

SPECIAL WAR ISSUE

NIGERIA

A QUARTERLY MAGAZINE OF GENERAL INTEREST

Number 22.

1944

Price 64.



From a drawing by K. A. Robertson, M.C.

OXFORD PROGRESSIVE ENGLISH

The Publisher has pleasure in announcing a new series produced specially for Infant Classes in Nigeria, as an approach to the Oxford English Readers for Africa:

"FIRST YEAR ENGLISH, WHAT & HOW TO TEACH"

A Book for teachers. 1/3 net

"FIRST YEAR ENGLISH" Wall Pictures for Africa

A set of twelve African subjects for class use with the above. **6s.** net

"A FIRST YEAR ENGLISH PRIMER FOR AFRICA"

The pupil's book of 32 full-page illustrations for use with the above. 5d.

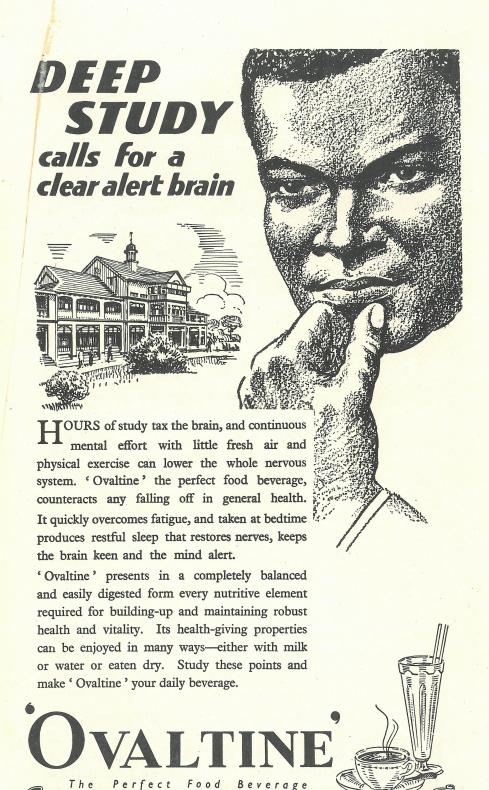
These three publications are by F. G. FRENCH, one of the authors of The Oxford English Readers for Africa.

What is to be our aim in the first year of English? Shall we teach the child to speak English as a mother teaches her baby to speak his mother-tongue? Or shall we teach him to read—that is to say, to identify strange printed symbols, connect them with the sounds they represent, link the new sounds with their counterparts in his own language, and then call up the picture or idea of the act or thing denoted by the printed words? Or shall we teach him to write, which involves a mental process rather similar to the reading process (but in the reverse direction) and adds nothing to the knowledge of the language?

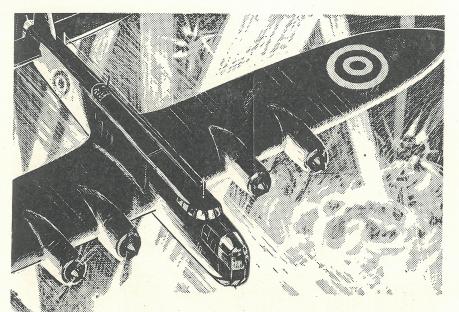
What we need to do in this important first year is to link English sounds with their sense and to form a direct connexion in the child's mind between English sounds and the ideas they represent, without the aid of the vernacular. First Year English therefore concentrates on speaking, and leaves reading and writing till the second year, when they will be mastered very much more easily and quickly. How to achieve this object is explained in great detail, lesson by lesson, and success is assured.

OXFORD UNIVERSITY PRESS

Southfield House, Hill Top Road, Oxford



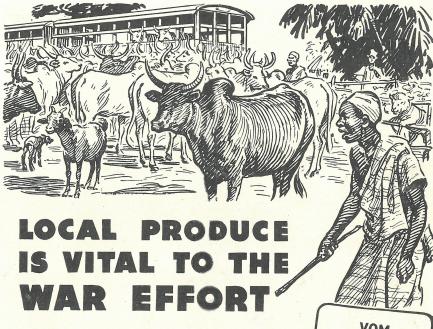
Builds-up BRAIN, NERVES & BO



MEDICINE for DICTATORS

of the Empire. But please remember that many of the materials needed for aeroplane and ammunition manufacture are materials which you have been accustomed to buying in different form from Kingsway Chemists. The machinery that once turned out scissors now produces machine gun bullets. The men who once mixed cough cure now mix T.N.T. The whole of the Empire's resources are directed towards winning the war and consequently you, and incidentally the chemist who does his best to satisfy you, must necessarily go without much that you've been accustomed to buy from us in the past. So please bear with us and remind yourself that everything you want but can't get means something the enemy gets but certainly doesn't want.

KINGSWAY CHEMISTS and The United Africa Company Limited



Valuable shipping space, formerly used to import food to West Africa, has been released for 100% War Service by the increased development of local livestock and dairy produce. With farm bred Beef, Mutton, Lamb, Bacon and Ham, the Cold Store services remain most comprehensive. Butchered and dressed under expert European supervision, all our stocks are available in excellent condition.

VOM
CREAMERY
BUTTER

CERTIFIED
CLARIFIED
BUTTER FAT
The all-purpose
Cooking Fat

COLD STORE

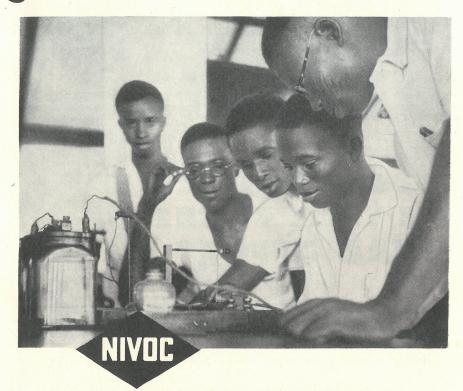
BROAD STREET, LAGOS.

Branches throughout Nigeria.

C.S.1

K.C.I

SCIENCE AND THE COMMUNITY



THE EFFICIENT DEVELOPMENT of the natural resources of a country to-day depends more than ever on scientific control. For this purpose increasing numbers of trained Scientists are required.

It gives us pleasure to be able to co-operate in this important work by supplying the scientific equipment with which the necessary basic training is being provided in Nigerian Educational Institutions.

W. & J. GEORGE LTD.

F. E. BECKER & CO.

Complete
Laboratory
Furnishers and
Manufacturers
of Scientific
Equipment.

Export address:

17-29 HATTON WALL
LONDON, E.C.I

Cablegrams:
BECKER, HATTON WALL
LONDON

This photograph shows only a small part of the great stock of books comprising thousands of volumes, at the C.M.S. Bookshop, Lagos.

¶ It is true that we have a very large and varied range of books in stock, but it is still possible that the one you want is not among them.

¶ In that case, let us order it for you. We pay all costs of ordering and transit and deliver it to you at the ordinary published price, plus insurance.

C.M.S. BOOKSHOP

LAGOS.

BRANCHES THROUGHOUT NIGERIA



'KODAK' FILM

is on war service



Photography is playing a vital part in the war effort, and 'Kodak' film is helping photography to play that part well and efficiently.

To mention but a few of the jobs 'Kodak' Film is doing: recording targets for our bombers — making air surveys to aid map-production — helping to speed work in the war factories and ensure flawless production — picturing the war for today and tomorrow.

When you have difficulty in getting 'Kodak' Film, please remember that this vital work must come first.

KODAK LIMITED, LONDON

SCIENTIFIC INSTRUMENTS

OF ALL DESCRIPTIONS



The chemical laboratory of the Government College, Ibadan

[Apparatus and equipment by Philip Harris & Co., Ltd.

FOR EXPERIMENTAL & PRACTICAL WORK

Science laboratories fully equipped from our comprehensive stock of apparatus for Chemistry, General Physics, Electricity, Botany, etc., etc., Microscopic, Magnifiers, Balances and Weights, Calorimeters and everything for scientific research.

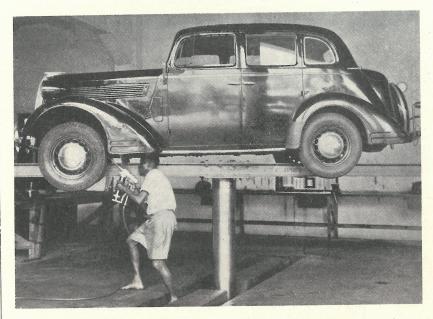
ALL SURGICAL INSTRUMENTS AND MEDICAL SUPPLIES

Philip Harris & Co. Ltd.

