Railway of Tanganyika appear to be spreading to the Lake Province of Kenya, where last week's rainfall was approximately three inches, against half an inch in the previous week. Rainfall now would do good to Native crops and to fly crops of coffee. The latest news from Dar es Salaam indicates that the Kilosa-Gidye section of the Central Line is not likely to be reopened for traffic until about the end of the first week of February.

Kagera (Uganda) Tinfields, which announces an output of 86 tons of tin concentrates during the last quarter of 1920, compared with 69 tons for the corresponding period of 1928, has agreed to restrict output on the lines recommended by the Tin Producers' Association. This will involve the suspension of tin winning for one clear week in January, another in February, and another in March if the Council of the Association deems it necessary. It is announced that Mr. C. E. E. Pargeter will continue to serve the company as general manager.

PERSONAL ANNOUNCEMENTS

Private—not trade—advertisements are now accepted by "East Africa" for publication in this column at the PREPAID rate of 3d. per word per insertion, with a minimum of 5s. per insertion; three consecutive insertions for the price of two. For Box No. advertisements there is an additional charge of 1s. per insertion towards cost of forwarding replies. Advertisements reaching "East Africa" 91, Great Titchfield Street, London, W.1, after Tuesday morning will not appear until the following week. Announcements will appear under such headings as Births, Forthcoming Marriages, Marriages, Deaths, In Memoriam, Appointments Vacant and Required, Land for Sale and Required, Agencies Wanted and Offered, etc. In Memoriam announcements can be inserted for five or ten years at special rates.

BEXHILL-ON-SEA.—Furnished house, four bedrooms, dining room, lounge, hall, garage, and tennis court, to be let. Moderate terms to good tenant. Apply Box No. 195, East Africa, 91, Great Titchfield Street, London, W.1.

NEWLY furnished Guest-house, quiet, comfortable; terms from £2 2s. per week.—76, Philbeach Gardens, London, S.W.5 (five mins. Earl's Court Station).

EAST AFRICAN LANDS & DEVELOPMENT

COMPANY, LTD.

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About 130,000 acres, on Freehold tenure from the Crown, in the best proved dairying district of the Kenya Highlands. Blocked out into farms, well watered and roaded. Available for sale in convenient areas to bona fide settlers. Instalment terms arranged.

Apply to Secretary, London Office, or Estates Manager, Gilgil, Kenya Colony.



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(DOUBLE ACTING)

BORE-HOLE PUMPS.

EVERYTHING

DUKE & OCKENDEN

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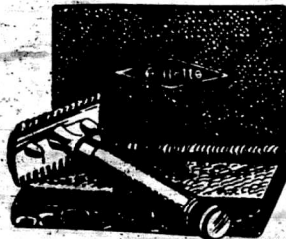
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WOVEN WIRE
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Catalogues L269 and L450 sent on request.

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WOOLWICH RD., LONDON S.E. 7

THE EAST AFRICAN NATIVE COVETS A SAFETY RAZOR.



THE EMPIRE SET

A Popular New Model at a Price the Native can Pay.
This set comprises a Genuine Gillette Safety Razor and
a Double Edge Gillette Blade (2 shaving edges) Packed in
Strong Metal Case. Made within the Empire.
The Dealer can sell it at 2s. and still have a Handsome Profit.

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THE
KENYA and UGANDA
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Offer access to a wonderful country which appeals to the

TOURIST—SPORTSMAN—SETTLER

ENTRANCING
 SCENERY of the
 KENYA HIGHLANDS

The Great
 RIFT VALLEY
 and LAKE District.



Big Game Trophies.

Easy access to
 MOUNTS KENYA,
 KILIMANJARO,
 ELGON and
 RUWENZORI.

LAKE VICTORIA
 and the NILE.

A Country where variations in altitudes result in every degree of temperate climate and every form of production, cannot but prove interesting and worthy of close inspection.

For information apply to—

H.M. Eastern African Dependencies Trade and Information Office, Royal Mail Building, Cockspur Street, London, or the General Manager, Kenya and Uganda Railways and Harbours Headquarter Offices, Nairobi, Kenya.



His Majesty's

Eastern African Dependencies'

Trade and Information Office,

Royal Mail Building

(Entrance in Spring Gardens).

Cockspur Street, London, S.W. 1

All interested in
 Land Settlement, Trade, Touring,
 Big Game Hunting, or Prospecting in
 KENYA, NORTHERN RHODESIA, NYASALAND
 TANGANYIKA, UGANDA, or
 ZANZIBAR

are invited to apply to the above address for the latest information.

The Commissioner will always be glad to give any assistance in his power to anyone in any way interested in Eastern Africa.

Telephones: Regent 5701-2-3.

Telegrams: "Eamatters, Westrand."

Spray Better with a Better Sprayer

In soundness of design, strength in construction and exceptional efficiency in action.

"MARTSMITH" Sprayers

are second to none. They represent the latest in up-to-the-minute sprayer design and are eminently suitable for all overseas uses.

"Martsmith" Devon Spraying Machine. Capacity 18 galls. Complete with pressure gauge, &c. Price £19



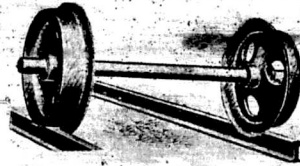
Martineau & Smith
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East African Representatives: Kenya Agency, Ltd.,
Union Buildings, Nairobi, Kenya Colony.

WAGONS, TRACK & LOCOMOTIVES FOR ESTATES.

ALL MATERIALS FOR ROAD CONSTRUCTION. WHEELS, AXLE-BOXES AND ALL SPARES IN STOCK.

Cables: "Dianthus," London.



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Works: Greenwich.

WHITE-COTTELL'S MALT VINEGAR

THE VINEGAR WITH THE DELICIOUS FLAVOUR AND FRAGRANCE.

- ¶ It is equally good for pickling, salads, and table use.
- ¶ It is guaranteed full strength, and will keep under all climatic conditions.

In short, it is the Ideal Export Vinegar.

Ask us for Sample and Quotation.

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Liverpool—The Greatest Spot Cotton Market in the World.

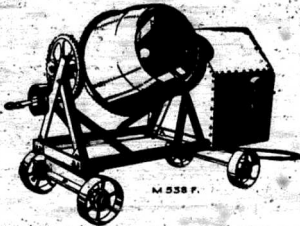
Members of this Association offer Facilities for the Sale, Purchase and Finance of Every Growth of Cotton.

THE WORLD FOLLOWS LIVERPOOL COTTON QUOTATIONS DAILY
Growers and Shippers should send their Cotton to Liverpool.

All information may be obtained from the Secretary of the Association.

"Eastern Africa To-day."—Worth a Guinea—costs only 6s. post free.

**STRONG!
SIMPLE!!
SPEEDY!!!**

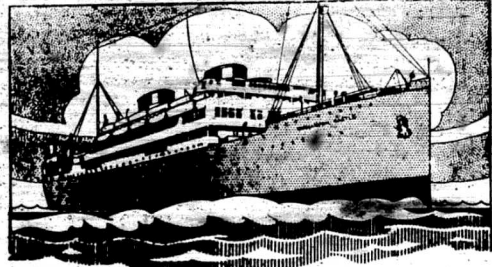


**The "GOOD-WIN"
Portable Open Drum Mixer**

This sturdy little mixer is built with the engine in a lock by a "Lister" engine through a roller chain drive. It is so simple that it can be operated by anyone.

**A small mixer with a big capacity for
BIG PROFITS!**

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"Langley Castle"	1930
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"Llandaff Castle"	March 27.
"Cargo only."	April 24.

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Direct Cargo Service between New York and South and East Africa.

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**10 minutes "Terry"
Steelstranding daily**

tones up every muscle, cleanses it of waste, and enriches it with new vigour and—you will meet—the strenuous conditions of your work more easily through the medium of scientific exercise.

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**100% Saddle
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—the "Terry" spring seat Saddle is a cushion of high-grade springs. Takes up all shocks and vibrations. List free.

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Redditch, England Est. 1855.

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**Foam That Fights
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Bubbling! Inquisitive! An active foam that cleans all around and in between your teeth—Kolygnos! It kills germs that cause decay; washes away film that makes teeth grey, and reveals them white and sparkling. It stimulates the gums, guarding them against pyorrhœa. You will enjoy the cool, fresh sensation it leaves in your mouth. Get a tube from your Chemist or Store.

KOLYGNOS
DENTAL CREAM

There is something to interest you in the Advertisement Pages.

MATTERS OF MOMENT

In this issue we publish important extracts from the report of Mr. C. Gillman, Chief Engineer of the Tanganyika Railways, on the proposed routes for a railway from the Tanganyika Central Line to the south-western areas of the Territory. He is a strong advocate of a line from Kimamba to Manda, in preference to one from Dodoma to Fife, claiming for the first project a capital saving of £2,000,000 and an annual operating economy of £47,000. Settlers in Central Uhehe will naturally dislike his recommendation, but to the Iringa Province as a whole it will be a consolation to be told that the Tukuyu, Ubena, Lupembe, Muñdi, and Dabaga areas would be better served by the eastern than the western route, and that Mbozi and Mbeya can be economically served by the eastern line. Curiously enough, the report, of great importance, makes no mention of the value of an aerial survey of the areas between the most easterly and the most westerly alignments possible. Where so much is at stake, and where so much has already been spent on survey work, the relatively small additional charge for a thorough aerial mapping of the country in question would seem wise.

A good deal of discussion appears to have been aroused in East African circles in this country by our criticism of the action of the East African Section of the London Chamber of Commerce regarding East African participation at this year's Belgian Colonial Exhibition in Antwerp, and, if we may judge from the expressions which have reached us, there is a strong body of public opinion behind our suggestion that the expenditure would be entirely unbalanced, and that, however desirable the object, Kenya took the right course in deciding not to vote the considerable sum which would have been involved. If the East African Dependencies' Office in London had adequate funds for propaganda and publicity in this country, the matter would be different, but as long as that is not the case we shall consider any heavy expenditure on any form of Continental advertising misplaced. We therefore trust that Kenya will stand firm, and that her example will save the other Dependencies from a step which, if desirable in itself, is beyond their present financial resources. If, however, any of them feels able to contribute from public funds the further sums which participation at the Antwerp Exhibition would necessitate, such sums might much more advantageously be utilised in extending East African publicity in this country, in which only the fringe of the work has yet been touched.

To criticise some of the acts of Northern Rhodesia's great copper mining companies, as a correspondent does in this issue, is not to be construed as a failure to recognise the immense importance to East and Central Africa of the undeniably vast mineral deposits in the north of that great Dependency. Their exploitation has within the last couple of years transformed the whole outlook of

Northern Rhodesia and can scarcely fail in the next two or three years to have still greater influence, while some sound observers believe that within the next decade Northern Rhodesia will, as a direct result of her mines, have a European population of between fifty and one hundred thousand. However that may be, the production of the mines must affect fundamentally the lives and fortunes of large numbers of men, white and black, not directly connected with them. For instance, their demand for food is already providing a local market for the produce of Northern Rhodesian settlers; to take a more remote example, a promise to send a reasonable share of the mineral traffic over a British railway to a British port on the East Coast, might be the decisive factor in the selection of the route for the Imperial trunk line from the Central Railway to the southern highlands of Tanganyika and thence to the present Northern Rhodesian railway. Thus, just as the interests at stake far transcend those of mining magnates and their shareholders, so anything likely to weaken public confidence in the management or future of the mines is inimical to East and Central Africa as a whole. Responsible people have for some time deprecated the way in which Northern Rhodesian mining shares have been forced to high prices, and it is with the object of sounding a note of warning that our contributor, himself a mining engineer, has set down what many East Africans have been thinking and saying.

The average Colonial Civil Servant, having done his work and contributed his effort to the maintenance and extension of the Empire, retires (if he is still alive) and is forgotten. A rather pathetic but entirely accurate reference to his fate is made by Mr. Frank Hives in his book, "Justice and Justice in Nigeria," which, though a *propos* of West Africa, is applicable in many particulars to the East African Dependencies: "And where," he asks, "are those men who, in the days of twenty-five years ago, risked their lives almost daily in the bringing about of the present-day prospects and happy conditions? Many of them have left their bones in the country they so admirably developed and controlled, while others have also joined the great majority and lie in early graves in Old England, or have 'made holes' in the Bay of Biscay with their poor malaria-emasculated bodies, tipped over the side of an Elder Dempster steamer. A few, far too few, are reaping their reward and taking their well-earned rest, eeking out an existence derived from a pension paid by a fatherly Government. In summer time they sit in the (very occasional) sunshine, the heat of which is so small compared with that in which they toiled for so many years; and in winter shivering over the fire in some small house, mostly forgotten by their successors of to-day, who have none of the hardships with which the men before them had to contend, and with only their past glories to look back upon."

RETIRED COLONIAL OFFICIALS.

From an Old Kenya Settler.

"My candid opinion of *East Africa* is that it is getting better and better each month."

FROM ARUSHA TO TANGA BY CAR.

By Captain H. C. Druett.

Editorial Secretary and Special Correspondent of
"East Africa."

Tanga.

MOTORING adds a spice of adventure to the traveller's enjoyment of the constantly changing and beautiful scenery of East Africa. Round the next corner you may come face to face with a lion—one resident in Arusha still proudly shows a dent in his mudguard, caused through running into a lion only three miles from the township; a patch of black cotton soil may force you to divest yourself of shoes and stockings and wallow in thick mud for three or four hours; a bridge may have disappeared and cause you to build a temporary one; or you may have to cross a particularly hazardous pseudo-bridge over a river with a particularly evil reputation for crocodiles.

In short, East African roads offer to the newcomer just that extra little thrill which lifts it out of the commonplace. It is driving astride a huge cavity in the road stretching perhaps for hundreds of yards; at another he endeavours—often without success—to follow in the winding tracks which an obliging fellow-traveller has left in the mud; and immediately he lifts his eyes from the road to the fascinating scenes, the car strikes a rut cutting across the track.

Meru to Kilimanjaro.

The route from Arusha to Tanga traverses empty plains, dense forest, and sisal and coffee *shambas*. On leaving Arusha the motorist passes through the Usa district, where an illustrated sign outside Lampard's store announces that it is his last chance to obtain refreshment or petrol. The warning is opportune, for the next place is over fifty miles away.

Gradually Mount Meru is left behind; ahead is one of the wonders of the world—snow-capped Kilimanjaro. The road is not a comfortable one, especially on the approaches to the small bridges, while on the plain beyond Usa are stones and boulders the presence of which must be a positive boon to tyre manufacturers. Game is scarce near the road, only one small group of ostriches being visible when I went through.

Some twenty miles from Moshi is a solid stone bridge, built by the Royal Engineers during the East African Campaign, and a few miles further on is a suspension bridge, which, to judge from the sagging movement and alarming noise as the car passed over its loose planks, did not strike me as too safe. Later I learnt that the Governor had given expression to the same thoughts. From a bridge expert I discovered that the foundations are simply tree trunks, and as the bridge is in constant use, the authorities may in course of time convert it into a more permanent structure.

Will Someone send a Photograph?

From Moshi a detour is made of some thirty-six miles before joining the Old Moshi road, which thoroughfare is, I believe, perfectly good, with the exception of a bridge over the Ruvu, to repair which would cost no more than £25! Meantime, the motorist has to pass over the Ruvu River and another stream by two log bridges, the first of which slopes downwards at a steep angle, and is just wide enough to take a car, while a few yards further on is another log bridge, the only difference being that the second not only slopes downwards but also sideways, with nothing at the side to prevent a car slipping off—to the crocs below. So, once safely on the bridge, I "stepped on the gas" before the car had time to slip, swinging round a sharp right-

hand bend immediately dry land was reached. My only regret is that the bad light prevented my taking a photograph. Will a Moshi reader who passes that way take one and forward it to *East Africa*?

After reaching the Old Moshi road—the track to which is hardly discernible in places, the route is sufficiently good to permit travel at 20 m.p.h. On the way I passed a derelict car which, from the outside, appeared to be quite good, but from which every useful engine part had been extracted. Curiously enough, its tyres remained on the wheels, I understand that its steering gear became useless, but why its owner should have left it "in the blue" remains a mystery. Maybe he feared the two bridges over the Ruvu.

Half on and half off a Bridge.

Now the road improved so much that I had visions of reaching Tanga in record time. The sun shone, making even the scrub look brighter than usual. Then appeared a deep watercourse, its steep sides deep with thick mud, and at the bottom a narrow bridge. Chains having been fitted to our wheels, we slid down to the bridge, though unfortunately we began to slide sideways, eventually reaching the foot with one front wheel on the bridge and the other resting on the river bed three feet below. Thus I remained for two hours, while my own boy went in search of as many Natives as he could muster from the nearest village, about three miles ahead. While he was away I dug as much mud as I could from the back wheels, which had sunk to their axles.

At last assistance came, in the form of twenty hefty Natives, who cheerfully lifted the car from the mud and on to the bridge, and then pushed it, inch by inch, up the other side. By racking the engine at intervals, and constantly digging away the mud, the top was gained. That short span had taken over four hours to negotiate—but as cars have been known to remain in the East African mud for days on end, I might have been much less fortunate.