Scientific Instrument and Laboratory Specialists
Contractors to the Crown Agents for the Colonies, Colonial Governments, etc.

Edmund Street BIRMINGHAM ENGLAND

THE UNION TRADING CO. LTD. MOTOR DEPARTMENT



The hydraulic car elevator with complete pressure greasing and oiling apparatus. The most up-to-date equipment in the country.

The Union Trading Co. Ltd. 2 JOSEPH STREET LAGOS TELEPHONE: 597

AGENTS FOR

OLDSMOBILE CARS AND G.M.C. TRUCKS

GENERAL MOTORS SERVICE STATION



MODERN living is gradually boiling down to a question of who shall have, soldier or civilian. The longer your razor blades or anything else are made to last, the longer will last the fighting efficiency of an infantryman. The Government knows it, we know it, and we feel sure you know it too, so please don't blame us if you can't get just everything you want in our stores. Remember the storekeeper who can't satisfy you is going short himself, and a few whiskers on both your chins will mean a few more grey hairs in the enemy's head.

The United Africa Co. Ltd.

Branches throughout West Africa

Established 1743



Johnson & Sons

MANUFACTURING CHEMISTS, LIMITED

of Hendon

LONDON, N.W.4, ENGLAND

MAKERS OF FINE CHEMICALS FOR ALL PHOTOGRAPHIC, PROCESS ENGRAVING, AND ALLIED TECHNICAL PURPOSES

HYDROQUINONE
METOL PYRO
MERITOL
AMIDOL

GOLD CHLORIDE SILVER NITRATE BICHROMATES COLLODIONS

etc., etc., under the well-known

Scales Brand

REGISTERED TRADE MARK

Johnsons of Hendon are the :: :: proprietors of :: :: HOUGHTONS (HOLBORN) LTD., suppliers of all Photographic Sundries and Apparatus

The Genuine Tools

for CARPENTERS, BLACKSMITHS, ENGINEERS, BRICKLAYERS, etc.. etc.

and

ALL BUILDING MATERIALS, ALSO HABERDASHERY, FANCY ARTICLES, AND PERFUMERY

from

The Union Trading Co. Ltd.

LAGOS - ABEOKUTA - IBADAN NIGERIA



PEPSODENT contains 3 3 0 0

We have proved its

Millions everywhere are discovering the joy of using Pepsodent, with its marvellous new cleansing ingredient, IRIUM. Millions are proving its effectiveness and their satisfied smiles gleam whiter and brighter than ever before. IRIUM, the latest discovery of dental science, does away

with harsh, gritty rubbing and cleanses gently but thoroughly. It removes every harmful impurity and leaves the mouth amazingly clean and healthy.

Progress with progressive science and change to Pepsodent, with IRIUM, today.

Available in Large, Medium and Guest Sizes.



RIUM in PEPSODENT for GREATER Cleansing power OR TOOTH POWDER

costs a little more, but gives you better pictures because-

SELOchrome

is extra fast

SELOchromeis highly orthochromatic

SELOchrome

is anti-halo backed

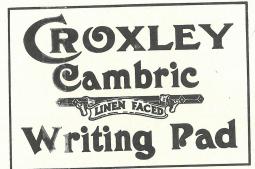
Obtainable from all good Photographic Dealers throughout Nigeria Made in England by ILFORD LIMITED, ILFORD, LONDON Obtainable from:

all C.M.S. BOOKSHOPS.

mm Branches of THE UNITED AFRICA CO., LTD. mmm

HOPE WADDELL TRAINING INSTITUTE BOOKSHOP.

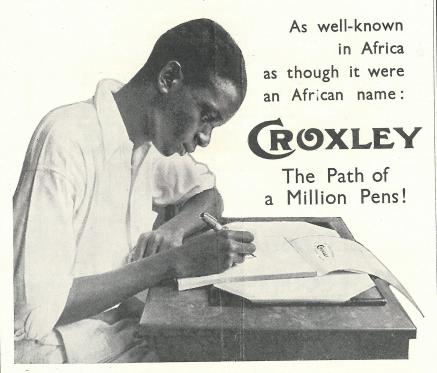
mm SUDAN INTERIOR MISSION BOOKSHOP.



SUPPLIED IN VARIOUS SHADES **ENVELOPES** TO MATCH

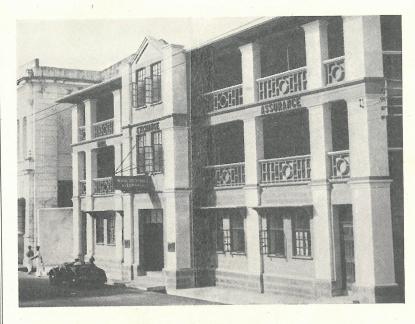
Use it for your Sea and Air Correspondence

Three sheets and envelope weigh less than half-ounce





Head Office : ROYAL EXCHANGE, LONDON, E.C.3. A.D. 1720.



No. 31 Marina, Lagos The New Offices of the West African Branch of the

EXCHANGE ASSURANCE

Lagos Branch Office: P.O. Box 112.

Tel. 231

Gold Coast Office: P.O. Box 50, corner of Horse and

Pagan Roads, Accra.

Tel. 272

Keep the family well on BOVRIL



DRINK BOVRIL DAILY FOR HEALTH AND VITALITY

NIGERIA

A quarterly magazine for everyone interested in the progress of the country. Compiled by the Education Department, Lagos, in collaboration with Private Contributors and all Government Departments

Edited by E. H. Duckworth, Inspector of Education

No. 22.———————————Price 6d.

PRINCIPAL CONTENTS

Editorial Pa	ge 3	A Yoruba Carver. By P. A. Allison	age 49
Improvement in Agriculture	14	Are You Colour-Blind? By A. G. Taylor	52
Poultry-keeping for Pleasure and Profit	16	Pottery Work from Kaduna	55
The Butter Industry in Nigeria	18	The Versatility of Cement and Concrete	57
Improvements in Agricultural Education		The Olu of Itsekiris. By Major R. L. Bowen, M.C	62
The Fruiting of Avocadas. By J. D. Clarke	28	Obi Oputa of Aboh. By Major R. L. Bowen, M.C	64
Onion-growing at Irrua. By J. N. Mordi	29	The Scout Movement in the Northern Provinces	67
The Moslem Areas of Northern		The Iperu Maternity Centre	68
Nigeria under British Rule. By a Special Contributor	30	Katsina Ala as seen by an Ijaw. By V. A. D. Kemmer	71
Ibadan Forest School	42	Education of Girls in Nigeria	74
The Nigerian Timber Industry	44		
Wooden Shingles for Roofing	45	Adaptation of Local Material to Craft Work	75
Home Carpentry	47	Book Reviews	77

NIGERIA

No. 22. 1944

This magazine although published under the aegis of the Government of Nigeria is not an official publication. The articles do not represent official opinion unless expressly stated.

All articles and photographs published in this magazine are copyright.



THE CALL TO SERVICE

The following pages show how Nigeria is answering it.

(Photograph by W. H. Large)

EDITORIAL

THE appearance of this issue of our Magazine has been delayed for many months—actually for more than a year—through a combination of causes arising out of war conditions. Chief among them, of course, have been the interruption and delay of communications between Nigeria and England; the nature and unavoidable character of these will be so generally and readily understood that it is quite unnecessary for us to enter into details regarding them.

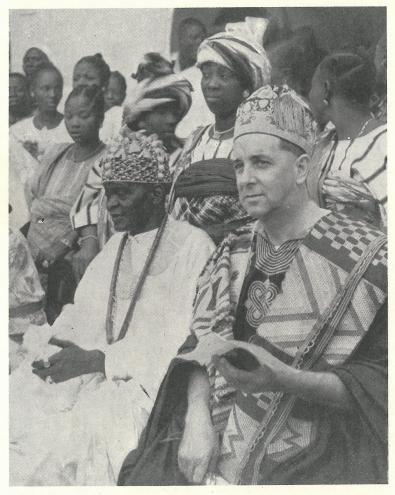
It has been a great encouragement to those of us who are concerned in the production of the Magazine to know that its appearance has been anxiously awaited by an enthusiastic body of readers—present and prospective—many of whom have made enquiries concerning it. In speaking of prospective readers, we have in mind the numerous visitors from distant parts of the world, now in Nigeria, who have displayed an eagerness to secure records of the life of the Colony which they can carry away with them and preserve as interesting souvenirs of what they recognize as a remarkable experience which has come to them as an agreeable and muchappreciated by-product of war conditions.

This issue of Nigeria is a Special War Issue and will thus have permanent value and significance as a chronicle, however incomplete, of Nigeria's contribution to the effort of the United Nations at this memorable period of world history. This does not mean, of course, that it is mainly concerned with military matters. On the contrary, great as has been Nigeria's aid in the successful operations of the United Nations in the African theatres of war, there is little that can at present be said about military activities beyond what has already become public knowledge through the newspapers. Our field in this Special War Issue is a much wider one than that of purely military operations. Our task is to show as many as possible of the widely diverse ways in which Nigeria has responded to the challenge of "total war" and the magnificent way in which Africans have risen to a great occasion, the splendid spirit of co-operation which has been shown by all sections of the population, from Emirs and Chiefs to the humblest members of African communities in such essential tasks, for instance, as food production for a considerably increased war-time population.

While this Special Issue was in course of preparation, we received another great encouragement by the keen interest shown in it by the Ministry of Information in London, whose help has been most valuable in facilitating production at a time when magazine production, through shortage of paper and other supplies, is fraught with particular difficulty. In expressing our thanks for this help, we are not unconscious of the implied compliment to our Magazine as a record of contemporary life and activities in Nigeria—a record which in the case of this Special Issue is destined to obtain very widespread publicity through the despatch of supplies of the Magazine to America and other parts of the world.

The editorial contents of this issue are concerned with what Nigeria is at present doing in many departments of life. In our next two issues, for which preliminary preparations are already in hand, we hope to be able to give our readers—again to a large extent in pictorial form—a review of plans now being studied and developed for the future of this part of the Empire. In recent broadcast talks from London, Lord Swinton reviewed what the various British Colonies in West Africa had done and were doing to meet not only their own abnormal war-time needs but also the larger economic needs of the Mother Country and Empire and the broad war

strategy of the United Nations; but he stressed the point that these recent developments are not merely temporary expedients to meet the needs of the moment. Many of them, more particularly in the economic field, would form the foundations of permanent movements for the betterment of conditions of life in the Colonies. This is a most important and valuable aspect of present policy, and one with which we hope to deal in our future issues.



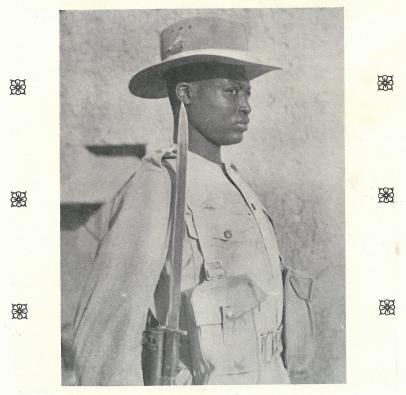
The Alake of Abeokuta and the Chief Muleoruwa of Ijebu-Remo (the Rev. W. F. Mellor), at the Afin of the Akarigbo, Shagamu, on the occasion of the visit of the Alake of Ijebu en route to the Oba's Conference, 1941.

SOME ASPECTS OF MILITARY LIFE

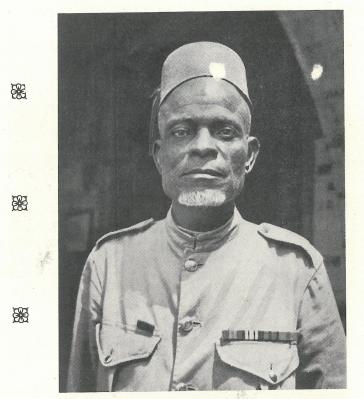
on both official and informal occasions



Men of the Nigerian Regiment marching through Lagos on their return from the victorious campaign in Abyssinia.



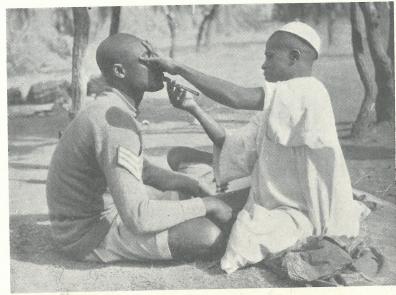
An infantryman on guard duty at the entrance to a camp.



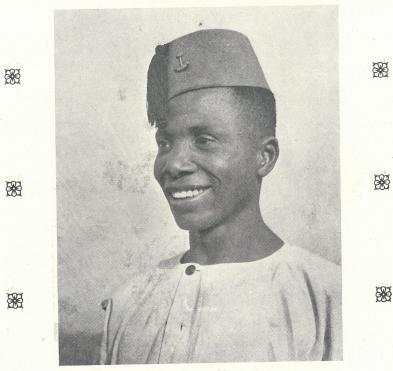
An old soldier of past wars now on the staff of the Public Works Department Headquarters at Lagos. His medals include those of the Ashanti War, the 1914-1918 War, and the life-saving medal of the Royal Humane Society.



An artilleryman taking sights at a forward observation post.



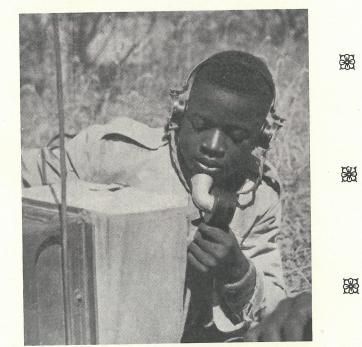
A Hausa sergeant having a shave by a civilian barber who has made a week-end call at the camp.



Felix, a young Ibo man from Umuahia. Before the war he was steward to a civilian. He enlisted during the early months of the war, and now he is in charge of an officers' mess.



A group of lorry drivers.



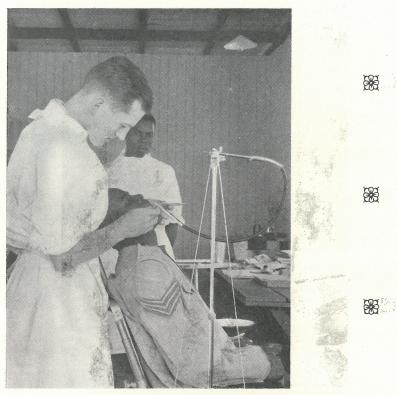
The operator of a portable wireless telephone. He has carried the apparatus on his back for many miles. The company he is attached to is now waiting to attack and he reports back to Headquarters as he hides in the bush concealed from observation by aeroplanes.



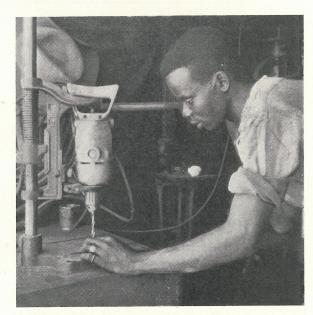
A Hausa sergeant-major engaged in the training of recruits to an infantry company.



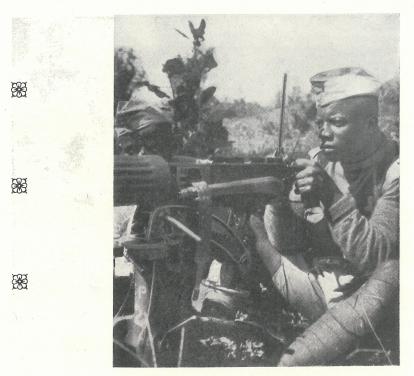
Drivers of motor ambulances engaged in early morning drill. Following the drill they attend classes in first aid.



A sergeant receiving treatment from an Army dentist. An African orderly of the Royal Army Medical Corps is in attendance.



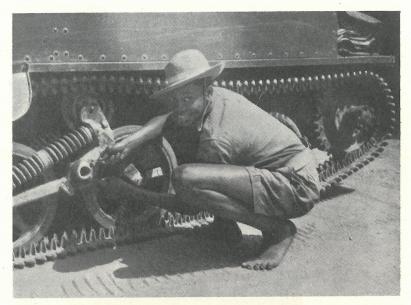
A motor mechanic using an electric drill that forms part of the equipment of a mobile workshop.