Proceeding onwards, we passed Kisangira railway station. Huge boulders in the road, through long stretches of which were deep cavities, made driving very difficult, and after the brief tropical twilight it was soon a dark, moonless night. Motoring through forest, especially on a road full of potholes, was by no means a pleasure. If I had not quite made up my mind on the matter I should definitely have done so when, after passing the side of a sisal estate, we came suddenly to a river over which a bridge had once stood. With sisal plants on either side, and a heavy thunderstorm in progress, I could do nothing but reverse the car for two miles until I reached an avenue leading through the sisal to a *duka* and some huts.

A Welcome Guest House:

The Indian in the *duka* was not too pleased at being called out, but on being addressed in Hindustani his attitude changed, and he led me to the *bwana's* house, not far away. The owner of the plantation, Mr. Manyakis, was at Arusha on his coffee *shamba*, but his boys told me they had a guest house, complete with bed and mosquito net, at which I could stay the night. Never was that guest house more appreciated, and in a few moments the boys served up coffee and a dinner of fried eggs and bacon.

Throughout the night the storm raged, but ceased in the early morning, so, after breakfast, I pushed on, fortunately finding the soil of a different nature from that behind us; indeed, the rains had had very little effect, except on the patches of black cotton soil, through which we raced as quickly as possible. On the road to Same, a small village at the foot of the Upara Mountains, 30 m.p.h. was possible, but,

pride going before a fall, at the end of one such stretch I found myself well into a long patch of water, in the middle of which was a rut nearly two feet deep. Meeting the unseen obstacle, the car bounded over to the side of the road, where the wheels stuck in the soft soil. Getting out, I found the centre of the undercarriage resting on the edge of the road and the side wheels sunk to the axle. Digging merely revealed a small stream six inches below the surface; then, two hours later, a lorry came along and lifted the vehicle back on to the road. With that our troubles ceased. The driver—a Greek planter living at Kiswar—invited me to his *shamba*, where I feasted on cold chicken, tea, and freshly picked bananas.

Resuming the journey after a brief rest, I soon found the road black with myriads of "hoppers," as locusts are called at the hopper stage of their existence. It was a really extraordinary sight to see the little black insects hopping along the road, the surface of which was completely blotted out. A little further on a lorry was stuck and he and other Europeans, together with hundreds of Natives, were engaged in attempting to destroy the insects before they reached the hopper stage. It is no means an easy job; for two days after clearing an area it is quite usual to find the ground swarming with other locusts, busily eating the bodies of their dead.

Through Gonja the road traverses thick forest, where we surprised a number of monkeys on the road. A little farther on are some sisal plantations, the managers' bungalows of which could be seen built on the side of the hills four or five miles from the main road. On the left lie the Usambara Mountains.

The Crowing Crested Cobra.

Then I found the home of the crowing crested cobra. Let me say at once that I did not actually see one, but Mr. J. Hophman—on whom I called in the hope of obtaining some petrol—assured me that he had killed one not far from his house only a few days before. Though it had no crest, he, his wife, and his two brothers all testified to its crowing abilities. Mr. Hophman, I found, came to East Africa some twenty years ago from his home in Switzerland, and he probably knows this part of Tanganyika more intimately than most people. He was one of the first to climb Mount Mawenzi, though, to use his own words, "it is easier to climb a mountain than to descend."

His bungalow, on the top of a small hill about two miles from the road, is surrounded by a *boma* of thorn bushes, and during the evening I listened to thrilling stories of hairbreadth escapes from lions and other animals. Sitting on the veranda in the cool of the quiet, tropic evening, it was difficult to imagine that only two weeks previously he had been called out to kill an elephant which was damaging the Native gardens five or six hundred yards away. Yet such had been the case. Incidentally, I learned that not far from Kihorru are the remains of an ancient civilisation similar to those found elsewhere in Africa. Mr. Hophman and his brothers are at present the only ones aware of the exact spot, where, on the walls of caves and rocks, can be seen carvings made perhaps thousands of years ago.

From Kihorru to Tanga—a distance of 120 miles—the road is, generally speaking, not so good as that between Same and Kihorru. However, the P.W.D. authorities do exercise control over the portions built on black cotton soil, for they close them completely in the wet weather. Unfortunately, many such patches are only small, and lorries laden with Natives, or with produce, simply plough through, leaving behind them ruts as much as two feet deep.



IN THE USAMBARA MOUNTAINS.

Through Delightful Scenery.

After rounding a big hill just outside Kihorru, and across the plain the road runs through a big sisal estate at Mkomazi—where the signpost, "To Tanga," had its finger pointing in the exactly opposite direction. At the next village, Mkumbara, the aerial railway, over five miles in length, is seen running down from the slopes of the Usambaras at Shume. In approaching Mombo—the first settlement from Moshi (160 miles distant) at which refreshment or eatables can be obtained—the road winds its way through park-like scenery. On each side is closely wooded forest, while overhead the branches of the taller trees are closely interwoven, and, when seen with the sun overhead and glimmering through the branches, it is indeed a sight not easily forgotten.

Beyond Mombo the road twists and turns through big sisal plantations to Korogwe, a Native town of more than average size and a centre of railway activity, though the closing of its hotel makes it impossible for the traveller to pass the night here on his way to Tanga. Ngunga, destined to be remembered by its long avenue of acacia trees, is reached shortly afterwards, and then the traveller passes over and through the Usambara hills some thirty miles from Tanga. Lorries which had gone over this portion of the road in wet weather had done considerable damage, but new deviations showed that the responsible Department had the matter well in hand. The scenery through the hills is delightful, but the gradients in some parts are particularly severe.

Tanga.

Tanga is approached through miles of coconut palms—many of them probably planted in the old slave-trading days. What a relief to leave the golf links on the left and reach the sea-front a few minutes later! To drive along a smooth, tarred road, and to see ahead the cosy lights of the Tanga Hotel, seemed for the moment to be adequate cause for delight.

It was a surprise to be greeted from the veranda by two Moshi residents, Mr. J. C. Rennie and Mr. Scott, who had quitted Moshi only the evening before, had driven right through the night, and had arrived in Tanga an hour or so ahead. They had driven in turn, seemingly in an endeavour to establish a new record for the Moshi-Tanga run, but, unfortunately for them, they had stuck for three hours in the middle of the night at the water-course on the Old Moshi road. Less fortunate than I had been, they had to rely on their own efforts to extricate their car.

FRENZIED FINANCE IN N. RHODESIA.

Are Present Share Prices Justified ?

By a Mining Engineer.

IN the many mining booms with which the financial world has been afflicted from time to time, the wave of pessimism following the wake of inflated prices seems invariably to depress the industry to a lower level than before inflation. Let it be hoped that with Northern Rhodesia this will not be the case; for the highly inflated prices of some of the Northern Rhodesian copper companies, their parent companies, and their grandparent companies, have led to much speculation by people who have little, or no, interest in the country, but who have been satisfied so long as their shares have gone up or down, according to their requirements. For the unfortunate individual, however, who has looked for a genuine investment, hoped to get in before prices were too high, and wanted an increase in the capital value of his stock less than substantial dividends, the Northern Rhodesian mining industry is offering the reverse of satisfactory.

It must be admitted that the companies controlling these mines have never in their numerous publicity puffs said anything about shareholders getting a dividend for a long time yet, but other methods have been employed, possibly unintentionally, that have had the effect of inflating the market. These matters, however, are outside the scope of this review. It is the colossal expenditure that is the really serious problem confronting the future of the mines.

A Voracious Mine.

From the average Press report the uninitiated might easily assume that Northern Rhodesia has only recently been discovered, and that the mineral wealth coyly hiding beneath its surface is a phenomenon only now beginning to shower its rays of financial warmth over the world. Little do they realise that the Bwana M'kubwa Copper Mining Co., Ltd., has been in active existence for many years, ever swallowing money with the voracity of a cuckoo in a thrush's nest.

Just as things looked blackest, however, there came to light a new property, N'kana. Expensive drillers were imported from America, boreholes were sunk, and there soon began to float back to London a succession of cables concerning the excellent copper values found within its boundaries. These reports were very good indeed, and even now we are treated every few weeks to glowing statistics of further riches encountered, each seemingly better than the other. Sir Edmund Davis, the driving force behind many of these interests, has made speech after speech, and more and more money has been subscribed for shipment to Northern Rhodesia, there to be spent with a rapidity almost unexampled in the mining world.

Following the dawn of this great activity came the inevitable prospecting companies—The Rhodesian Congo Border Concessions (rejuvenated by fresh capital), Serenje Concessions, Ltd., Loangwa Concessions, Ltd., Kasempa Concessions, Ltd., and so on. An internationally known geologist was engaged from Canada, and brought with him a host of technically trained geologists direct from universities in Canada and the United States.

Local Prospectors not Wanted.

The local prospector, with his knowledge of local conditions and labour, was not encouraged, and rarely engaged. Only highly trained academicians here, they said. Schedules and time-tables were compiled for these men. Each one had to walk

twenty miles a day, by a set compass-bearing, and accompanied by a bicycle wheel, complete with speedometer, pushed by a perspiring and wondering Native. Every inch of the ground had to be covered, no matter what the expense. At one time these prospecting companies, three of which now operate under the title of Loangwa Concessions, Ltd., employed approximately sixty geologists. Roads were cut through the bush for hundreds of miles, lorry services were inaugurated, and camp equipment bought by the ton. It is difficult to estimate the present working staff of these concessionary companies, but there is no difficulty in observing that the colossal expenditure still goes on its merry way.

A well-known independent mining engineer estimated a few months ago that Northern Rhodesia has, within the last few years, absorbed over £10,000,000 from mining interests. To date there has been no appreciable return from this sum. It can therefore be seen that, even supposing that no more capital expenditure were necessary for the development of these copper mines in Northern Rhodesia (which is far from the case), a very substantial amount would have to be earned each year to pay even a moderate rate of dividend. Nor must it be overlooked that if any of the prospecting companies find any other mineral fields the same process will have to be repeated. Their present expenditure is only initial, and if and when it is decided to develop any of their finds, yet another million or so sterling will be needed to bring it to the profit-earning stage.

In the opinion of well-informed Northern Rhodesians the Sir Edmund Davis companies have as much work on hand as they can cope with. Surely then it would be more compatible with the interests of the shareholders in their several inter-linking companies if for the time being they abandoned the indefinite for the concrete, and, instead of spending more money in looking for fresh mines, devoted their funds to bringing their proven properties to the production stage more quickly than is now possible.

Broken (Reed) Hill.

Broken Hill, which produces zinc, lead, and vanadium, is probably the most disappointing mine in Northern Rhodesia from the shareholder's point of view. Some little time ago a large sum of money was raised for the purposes of conserving the water, and of building a large dam, at Mulungushi, in order to instal a hydro-electric plant for the supply of electric power to Broken Hill mine, and, possibly, to the copper mines further north. At the same time the mine, with its enormous overhead and running expenses, was in dire straits, and it was realised that the only thing to save it was to increase production. Accordingly a new zinc plant was erected at great cost, and, with power flowing evenly from Mulungushi, everything in the local garden was lovely. The production of zinc, we were told, would ascend to a minimum of 1,000 tons a month, and might even reach 1,500 tons. So far—and the plant has been in full working order for some time—the output has never reached 1,000 tons; usually it has been nearer 850 tons.

Explanations were made. The plant was not running quite smoothly and was using 50% more sulphuric acid than it should have done in the chemical process, but "adjustments" were being made, and everything would be all right in the long run. It would appear that this property can rival "Charley's Aunt" in this respect, for it has now been "running" for over twenty years—but it has an audience

(Concluded on page 647.)

A RAILWAY TO SOUTH-WEST TANGANYIKA*

The Problem of the Imperial Through-Line.

"The case for an Imperial through-line which will eventually link up all, or most of the East and Central African Dependencies, and will thus bring about overland connection between British North and South Africa, need not be elaborated. Such a railway is essential for the realisation of many well-known and widely accepted principles. With rapid progress, however, of aviation which will doubtlessly lead to a reliable air line for passengers and mails throughout the length of Africa in the not too distant future, it would be a mistake to look at the problem of a through railway primarily from the point of view of the best through passenger service; the advantages of such a line to the passenger lying rather in the direction of assisting the administrator and business man in his locally restricted north-south movements and in offering opportunity to the more leisurely tourist for the study and enjoyment of Central Africa.

"Although a large-scale transport of labour may also enter the argument, the main function of the contemplated Imperial through-line will always remain in the fields of goods traffic, and the considerations which should rule the choice of the most efficient alignment can, therefore, be summed up under the following two broad view-points—

"(a) The through-line should develop deserving areas not as yet accessible to the world's markets; and

"(b) Its various, more or less north-south trending sections should form feeders to the existing trunk lines, which, with their eastward trend, will facilitate the concentration of Central African produce at as few ports as possible.

"In addition, the greatest use should be made of already existing lines, or parts of such lines wherever their general direction coincides with that of the Imperial through-line.

"It is, of course, a foregone conclusion that the realisation of a through-line, say from Nairobi to Broken Hill, will take a considerable time, and that long before the final achievement certain sections must and will be constructed, temporarily at least, on their own merit. In order, therefore, to locate these 'advance sections' correctly it is necessary to fix, once and for ever, upon a definite general scheme for the eventual through-line; or, in regions whose future development cannot as yet be accurately gauged, to plan the 'advance sections' in such a manner as to render them useful links whatever the final development may prove to be.

Local Considerations of Revenue.

"As each Territory will, presumably, have to construct its portion of the through-line out of its own resources, local considerations of revenue will naturally play an outstanding part in the final deliberation, and it may well be that such local dictates may lead to the lengthening of the whole line, a fact which, however, would appear to possess but very secondary importance. Especially in Tanganyika Territory, which, due to its vast extent and to its geographical position as an intermediary, will in any case have to bear the brunt of the cost, the right to put economical development before shortness of the through-line is one that should be tenaciously insisted upon.

"Wherever reference is made to sections lying to the south of the south-western border of Tanganyika Territory, such reference is based solely upon the very meagre information from the 1 in 1,000,000 map, no superior sources of knowledge being available for the present. But as these sections do not materially affect the argument as far as this Territory is concerned, it seems safe, for the time being, to assume that a railway from the south-west will reach North-Eastern Rhodesia somewhere in the neighbourhood of Pa Chawa (some 80 kms. to the south-west of Fort Hill, approximately at New Fife), from where a linking up with either of the Tanganyika Territory alternatives for an Imperial through-line is possible. It thus remains to review these alternatives from the Rhodesian or Nyasaland border northwards to Nairobi.

"Such a review would be incomplete if no mention were made of the already existing through connection, by railways and lake steamers, between Nairobi and Abercorn *via* Kisumu, Lake Victoria, Mwanza, Tabora, Kigoma, and Lake Tanganyika—a roundabout way, to be sure, with its four transhipping stations and its total eventual distance of approximately 3,100 kms. from Nairobi to Broken Hill, but one which is already to a large extent available for the administrator and tourist.

The Main Divide Line.

"Due notice should be taken of the existence of what may suitably be called 'The East African Main Water Parting', which, at least in places, promises to offer easy, high and dry ground and accordingly cheap construction. This 'Main Divide', keeping generally between 1,500 and 2,000 m. altitude, runs more or less parallel to, and at some distance from, the western edge of the great East African zone of rifting, from Mbulu in the north to Mount Mbeya in the south. From this point it jumps across the relatively low Engano Pass on to the Central African (Nyasaland-Tanganyika) rift-belt, traverses the Livingstone-Ubena block in the south-easterly direction, and then, in the region of the Pittu headwaters, dips suddenly and unexpectedly from the archaic 'High Africa' down on to the much lower ground formed by the mesozoic sediments of the coastal hinterland.

"To gain this divide from the south-west would mean, of course, the crossing of the Central African rift system, that is, such an alternative through-line would coincide with the Dodoma-Fife line as far north as Old Utengule. From there it could only reach the neighbourhood of the divide by a detour down the Rukwa rift and then across Ibungu to the headwaters of the Lupa river. An investigation has shown that far from being a broad expanse of high flat ground, the actual divide line has a markedly sinuous course, both in the horizontal and vertical sense, and offers practically nowhere exceptionally favourable for a railway. To the north of the central line topographical conditions become easier as far as Singida, where the divide would, in any case, have to be left and the more broken ground of the East African rift system entered.

"Economically, also, such a line would traverse most part of its length through extremely poor, often uninhabited and uninhabitable country. And such areas as the higher ground south of Ifigi or as the Singida and Mkalama districts, which are economically more promising, are too limited in extent to influence the choice of an Imperial through-line and can, furthermore, be linked at no great cost with existing railways. Chief of all, however, this 'main divide' line would contribute nothing towards the development of the south-west of Tanganyika Territory, and must for this reason alone be ruled out of competition, even though it might form the shortest and probably the cheapest of all possible through-lines.

"There thus remains only two alternatives: the *Western, or Rift-Zone, Line*, based on the Dodoma-Fife project, and the *Eastern, or Scarp Foot, Line*, emanating from the Kilosa-Manda scheme. The southern portions of both these lines between the Central and the Nyasa border have been sufficiently studied in the present report, their respective lengths being 741 and 750 kms. To enable one, however, to form a preliminary estimate of their merits as a whole, it will be necessary to outline the possibilities of their northern extensions within the limits of the available and as yet merely superficial knowledge of the ground.

The Western or "Rift-Zone" Line.