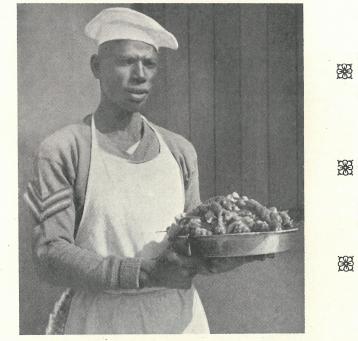
A machine gunner.



A mechanic of a mobile workshop adjusting a motor cycle.



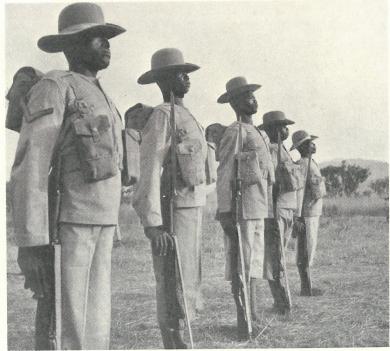
This cheerful mechanic is engaged in the adjustment of the track mechanism of a Bren gun carrier.



An Army cook with a dish of red peppers. Most Nigerian soldiers like their soup and fried vegetable cakes made hot with plenty of pepper.



The Sergeant Major of an infantry battalion, Nigeria Regiment.



Members of a camp guard about to be inspected by the Orderly Officer.



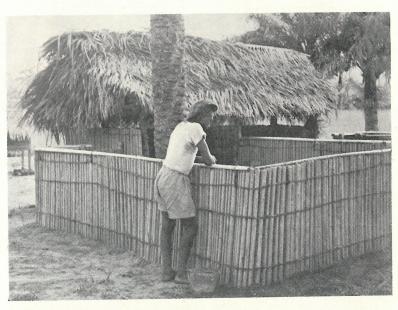
The farmer's house and office at the Native Administration farm at Badagry.

IMPROVEMENT IN AGRICULTURE

NE useful effect of the war has been to concentrate more attention on the development of farming with a view to increasing the production of food for local consumption.

In the south, there has been a large increase in the growing of rice and in parts of the Northern Provinces wheat is being grown for export to the coastal areas.

Mills have been established for grinding the wheat and converting it into a good brown flour. A school for training young men in modern farming methods and establishing them on the land has been started at



Sheep and pig pens on the Native Administration farm at Badagry. On the same farm are cattle pens constructed on the same principle. These pens are made entirely from local materials, and not even nails are used.



Cows on the Mission farm at Topo in Badagry Division. During the day the cows graze through the coconut plantation and at night they are impounded under the trees. The enclosed area is moved at regular intervals throughout a section of the plantation so that the trees are periodically manured with farmyard manure.

Oyo. At this school, the pupils are given instruction in mixed farming and farming methods, making use of cattle and crops.

At Badagry, the Native Administration have an experimental farm under the supervision of the Agricultural Department. Here experiments are carried out regarding the introduction of new crops, such as swamp rice and castor oil. A good bull is kept for serving cows brought in by local farmers, while pigs, cattle and sheep are kept at the farm under conditions that enable the valuable manure to be collected and used on the land.

The farm buildings, all made of local materials, demonstrate a good design that can be copied by any farmer at small cost. The buildings provide comfortable living quarters for the farmer and his family and good rainproof and windproof shelter for the animals.



A good type of shorthorn bull at the Native Administration farm at Badagry. Cattle in the Southern Provinces are very small compared with those from the North; another most noticeable characteristic is their short legs. At Badagry sugar cane provides a valuable feeding material.

POULTRY-KEEPING FOR PLEASURE AND PROFIT

An Account of the Activities of the Ijebu Co-Operative Poultry Association, By E. ORENUGA, Secretary.

N July, 1940, there was a great demand for fresh eggs in Lagos. An Association was formed at Shagamu in August, 1940, to assist in meeting this demand. The Association consists of members from various towns in the Ijebu Province-Shagamu (Headquarters), Ikene, Akaka, Ode, Ijebu-Ode, Ago-Iwoye, etc. The members are poultry-keepers, and they are named "The Ijebu Co-operative Poultry Association."

The main purposes of the Association are: (a) To raise fresh eggs for the community; (b) To improve poultry-keeping in the Province; (c) To help one another in case of bad luck, e.g., theft, disease, etc. The members of the Association meet regularly and discuss matters relating to the right working of the business. Any difficulty encountered by any member is also brought to the meeting for advice. Regulations are made to guard the proper working of the business and to keep the good name of the Association, e.g., "Any member forwarding bad eggs will be liable to a fine of sixpence. If the action is repeated he will be suspended for a given period."

The eggs are sent to the Secretary on Mondays and Thursdays, to be weighed and packed. A receipt is given to each member for the eggs thus sent. The eggs are then despatched by the Secretary to the President of the Association (E. R. Ricketts, Esq.) at Ikorodu, on Tuesday and Friday mornings to be distributed to customers in Lagos.

The eggs are sold according to their weight and quality. The weight of an egg varies from one ounce to three ounces. At present, only eggs from 11/2 ounces upwards are passed for sale to customers; those less in weight are rejected, to be consumed locally. The selling price rises from 9d. per dozen upwards, according to the weight and size. The members guarantee that pure, fresh eggs are sent to the market for sale. Eggs must be kept clean, as an attractive appearance is a help to sale. An average of from 200 to 500 eggs monthly are marketed by the Association. The Treasurer, Rev. W. F. Mellor, receives payment each month from Lagos, and 10 per cent is deducted for expenses and loans to members.

Members raise and purchase pure-bred cockerels for improving the strain of the local birds. Breeding cockerels are also exchanged between the members. Sittings of Rhode Island Red eggs are available to members at reduced rates for the maintenance of pure stock.

Points to watch in poultry keeping are: Clean, dry, draughtproof quarters for the birds; protection of chicks against hawks, snakes and driver-ants; clean drinking water and regular food; periods of liberty for the birds to scratch on grass or in the bush; isolation of all sickly birds, and prompt treatment; regular inspection of stock for lice, and periodic disinfection of quarters.

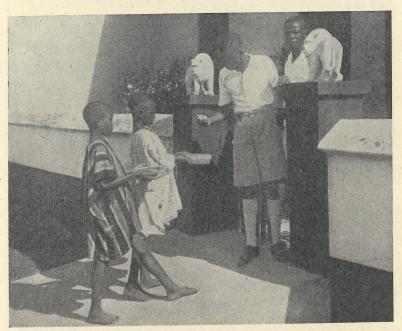
Given reasonable care, poultry-keeping in Nigeria can prove both pleasurable and profitable.



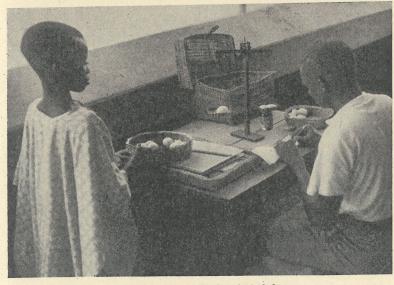


SYSTEMATISED EGG PRODUCTION

Two Aspects of the useful work of the ljebu Co-operative Poultry Association



Children bringing eggs to the collecting depot.



Every egg is weighed and graded.



Dairy herds on the Veterinary Stock Farm at Vom, Northern Nigeria. The northern cattle are much larger than the small, tsetse-fly-immune cattle of the south. Many of the northern cattle have humps and very large horns. Around fos and Vom are vast stretches of high open grass country that yields good grazing for animals.

THE BUTTER INDUSTRY IN NIGERIA

to which the War has given a great stimulus, making butter imports now unnecessary

HE war has given a great stimulus to the production of butter in Nigeria and it is no longer necessary to import it from abroad.

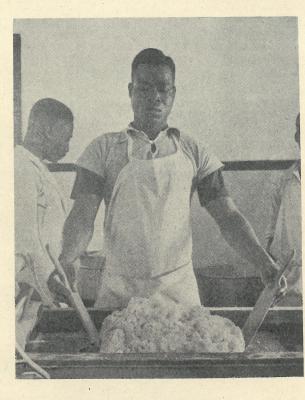
Early in September, 1941, butter was being produced commercially at the Veterinary Stock Farm at Vom, and shortly afterwards at the Agricultural Farm at Kano, at which latter place the scheme was financed by the Native Administration. The Government of Nigeria readily supplied funds for the establishment of dairies at Vom and Jos, and the Veterinary Department was charged with the duty of raising production, after a year or two, to the huge figure of approximately 300,000 lbs. per annum.

The average pre-war import of table butter was in the region of 72,000 lbs., but the lack of raw material for the production of dairy supplies in the other West African Colonies and the large increase of European population in these areas as a result of the war, meant that this huge total had to be produced in Nigeria. This, naturally, would take time, for buildings had to be erected, equipment had to reach this country from the United Kingdom and South Africa, staff had to be trained and so on.

Not the least of the difficulties was the actual production of butter under tropical conditions, and many snags arose. The department was fortunate in having a fully-trained dairyman in its ranks and he gradually overcame all difficulties. The total of over 160,000 lbs. of butter was reached in 1941 at the Veterinary Dairies, and, together with that produced by the Agricultural Department in Kano, a grand total of close on a quarter of a million pounds was manufactured.

It requires an average of two gallons of milk to make a pound of butter, so that even at the present rate of production, well over a thousand gallons of milk a day are required. It would be quite impossible to obtain such a large quantity of milk from Government herds of cattle. A large proportion of the milk, therefore, is obtained from the Fulani herds in the areas surrounding the dairies. Small milk-buying units are being set up in areas where there is a heavy concentration of cattle, and the Fulani women bring (Continued on page 20.)

Some salt is added to the butter and when it comes from the churn it is in the form of fine granules. Short wooden spades are used by the dairy workers to shape the butter to the required form.





SE SE

The cream is heated to a temperature just high enough to kill all harmful bacteria. This heating process is known as pasteurising. The following day it is placed in a churn. This is amachine that enables the cream to be rotated and turned over and over. The turning is continued for half an hour or so and changes the liquid cream into a firm mass of butter.



the milk to the door. It is purchased at 4d. a gallon and put through a separator which removes the cream. The separated milk is returned to the women free. Motor lorries travel round a circuit daily, and bring the cream to the dairy. Where a unit is near a railway, the cream is sent by train.

On arrival at the dairy, it is pasteurised and next day churned and put through all the processes required to produce the valuable article of food, without a little of which each week a diet is not really complete.

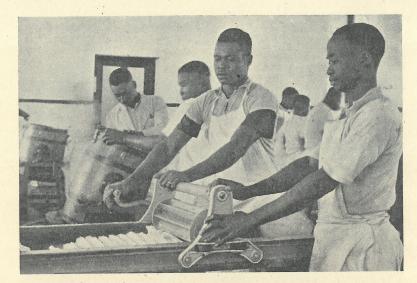
The butter is distributed from the dairy to the local retailing firms with cold storage service, and is transported weekly from Bukuru to Lagos by a cold-store van on the railway.



Pouring milk into a cream separator machine that whirls round at a high speed and separates the watery portion from the cream. The cream is used for butter-making; the watery portion (the separated milk) is a valuable food for pigs.

This new industry is of great value to Nigeria, because all the money that was spent on butter before the war was sent out of the country, and did not benefit anyone in Nigeria at all. Now, things are different. The Fulani cattle-owners have a steady market for their milk—over £600 a month is being paid to the women producers in the rainy season in the neighbourhood of Vom and Jos alone. Secondly, an increasing number of Nigerians are obtaining good and well-paid employment in this industry.

Finally, and not the least important, all the profits from the sale of butter are going into the general revenue of the country where, after deduction of a proportion of the capital expended, the money will be made available for social services. The money you spend in the purchase of butter is helping your own native land rather than going to swell the pockets of unknown shareholders in far-distant countries.



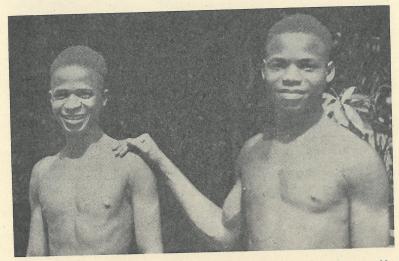
The butter is passed under a wooden roller to remove the excess moisture.



Weighing the butter and wrapping it into I lb. packets.

A. I. U.

VEGETABLE CULTURE ON LAGOS ISLAND

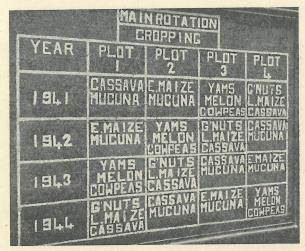


Two young Ibo farmers who, with several others, engage in growing fresh vegetables at Onikan on Lagos Island. The ground they are using is by nature of poor sandy quality, but they are very industrious and by enriching it with compost made from cut grass they succeed in raising excellent crops.

They grow lettuce, beans, parsley, mint, celery, peppers, cabbage, radish, spinach and flowering shrubs. They sell the vegetables to ships calling at Lagos Harbour, in the local markets and to private order. They grow many uncommon flowering shrubs in baskets all ready to plant out. Shrubs include orange bougainvillea, white duranta, white lantana and white hibiscus.



At work on the lettuce beds. The seeds are germinated in boxes, then planted out into prepared beds. The growing plants require careful attention to protect them from land crabs, crickets and heavy rain.



The crop-rotation board at Shagamu Wesley School Farm.

IMPROVEMENTS IN AGRICULTURAL EDUCATION

Successful Ventures in the Southern Provinces

NE of the most valuable pieces of work done in recent years by the Agricultural and Education Departments of the Southern Provinces has been the establishment of the Agricultural Education Centres at Ibadan and Umuahia. Most of our readers knew the old type of "School Farm" now happily almost extinct. Work on the farm was usually hated by the boys, and was looked upon as a punishment, farm work, indeed, being often prescribed for offences against the regulations of the School. The farms were a source of amusement to the local farmers, and the work contributed nothing towards the life of the scholars, save a deep-seated determination to have nothing whatever to do with the land, work on which had proved so dull and profitless.

Such an attitude has been completely changed by the expert and practical training given and being given, often to senior Teachers, at the Agricultural Education Centres. Here for the best part of a year a group of some 30 teachers happily combine the theory and practice of agriculture under trained and devoted instructors. Care of the soil, manuring, crop rotation, composting, prevention of erosion and desiccation are taught and practised, proving the possibility of the continued fertility of the land and the harmfulness of shifting cultivation. Poultry rearing is also taught, budding and grafting of fruit trees, and the use and value of improved strains of seeds.

The teachers return to their schools with a knowledge only matched by their enthusiasm. New farms are planned and often hacked out of the virgin forests, sometimes with the aid of the parents of the scholars. One of the accompanying illustrations shows such forest land, cleared entirely by the school boys, and the resultant magnificent crop of maize, with ground-nuts in the foreground. Others show the boys tilling, in the midst of a first-class growth of ground-nuts, and shouldering their tools in preparation for work on the farm.



Inspecting the crops on a school farm where a modern system of rotation has been adopted. A large area has been cleared in the bush and the same land is used from year to year.

Carefully designed rotation of crops, and the use of cover crops such as Mucuna, also used as a green manure, are essentials of success. Farmers remain unimpressed by the quality and yield of the crops for the first three years or so. Their own methods can produce similar results from virgin soil. After five or six years of continuous cropping from the same farm, however, their attitude changes, and they can often be seen gazing over the fences, or being shown round by the Agricultural Instructor at the time of harvest, expressing amazement at the yields. Another objection often heard is that the local farmer cannot economically provide an amount of labour equal to that of a swarm of boys from the School. To meet this objection, careful records are kept of the number of hours worked, and it is generally found that the labour does not exceed that possible to the farmer, especially if the heavy work of clearing and burning new bush every three or four years is reckoned.

Compost heaps or pits are kept for the collection of all waste vegetable matter such as grass-cuttings, weeds, leaves and stalks. These deposits, layered with black soil and if possible a little animal or poultry manure, and regularly turned, produce in a short time a rich supply of humus for the farm, being spread between the furrows prior to the moulding of the new ridges.



Some happy Yoruba schoolboys preparing to work on the school farm. Their master has been trained in modern farming methods at the Ibadan Agricultural Training Centre. Under his direction they are able to learn about crop rotation, fruit growing, poultry work and animal husbandry.

Lime hedges, planted either in situ or transplanted from a nursery bed, in a double-staggered row, are being increasingly used as boundaries, being animal proof, and requiring little attention beyond occasional trimming to stimulate undergrowth.