"Although much more detailed work is required, it can already be asserted from the General Manager's, and the present writer's flying reconnaissances that the only feasible alignment would traverse Central Ugogo over easy ground, would then have to cross the north Ugogo range of high hills—an unavoidable obstacle—gain the great elbow of the Bubui river, and then follow the long and winding course of that river, very probably for the most of the way through far from favourable topography, to its source above Dareda. Thence a by no means easy descent would lead to the Mbugwe flats, from where Arusha can be reached through the arid wastes of Masai Land. The estimated length of such a line is at least 460 kms., the average kilometric cost being tentatively put at £5,400.

"From Arusha to the Kenya border, which should be crossed well to the east of Mount Longido at Ngaramoni, the line of least resistance, making use of the existing line from Arusha to Sanya and of the contemplated branch from Sanya to Engare Nairobi, runs through the great gap between Kilimanjaro and Meru and not over the high and difficult pass between Meru and Mondul. From the border Kajado can be reached over ground not too excessively broken. The estimated length is 60 kms. from Sanya to the border and 700 kms. thence to Kajado, with an average kilometric cost of £4,200.

"The total estimated loss of level between the Kenya border and Dodoma amounts to 1,100 m., or 3 m. per km. It will thus be seen that this northern extension very ably continues the traditions of its southern Dodoma-Fife root by persevering, as much as possible, to run against the grain of an intensely shattered land. Economically, too, it does not open up particularly promising country, and

* Being further extracts from Mr. C. Gillman's Report.

the few small highland oases of Native and white settlement (Usandawi, Burungi, Kondoa Irangi, Uasi, Ufomi, and Mbulu) will not, for topographical reasons, be actually traversed, although they lie well within the economic zone of the line which, with the exception of Ufomi, they can reach by short descending roads.

There is, however, another possibility of continuing an Iringa-Fife line northward. Choosing the Kalenga-Msagali, instead of the Kalenga-Dodoma alternative, one could gain, and remain in, comparatively easy country by following the flat open valley of the Kinyasungwe (and thus avoiding entirely the obstacle of the north Ugogo range), by skirting the Burungi block either to the east or west and by thus reaching the Masai plain at the foot of the Masai scarps. Such a line would be the natural, direct and shortest link between north and south through Central Tanganyika Territory. It would touch none of the few productive oases which would; however, as in the case of the Bubu line, all except Usandawi, be situated within an economical distance from the railway to which they could again be connected by descending roads. Next to nothing is known of the topographical and technical detail of the country along its route, which is being proposed solely on the basis of such general information as can be gathered from the map. Very rough estimates give its length at 430 kms. (Msagali-Arusha), with a mean kilometric cost of £4,200 and a loss of level of 1,230 m. (Kenya border to Msagali) or 1,230 m. per kilometre.

The Eastern or "Scarp Foot" Line.

"For a continuation northwards of the Kilosa (or Kimamba)-Manda line we possess better material in the shape of an extensive and useful though rough reconnaissance by a competent German railway official; and much of the ground has been visited, in 1921, by the present writer.

"From the available evidence it appears that the technically and economically best line would be one leaving the Central Railway at Mamba, and crossing the fertile cotton land at the foot of the great East African scarp towards Tuliani. From there two alternatives are possible: either to keep outside the mountainous belt and continue through the well-populated districts of Uzeguha and Handeni, where not less than twenty-four plantations had existed before the War; or cut through the corner of the broken mountain land into which the great scarp is here dissolved and thereby to get closer to areas suitable for white settlement. In either case the Tanga line should be reached somewhere near Maurui station in order to avoid a new crossing of the Pangani river. The length of the line is estimated at 200 kms. and its mean kilometric cost at £4,700.

"From Maurui to Sanya the Imperial through-line would coincide for over 280 kms. with an existing railway, which, though not very favourable from the point of view of loss of level between Mushi and Maurui, will result in a saving of at least 280 by 5,000 or nearly £1,500,000 capital on new construction without materially increasing the length of the whole line.

"Such an alignment, furthermore, would likewise continue the traditions of its southern route by following almost throughout the relatively easy ground along the foot of the great scarps by which the high plateau backs of East Africa break down the coastal foreland; and it would remain in climatically more favoured areas where syndicate development can supplement the production of a relatively dense Native peasantry. It would, in addition, form a very useful and badly wanted link from the Territory's administrative point of view, and perhaps even more so from the point of view of a more efficient railway organisation; a line, furthermore, the realisation of which would seem achievable within a short period.

Comparison between the Western and Eastern Alternatives.

"It is possible to summarise and compare the main technical and economic features of both alternatives for an Imperial through-line:—

"(a) Length.—Broken Hill to Nairobi:—

Alternative	Total length		New construction	
	Kms.	Miles	Total kms.	In T. T. only kms.
(a) Western.				
(1) <i>via</i> Dodoma-Arusha	2,430	1,510	2,260	1,290
(2) <i>via</i> Msagali-Arusha	2,410	1,498	2,240	1,270
(b) Eastern.				
<i>via</i> Kimamba-Maurui	2,620	1,628	2,130	1,130

(b) Section and Grades.—The loss of level between Kenya border and Pa Chawa in North-Eastern Rhodesia is estimated as follows:—

kms. 1,485 Western *via* Dodoma 5,200 m., or 3.5 m/km.
 kms. 1,405 Western *via* Msagali 4,600 m., or 3.1 m/km.
 kms. 1,975 Eastern *via* Maurui 2,950 m., or 1.8 m/km.

These figures are, of course, nothing but the arithmetical expression of the fact that the western line runs across the grain of the country, whilst the eastern, by making use of that remarkable dip of the main East African divide and by keeping outside the shattered rift belts, follows most ideally the lie of the land.

"While the Dodoma-Fife line has been shown to require a one-in-fifty ruling grade for economic operation, the Kilosa-Manda line, which traverses practically everywhere much flatter ground, can easily be built to a one-in-eighty grade. This easy grade can also be continued northwards to Maurui, whereas on the Rift-Valley section between Dodoma and Arusha one-in-fifty will probably have to remain the ruling grade.

"(c) Operating Cost.—For ten trains per week in each direction, or approximately 1,000 trains per year, the influence on operating cost of reduced loss of level and of easier ruling grade over the 740 (760) kms. sections south of the Central Railway works out as:—

Due to loss of level, 2,200 by 8.50	28,000
Due to ruling grade	20,000

Total annual saving in favour of eastern line ... £47,000

"Additional and similar savings in favour of the eastern line will also be made over and over at least of the northern portion, but in the absence of sufficiently accurate data it is not at present possible to give definite figures. A conservative estimate, however, might put the total savings on operating cost, over the whole line within Tanganyika Territory at £60,000-£70,000 for 1,000 trains.

"(d) Capital Cost (exclusive of rolling stock):—

	Million £
Western line.—Total: Broken Hill-Nairobi	12.3
Eastern line.—Total: Broken Hill-Nairobi	10.3

or £2,000,000 in favour of the eastern line—a saving which will accrue entirely to the benefit of Tanganyika Territory finance, and which represents £120,000 less loan charges per annum.

Pros and Cons.

(i) Dependencies Served.—Whereas the western alternative does not serve any part of Nyasaland except perhaps Fort Hill in a very roundabout way, the eastern not only runs for some distance through that territory, but would assist admirably the large Native population of Northern Nyasaland besides ensuring, *via* the lake, easy passenger connections with its capital and commercial centre. Whether the Zambesi Bridge is built or not, it is maintained that the natural outlet for Northern Nyasaland is Dar es Salaam, a view apparently shared by the Hilton Young Commission (page 25 of their report).

(ii) Relation to Areas of White Settlement:—

"Areas exclusively served by the western line: Central Uhehe (Ifunda-Sao), Mbulu.

"Areas exclusively served by the eastern line: Northern Nyasaland, Songea, Upangwa, Nguru Mountains.

"Areas better served by the western, but still economically served by the eastern line: Mbozi, Mbeya (both small and unimportant).

"Areas served by both lines, but better by the eastern: Tukuyu, Ubeni, Lupembe, Mufindi, Dabaga (*ie.*, all the most promising settlements).

(g) Relation to Syndicate Development.—While the western line can only compete with the eastern with regards to the Ubeni, Ukinga and Mbeya areas of potential wool production and the cotton lands of Mgororo, the latter would serve those areas partly better and partly nearly as well and would, in addition, traverse from Mamba in the Upper Kilombero to Hadeni, or for 60 kms., ground suited to a large extent for plantation enterprise.

(h) Relation to Native Development.—Talking generally, the Native population in the economic zone of the eastern alternative is undoubtedly much denser than in the western zone. And whereas the former would also largely benefit most of the better areas served by the Dodoma-Fife line (*ie.*, Udzungwa, Ubeni, Ukinga, and Ucafa), the latter would in no conceivable way contribute to an efficient development of such admittedly important districts as the Kilombero plain, Mahenge, Songea, Matengo mountains, Kondeland, and Northern

Nyasaland. The few small oases between Dodoma and Mbugwe, which could only be served by the western line, are, in comparison, of very minor importance, and lie, furthermore, within economical reach, for high value Native produce, of the railways at Dodoma or Arusha. The capital cost of tapping the Native population of the south-western area has been computed at £110,000 in the zone of the eastern and at £100,000 in that of the western alternative, for every 10,000 people, or at a ratio of 1 in 7 in favour of the eastern line.

"(i) *Mineral Development*.—Of the proved areas for mining enterprise the Dodoma-Fife line would undoubtedly be the shortest connection for the Lupa gold fields, though the fact must not be overlooked that a railhead at the north end of Lake Nyasa would materially improve communications with that field.

"The good proved coal near Manda and Songea, the great iron-ore deposits in Upangwa (which may one day be of Imperial importance), all lie within easy reach of the eastern alternative.

"Should, as is strongly hoped, Tanganyika Territory be permitted to share in the rich future copper traffic from Northern Rhodesia, the eastern alternative alone could enter into competition with other African railway systems serving this mineral belt.

"(j) *Transshipping*.—The western line has only one transshipping station, at the point where gauge changes from metre to 3 ft. 6 in., a point which will exist somewhere for a long, almost indefinite, time even if the Dodoma-Fife section should be laid on convertible sleepers.

Concluding Comparisons.

"The eastern line, due to its short lake section, has two transshipping stations for produce from and to North-Eastern Rhodesia and for passengers. From the latter's point of view, such a break in a long overland journey can only be looked upon as a pleasant change. That transshipping does not prevent traffic from patronising a route afflicted with this minor nuisance has, it is believed, been amply proved during recent years by the Congo traffic which crosses Lake Tanganyika. The whole of Northern Nyasaland produce, whether it goes south or east, has in any case to undergo transshipping. Besides, if transshipping is economically organised and equipped, its (largely imaginary) disadvantages can be made to take on such infinitesimally small dimensions as not to require further argument. All over the world wholesale transshipping is of such common occurrence in the carrying trades that one really need not worry over a single additional transshipping station in the heart of Africa. And if the worst came to the worst there are still possibilities of a ferry service and of a through-line round the north end of the lake in the dim future, after the fashion of Lake Baikal on the great Trans-Siberian trunk line.

"The foregoing comparison cannot be closed without drawing attention to the following point of, obviously, primary importance. The choice of the western alternative would, once and for all, establish a definite and unalterable policy by permanently excluding from the benefits of an Imperial through-line the vast regions of the real south-west of Tanganyika Territory which lie south of the great mountain ranges and plateau blocks which a Dodoma-Fife line would skirt on the north.

"Selecting now the eastern alternative, on the other hand, would still allow of a postponement of the grave hour when the final word will have to be spoken regarding the future of the country between the Great Ruaha and the Portuguese border in the south. For this eastern alternative possesses at Mamba a temporary terminus from which extensions are possible in two directions: either *via* Manda or *via* Ubenia to Ilongo and thence along the western route to North-Eastern Rhodesia."

SETTLERS' PROBLEMS IN KENYA.

Views of Sir Daniel Hall.*

It was only after the South African war and the opening of the railway in 1903 that settlers penetrated into Kenya. They began with pastoralism, attracted by the great areas of grass upon the plateaux, grass which in many districts remains green the year round. But they had not reckoned with the prevalence of disease, particularly rinderpest and East Coast fever, and they were perforce driven to agriculture, to maize and wheat growing, before the value of coffee and sisal had been established. Even sheep, which at first had done well in the Rift Valley, became infected with heart water after the Masai trek through that region, and for a time were abandoned.

Hence there has been very little time in which to establish a tradition of farming. The conditions, too, were unprecedented. One of the wisest farmers in the Colony told me that he sowed wheat every month in the year before he made up his mind what was the proper procedure. Research takes time, and a settler who sees his crop endangered or his stock dying daily is apt to get impatient with a Department of Agriculture which can propound no immediate remedy.

Stock Farming.

Africa has always possessed an undeviating notoriety owing to the variety and virulence of the animal diseases that are there endemic. There are indeed few of the known epizootics which do not take their toll of life stock in Kenya. The settler has to deal chiefly with rinderpest, East Coast fever, redwater and anthrax, and foot-and-mouth disease, although the latter is a mild affair. The others are steadily yielding to investigation; their eradication is only a matter of time and care. But even when a sound form of treatment is available its application represents some expenditure, and Kenya stock farmers at present remain under a handicap compared with their competitors in other countries like South America and Australia, where cattle breed and thrive with little or no attention. It has been estimated that preventive measures in Kenya add £2 to the cost of a four-year-old beast.

Rinderpest is now dealt with by a process of double inoculation which confers practical immunity on the treated animals for their normal working life, and investigations at Kabete give very definite promise of the possibility of replacement by a single vaccination. East Coast fever can be controlled by dipping to destroy the ticks. The first necessity is the enclosure of the grazing into paddocks. The stock are then dipped as frequently as every third day in an arsenical dip; this kills the ticks before they can inoculate the cattle. Eventually the tick population of the farm becomes free from disease, since each generation of ticks has to be re-infected by feeding upon a diseased animal. By this rigorous process many areas in South Africa have been freed from East Coast fever. Few of the settlements in Kenya are yet fenced and paddocked, and one of the necessary starting points before the white grazing areas can be cleaned up is the erection of boundary fences where they border upon the Native reserves.

Elimination of Squatter Cattle Necessary.

Another urgent measure is the elimination of squatter cattle in any stock-keeping area. In some districts settlers have already come to an agreement not to allow squatter cattle. Possibly legislation is needed to enable areas to be scheduled within which squatter cattle are forbidden when a majority of the settlers agree, and such legislation may well follow the measures now under consideration for the formation of areas within which fencing and regular dipping will be compulsory. These steps are imperative if the country generally is to be cleaned up. This procedure is required by the agriculturist as well as by the stock farmer. The maize grower requires work oxen, and though he can buy salted animals among which the mortality is small, it is desirable that the maize grower should become a mixed farmer, keeping some kind of stock in order to make farmyard manure and so restore to the soil the humus of which it is so much in need.

Perhaps the most serious question is that of the breed to

* As expressed in an address to the Dominions and Colonies Section of the Royal Society of Arts on Tuesday afternoon. Mr. Ormsby-Gore presided.

"COFFEE GROWING"

By J. H. McDonald

will be published next week. Copies will be sent post free to any address on receipt of 21/- by East Africa, 91, Great Titchfield Street, London, W. 1.

adopt. Most new countries have been stocked with the British breeds, Shorthorns, Herefords, Devons, etc. The only non-British breed which has attained world-wide distribution is the Dutch or Frisian black and white dairy cattle. The usual procedure in new countries has been to introduce pure-bred sires of one or other of the above breeds and by repeated crossings to grade up the herds to approximate purity. But where a country owns a distinctive race of its own, more permanent results are likely to be attained by selection within that race. This argument is particularly applicable when the climate differs widely from the temperate conditions of England. The Native cattle of East Africa are of very mixed origin, in which Oriental blood has been infused from early times, as may be guessed from the prevalence of the hump; but they have acquired a certain measure of resistance to the African diseases and for that reason alone they offer better prospects by selection than by crossing of building up a race suited to the country.

Indoor Dairying Suggested.

Dairying, too, is making steady progress in the highlands near the railway, and a prosperous co-operative creamery is at work at Lumbwa. It is worth considering whether many settlers could not avoid some of the risks of disease by keeping a small herd entirely indoors on the soiling system. Contact with ticks would be minimised and those that would be introduced in the green fodder would be removed. Of course, labour is involved in such a system, but the price of dairy produce is high enough to pay for it.

There are considerable potentialities of extending sheep breeding, since it is now possible to control heart water by immunisation by the farmers with material supplied from the Veterinary laboratory. The drier plains and the Rift Valley will carry oxen, while the plateaux and higher country are more suited to dual purpose sheep like the Romney Marsh. There are undoubted difficulties to be overcome. It takes some time to get the grassland fine enough for sheep, and many districts they have to be rounded up and watched at night because of the leopards and other vermin. Sheep stealing, too, by the Natives is not unknown.

About 200,000 acres of maize are grown by white settlers, with a production for export of about a million bags (of 200 lb.). The average yield per acre (about 1,600 lb.) is not high, mainly due to factors which lie at the base of the farming in Kenya. Some better return may be expected from improved varieties, the breeding of which is just being taken in hand, but there is little reason to expect that new varieties will be created with a yielding capacity markedly in excess of the standard American varieties now being grown.