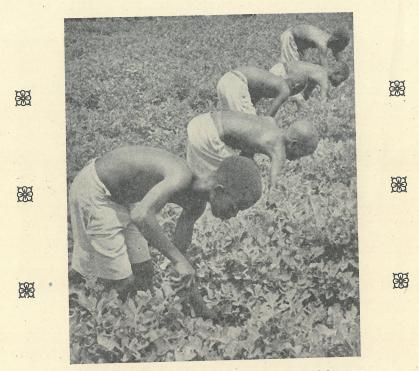
In many instances, beds for the growing of native vegetables are laid down, and yield a steady if small income. Citrus and palm plantations are increasingly popular, and experiments with the growing of castor-oil plants, and with rice growing, are proceeding.

Poultry-keeping, designed to raise the quality of the native birds by crossing with Rhode Island and Leghorn cockerels, is developing, and there is a steady demand for pure-bred cockerels from the local farmers—sometimes, it has to be admitted, satisfied by irregular means!

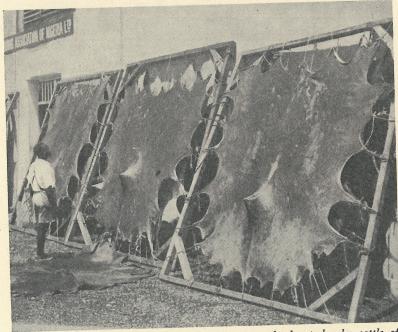
The attitude of the boys to farming and the land, and of the contribution offered by education and the School, has profoundly changed. Work on the farm is a pleasure, and free time is often spent there. Farmers seek the advice of the teachers who have been trained, and many a Saturday morning and holiday is spent by them in walking or cycling to distant farms to give advice, or in the oversight of their own farms.

Profit on the School Farm at Shagamu is divided into three parts. One part goes for tools, equipment, stock, etc., another part goes to the School for apparatus (a large share of the cost of the School harmonium, for example, was contributed in this way) and with the remaining third, a dividend is declared for each scholar working on the farm. This is taken away partly in crops and partly in cash, and does much to maintain interest.

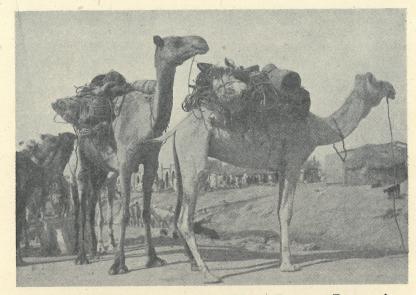
It is not intended to imply that there is a rush back to the land on the part of boys leaving School. The prizes for clerical and commercial work are still out of all proportion to those possible to the farmer, and with much less toil and sweat. What is certain is that there is a greatly-quickened interest and knowledge that, in years to come, will be increasingly applied to the land, which, like the sensitive and responsive instrument it is, will yield its rewards to those who love and tend it.



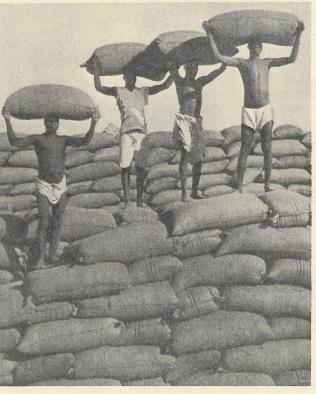
Boys attending to ground-nut plants on their school farm at Shagamu.



Leather to help Britain's war effort.—Hides from the humped zebu cattle of Moslem Nigeria being stretched and dried before export. Every year between £60,000 and £70,000 worth of hides and skins is exported.



Camels from the Sahara in the heart of Kano. Every year Tuareg and Tebu from the Southern edge of the Sahara come with their camels to help transport Kano's gigantic ground-nut harvest.



A small part of an impressive pile of ground-nuts (English, "monkey-nuts"; American, "peanuts"). Between £1,500,000 and £3,000,000 worth are exported from Moslem Nigeria annually.



Young calves tethered to posts on the Mission farm at Topo in Badagry Division. All male calves are castrated at an early age with a special instrument that performs the operation without pain or the shedding of blood. The cows are mated with the good Gold Coast bull.

THE FRUITING OF AVOCADOS

By J. D. CLARKE, Education Service.

ARDENERS in Nigeria are sometimes disappointed at the failure of their Avocado pear trees to produce fruit. A pamphlet on the pollination of these trees issued by the University of Florida Agricultural Experimental Station may explain the cause of this apparent sterility. (Bulletin No. 257 of March, 1933.)

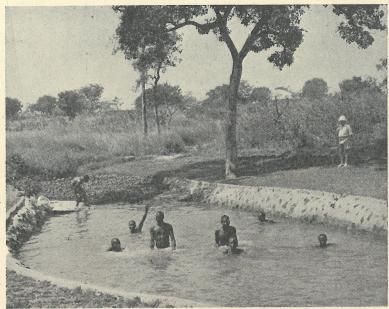
It appears that the Avocados have developed a device to prevent self-pollination and encourage crossing which, in some circumstances, prevents pollination altogether. The trees are not male and female as, for example, in the Casuarina or, to take a commoner example, as is the case with the Pawpaw. If that were the case, one would get fruit off the female tree if there were a male tree of the species in the neighbourhood, for bees would carry the pollen from one to the other and effect fertilisation.

The Avocado bears both male and female flower parts and every tree is capable of bearing fruit. The interesting point about the Avocado is that it does not bear the male and female at the same time; in some trees which we will call the A type trees the female parts develop in the morning and the male in the afternoon, while in others, in the B type trees, the opposite is the case—the tree is male in the morning and female in the afternoon.

The result of this complicated arrangement is that pollination and fertilisation can only take place if there are two trees of opposite type in flower together; the A type tree is fertilised by the B type in the morning, and vice versa in the afternoon. If there are only two A's or two B's, it is very unlikely that fertilisation will take place at all.

It will be seen, also, that if you have a solitary tree it is very unlikely that self-pollination will occur. It might happen that a sleepy bee would collect pollen in the morning from the male parts of a B type tree, go to sleep and then revisit the same tree when the female parts of the flowers had developed—but it is unlikely. In the case of the A type trees he would have to wait all night so that self-pollination is even less likely to occur.

Hence if your trees do not bear fruit they are probably all of one type. You would be well advised to watch the flowering carefully and then attempt to get another tree of the opposite type and plant it nearby.



A swimming pool constructed by students and staff of Kaduna College. The pool is kept filled by a small stream. Before entering the pool, the water passes through a wide filter-bed of stones (seen at the far end). Flower beds and grass alongside the pool make it a very pleasant place on a hot day.

THE GROWING OF ONIONS AT IRRUA GOVERNMENT SCHOOL, BENIN PROVINCE

By J. N. MORDI, Headmaster

ANY people in the Southern Provinces of Nigeria believe that onions of all kinds are best grown in the Northern Provinces and think that there is much difficulty in getting good results in growing this crop in the South.

My experience in growing onions from seed may be of value to Southerners and help them in producing this plant which is grown and much liked as a vegetable for its high food value, its piquancy and its rich vitamin content. I ordered seed of Sutton's White Leviathan strain early in the year for planting in April. Onions prefer sandy loam. Two beds were specially prepared, trenched two feet deep and filled up to a foot with cow dung and other compound rubbish and then covered with the soil which had been dug out. This was done three months before the planting. At the time of planting (transplanting from the nursery) the beds were forked over and were made firm by treading, and care was taken to see that the surface was even. Wood ashes were spread over the surface. The seeds had been planted in nursery beds and germinated after four days. They were transplanted when they were four to six inches high. They took a month to reach this stage. The seedlings were planted out six inches apart in rows nine inches apart. The beds were hoed often and kept clean and care taken not to injure the young plants with the hoe or remove the earth from the row. As the crops grew, the soil around each plant was made firm so that the bulbs should not split.

It took the plants just over four months to mature. When they were full-grown, their tops were bent over to dry them off. They were then lifted and the bulbs were stored in a dry place. Some were roped and hung up under the eaves of a store and it was found that they kept quite well.



The Emir of Kano studies an Arabic classic with Sheikh Bashir of the Law School, Kano. The Arabic religious and legal classics are one of the Emir's deepest interests. Every day, if possible, he reads with Sheikh Bashir. He made the pilgrimage to Mecca in 1937.

THE MOSLEM AREAS OF NORTHERN NIGERIA UNDER BRITISH RULE

(By a Special Contributor)

HE Moslem areas of northern Nigeria measure over 200,000 square miles (about the size of the Kingdom of Egypt) and are inhabited by some nine million people, of whom perhaps two millions are not Mohammedans.

Forty years ago, when the British arrived, this area was isolated from the world by desert, forest, or war. The Emirates fought among themselves. Great tracts of land lay waste. "Bribery and extortion marked the so-called administration of justice. . . No man's life was safe; common people were killed without compunction. . . Trade was paralysed by extortionate levies and rendered difficult by insecurity of the roads."* Civil war broke out in Kano, the greatest Moslem Emirate, and adherents of the rival Emirs slew each other in the streets. The Emir of Zaria was routed and nearly killed at the gates of his own city when he attempted to drive off a party of outlaws. The "Leader of the Faithful" (the Sultan of Sokoto) and his cousin at Gwandu, revered as descendants of Usman dan Hodio, the Moslem saint and reformer of the 1800's, were unable to protect their subjects. Bornu was ravaged by an adventurer, who looted and massacred with most efficient brutality.

That was only 40 years ago. To-day, in spite of the difficulties caused by two world wars, Moslem Nigeria is, by the mercy of God, very different. Ordered administration in the country is still young: but under the direction of British officers it has made a gigantic leap forward. The wars which brought big difficulties also provided the native authorities and the administrative system they control with big opportunities. British advisory staff on each occasion was reduced to a minimum: yet native administrations,

*Lugard; Annual Report, 1902. s.27.

(Continued on page 32.)

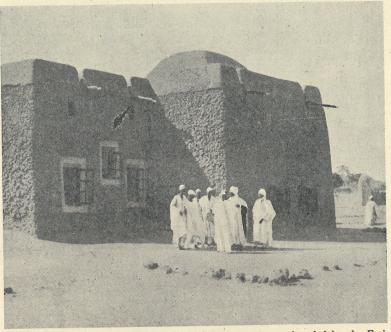


Alhaji Abdullahi Bayero, C.B.E., Emir of Kano, ruler of 2,300,000 people. The Emir wears the usual costume of men of high rank—cloak, embroidered govon, wide trousers, and snowy turban, while on his feet are ostrich-feather slippers. He holds his silver-headed staff of office as a First Class Chief of Nigeria.

By ancient custom, men of high rank hide their mouths and expressions from their subjects.

The Emir meets his eldest son and other councillors daily to discuss the affairs of the Native Administration. When he rides to Friday Prayers he wears simple white robes and is attended only by a few footmen. At the mosque all men are equal.

little more than ten years old at the outbreak of war in 1914, they maintained law and order, kept open long stretches of road, collected taxes and, in addition to many other ordinary duties, maintained supplies for the units of the Royal West African Frontier Force operating in the Cameroons; so also the still infant Administrations of to-day are discharging far more complex duties of government with the help of a skeleton staff of British officers. Each of the Emirates mentioned above, and a score of others, now has its schools and its Moslem courts, its motor roads and modern markets, its staff of European and African agricultural, forestry and veterinary officers, its doctors and engineers. Local administration is entirely carried on by the Emir's own organization, known as the "Native Administration" or "N.A." It collects the taxes, after the assessment has been fixed in



The Old Learning. Students outside the Arabic Library founded by the Emir of Kano.

consultation with its British advisers; the Central Government takes a share of these taxes, varying from a quarter to one-half, and hands over the rest to the Emirs' Treasuries—the "Native Treasuries." Through an appreciation of their financial responsibilities in the expenditure of these funds the Native Authorities are helped to realize their obligations as instruments in the Government of Nigeria.

Law and order are maintained by the Native Administration's own police. These men pass through a Central Police School to learn modern methods. In picturesque mud buildings, built in a style 500 years old, you may find N.A. police tabulating fingerprints or teaching recruits C.I.D. methods. Crimes of violence are now rare—much rarer than in Europe.

This new security has created a land in which everyone travels, though 90 per cent of the population are farmers. Railway fares (3rd class) are under a farthing a mile, perhaps the cheapest rate in the world. No less than 1,450 miles of railway have been constructed in the Northern Provinces, fed by a network of motor roads, along which roll night and day lorries carrying passengers or freight. Even during the war, Government have



The Chiroma of Kano (eldest son of the Emir). He issues instructions on behalf of his father to the Headmen in charge of the 27 districts of Kano Emirate, and receives their reports. He enjoys listening to the Arabic broadcasts from the B.B.C. The walls and the vaulted ceiling of his reception room are decorated in mud relief coloured with paint and with gold coloured mica obtained from local deposits.

contrived to allot enough petrol to keep these motor services running for the people, so that internal trade, vital to the African's well-being, should not be adversely affected.

Better communications and contact with the outer world are slowly improving the standards of life. The area which 40 years ago exported only feeble quantities of slaves, ivory, leather and homespun, now sells to Europe nearly £2,000,000 worth of ground-nuts a year, with half a million pounds' worth of cotton.*

In the past the Moslem villager received a handful of cowrie shells for *Figures for an average pre-war year.

his goatskins (which were then carried across the Sahara and resold to Europe as "Morocco leather"). To-day the world buys £700,000 worth of Nigerian hides and skins a year, almost entirely the produce of the Moslem north. Other exports which are bringing money into the area are gold, cattle, reptile skins, gum arabic, shea nuts, shea butter, and ghee.

The influx of this money into the country has raised the standard of living slowly but beyond all comparison with the conditions 40 years ago. Sugar, matches, European salt and soap, bicycles, sewing machines, kerosene, and kerosene lamps, unknown 40 years ago, now make life easier everywhere. European and Indian cotton cloth, which is preferred to native homespun as lighter, gayer and more comfortable, is imported in vast quantities. Rubber shoes are cheap and protect the feet against thorns and jigger insects. The railway and the motor lorry have reduced the burden of head-transport.

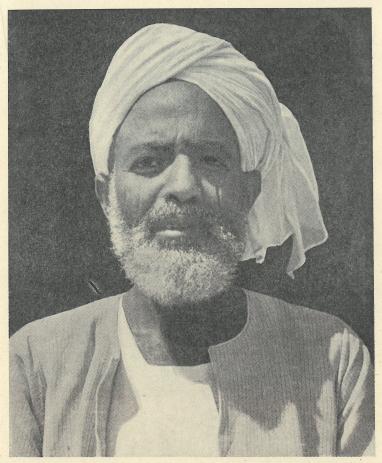


The Chiroma (see previous page) leaves his house for his office, to see the reports which have come in from the Districts.

In many towns pipe-borne water and electricity are available. Slowly—for imported material is still dear, owing to the distance from the sea—the people are learning to use cement and corrugated iron to build houses which may be less picturesque but are drier and cleaner.

Medical help is coming to be appreciated. Hospitals have been built, with separate blocks for female patients. Each hospital is connected with a chain of village dispensaries. Lepers are maintained and treated in leper settlements. Where tsetse fly has spread sleeping sickness, the population has been examined for the disease and treated if necessary. In Zaria Emirate, where the disease had created a wilderness of dead and dying towns, the tsetse-infested bush has been cleared and model villages built, each with its own mosque, its market, cement-lined wells and wide streets. This was made possible by a grant from the Colonial Development Fund.

In 1900 Lord Lugard promised the Moslem Emirs that there should be no interference with their religion. This promise has been kept. At every street corner the muezzin still mounts the stairway of his mosque and calls the Faithful to prayer, as for centuries past. In every village boys and girls still learn their religion and a little Arabic from the village schoolmaster in his round hut. Every important town has its Moslem judge, administer-



Sheikh Bashir, Chief Professor at the Moslem Law School, Kano. Sheikh Bashir came from Gordon College, Khartum, to found the school.

The Native Administrations support this school for Moslem judges-to-be. The teachers are three scholars from the Anglo-Egyptian Sudan and local pupil teachers trained by them.

ing Moslem law; 99 per cent of cases affecting Moslems are settled in these courts. Since 1934 three learned *ulema* from the Anglo-Egyptian Sudan have maintained a School of Moslem Law at Kano, supported jointly by the Moslem Native Administrations. Here judges and future judges are trained in the Arabic language and in the philosophy, literature, law, religion and history of Islam. These *ulema* from a Moslem country which is at once part of the Arab world and of Mediterranean civilization have brought much-needed help to a country which for centuries was disastrously cut off from both.