Progress has to be sought in soil management and cultivation. The normal red soils of Kenya, other than the black land in the swamps and hollows, are not initially rich in organic matter, and that which is at the outset contributed by the natural vegetation turned in by the first ploughing very rapidly decays, owing to the dryness and high temperature which the soil attains at certain seasons of the year. Hence the humus runs down rapidly. Soil erosion and washing is also markedly increased after the land has thus been cropped for some time. It is, moreover, important to stop burning the stalks, which could be converted into manure by the Adco or similar process. The general run of Kenya soils will not long tolerate this kind of mining into their fertility, and a stable system of farming depends upon the introduction of a rotation more conservative of fertility and capable of restoring humus to the soil.

One obvious step is the introduction of a green manuring crop. There are many leguminous plants capable of giving a great bulk of herbage in Kenya, soya and velvet bean, cow peas, crotalaria, etc., but sufficient experience has not been accumulated to decide which is the most effective. Green manuring must also involve the use of artificial fertilisers. There is evidently an opening for some of the newer fertilisers now being manufactured with a very high concentration in the essential elements of fertility. Synthetic urea, for example, contains over 45% nitrogen, synthetic ammonium nitrate about 35%, whereas sulphate of ammonia contains only about 21%, and nitrate of soda less than 16%.

Coffee Problems.

The Department of Agriculture has devoted considerable attention to coffee problems, especially in the entomological side, where three men are almost wholly employed on coffee. Considerable expenditure has recently been incurred in an organisation for the mass production of a particular ladybird which keeps in check the mealy bug that is the worst insect pest of coffee. However, it is necessary to push the defence measures further back and study the conditions of growth of the coffee plant.

Coffee is generally regarded as requiring some shade,

and it is common to interplant the coffee bushes at somewhat wide intervals with a light shade tree like *Grevillea robusta*. In other cases the shading is confined to belts of the *Grevillea* and other trees, while there are many plantations growing freely without shade at all. Experiments are being made with artificial shade provided by slats of wood supported on wires above the bushes. In this way the amount of shade given can be adjusted and there is no draught on the soil moisture. Some observers hold that the crucial thing is shade the ground by means of a surface cover crop. It is pretty certain that the amount and nature of the shade required depend upon factors like depth of soil, aspect, elevation and rain fall, and that further investigation will show that no one method will apply to all cases.

Some evidence has been obtained that the growth and healthiness of the coffee after it has come into bearing are dependent upon the reaction of the soil, and that the incidence of disease can be correlated with the presence of an acid layer in the subsoil. This requires further investigation, the outcome of which may be that the soil chemist will be in a position to warn settlers against planting coffee in particular soils. Further, the whole question of the use of fertilisers requires systematic study.

I should like to emphasise the need of some special organisation for continuous investigation of coffee. However seriously a Department of Agriculture may approach the question, its technical officers, after they have acquired experience in regard to coffee, may be transferred to another Colony. For this and other reasons the recent Agricultural Commission recommended the formation of a special Research Institute for coffee.

One type of research in connection with coffee has not been attempted, yet is of fundamental importance, and that is breeding. Coffee bushes are raised always from seed, and though distinct types of coffee have been segregated, e.g. *arabica*, *robusta*, *liberica*, one has only to walk through a plantation to see the great range of variation in the plants in such matters as habit of growth, productivity and disease resistance. Here is clearly work for the plant breeder, who would begin by selection and trying out the best system of vegetative propagation, in order to obtain a plantation that is uniform for high yield and disease resistance. It is becoming evident that the best way of combating plant diseases is by breeding immune varieties; though this is more easily attained in regard to fungus than insect invasions.

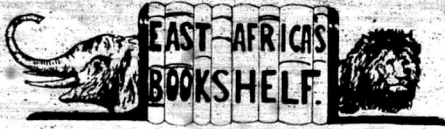
Native and European Labour.

Settlers who treat their Natives properly have no difficulty in obtaining an adequate labour force; in fact, it is generally held that any man who complains that he cannot obtain labour has condemned his own management. It does not, however, follow that the sources are inexhaustible. Hence settlers should give close consideration to making their Native labourers as efficient as possible by instruction in the actual operations, by organisation, and by the use of machinery and every means of economising on sheer manual effort.

There is another side to this labour question that demands consideration, whether it is not desirable to bring in British workmen to act as foremen and leaders to the Native gangs. Some settlers have done so with success, especially where machinery is being utilised. To make a success of this method it will be desirable to afford opportunities for such men to acquire holdings of their own, beginning on a small scale that enables a large proportion of the work to be done by the man himself.

A closer settlement scheme of small farms is already under consideration, but this scheme chiefly contemplates settlers coming straight from Britain into occupation of the farms. These men would be more likely to succeed if they had worked in the Colony for some years before starting on their own account. These schemes are opposed by many settlers on the ground that they might lead to the growth of a class of "poor whites," without capital to farm on their own account and unable to obtain employment such as is appropriate to the dominant white race. I hold that this view is mistaken. The "poor white" class has arisen in South Africa precisely because manual labour upon the land has been ruled out by public opinion as a fitting occupation for a white man. If an aristocratic class is created that cannot be allowed to dig, some members of it inevitably will become not ashamed to beg. Agriculture is, and must remain the prime source of employment in Kenya, and if a permanent white population is to be maintained, there must be opportunities in the great industry of the country for all sorts and conditions of men. Some will rise and some will fall, for this is progress and leadership assured.

Limited as my experience has been, I can only say that I have seen few countries more taking to the farmer's eye, or where a man may look forward with more confidence to settling down and founding a family.



A LIFE OF SIR HARRY JOHNSTON.

A Great East African Pioneer.

THE late Sir Harry Johnston has never seemed to acquire quite his rightful place in public esteem among the great men who built the British African Empire. As an explorer, administrator, naturalist, writer, and artist he is known to the great majority of our readers, but the man himself has always remained something of a mystery. In "The Life and Letters of Sir Harry Johnston" (Jonathan Cape, 12s. 6d.) Mr. Alex. Johnston, his brother, and for thirteen years his private secretary, tears aside the veil and reveals the strong, ambitious, questing, and quenchless spirit of one of the most brilliant of our race to live in and work for Africa. However, the book is a real contribution to East African history and a most entertaining account of events long forgotten by the general public.

Sir Harry Johnston, he is recalled, was travelling as a free-lance in the then dangerous regions of the Congo before he was twenty-four, was the first to see far enough into the future to coin the phrase "from the Cape to Cairo" was the original enunciator of the idea of East African federation, was one of the first to anticipate white settlement in what is to-day Kenya Colony, to envisage European plantations on the slopes of Kilimanjaro, to detect Germany's African ambitions, and to realise the necessity of prompt action in Nyasaland and Northern Rhodesia if both German and Belgian schemes were to be frustrated. But even such achievements touched only the fringe of his many-sided life, for he was one of the greatest linguists and one of the best naturalists which Africa has known, his paintings were accepted by the Royal Academy, he was a successful novelist, and he had the strength of mind to speak his thoughts, whether acceptable or disagreeable, to men of high station who were too seldom shown the naked truth.

That habit, which had smaller results for East Africa than would have been the case if some of our then politicians had been of stronger fibre, was his own official undoing, for some of the principal permanent officials at the Foreign Office, unaccustomed to and offended by such candour, and jealous of the undeniable brilliance of one whom they regarded as an interloper in the Diplomatic Service, soon marked him down as a man to be curbed and perhaps shelved. How badly he was treated by the servants of a country for which he had run indescribable risks is fully set out in this book, which also shows that Johnston, by contrast, never forgot unstinted service on the part of white or black subordinates; indeed, he inspired feelings akin to love among his Native servants, whom he well understood but whom he took care not to pamper and spoil.

As plucky as any professional soldier when the need for military action was clear, a less soldierly appearance than that of Johnston could hardly be imagined. He fought, as his lieutenant Mr. A. J. Swann wrote to *East Africa* a couple of years ago, in a sailor's straw hat, and even in the thick of the fight he would hold above him his beloved white umbrella! When warned by his officers that this

made a terribly easy mark for enemy gun fire, he replied that he feared sunstroke much more than the bullets which used to splash all round him; hundreds of times he had the narrowest escape, but he was never hit, and his Native troops, "firmly believing in his invulnerability, and perhaps in the oriental inception of the umbrella as a mark of greatness, followed this quaint form of standard up to and over stockades belching with gunfire. In the maddest rushes nothing escaped the attention of the White Umbrella."

That quotation refers to his battles in Nyasaland, of which he wrote just forty years ago, when he first saw the Shire Highlands:—

"In this little Arcadia, with mountains towering up to seven and eight thousand feet, there are sweet English-looking farmhouses, churches, cottages, roses, fat cattle, gobbling turkeys—a patch of England planted in Central Africa, a sight to rejoice poor Livingstone's ghost if it ever revisits the namesake of its birthplace (Blantyre). The air is full of the scent of haying."

He chose as the site of his Residency the rugged and beautiful Zomba district;

"which was much wilder (and therefore more interesting to him) than the trim and ordered civilisation of the older missionary centre at Blantyre, where in early days the secular arm had been too much identified with the spiritual. For this reason he deliberately chose a political capital apart from the pre-existing religious one. It delighted him at Zomba to hear lions and leopards in the night. One of the latter he tamed, together with a number of other wild creatures. Another leopard he served up as steaks and soup at a Residency dinner party, and wrote to Mr. (now Sir Alfred) Sharpe that his guests found it delicious. No doubt they politely said 'so.'"

An amusing picture of his *ménage* in Entebbe, when at a later date he was Special Commissioner and Commander-in-Chief of the Uganda Protectorate, is given by the author of this fascinating volume:—

"At Entebbe Harry made a practice of having the baby elephant in to tea. It behaved with unexpected delicacy and good manners. It would help itself deftly to jam sandwiches from a plate, and then take its private milk bottle by the neck and pour the contents down its capacious gullet with a glug-glug sound, just like the courteous Spanish peasants drink wine when it is handed round. Only once did the elephant break crockery, and that was when he butted the butler on account of some little difference of opinion. This elephant's special chum was a zebra foal, and the two used regularly to go off for walks together. When the zebra did not seem keen about a ramble in its noontide hours of siesta, the elephant would wind his trunk round the zebra's neck and tug."

"There was a large snake pit near our front door. I used to think that callers were far less numerous and less assured and that Harry was pleasantly aware of the fact. It was at Zomba, however, that a lion of his playfully knocked two men downstairs. It may have received a hint from a Blue Book (joyfully quoted by the Press), in which he complained of an incursion of tourists into Central Africa and their use of his house as an hotel, even to the extent of their taking the Residency sponge with them when they went away—sponging with a vengeance!

"Leopards, without any pretension to be tame, were pretty frequent visitors to us in the Entebbe of those days. But the crocodiles lurking in the wild garden by the lake shore were a more serious menace. A neighbour of ours lost his much prized cook, who failed to return after having gone down to draw water. On the following Sunday our friend went down to the lake shore near our house and shot a crocodile. In the contents of its stomach was identified a black hand with a silver ring on it which had belonged to the missing cook."

So fond of animals was Johnston that his caravan looked like a travelling circus. He could not bear to be parted from all his animals when on *safari*, so favoured monkeys sat perched on the woolly heads of porters and peered above the waving elephant grass.

"His golden rule for breakfast while on the march was Spartan but wise. It was eaten with our loins girt, and standing, like the Passover, but never in company. He did not think it a tactful moment for social intercourse. He had known more than one African expedition to have been wrecked by ill-timed attempts at conversation when tempers are at their worst. Afternoon tea was also a meal we took separately, as soon as we had pitched our tents, and could rest and read in their green shade, thankful to be freed from most of our clothing.

"At dinner, on the other hand, Harry was inexorable on his travelling staff appearing in full evening dress, and the Goanese cook knew he was expected, like their dress, to remind the company of civilisation. Conversation and cards were then encouraged by the camp fire. Hyenas might be laughing like maniacs in the outer darkness; the tree-hyaxes be emitting their unearthly screams above the incessant chorus of frogs and crickets; the hideous flying foxes or fruit bats might pass like evil spirits above our narrow circle of light; our porters might sing barbarically of love and of pumpkins; but this was our hour of home talk, of Europe, of mind rather than matter. Hence the significant symbol of the white shirt in the Dark Continent. The Press was quick to appreciate the meaning of Harry's table in the wilderness, realising that when white men abandon the symbols of civilisation in the tropics they tend to lose its substantial and spiritual gains."

This is a most attractive book for any East African. F. S. J.

TREASURE OF OPHIR.

Commander Craufurd's Interesting Book.

TREASURE hunting has ever gripped the mind of man, inspiring adventure and deeds of derring do, but it is not often that a notion obsesses the mind of a child and becomes the moving spirit of his whole life. Commander C. E. V. Craufurd, R.N., is the exception, and it is indeed remarkable that from his earliest years he should have set himself to solve the problem of the Land of Ophir. That he joined the British Navy was fortunate, for his service brought him into just those parts of the world likely to assist his quest; and in his book, "Treasure of Ophir" (Skeffington, 18s.) he tells the tale in full.

In spite of common report and the fact that Sofala was most probably connected with the land of the Queen of Sheba, there is no proof that that part of East Africa was the Land of Ophir spoken of in the Bible. Some have claimed Ophir to have been China, basing their theory on the assumption that King Hiram's fleet, sailing from the Middle East, must have voyaged as far as China in order to complete its three-years' cruise to Ophir. The author has no faith in either of these theories.

"I had fifteen years more of search, and seven further years of arranging proofs, before I was able to assert that Ophir is no longer a lost city," he writes, "and twenty-two years is but a tiny fraction of the time that Ophir has lain dreaming in the desert sands. Meanwhile, I have had time to appreciate some of its problems. I have learnt that Ophir and the gold of Ophir represent far more than a lost city and a tale of romance. The lost lands of Ophir may awaken the whole of the Middle East; they may bring prosperity to a poverty-stricken peninsula that is larger than India."

What solution is offered must be left to the reader to discover. He will certainly enjoy the search with the author, and enjoy, too, the accounts of life in the Navy and the anecdotes with which Commander Craufurd embellishes his pages. One hint must in fairness be given: Ophir is not located by the author in any part of East or Central Africa.

The book has been most capably edited by Mr. Granville Squiers, to whom credit must be given for arranging the mass of material in a readable and appealing form. As now presented, it rivals "Treasure Island" for interest and thrill.

A. L.

THE LANGUAGE OF THE RED SEA NOMADS.

A Useful Sudan Vocabulary.

GOVERNMENT officers, missionaries, and settlers who work in other parts of East Africa must be grateful that the Native languages they have to learn are of the Bantu type and not the weird and wonderful Hamitic dialects which fall to the lot of the Sudan service. This gratification is prompted by a study of the handbook of the grammar, texts and vocabulary of "Tu Bedawie" (the correct spelling requires a special fount of type), which has been compiled by Mr. E. M. Roper, of Sinkat, and is published by Stephen Austin and Sons, of Hertford; at 10s. 6d.

"Tu Bedawie (constructive form of this name is Bedawiet)," writes the author in his introduction, "is the language of the nomads of the Red Sea hills from Egypt to Kassala. It is to-day the most important and the most widely spoken of that group of languages of north-east Africa commonly called Hamitic. It has no script, and there is no trace of its ever having been written other than in the characters by European travellers during the past hundred and fifty years."

The alphabet employed comprises twenty consonants and eleven vowels, with six diacritical marks, and even then all the sounds in the spoken language are not represented. The "grammatical structure of the language is far from simple," writes Mr. Roper, "and it seems impossible to lay down rules which do not admit exceptions." And there is a further complication:—

"If you endeavour to speak and understand Bedawiet, you must bear in mind that the Natives are not in the habit of speaking it to, and of hearing it spoken by, Europeans. . . . For instance, if you address a woman in the masculine in Bedawiet, she will not realise that you are speaking to her."

Mr. Roper has evidently made an intensive study of this dialect and has produced a book which will be a tremendous boon to British officials in the Sudan. He has consulted all the known authorities on the language and has spared no pains to make his work of a high standard. He hopes eventually to produce a larger and even more accurate edition, and to that end he asks for criticism and notice of errors. The present reviewer disclaims any pretence to criticise; he can offer the author only admiration—and sympathy.

A. L.

A GUIDE TO SOUTH AND EAST AFRICA.

1930 Edition of Union-Castle Year Book.

THE 1930 edition—the thirty-sixth issue—of "The South and East African Year Book and Guide," published by Messrs. Sampson Low, Marston & Co., of London, for the Union-Castle Steamship Company, at the remarkably low price of 2s. 6d., is wonderful value for money. In addition to its long-established features, the 1930 edition contains a new map of the central areas of Kenya and Uganda, and, for the first time, plans of African harbours touched at by the company's steamers. The sixty-four maps in colour constitute the finest atlas of South and East Africa of which we are aware, and for anyone visiting the area covered—the business man, the settler, the sportsman, the tourist, or the invalid—the book is quite indispensable. It will be sent post free to any reader remitting 3s. to the Union-Castle Company's head office at 3, Fenchurch Street, London, E.C.3.

"EAST AFRICA" is indispensable
to everyone who would be well informed of East African affairs.
Subscribe TO-DAY.

PERSONALIA.

Sir Edward Denham has reached London.

Sir Piers Mostyn has been visiting Uganda.

Mr. E. B. Seex, A.C.A., is now on his way to Kitale.

Sir Alan Cobham left Cape Town last week for England.

The Rev. L. C. Wilson was recently married in Uganda to Miss Muriel Wood.

Mr. B. A. Crean, Resident Magistrate in Nairobi, has arrived home *via* the Cape.

The Prince de Ligne is, we learn, shortly returning to Lake Kivu from Belgium.

Mr. R. P. Caldwell, recently stationed in Tanga as an Assistant Auditor, has been transferred to Uganda.

Sir Philip and Lady Brocklehurst, who have left for the Sudan, do not expect to return to England until April.

Mr. S. B. Jones, Assistant District Officer, recently assumed charge of the Mwanza district of Tanganyika.

Mr. R. Davies, Assistant Civil Secretary, has been appointed Assistant Financial Secretary of the Sudan Government.

Mr. W. B. B. Robertson, M.C., recently stationed in Mbulu, as Assistant District Officer, has arrived from Tanganyika.

Mr. E. D. Mather has been elected Chairman of the East Africa Committee of the Manchester Chamber of Commerce.

The Hon. William and Lady Beatrice Ormsby-Gore have returned to 5, Mansfield Street, where they will remain until Easter.

Sir Claud Hollis, Governor-Designate of Trinidad, is to be entertained at dinner by the West Indian Club on Wednesday next.

Mr. J. P. Jones, Provincial Commissioner of Pemba, has been appointed an official member of the Legislative Council of Zanzibar.

Viscount Ockham, who is at present in Tanganyika Territory, has, on the death of his father, succeeded to the Earldom of Lovelace.

Mr. Walter Osborne Stevenson, foreign general manager of Barclays Bank, has been elected a director of Barclays Bank (D.C. & O.).

Mr. A. Chester Beatty has resigned his seat on the board of Nyanza Copper Mines, Ltd., on account of extreme pressure of business.

Mr. E. J. Wortley, until recently Director of Agriculture of Nyasaland, is about to take up his appointment as Director of Agriculture in Trinidad.

Mr. E. D'A. Sullivan, who has been acting as private secretary to Sir Claud-Hollis, has left Zanzibar on leave prior to the termination of his appointment.

Mr. W. B. Mumford, who has done such good work as Superintendent of Education in charge of the Native school at Malangali, is on leave from Tanganyika.

Major-General Vesey John Dawson, who has died at Henley at the age of seventy-six, served in the Nile Expedition of 1884-5. He was heir-presumptive to the barony of Cremorne.

Lieutenant-Colonel W. T. Shorthose, formerly of the King's African Rifles, has returned to Jos, Northern Rhodesia, where he is on the staff of one of the largest tin mining companies.

Dr. C. T. Loram, a member of the Native Affairs Commission of South Africa, who visited East Africa a couple of years ago, has been awarded the Columbia University medal for public services.

Capt. F. R. M. Mundy, D.S.O., M.C., of the South Wales Borderers, was appointed Major and Second-in-Command of the 6th King's African Rifles on his recent arrival in Tanganyika Territory.

Amongst recent arrivals from East Africa are Mr. W. Anderson, Mr. and Mrs. N. Baldwin-Davies, Mr. S. Beaumont, Mr. and Mrs. A. Cairns, Mr. D. C. Fraser, Mr. L. Jones, and Mr. C. B. Watt.

On the eve of his departure from Zanzibar Sir Claud Hollis was appointed by the Sultan to be a member of the first class of the Order of the Brilliant Star of Zanzibar. Sir Claud has now reached England.

Mr. F. S. Gibbs, the new British Vice-Consul in Beira, has served successfully in Genoa, Madrid, Rio de Janeiro, Paris, and Marseilles. His predecessor, Mr. A. S. Paterson, had been in Beira for about two and a half years.

The departure from Beira for Durban of Mr. H. G. Harrison, of the staff of the Eastern Telegraph Company, was marked by a dinner given in his honour by the Beira Sports Club, of which he was one of the leading members.

Mr. D. F. G. Charlesworth, only son of Dr. Francis Charlesworth, formerly of Zanzibar, was recently married at St. George's, Hanover Square, to Nessie Monica, daughter of the late E. B. Muspratt and Mrs. Edmond G. Concanon.

Mr. Hubert W. Peet, editor of the Far and Near Press Bureau, has left London on a visit to America under the auspices of the Phelps-Stokes Fund of New York. He will particularly study Negro education and developments in the United States.

The engagement is announced, and the marriage will take place on February 1, at the Cathedral, Nairobi, between Captain Richard L. G. Poole, son of Major A. E. Poole, Military Knight of Windsor, and Ella, daughter of Mr. and Mrs. H. Mayne, of Reading.

Mr. J. W. Allen, a director of Messrs. Longmans, Green & Co., Ltd., the London publishers, is about to visit East Africa in connection with educational business. He expects to reach Blantyre about May 1, Dar es Salaam about May 13, Zanzibar a week later, and Nairobi at the beginning of June.

Nyeri has lost two well-known settlers by the departure for South Africa of Mr. and Mrs. J. H. Twigg. Mr. Twigg had been in the Colony for the last twenty-five years, first as a white hunter, and latterly as a coffee farmer. Their estate has been purchased by Commander Herbert Schofield, R.N.

Miss Mary Hawkes, who is joining the Northern Rhodesian nursing staff of the U.M.C.A., was trained at the Croydon General Hospital, nursed during the War in France and in King's College Hospital, and later ran her own surgical nursing home. She holds the Queen's District Nurses certificate.

The engagement is announced between Charles Henry Gormley, 2nd, of the Administrative Service, younger son of the late Mr. and Mrs. Thomas Gormley, and stepson of Mrs. M. M. Gormley, of Palmer, Kent, and Eileen Beatrice, eldest daughter of Mr. and Mrs. John Sherborne, of Woodhill Manor, Kidmore, Oxon.

The engagement is announced between Robert Hugh Alexander Stewart, of Thurlstone Toy, Kenya, elder son of the late Mr. and Mrs. H. M. Stewart, of Dyssryn, Dulwich, S.E., and Gladys Mary Symons, of Asururiet, Eldoret, Kenya, daughter of the late Mr. and Mrs. R. H. Symons, of Weymouth and Eastbourne.

The Fort Jameson branch of the British Empire Service League has elected the following officers for 1930: President, Commander T. K. Maxwell; Secretary, Major G. R. Jeffrey; Treasurer, Mr. W. H. Jollyman; Committee, Commander Triggs, Capt. A. W. Griffin, M.C., and Messrs. R. A. Barclay, G. R. Christie, and W. McKay.

A marriage has been arranged, and will shortly take place, between Hubert Graham Lawrence, Nyasaland Civil Service, younger son of the late Captain Alfred Lawrence, 17th (D.C.O.) Lancers, and Mrs. Lawrence, of Chippenham, Wiltshire, and Margaret, widow of Richard Wilkinson, Gatwick Manor, Surrey, and Gandish Cottage, East Bergholt, Suffolk.

On their return to Uganda from leave Lieutenant-Commander R. J. Jowitt, R.N. (Retired), has been posted to Mbale as Assistant District Officer, and Messrs. E. T. James, F. R. Kennedy, F. W. Johnston, and G. C. Whitehouse to Entebbe, Tororo, Jinja, and Soroti respectively.

Colonel Sir Edgar Bernard, K.B.E., D.S.O., C.M.G., late Financial Secretary to the Sudan Government, now of Billa Portelli, Malta, was married in Westminster Cathedral on Monday to Miss Vera Maria Gwendoline Wolseley Hobbs, only daughter of Major-General Percy E. F. Hobbs, Colonel Commandant of the R.A.S.C.

Mr. H. Wolfe, Deputy Director of Agriculture in Tanganyika, who was wounded in a shooting accident in the Iringa Province a year or so ago, has now returned to the Territory. A Dar es Salaam correspondent writes that he has still to walk with a limp, but has made a much better recovery than the doctors had thought likely.

According to a Mombasa correspondent, Mr. D. S. Fraser, who has been appointed Town Clerk of Kenya's port, entered the Indian Civil Service after leaving Cambridge, served during the War in Palestine and Egypt, returned to India after the Armistice for two and a half years, and then resigned and took up farming in Southern Rhodesia.

The Nyasaland Tea Research Association has been formed with Mr. W. Tait Bowie, O.B.E., as Chairman, Mr. A. E. Shinn as Vice-Chairman, and Mr. G. G. S. J. Hadlow as Honorary Secretary and Treasurer. The Board of Control consists of the above three gentlemen and Messrs. Barrow, C. F. S. Shaw, W. Morris-Scott Hayter, D. M. Daft, and H. B. Morton.

Miss Molly May, daughter of the late Rev. John May, of Kawimbe (where she was born), has just left England for Northern Rhodesia to be married to Mr. Nathan H. Porritt, who for the past year or more has been working at Kambole on the mission station founded and conducted by the Rev. J. A. Ross. Mr. Porritt is a son of the editor of *The Christian World*.

The appointment of the Hon. P. W. Perryman, C.B.E., as Chief Secretary to the Government of Uganda, in succession to the Hon. R. S. D. Rankine, will give much satisfaction in a Protectorate which he has served long and earnestly.



He is well liked by all sections of the community, has a reputation for sound and systematic work, and the appointment will be all the more acceptable because several recent departmental headships have been filled from outside sources when it was felt in official and unofficial circles in Uganda that men who had proved their ability as Acting Directors might well have been promoted to substantive rank. Mr. Perryman first went to Uganda in 1908 as an Assistant District Commissioner, became Senior District Commissioner in 1920, and Assistant Chief Secretary three years later.



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GROWING ESSENTIAL OIL PLANTS.

"Side-line" Crops for East Africa.

£7 10s. per lb. is not at all a bad price for an essential oil distilled from an easily grown plant, but that is the sum "true lavender oil" was recently fetching on the market. Mitcham peppermint oil produced in England was quoted last year at from 105s. to 110s. per lb., and a sample of the same kind of oil, from Mitcham plants grown at Molo, in the Kenya highlands, about sixteen miles south of the equator, longitude about 35° 40' E., was thus reported upon by technical experts in England:—

"The oil possesses a most excellent aroma, quite free from bitterness, and a very high figure indeed for menthol. There can be no question that this source of supply should be an important one in the future."

Planters in various parts of East Africa have for some little time been showing considerable interest in the growing of essential oil plants as a side-line or second string to their staple crop; and a timely article in a recent issue of the *Bulletin of the Imperial Institute* deals most helpfully with this very subject. The chief points are summarised:—

Peppermint.

Varieties grown: *Mentha piperita* var. *viridis*: Mitcham, or "black mint": hardy, big yielder.

Mentha piperita var. *officinalis*: "white mint": smaller yielder, but finer oil.

Mentha arvensis: Japanese oil.

Yields: Vary between fairly wide limits: weight of plant harvested, 3-4 tons per acre; oil, 8-12 lb. per ton; average yield about 30-40 lb. per acre per annum.

Prices (August, 1929) per lb.
 Finest English Mitcham 105s. od. to 110s. od.
 Best American 20s. 6d. to 21s. od.
 American, ordinary 15s. 6d. to 15s. od.
 Japanese 6s. 4d. to 6s. 6d.

Soil: Any soil except heavy clay, if well drained, chalky soil said to give oil of high quality.

Cultivation: From "roots" (rhizomes or underground stems), dibbled in in rows 12-15 in. wide and from 12-18 in. apart. In America, "roots" one-eighth inch to 1 in. thick and from 1 1/2 ft. long are placed in furrows so as to form a continuous line.

Weeds must be kept down by hoeing; as any strong-smelling weed collected with the peppermint crop may seriously injure quality of oil.

After harvesting, beds are ploughed over to divide runners and cover them with soil. This gives a good "stand."

Manure: Sulphate of ammonia, 1 cwt.; superphosphate, 2 cwt.; sulphate of potash, 14 cwt., per acre. The potash helps to prevent "rust disease."

Harvesting: Just before flowers begin to open; cutting done with small sickles or scythes; cut laid on beds to dry for a day or two; made up into cwt. bundles and wrapped in Russian mats and taken to distillery, where it can be kept indefinitely, if thoroughly dry.

Distillation: Whole plant distilled with steam, from—preferably—a boiler with a perforated false bottom; if this is not used, material should not be placed in boiler till water is actively boiling.

Duration of plantation: Four to five years; best results in second year. After breaking up, land not used again for mint for some years.

Uses: There is a large and constant demand for peppermint oil, which is used chiefly in confectionery, for flavouring essences and dentifrices.

Note.—Arrangements are being made, with the assistance of the Royal Botanic Gardens, Kew, to send plants for trial cultivation to certain Departments of Agriculture which have expressed interest in the matter; the samples of oil to be sent to the Imperial Institute for examination and valuation.

Lavender.

Varieties grown: *Lavandula vera* (cultivated): English lavender oil.

Lavandula vera (wild): French lavender oil.

Lavandula officinalis: also used for "true lavender oil" as opposed to "spike" oil.

Lavandula spica or *L. latifolia*: spike or spike lavender oil; Southern Europe, esp. Spain.

Yields: Vary with conditions, but an acre should give from 2,680-3,580 lb. of fresh flowers yielding, say, 20 lb. of oil per acre.

Prices (August, 1929) per lb.
 Finest English "true" lavender oil 150s. od.
 French, "true" 15s. od. to 15s. 6d.
 Spanish, "spike" 3s. 6d. to 4s. 6d.

Climate: Moderately warm and dry; plants are injured by frost and wet ground in winter.

Soil: Well-drained, light loamy, esp. one overlying chalk. In absence of chalk subsoil, top-dressing with lime or calcareous material advisable. A rich soil should be avoided as this tends to vegetative growth; the oil is distilled from the flowers.

Cultivation: By cuttings; young shoots, taken in early spring, planted 2 in. apart in prepared beds. Any flowers which appear are removed, until plants are set out in plantation in the autumn.

After being trimmed, plants are dibbled in, spaced 18 in. in rows 18 in. apart; deeply and firmly planted with top 2 in. only above ground. After a year in the field alternate plants and rows are removed to give a spacing of 3 ft. each way. The plants removed can be split up and used for planting up fresh land.

The continuous cutting induces a very bushy habit, which tends to prevent free circulation of air and encourages fungoid disease; thinning during dormant season is advisable.

Harvesting: Flower spikes only, cut with a sickle; crop ready when top flowers of spike are fully out and lowest have faded. (For dried lavender spikes are cut earlier when middle flowers are out.) Must be cut for distilling when sun is shining to ensure dryness, and must be covered immediately with Russian mats to prevent scorching; fermentation must be avoided.

Distillation: Whole flower-spikes with about 6 in. of stalk are distilled, in a modern still, for about 3 1/2 hours. Water must be soft, as carbonate of lime decomposes the oil, and still must be emptied after each charge. There should be no delay in distilling.

Duration of plantations: Five years. Land may be divided into six areas, five bearing plants of successive ages while sixth is fallow for a year.

Uses: Lavender oil is used in perfumery, for toilet soaps and toilet requisites. It is one of the most largely used essential oils; demand is regular and likely to be well maintained.

"Geranium" (Pelargonium).

Pelargonium or "geranium" plants have been grown for some time in Kenya Colony, and of the 450 acres now under essential oil plants, 400 are planted with "geranium." That area is probably now increased. Grasse, in Southern France, Réunion, and Algeria are the chief sources of supply.

Varieties grown: Grasse: *Pelargonium capitatum* (chiefly), *P. radula* var. *roscum*.

Réunion and Algeria: *P. graveolens*.

Another variety: *P. odoratissimum*.

Yields: Vary with number of crops harvested in year and with oil content. In France, only one crop is got per annum; in Algeria, three crops a year after first year; in Réunion, cutting takes place all through the year.

In Algeria, yield may be taken as 20-26 lb. of oil per acre per annum. Yield of oil from fresh material varies from 0.1% to 0.2%.

Prices per lb.	1924	Réunion (Houbronn)		Algerian	
		s. d.	s. d.	s. d.	s. d.
1928 [Aug. 1929]	3 1/2 times that of Réunion	28 0	to 40	28 6	to 40 0
	20 6	to 20	11 0	to 16 9	
	20 6	to 21	21 6		

Climate: Warm and sheltered; plant injured by frost and winter rains, but irrigation necessary in summer for full development of leaves. Non-irrigated land, however, may give finest oil. In Réunion, plants grown at altitude of 1,200-3,500 feet.

Soil: Deep, rich, permeable, with plentiful humus and sufficient lime to keep soil sweet.

Manure: To be dug or taked in in autumn, after harvesting; superphosphate, 1,000 lb. per acre per annum, greatly increases oil yield.

Cultivation: By cuttings from strong, healthy plants with maximum leaf; cuttings of uniform size and quality; in Algeria 10-12 in. long. All or most of leaves are cut off with a knife, leaving four or five buds at end of branch; planted directly in field or in nursery beds.

Spacing varies; in France, rooted cuttings are put out 3 ft. each way, or 10,000 to acre. In Algeria, 12-15 in. apart in rows 30 in. apart. Where rain is heavy greater distances should be adopted to prevent "rust."

Persistent hoeing and weeding essential.

Harvesting: Crops consist of leafy twigs, cut with sickles or *secateurs*, just before plant flowers when leaves begin to turn yellow and perfume becomes rose-like. Must be done in sunny weather to ensure dryness. Only woody portions are rejected.

Distillation: Green branches with leaves and flowers used; distillation for each charge, about 14 hours; modern stills strongly recommended.

Duration of plantations: Many years, if properly prepared in first place.

Uses: In good and constant demand for perfumery, and its extension is being strongly advocated.

This information should be of real value to East African settlers, many of whom are, we know, wisely determined to seek means of spreading their risks, over several

ARE N. RHODESIAN SHARE PRICES JUSTIFIED?

(Concluded from page 637.)

not quite so appreciative as that of the admirable play!

Whilst there is no intention of criticising the values of such mines as N'kana, Roan Antelope, N'Changa, Mufulira, Chambezi, etc.—for some of their values in copper content are phenomenal—the public should realise that there can be no hope of any sort of return on capital invested in these properties for a considerable time. For at least two or three years, and possibly longer, there cannot be any great export of copper from Northern Rhodesia, and meantime any capital lying in these mines must be considered a lock-up investment, earning, at best, capital appreciation—and that must always be considered speculative until such time as a fair return of interest can place share values in their true perspective. Though such are the facts, market puffs are constantly seeking to send up Northern Rhodesian share prices, which already discount the future more than amply. It seems high time for a halt to be called.

[A note on the subject of this article appears under "Matters of Moment" in this issue.—Ed. "E.A."]

PERSONAL ANNOUNCEMENTS

Private, not trade, advertisements are now accepted by "East Africa" for publication in this column at the PREPAID rate of 3d. per word per insertion, with a minimum of 5s. per insertion; three consecutive insertions for the price of two. For Box No. 3 advertisements there is an additional charge of 1s. per insertion towards cost of forwarding replies. Advertisements reaching "East Africa," 91, Great Titchfield Street, London, W.1, after Tuesday morning will not appear until the following week. Announcements will appear under such headings as Births, Forthcoming Marriages, Marriages, Deaths, In Memoriam, Appointments Vacant and Required, Land for Sale and Required, Agencies Wanted and Offered, etc. In Memoriam announcements can be inserted for five or ten years at special rates.

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RIFLE FOR SALE. Rifle, Jeffery .404, good condition. Maximum rounds fired twenty. In case with 150 rounds and spare foresight. Immediate disposal for reasonable offer. Write Box No. 197, East Africa, 91, Great Titchfield Street, London, W.1.

POST WANTED IN EAST AFRICA.

EX-REGULAR OFFICER and Cambridge Graduate, married, seeks post in East Africa. Useful knowledge coffee and maize. Good with labour. Keen. Apply Box No. 198, East Africa, 91, Great Titchfield Street, London, W.1.

"EAST AFRICA'S" SPECIAL CORRESPONDENT.

Capt. H. C. Druett, the Editorial Secretary of "East Africa," who recently arrived in Nairobi from London by air, may be addressed c/o Standard Bank of South Africa, Dar es Salaam, until March 7. Any readers in East Africa who would like to discuss any matter with him are invited to write him to that address.

EAST AFRICAN INDIAN CLAIMS.

Mr. Biharilal Anantani, founder and editor of *The Zanzibar Voice*, who left England recently to return to East Africa, told *The Manchester Guardian* before he sailed that East African Indians want a common electoral roll, but, recognising the wide variations in the social status of the populations, would agree to any reasonable civilisation and property test which might be imposed. In brief, they wish to be treated as are their brethren in Ceylon. He claimed that there could be no possibility of the Indian community swamping the white community, since the Indians would accept a civilisation test which, while enfranchising quite 90% of the white people resident in Kenya, would not qualify more than 10% of the Indians. Mr. Anantani described the Indian claim as one that character and capacity, not colour, should be the test of British East African citizenship.

The resolutions at the Nairobi session of the East African Indian National Congress were, however, much more militant.

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LETTERS TO THE EDITOR.

THE FIGHT AGAINST TSETSE.

Grass Burning Proved Successful.

To the Editor of "East Africa."

SIR,

The interesting Pen Pictures of East Africa by Mr. Julian Huxley in your issue of January 16, and his reference to methods of exterminating tsetse fly, induce me to place the following facts before your readers in the hope that they may assist in the fight against these pests.

In 1897 I was appointed by the Foreign Office to the then British Central Africa Protectorate (now Nyasaland). In those days tsetse fly existed only in a small patch of country near Chiwata, and as there were but a few Government stations and no settlers, Native law was in force. This laid down that no grass should be burnt until everyone had collected (cut) the new thatch for huts, and this law was enforced by penalty of death or some similar severe punishment. As a result, no grass was burnt until about the end of October or the beginning of November. When the weather was as dry as tinder, on a given date, westerly winds were a daily occurrence, at about midday the word went forth and the whole country was fired simultaneously. These fires went on for days and destroyed tsetse, ticks, and other pests which now scientists are fighting.

As the country became settled and opened up, and the Natives moved out of their walled-in villages, the grass was burnt in patches when only partially dry in July or August. The tops only of the grass were burnt, leaving the undergrowth, which would not be burnt until the following year. When later the rest of the country was burnt, the tsetse and other pests settled in these partially burnt patches where they lived and propagated in thousands. Now country which has always been clear of fly is full of it, and the Natives and planters are being driven out.

When the elephant marsh near Chiromo was a game reserve and unburnt except in patches by Natives, it was full of fly. When the reserve was opened I was in charge of the Chiromo district, and determined to clear the country of fly. In the middle of October, I, with hundreds of Natives, fired the grass (which had been preserved) about noon from the hills to the Shiré river, starting along the banks of the Ruo. The roar of the flames, twenty to thirty feet high, could be heard for a mile as they swept over plain and hill and utterly destroyed every fly. The plains were afterwards grazed by buffalo and other game and the country was thoroughly examined by medical experts, who were unable to find a single fly. The Government cattle subsequently fed with the wild buffalo and we never lost a single animal from fly.

Killing game will never eliminate fly. If the Government took the matter in hand, made it illegal for anyone to fire the grass until official permission was given, a properly organised burning would gradually kill the fly and other pests such as the carrier of East Coast fever. I have carried out many experiments during my twenty-three years' service, and always with success.

Yours faithfully,

The Constitutional Club, G. B. RITCHEY.
London, S.W.1.

The catalogue of the Royal Empire Society's library, which is about to be published, will form a fairly complete modern bibliography of the British Oversea Empire. The first volume is to consist of about 800 quarto pages, in double columns, and will refer mainly to the continent of Africa.

THE CASE OF SULTAN SAIDI.

A Letter from his Counsel.

To the Editor of "East Africa."

SIR,

East Africa's leading article of November 28 is likely to create an impression that the learned Counsel for the Crown did not bring to the notice of the Court a section of the Procedure Code which might have been an answer to the technical legal point urged successfully on behalf of Sultan Saidi. As Counsel for Sultan Saidi, I deem it my duty in fairness to let the learned Counsel for the Crown to dispel any such impression created by the said article.

In all appeals the appellant generally addresses the Court first. As Counsel for the appellant, I opened my case. I had hardly begun my address when I was asked by one of the judges whether Section 537 of the Procedure Code would not cure the irregularity. Before it was Mr. Mosley's turn to address the Court the applicability or non-applicability of Section 537 was discussed by the Bench with me.

I have no doubt that Mr. Mosley had considered the applicability of Section 537 to the point in the case and agreed with the learned judges that it did not apply. It was a point raised by the Bench, and the Bench was convinced that the Section did not apply and wisely did not refer to it in their judgment.

Mr. Mosley is highly esteemed by practising members of the Bar as one of the most impartial, fair, and capable Crown Counsels.

Counsel fights his case on materials placed before him, and it is a pity that the comments of His Honour Mr. Justice Gour on the manner in which the case was conducted at the Sessions Court at Tabora have not been recorded.

Yours faithfully,

Dar es Salaam.

K. A. MASTER.

[Mr. Master, the barrister who defended ex-Sultan Saidi, thus endorses East Africa's contention that the public should be given more information about this strange case. We hold that all the papers, including those of the preliminary inquiries, should be made available, and, now that the unofficial members of the Tanganyika Legislative Council have refused to press the local Government, we hope that some member of the House of Commons will take up the matter and demand adequate explanation. The grant of a pension of £30 a month to Saidi strikes us as ludicrous.—Ed. "E.A."]

Mr. S. H. C. Hawtreay, now of Dar es Salaam, suggests that the postal authorities of Southern Rhodesia should cancel all letters going overseas with a slogan advocating the smoking of Rhodesian tobacco and cigarettes, thus emulating Kenya's example in advertising Kenya coffee.

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DOES CATTLE-DIPPING PREVENT MALARIA?

An Old Settler's Experience.

To the Editor of "East Africa."

SIR,

Twenty-six years ago I lived in places where we all got fever and blackwater and quite a few died. Lately I have had occasion to revisit these places, and the people there told me they do not use nets now as it is unnecessary. For the last few years I have been living in what was once one of the most deadly parts; we seldom use a net, yet we never get malaria and are always fit. After studying the problem we could only come to the conclusion that dipping the cattle was the cause of the malaria dying out. Even the Natives noticed it. In one district the conditions were perfect for a malaria epidemic before dipping was introduced; after a few years of regular dipping there was still fever but a wonderful difference in the health of the Natives, especially of the womenfolk and children.

In fourteen-day dipping there is no appreciable difference in the number of mosquitoes, but when the cattle are dipped every five or seven days and there is no rain, the mosquitoes get out of their coats, there is a decided lessening of mosquitoes. But cattle dipping is too uncertain in its action and will always be only a partial help in the war on mosquitoes; for one thing, just after dipping, the cattle may get washed clean with a shower of rain, and then they are harmless to mosquitoes. For another, the cattle kraals are often too far away from European dwellings to be any good, though for Natives it is different—the cattle are always in the back yard. It is a fact that Natives improve in health in the malaria season in districts where dipping is enforced and where previously they used to go down practically *en masse* with fever. When the rains are continuous and cattle cannot be dipped, there is an increase of malaria among Natives, but soon after dipping can be resumed there is a marked decrease in the disease.

As I recognised that depending on the poison carried by the cattle was a very uncertain method, and as we happened to be far away from a dipping tank, I put down drums filled with a weak solution of arsenic around the camp, with the happy result that after the first few days there were no longer any mosquitoes. The drums were covered with wide-mesh fowl-wire netting to keep animals from being poisoned.

From my experience I suggest the following as a way to combat the mosquitoes:—

Make a weak solution of arsenic in water—quite a weak solution will do; cattle dip is not so effective as it has a strong smell. As mosquitoes prefer shallow water in which to lay their eggs, the most effective trap is a petrol tin cut in half and containing from three to six inches of the arsenic solution. Place the tins on the ground level or at most thirty inches above the ground in places round the house and the Native quarters—especially the latter—in spots well sheltered from the wind, for mosquitoes dislike wind. Cover the tins with coarse fowl-netting; where necessary the tins can be put in high wire netting enclosures without a gate and filled with a pipe and funnel.

I am sure I am on the right track, and I will make this statement: Given a free hand, I will make any unhealthy town a healthy and trouble-free place in three years with my poisoned-water method at a very small expense.

Bulawayo.

Southern Rhodesia.

Yours faithfully,

"X. Y. Z."

HOME MAILS FROM ARUSHA.

Need for Better Information.

To the Editor of "East Africa."

SIR,

When visiting Arusha from Nairobi last week I was struck by the absence of any information whatsoever regarding the departure of English mails from the coast. Mails leave Arusha each Wednesday and Saturday, and I feel it would be helpful to the business man here to know whether a letter posted by either of these mails is likely to be held up at Mombasa for a number of days, or whether it will leave immediately for Home on its arrival at the Coast. Doubtless if the point could be brought to the notice of the authorities in Kenya and Tanganyika the Arusha and Moshi post offices could be kept informed of the departure of English mails.

Yours faithfully,

"A NAIROBI BUSINESS MAN."

Arusha,

Tanganyika Territory.

STIMULATING THE USE OF EMPIRE TOBACCO.

To the Editor of "East Africa."

SIR,

Mr. J. H. Thomas is to be congratulated on getting the British railways to accept his suggestion for the use of steel sleepers. What about the telegraph poles next? But, to come nearer to this distressed area, will Mr. Thomas ask why more Empire tobacco is not being sold? The import figures into Great Britain show Empire tobacco to represent only 18.4% and foreign tobacco 81.6%. Here is great room for improvement.

Yours faithfully,

Fort Jameson.

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WHITE CHILDREN IN TANGANYIKA.

The Problem of the European Child's Education.

TANGANYIKA has been fortunate in its first British Director of Education, Mr. Rivers Smith, who has done good work in organising a system of Native education which, founded on sound principles and informed by his long experience in Africa, is bold in experiment and inspired by modern ideas. He has a good staff (twenty-two of them hold University degrees and several have special diplomas), and his reports are thoughtful and able, but the searcher for information concerning the provision made for the education of the increasing number of European children finds much to seek.

The 1928 Report (Government Printer, Dar es Salaam, 2s. 6d.) states that there are 898 European children in the Territory, of whom 468 are boys under fifteen and 430 are girls under fifteen: British children number 312, German children 256, South African Dutch 191, and Greek 88. Of the 191 Dutch children no fewer than 178 are centred in Arusha, which should make provision for them easy; of the British 63 are in the Tanga Province, 63 in the Northern Province (28 at Arusha and 35 in Moshi), 74 in Dar es Salaam, 19 in Mwanza, and 12 in Tabora; 70 of the German youngsters live in the Tanga Province, 56 in Iringa, 49 in the Northern Province, and 20 in Dar es Salaam; while in Lushoto and Pangani are to be found 10 Russian and 18 Swiss children out of the total of 39 of those nationalities.

An Unsatisfactory Position.

Turning then to the European education, the reader finds to his astonishment that in Dar es Salaam the Junior School, which was opened in September, 1927, and was taken over by the Government some months later, has an attendance which has fallen to 19. The Convent School of the Capuchin Fathers, which was opened in July, has on its rolls 45 European children, 11 Syrians, 11 Anglo-Indians, and 42 Goans; ten different languages are represented in the school, and the language of instruction is English, though the language question is complicated. In Tanga not more than fourteen children have been on the roll of the small junior school which was organised by a committee of ladies. The Bishop of Central Tanganyika, who is taking an active interest in the education of European children, and has brought a schoolmaster with him from Australia, has begun work at Ngare Nairobi and is showing commendable enterprise, which is, however, rivalled by the Germans, who have established their own schools at Mtumbi (Lushoto) and Lupembe (Iringa), and are setting up another school in Lushoto. The new Dutch school at Ngare Nanyuki has been completed, but otherwise no progress has been made.

Nowhere in the Report is there any indication of the curricula adopted in any of the European schools, of reports from headmasters, of information, in fact, of the very points which anyone interested in this important topic would wish—progress, games, effect of climatic conditions on health and intelligence, school equipment, hours of study—all points of vital interest to any European with a young family taking up an appointment in the Territory.

Unfavourable Comparison with Native Reports.

All this compares very unfavourably with the excellent reports and full details given of Native education. Each of the twenty-two Government schools has its Superintendent, a fully qualified European; details of the teaching are given, industrial education is fully dealt with, mission school reports are summarised, and extracts from headmasters' reports are printed. Major W. E. H.

Scupham, M.C., District Officer, writes an interesting account of the Nzega Native Administration School, and the Bishop of Masasi sets out the present educational needs of the Lindi Province. It is all very admirable, but it serves to emphasise the contrast between the time, money, brains and energy spent on Native education and the meagre attention paid to the needs of the unfortunate European children.

The Nzega school, opened on January 1, 1928, to provide suitable education for the successors of the sub-chiefs and headmen of the Nzega district, aims at maintaining a proper balance between the purely literary side of education and practical training in work directly related to the everyday life of the community. Principles of Native administration are taught, mainly by the organisation of the school itself. A School Court, with a local chief as president, tries offences against conduct and discipline, the procedure adopted being an exact replica of that in force in the Native Courts. The 154 boys in the school are divided into "villages" according to their classes. Each village consists of six huts and is named after the clan which resides in it. Each hut is in charge of a *baba*, who is responsible to the *managwa* or head boy of the "village" who, in turn, is responsible to the *mtemi*, or head of the school.

The idea underlying this school is thus very like that at Malangali, on which East Africa has already commented favourably. There the aim is to develop a Native educational system based on Native custom, with such modifications as will fit the individual for the social and economic changes which must follow on increasing contact with Europeans.

Education of Native Girls.

Of education for female Natives perhaps the most notable is the Leipzig Mission school at Moshi, which is being organised with the most careful regard for tribal customs. The tradition of hard work for the women is well maintained, says the Report, and is reflected in a daily routine which is almost Spartan. The first batch of girls appear to have suffered something of a shock when they discovered that school did not emancipate them from the normal agricultural activities of the home. The headmistress in charge sets a personal example in every kind of garden activity—but what will some of our cranky legislators say and do if ever they hear of such a school?

IMMIGRATION INTO UGANDA.

At a recent session of the Uganda Legislative Council the Hon. Dr. H. H. Hunter asked what steps were being taken to prevent persons without visible means of support, or likely to become a public charge, from entering the Protectorate.

The Acting Chief Secretary replied: "The question of enforcing more strictly the existing immigration regulations is one which has been engaging the attention of the Government for the past two years. It has been decided that the expense of adhering to the letter of these regulations, which would involve, among other measures, provision for barriers across motor roads and officers to supervise them, would be out of proportion to the benefit which might accrue; and the Protectorate must, in the main, be dependent upon the scrutiny of immigrants which is carried out at the coast ports of Kenya and Tanganyika. It is considered, however, that the position may be improved by appointing the Commissioner of Police as Principal Immigration Officer and the maintenance of a Central Registry of Immigrants and by the enactment of legislation requiring employers to make periodical returns of non-Native employes."

HOW AND WHEN TO TOUR NYASALAND.

May, June, and July best Time for a Visit.

THE importance to Nyasaland of improved communications is emphasised in the latest report received from that Protectorate by H.M. Eastern African Dependencies' Trade and Information Office in London. In that document we read:—

“Most topics and problems in the Protectorate resolve themselves eventually into the question of communications, and with the decision to make the road between Blantyre and Salisbury *via* Tete an all-weather route the question of Nyasaland as a country for tourists deserves consideration. It is said that several persons would have come by air if a suitable landing ground had been available, and this question is being investigated with a view to making one near Limbe. Arrangements are also being made to provide a landing stage for motor cars at Mwaya, at the north end of Lake Nyasa, so that by way of the Lake the Nyasaland road system would be linked up with that of Tanganyika Territory and the north.

“The best months of the year for tourist traffic in Nyasaland are May, June, and July. In August it is apt to be hazy, and the weather begins to get warm and the smoke from the grass fires obscures the scenery. During the best time of the year the scenery of the Shire Highlands is well worth a visit.”

Hotels in the Protectorate.

“The road from Salisbury to Blantyre can be done in two days, but more comfortably in three. There are good hotels at Toko, in Southern Rhodesia, ninety-six miles from Salisbury, and at Tete, in Portuguese East Africa, 244 miles from the same place. At Mwanza in Nyasaland, 330 miles from Salisbury, there is a rest house where accommodation can be obtained. The whole distance is 387 miles.

“A road is also under construction between Fort Jameson and Tete, and when this is complete it will facilitate very considerably a circular tour through Tete, Nyasaland, and Northern Rhodesia, and back by the western route.

“Hotel accommodation in the Protectorate is available at Limbe and Blantyre, and at Zomba about 40 miles away. There is a very good hotel at Dedza, 129 miles from Zomba. Accommodation is available at Lilongwe, 56 miles beyond Dedza, and at Fort Jameson in Northern Rhodesia, which is 94 miles beyond Lilongwe. There is also a hotel at Fort Johnston at the south end of Lake Nyasa. The round trip on the Lake takes about two weeks.”

IDENTIFICATION BY FINGER PRINTS.

Unique Case from Kenya.

WHAT is believed to be a case of finger print practice unique in the history of the method in East Africa is related in the 1928 Report of the Kenya Police Department.

The body of an African was discovered on the Meru road some seventeen miles from Nyeri. He had evidently been murdered, but no one had been reported missing and no clue to his identity existed. Death having taken place, apparently a week before the discovery, the corpse was unrecognisable, but the Assistant Superintendent in charge found that the skin of the top of the left thumb was still sufficiently preserved, and despatched that fragment of the unfortunate Native to the Central Finger Print Bureau. On arrival it was found to be in a decaying condition and too hard to manipulate; so, after being photographed, it was forwarded to the Medical Laboratory for treatment. There it was rendered so pliable that good impressions were possible by folding the piece of skin over the left thumb of an operator. Photographs of these impressions having been taken, the records of the Bureau were searched, and out of the million of these the identity of the Native was ascertained within thirty hours. Identification particulars were telegraphed to the District Police concerned, who traced the movements of the deceased and arrested the murderer in about twenty-four hours. He was convicted and sentenced to imprisonment for life.

TANGANYIKA CHALLENGES POSTAL PACKETS.

Natives not Fond of Post Office Work.

IT is no doubt annoying for duty, especially if one lives out in the blue and much delay ensues, but as the law in Tanganyika Territory now stands the alternative would be to prohibit the importation of dutiable articles by letter post—a proceeding which would cause far greater inconvenience. From the Annual Report of the Posts and Telegraphs Department of Tanganyika Territory for 1928 (Government Printer, Dar es Salaam) we learn that during that year no fewer than 5,279 postal packets were challenged, three-quarters of them were found liable to duty, and the amount collected on them was £660, or £105 more than in 1927.

Native Africans do not seem to take kindly to Post Office work: 128 are at present so employed, of whom 71 are telegraphists and one is a wireless operator; but in the accounting branch it was decided to limit Africans to the simplest duties in the telegram clearing house, as trials over an extended period showed that this is, at present, the limit of their economic employment. “The African with any pretence to education,” says the report, “is not attracted to the outdoor duties of the Post Office, and the staff is still largely composed of illiterates.”

Motor transport still lacked the reliability that is so great a factor in a satisfactory mail service, and has yet, in some cases, to prove itself superior to Native runners. The wireless station handled 2,741 messages, and experiments carried out with a portable wireless set of 100 watts resulted in effective speech being transmitted from Dar es Salaam to Mombasa. The number of receiving licences (which are free) at the end of the year was thirty-one, of which thirteen were issued during 1928.

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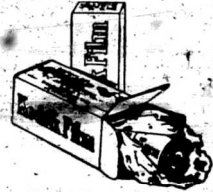
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Camp Fire Comments.

Marriage and Motor Cars in Africa.

It is possible that the motor industry in Great Britain does not adequately realise the great part motor cars play in the social life of the British Colonies and Dependencies. British manufacturers accept the fact that in the United States of America workmen drive to their jobs in motor cars and that even a coloured "cook-lady" has her own Ford; but do they know that in Natal, to quote only one instance, no young man is considered efficient without a motor-cycle, and that no self-respecting girl will marry a man who does not possess a motor-car of his own? We doubt it; but the information is given on the very best authority... Evidently there is no prospect of the "saturation point" being reached yet in the Colonial market, and it is for British manufacturers to seize the chance before the American firms gain the position.

Developing the Native Market in Africa.

A good example of the determined efforts which are now being made in certain quarters, at least, to develop the immense market offered by the Native population of Africa, was given by Sir Charles Smith last week at the Vintners' Hall. There were, he said, 7,000,000 Natives in Natal to 1,750,000 whites; and the Association of which he is President (which is interested in sugar) is making up parcels of sugar of a convenient size and selling them to Natives at a very cheap price in an endeavour to help the industry to tide over the present bad times due to the fall in sugar prices and the threatened removal of the British preference for sugar. The Sudan now measures its prosperity by the increase in the consumption of sugar by its Native population, and though sugar is not yet a staple of East Africa, the enterprise of the Natal sugar industry in exploiting the Native market is an example which can be followed with profit in other lines.

The Goat as a World Menace.

"I have never liked goats," writes a subscriber, "for when I was a child an old Billy of that breed haunted our end of my home village and never missed a chance of chasing me. He became, at last, the terror of my life. I liked them even less when in East Africa in later days I had to feed on goat flesh masquerading as mutton chops—horrid stuff. You can imagine, then, how pleased I was to see the beasts getting a proper ticking-off from two authorities in your issue of January 23. Sir Daniel Hall declared that: 'The goat destroyed the fertility of Greece and other Mediterranean regions, denuding

the hillsides and washing the soil into malarious swamps in the valley; this process is rapidly being repeated in East Africa, while Dr. T. F. Chipp, the Assistant Director of Kew, has discovered that goats are endangering the very life of the gum-tappers of Kordofan by eating the baobab seedlings which should become the water-storers of the future. I knew, of course, that goats had done irremediable damage in oceanic islands by killing off the unique indigenous flora, but I did not realise that they were a world menace."

A Record Lion.

The record for lion given in Rowland Ward's 1928 edition of "Records of Big Game" is 10 ft. 7 in. Mr. G. W. Repton sent, last year, to *The Illustrated Sporting and Dramatic News* a photograph of a Kenya lion which measured (the lion, not the photograph) 10 ft. 8 in. Now Mr. D. J. Gray, of Honiton Farm, Nega-Nega, Northern Rhodesia, has written to the same journal pointing out that lions over 11 ft. in length are common in his district. He backs up his statement with a photograph of a lion 11 ft. 2 in. shot by his son, Jack Gray, adding that one shot in the Namwala area of N. Rhodesia was 11 ft. 7 in. from nose to tail. This is very easily the record; and as the measuring appears to have been carefully and properly done from the carcass and not the skin, and by the method set out in Rowland Ward's book, it must be accepted. But such a wide difference between the size of Kenya and Northern Rhodesian lions needs confirming. It is a point which seems to have escaped the notice of the many game hunters who have shot lion in East Africa.

Why is the Grey Parrot Grey?

Among the many puzzling points in the great problem of the coloration of animals is the greyness of the grey parrot. Most of the parrot tribe are green; a colour which one assumes to be correlated with their mode of life in trees, where greenness naturally makes them inconspicuous and acts as a protection. But the grey parrot also spends most of its time in trees, feeding on palm nuts and other fruits, though they are very fond of grain and starchy seeds, raiding Native gardens to get them. In these habits their grey colour can hardly be considered to harmonise with their environment; on the contrary, one would think it made them distinctly conspicuous. Some interested persons have suggested that grey parrots nest among rocks, where their colour would probably be a real protection while nesting, but Mr. G. L. Bates, a most competent observer and a life-long student of tropical African birds, definitely states, in his new book, that these parrots "perch high, and have certain roosting places to which many resort at evening. They prefer openings and clearings in the dense forest and breed in holes in the very high trees always left standing in clearings." Which leaves the problem of the greyness of the grey parrot still unsolved.

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East Africa in the Press.

WHY THE PRINCE LIKES AFRICA.

WRITING in *The Daily Chronicle* on "Why the Prince likes Africa," Mr. W. J. Makin, who accompanied him on his official South African tour, says:—

"The Prince is not a head hunter. I once spent a week in a hunting camp in Rhodesia with him and his staff, and the one person in that camp who was not seriously interested in big-game shooting was the Prince of Wales. True, he went out one day and stalked a fine wildebeeste for several hours, eventually bringing it down with a shot at 150 yards range. It was a clean shot, through the heart. But this kill completely satisfied the Prince. He is not keen on slaughter with a modern express rifle."

"He delights much more in the routine of camp life. To wander through the African bush during the day, dressed in an old coat, shorts, and a sun-helmet, and then to return in the evening, his face burnt brick red, after a tramp of many miles, is, for the Prince, the ideal holiday."

"In camp at night he is usually the biggest of fires, strumming a ukulele and singing songs with his companions. Give him this perfect atmosphere of a night in the bush, a fire with the sparks fighting the stars, and a few companions lolling round. Depend upon it, no one will seek his bed until midnight; yet the Prince will be up and tramping through the bush again as soon as dawn causes the first Native to rub his eyes."

TROUBLES OF A NEWSPAPER.

It is not easy for a newspaper to write about itself without risking the charge of egotism, but Northern Rhodesia's only journal recently accomplished the task with good humour and complete success. In the course of a leading article on plans for its extension it was stated:—

"The *Livingstone Mail* came of age nearly three years ago, and, appropriately enough, became self-supporting. How many times during those earlier years its parents decided to abandon it but proved infirm of purpose we cannot now recall. It was a troublesome infant, an embarrassing youth, and now threatens to become an obsession—it demands service that almost amounts to slavery. Like most lads, once they become self-supporting, it contributes nothing to its parents. Every penny it earns is expended in supplying its needs, and it continually cries for more."

"It has just been supplied with a new set of machines, more becoming to its age, and now it demands two issues a week, with a supplementary hint that even these are regarded only as an instalment. Dark references to restricted accommodation and inadequate ministrations multiply. New features are demanded: sport, motoring, book reviews, district news, illustrations, the ladies are insufficiently catered for, and we are sternly admonished to look to it. We have long sympathised with the creator of Frankenstein."

"Our trouble is that the budding monster has justice on his side. Did we expect him to remain a baby, or even a child indefinitely? Very well, then, more suitable attire, pocket money, and even a latchkey! Something will have to be done about it and, with a heavy sigh—for we are constitutionally lazy and averse to change—we have conceded his demands and made a beginning to fulfil them. In less than a month the first mid-weekly edition will appear—mid-week, because the mail service compels him to ignore calendars."

According to the current issue of the *Kenya Church Review* the congregation at a certain Harvest Festival service in this country last autumn was strongly recommended not to buy Kenya coffee "because of the conditions under which it was produced!"

TANGANYIKA'S ANTI-TSETSE CAMPAIGN.

COMMANDER BERNARD ACWORTH, R.N., writes to *The Times*:—

"Professor Huxley says 'the tsetse fly is painted with three spots of paint, whose position and colour indicate the place, day, and hour of its capture, and then released. By this means we shall learn how far and how quickly fly stray from one locality to another, and whether they behave differently in different kinds of bush and different kinds of weather.' Professor Huxley of course appreciates that a tsetse fly on the wing, like a bird, an aeroplane, or an airship, is absolutely parasitical to the air in and on which it is borne. Accurate observation of the time taken between two spots cannot surely, therefore, give any information of the insect's own flight capacity, the speed and course of the insect's passage being the product of the insect's own proper speed and course in dead still air, and the full speed and direction of the wind or breeze prevailing at the time of the passage. From this it follows that the insect's apparent behaviour in differing wind conditions will be the exact measure of those wind conditions. The insect, in fact, is a constant, and the prevailing conditions provide the inconstant factor."

CAPTAIN D. COMPTON-JAMES, in the course of a recent article on African animals, describes the attitude of the African buffalo when charging, which is of interest in view of the statements already made to *East Africa*. "The animal charges," he writes, "with head lowered so that its chest is covered. The target presented is a hump which is not vulnerable and a forehead which is almost entirely covered with thick, flat horn." As the writer served in the Legion of Frontiersmen with the late Captain F. C. Selous, his opinion deserves attention, but the general idea, confirmed by correspondents, is that the buffalo charges with head up. What say our readers?

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THE CONGO BASIN TREATIES.

Views of the Associated Chambers.

Nairobi, Jan. 25.

THE Association of East African Chambers of Commerce has resolved that, though there is a strong desire to help the Motherland, in their opinion the Congo Basin treaties should not be disturbed in a manner to enable British East Africa to grant Imperial preference.

The opinion was further expressed that the paramount present economic interests of East Africa were the development of closer trading relations towards the ideal of a homogeneous unit or home market. While Article 10 of the Tanganyika Mandate permitted closer economic co-ordination, yet its implication (it was held) forbade Imperial preference either on sentimental grounds or as a bargaining tariff instrument. As the Association could not tell whether a radical change in the Mandate would be acceptable to all parties to the Congo treaties, it therefore decided against favouring any change which might disturb the complete accomplishment of East African unification.

However, the Association recommends an adjustment of boundaries to conform more closely to the "natural" boundaries of the countries concerned; also that the term "complete commercial equality" be unequivocally defined. Finally, the Association holds that the earliest opportunity should be taken for framing a consolidated amending treaty which would supersede the treaty of Berlin and all subsequent conventions.

The reference to the definition of commercial equality is understood to be due to the belief, for example, that British citizens find it difficult to obtain concessions in foreign territories such as the Belgian Congo as easily as Belgians, though there was probably no direct breach of the letter of the Congo treaties.—*Times*.

UGANDA'S VIEWS ON PROTECTION.

A COMMITTEE, consisting of representatives of the Uganda Government, commerce, and Native interests, was appointed last November by the Governor to report on (1) alterations in the Customs tariff essential in the interests of the Protectorate without loss of revenue; (2) to recommend the best means of reconciling the protection of local industries in any of the territories of Uganda, Kenya, and Tanganyika, with the operation of a complete Customs Union; and (3) to recommend a general policy on railway rates in furtherance of the development of the three territories.

The Committee recommends unanimously a Customs tariff of 10% *ad valorem*, but is prepared to agree to 20% to meet the views of the other territories and secure revenue. It states that protection is unnecessary and unwise for Uganda, and suggests that any country wishing to protect its own industries should do so at its own expense. It expresses a great desire to preserve the Customs Union, but not to the detriment of the interests of Uganda.

Further, the report strongly recommends the prompt removal of preferential railway rates for country produce as an indefensible, unnecessary, and unreasonable restriction on imports from the Mother Country, where the taxpayers bear a considerable portion of the interest and sinking fund charges on the capital of the railway.—*Times*.

Having recently received a cable from London from a prospective settler who wished an immediate valuation of a property in the Thomson's Falls area, the Nairobi office of Messrs. Smith, Mackenzie and Company chartered an aeroplane to carry one of their valuers who, leaving Nairobi at 8 a.m., had completed his task and returned to the town before 5 p.m., thus demonstrating the commercial use of aircraft in East Africa to-day.

NEWS IN BRIEF BY MAIL AND CABLE.

A Belgian Military Mission, consisting of a major and two lieutenants, left Europe last week to organise the Ethiopian army.

A cable received from the Tanganyika Railway authorities states that water in the Lake Gombo district is still 2 ft. 5 in. over the rail, but that if present conditions continue they hoped to tranship passengers from the beginning of this week and to resume through trains by Saturday.

The Uganda Government has decided to close the Agricultural Department's experimental plantation at Isigoma, near Fort Portal, and is receiving tenders for a lease of the land (44 acres) for agricultural purposes. Some sixteen acres are under arabica coffee, tea, sugar cane, fruit trees, cinchona, etc.

The Public Schoolboy Tours Committee is planning an East African tour starting on August 1 and ending in London on November 22. It is proposed that the party should spend four days in Zanzibar, visit Tanganyika, spend twelve days in Uganda, and about a month in Kenya. The expense is estimated at £150 for each boy.

The Sudan Government is experimenting to see if crude fuel oil in the soil is an effective barrier against termites, the so-called "white ants." Three of a series of nine houses have had their foundations completely insulated from the surrounding earth by a three-inch layer of oil-impregnated soil. A trial might be given to this method in East Africa, where anyone is pestered by these unwelcome insects.

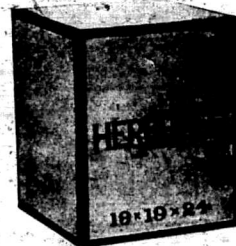
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"EAST AFRICA'S" INFORMATION BUREAU.

"East Africa's" Information Bureau exists for the free service of subscribers and advertisers desiring the Editor's aid on any matter. One of its principal objects is to contribute to the development of British trade throughout East and Central Africa, and any information which readers are willing to give for that purpose will be cordially welcomed.

Manufacturers wishing to appoint agents, and agents seeking further representations, are invited to communicate with the Editor. No charge is made for the service rendered by this Journal in such matters.

The ordinary general meeting of Barclays Bank (D.C. & O.) was held last week.

A Kiambu farm of 436 acres was recently sold at auction in Nairobi for £3,200.

Messrs. J. R. Cox & Co. are understood to be closing down their Kampala branch.

The Standard Bank of South Africa has declared an interim dividend of 10% per annum, less tax.

The annual general meeting of the African and Eastern Trade Corporation was held last week in Liverpool.

Tanganyika's mineral output in December totalled 589 ounces of gold, 47 carats of diamonds, and 724 lb. of mica.

The Carnegie Corporation of New York has made a grant of £3,000 for the establishment of rural libraries in Kenya.

Gain Ltd., of Nakuru, is being voluntarily wound up, since the company cannot by reason of its liabilities continue business.

The Beira Railway Company has purchased the Savoy Hotel, Beira, for many years owned by Mr. A. J. Lawley, the well-known pioneer.

The total public traffic dealt with by the Kenya and Uganda Railways during the first nine months of 1929 reached 733,301 tons, or an increase of 9.8% over the corresponding figures for the previous year.

Mr. G. St. Claire, who has had fifteen years' business experience in East and South Africa, and who was for a time port manager in Mombasa of the Magadi Soda Company, has begun business in Durban as an indent and commission agent.

Some idea of the severity of the plague in Uganda during recent months may be gleaned from the statement of the Director of Medical and Sanitary Services that there had been 4,519 deaths among Natives and 35 among non-Natives up to October 19.

The special aeroplane built for the Aircraft Operating Company's air survey work in Northern Rhodesia is unique in that it can fly, turn, and climb with one of its two engines cut out, thus eliminating much of the risk involved in flying over unexplored country.

£1,000 was left to the Church of Scotland Mission at Kikuyu by Mr. Samuel White, of Dorset House, Clifton, whose estate has been proved at £267,352.

The Uganda Chamber of Commerce is petitioning the Secretary of State for the Colonies against the removal of the headquarters of the Agricultural Department from Kampala to Entebbe.

An Uganda correspondent believes that the Protectorate must this season expect to get for cotton seed prices not higher than and quite possibly lower than those of 1920, in which year the cotton tax was reduced by the local Government and special reductions made in freight charges by the Kenya-Uganda Railway and the shipping companies in order to assist the industry.

An unofficial but reliable cable received from Uganda by H.M. Eastern African Dependencies' Trade and Information Office states that a cotton buying combine is expected to be formed in the Bunyoro and West Nile districts. The 1930 crop in Buganda is estimated at 72,000 bales, but in the Eastern Province a lower yield is expected than the estimate of 95,000 bales. A record crop of robusta coffee is anticipated.

A travelling post office now runs in connection with each alternate steamer on the Khartoum-Malakal intermediate mail service. All classes of postal business, except that of savings bank, will be dealt with by the T.P.O. at all places of call on the river except at El Geteina, Ed Dumein, Kosti, El Jebelajn, Er Renk, Kaka, Melut, Kodok, and Malakal, where post offices already exist.

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*Enquiries may be addressed to
Commander W. R. Gilbert,
R.N. care of Barclay's Bank
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EAST AFRICAN PRODUCE REPORTS.

COFFEE.

STEADY to slightly dearer prices were realised last week for East African coffees.

Kenya —			
"A" sizes	133s. 6d.	to	165s. 0d.
"B" "	70s. 0d.	to	129s. 0d.
"C" "	63s. 0d.	to	93s. 0d.
Peaberry	130s. 0d.	to	160s. 0d.
London graded —			
First sizes	102s. 6d.	to	141s. 0d.
Second sizes	81s. 0d.	to	122s. 6d.
Third sizes	46s. 6d.	to	79s. 0d.
Peaberry	125s. 0d.	to	134s. 6d.
Pale	70s. 0d.		
Ungraded and mixed	43s. 0d.	to	71s. 6d.
London cleaned —			
First sizes	134s. 0d.	to	141s. 0d.
Palish	90s. 0d.		
Second sizes	87s. 6d.		
Pale	66s. 0d.		
Third sizes and triage	35s. 0d.	to	40s. 0d.
Peaberry	138s. 6d.	to	132s. 0d.
Uganda —			
First sizes	71s. 6d.		
Second sizes	58s. 6d.		
London cleaned —			
First sizes	70s. 0d.	to	84s. 0d.
Second sizes	48s. 0d.	to	69s. 0d.
Third sizes	32s. 6d.	to	53s. 6d.
Peaberry	69s. 0d.	to	85s. 6d.
Toro —			
"A" sizes	52s. 0d.	to	69s. 6d.
"B" "	52s. 0d.	to	59s. 6d.
"C" "	40s. 0d.	to	42s. 0d.
London cleaned —			
Smalls and triage	30s. 0d.		
Peaberry	73s. 0d.		
Tanganyika —			
Arusha —			
First sizes	100s. 0d.	to	127s. 0d.
Second sizes	66s. 0d.	to	94s. 0d.
Third sizes	40s. 0d.	to	58s. 0d.
Peaberry	73s. 0d.	to	118s. 0d.
Kilimanjaro —			
London cleaned —			
First sizes	100s. 6d.	to	115s. 6d.
Second sizes	71s. 0d.	to	80s. 6d.
Third sizes	41s. 0d.	to	56s. 0d.
Peaberry	85s. 0d.	to	114s. 6d.
Brown	41s. 0d.	to	70s. 6d.
Usambaya —			
London cleaned —			
First sizes	129s. 0d.	to	129s. 0d.
Second sizes	70s. 0d.	to	78s. 0d.
Third sizes	41s. 0d.	to	44s. 6d.
Peaberry	94s. 0d.	to	130s. 0d.
Nyasaland —			
London cleaned —			
First sizes	92s. 6d.		
Second sizes	70s. 0d.		
Third sizes	35s. 0d.		
Peaberry	72s. 6d.		
Belgian Congo —			
Kitu —			
Greenish			
London graded—	103s. 0d.		
First size brownish green	93s. 0d.		
Second sizes	78s. 0d.		
Huri —			
London graded—	79s. 6d.		
First size palish green	79s. 6d.		

OTHER PRODUCE.
Castor Seed.—On a very quiet market the nominal value for February-March shipment is £15.
Chillies.—Quiet, with Mombasas quoted 70s. per cwt.
Cloves.—Zanzibar spot are offered at 9d. to 10d., with sellers of January-March parcels at 8½d. c.i.f.
Cotton.—East African cotton continues in fair demand, prices ranging from 7.12d. to 10.5d. per lb.
Cotton Seed.—New crop is quoted at £6 15s. ex-ship.

Groundnuts.—No business is passing, but £16 10s. is quoted as a nominal figure.
Hides and Skins.—For Mombasa hides 30/40/30%, about 8½d. per lb. is quoted for the heavier weights.
Ivory.—Soft, large and medium tusks showed declines of from £5 to £8 per cwt. at the recent sales, but in the better qualities there was hardly any depreciation. Billiard ball pieces and centres were irregular, £105 per cwt. being paid for 3 in. diameter, £129 for 2½ in. and £132 for 2¼ to 2½ in. Scriverloes were steady to rather lower at £89 to £100 for 21 to 27 lb. tusks of 2½ in. diameter, £86 to £88 for 12-13 lb. tusks and £60 to £80 for 10 to 12 lb. Cut points off large tusks were a little lower at £78 to £86 for soft grain, and soft bangle tusks were from £50 to £62 per cwt. for sound, round, and hollow.
Simsim.—The market is very neglected with white and/or yellow around £16.
Sisal.—Quiet and easier, with good marks No. 1 Tanganyika and Kenya quoted £34 10s. c.i.f. for January-March shipment.

PASSENGERS FOR EAST AFRICA.

THE s.s. "Dunluce Castle," which left London on January 23, and Plymouth on the following day, carries for—
Beira. Mr. and Mrs. J. C. Jeremy
 Major and Mrs. W. C. Miss Jeremy
 Annable-Dainton Mr. C. J. Maitland
 Miss G. Bond Mr. and Mrs. H. M.
 Mr. C. E. P. Curran Mitchell
 Miss M. H. Grant Mr. Stewart Robertson
 Mr. G. H. Hackwill Mr. F. Wood
 The P. & O. liner "Mongolia," which left London on January 23 and is due to leave Marseilles to-day, carries for—
Port Sudan. Lady de L'Isle and Dudley
 The Lady Janet Bailey Miss M. O. Sidney
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- "Prevents rickets and teething troubles."
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PASSENGERS FROM EAST AFRICA.

THE British-India liner "Matiana," which arrived in London from East Africa on January 17, carried the following passengers for

<i>Marseilles.</i>		Mr. and Mrs. F. Caldwell
Dr. and Mrs. T. F. Anderson	Mr. S. Campbell	
Mr. A. G. Bailey	Mr. F. D. Cleland	
Mr. W. H. Baldwin	Mr. J. Coates	
Mr. W. Brown-Robertson	Mr. R. B. Cockle	
Mr. D. G. Burns	Mr. C. M. Coke	
Capt. D. Chapman	Mr. and Mrs. S. A. Evans	
Mr. G. F. Clay	Mr. C. A. Frost	
Miss Foster-Smith	Mr. W. J. Foster	
Mr. G. Gulliver	Mr. H. J. Galt	
Miss A. Hammond	Mr. G. R. Gibbons	
Sir A. Claud Hollis	Mr. S. Gill	
Mr. C. H. Lloyd	Mr. W. P. Heard	
Mr. and Mrs. A. J. Lush	Misses V. M. Hockley	
Mr. C. G. Morrison	Miss M. Hume	
Dr. and Mrs. C. E. Roberts	Misses E. and C. Keates	
Mr. H. Selig	Mr. J. W. Large	
Mr. E. D. Sullivan	Mr. R. D. Pearson	
Mr. J. D. W. ...	Mr. and Mrs. J. Poncia	
Mr. and Mrs. A. E. Waterman	Mr. and Mrs. E. A. Ruck	
The Rev. A. W. Wheeler	Mr. R. Ross Stark	
Mr. J. B. Witherick	Miss M. Speke	
<i>London.</i>	Mrs. E. and Miss B. Stanley	
Mr. and Mrs. H. M. Bailey	Mr. A. Stanton	
Mr. and Mrs. W. H. Bailey	Mr. A. C. Thomas	
	Mr. and Mrs. C. G. Usher	
	Miss I. Wilson	

THE s.s. "Giuseppe Mazzini," which arrived in Genoa on January 20, brought the following homeward passengers from

<i>Dar es Salaam.</i>		Mr. Charles Lenox Cuninghame
Mr. N. Robertson Blockley	Mrs. M. Louise Cuninghame	
Baron G. Harry		
Capt. L. Mathews		
Mr. Otto Reginald Pearson	Mr. H. A. Brower	
Conte V. Van de Burch	Mr. A. O. Calmers	
Mr. and Mrs. Marcel Parmentier	Mrs. Doris Chalmers	
Mr. Kikikani	Mr. D. Doshi	
	Rev. G. H. Morrison	
<i>Mombasa.</i>	Mr. A. L. Knowles	
Mr. H. Beinhoff	Mr. Bela Rogenberg	
	Mr. I. M. Thyssen	
	Mr. Vergrugge Gerard	

The names of passengers who left England for East Africa by the "Dunluce Castle" and the "Mongolia" appear on the previous page.

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BRITISH-INDIA.

"Malda" passed Perim homewards, January 25.
 "Madura" left Marseilles for East Africa, January 25.
 "Modasa" left Dar es Salaam, January 23.
 "Ellora" arrived Mombasa from Bombay, January 27.
 "Khandalla" left Zanzibar for Durban, January 27.
 "Karagola" left Durban for Bombay, January 27.
 "Karapara" left Mombasa for Durban, January 20.
 "Karoa" left Mombasa for Bombay, January 22.

CLAN-ELLERMAN-HARRISON.

"Governor" left Dar es Salaam for further East African ports, January 20.
 "City of Bath" arrived Mombasa, January 10.
 "Hilhartus" left Birkenhead for East Africa, Jan. 11.

HOLLAND-AFRICA.

"Springfontein" left Dunkirk for Hamburg, Jan. 21.
 "Rietfontein" left Hamburg for East Africa, Jan. 22.
 "Alkaid" arrived Genoa homewards, January 20.
 "Nykerk" left Port Said for Hamburg, January 18.
 "Giekerk" left Mombasa for Rotterdam, January 19.
 "Klipfontein" left East London for East Africa, January 20.
 "Heemskerk" left Amsterdam for East Africa, Jan. 21.
 "Rypperkerk" left Hamburg for Beira, January 22.

MESSAGERIES MARITIMES.

"Leconte de Lisle" left Diego Suarez for Marseilles, January 25.
 "Aviateur Roland Garros" arrived Marseilles, Jan. 25.
 "General Voyron" left Tamatave for Mauritius, January 26.
 "Bernardin de St. Pierre" left Port Said for Mauritius, January 22.
 "Chambord" arrived Zanzibar for Mauritius, Jan. 22.
 "General Duchesne" left Mombasa for Marseilles, January 20.

UNION CASTLE.

"Carlow Castle" left Suez for East Africa, Jan. 23.
 "Dunluce Castle" left Plymouth for Beira, Jan. 24.
 "Garth Castle" left Ascension for Beira, January 25.
 "Grantully Castle" arrived London, January 25.
 "Guildford Castle" left Dar es Salaam for London, January 27.
 "Llangibby Castle" left Cape Town for London, January 21.

EAST AFRICAN MAILS.

Mails for Kenya, Uganda, Tanganyika, and Zanzibar close at the G.P.O., London, at 6 p.m. on—

January 30	per s.s. "Rawalpindi"
February 6	"s.s. "Kaiser Hind"
12	"s.s. "Aviateur Roland Garros"
13	"s.s. "Narkunda"
20	"s.s. "Ranpura"
26	"s.s. "General Duchesne"

Mails for Nyasaland, the Rhodesias, and Portuguese East Africa close at the G.P.O., London, at 11.30 a.m. every Friday.

Inward mails from East Africa are expected in London on February 1 per s.s. "Rajputana," on February 9 per the s.s. "General Duchesne," and on February 15 per the s.s. "Mooltan."

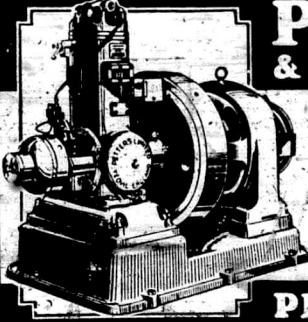
To commemorate the first session of the Legislative Council of Tanganyika held in Arusha, the Arusha Coffee Planters' Association, the Usa Planters' Association, the Arusha Chamber of Commerce, and Meru Agricultural Society have combined in the publication of a brochure on Arusha, copies of which can, we believe, be obtained by anyone interested from either of the public bodies mentioned. The brochure contains up-to-date information about the district and a number of attractive illustrations.

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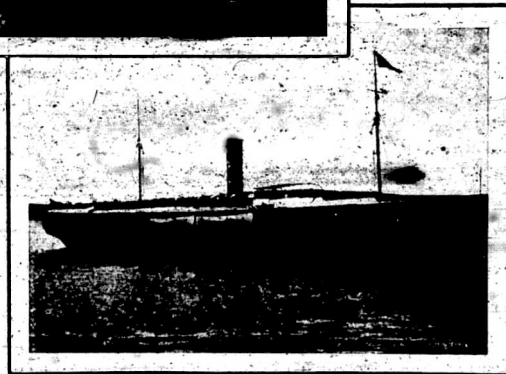
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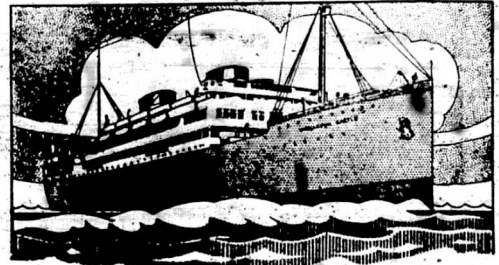
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