Emirs and their councillors have in recent years visited Mecca, the Sudan, Egypt, and Europe. This again has helped them to realize that their peoples are still backward; owing to their long isolation they had become "fish in a well," as their own proverb says. After one of these trips the Emir of Katsina, with the assistance of British engineers, built and presented a magnificent mosque to his people, a dignified modern building with a gleaming blue dome, the first of its kind in the north. The Emir

of Kano has planned a similar building for his city, and it is hoped to begin construction of it soon.

Besides the village schools mentioned, where nearly a quarter of a million children learn their religion and a little Arabic in the traditional way, the Moslem Native Administrations have established nearly 200 schools of more modern type. The conservative peasant peoples are slowly coming to appreciate the value of such education. Middle (secondary) schools are fed by a chain of village elementary schools. Teaching and inspection is carried out by teachers who have been recruited from the local population and trained in training colleges with the advice of a European Education Officer at the centre of each group. Selected pupils from these schools pass to Kaduna College for higher education. A prominent place in the curriculum is given to Arabic studies.



The Old and the New in Kano. One of the greatest boons resulting from British rule in Africa is a pure pipe-borne water-supply, provided, in the case of Kano, at a cost of £220,000.

Literates are catered for by a fortnightly vernacular newspaper, which has a paid circulation double that of any other newspaper in Nigeria.

With the help of the Emirs, a start has been made with female education. Parents are sending their daughters to elementary schools in small numbers, while at Sokoto, the seat of the Sultan, the "Leader of the Faithful," a women's college has been built, where young Moslem women willing to become teachers in girls' schools are trained. Fortunately some of the chief women realize that Nigeria cannot progress unless its women are educated and enlightened. The wife of the Emir of Katsina, who is a sister of the Emir of Kano, has visited Mecca, Egypt, and England, and set a precedent by going to the Katsina Hospital to preside at the opening of the Female Wards by the Governor's wife.

The system of government which the Moslem Emirates of Nigeria owe to that great authority on administration in Africa, Lord Lugard, and which British officials now practise, is the system of "Indirect Rule," a deliberate attempt to train the Nigerian to govern himself through his own traditional institutions. British policy has been to recognize the natural



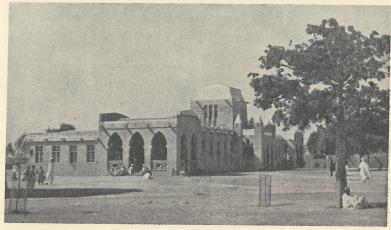
A daughter of the Emir of Kano; she is Head Girl at the Girls' School. Female education is slowly making headway in the North.



At the Girls' School, Kano. Spinning the local cotton into thread by hand.

rulers—that is, in the Moslem areas, the Emirs and their councillors—and to train them to improve and develop their traditional organs of government—the council, the chiefs, the village heads and their councils, the Moslem judges and teachers—to suit modern conditions. Though as Sovereign Power the British retain the right to overrule an Emir's wishes in order to protect the people against injustice, the aim of the system of "Indirect Rule" is to advise and explain policy to the Emir in such a way that he carries out the government of his Emirate progressively and with justice so that there shall be no need to depart from the principle that the British staff should not come between an Emir and his people.

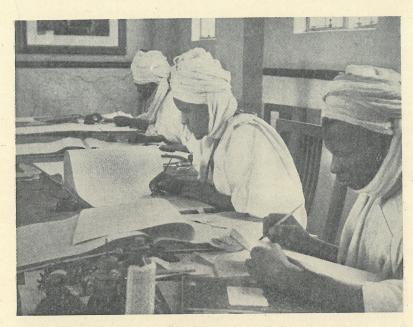
The methods of applying the principles of "Indirect Rule" to the constantly-changing conditions in the Emirates are continually evolving.



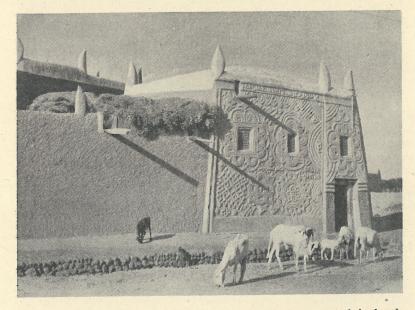
The Central Court of Moslem Justice, Kano City. Here 99 per cent of all disputes in Kano City are settled, according to Moslem law, by the Chief Alkali (Qadi).

Under the system, which has served as a model for the best administrative work in other parts of Nigeria and elsewhere in Africa, progress may be slower and less spectacular than it might be by direct European methods, but it is or should be the progress of the people as a whole and not of a specially favoured section. Great patience, and deep knowledge of the people's essential institutions are demanded from the administrative officer. He must advise the Emir how to prevent misgovernment by subordinates who are still feeling their way in modern methods of rule; yet he must not interfere in such a way as to destroy the initiative or interest of these Moslem officials, and he must always try to foster the conviction that it is they—not the British adviser—who are responsible for the happiness of their people.

The Emir and his Council normally meet daily. Where there is a resident administrative officer, he meets the Council formally at least once in a week, to discuss the administrative activities in the Emirate and bring forward any suggestions of his own or of the Central Government. This is only one of many ways in which the British advisers try to help the Moslem rulers to realize their obligations to their people and also to enter into their heritage as members of modern civilization. Interest is shown in their reading such books as Muhammad Al-Maghili's Obligations of Princes.



Three Scribes record cases in the Chief Qadi's Court, Kano. All cases are recorded in the traditional Arabic and in the vernacular (in Roman characters).



Kano Architecture—a rich Merchant's house. The mud ornament of the façade includes traditional motifs such as "the Lion's Paw" (bottom row, 2nd from left), a Moslem prayer, a Hausa proverb ("The spite of others only helps the man who is destined to success"), and the address ("House of Dan Wawu").

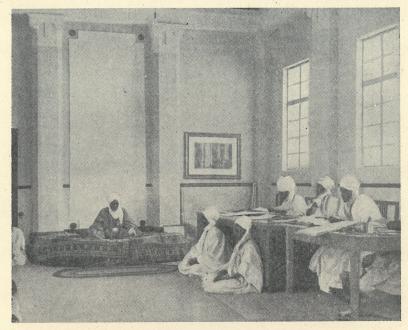
They are encouraged to travel—to southern Nigeria, Egypt, Mecca, England. Some have wireless sets on which they listen to Arabic broadcasts and a few, also, to the transmissions in English. A most valuable institution is the Northern Provinces Chiefs' Conference, attended by the leading Emirs yearly and the others in turn. Here they meet for a week's discussion, mostly of problems suggested by themselves—Moslem education, hospital work, the pilgrimage, and so on. There is also one day's discussion with the Governor and the Chief Commissioner, Northern Provinces. Round the council table Moslem chiefs learn the give-and-take of modern government, learn from the experience of other chiefs, and come to realize that their own Emirate is no longer the centre of the universe.



The changeless streets of Old Kano. The little girls selling cakes are doubtful of the camera. Drain pipes project like cannon from the edges of the flat roofs.

A more recent institution is the Advisory Council of leading Emirs and administrative officers, which assembles before every meeting of the Legislative Council of Nigeria, to discuss all legislation which would affect the Emirates so that the considered opinions of the Emirs can be available to the Governor.

If further proof of the suitability for the Emirates of the policy that has been adopted for their administration were needed than the happiness and prosperity of the people, it is to be found in the reactions of chiefs and peasantry to events since September, 1939. In spite of the mobilisation of a large part of the British advisory staff, the Native Administrations have continued their work smoothly. More than this, the people have shown their eagerness to help. Large numbers have enlisted for service with the Nigerian Regiment, others have joined the Local Defence Volunteers. Following a lead made by the Sultan of Sokoto, the Emirs have given 5 per cent of their salaries to the Imperial war effort. Further contributions have been made by the Native Treasuries, and the peasants have gladly subscribed their pennies to buy Spitfires to defeat the "accursed" Hitler, whose name has passed into language as a scion of the Powers of Evil.



The Chief Alkali (Qadi) of Kano in Court surrounded by Court Scribes and Assessors. There are about eight assessors. Two can be seen seated on the floor in front of the scribes. These experts assess the figures at which damages are to be awarded for wounds, broken bones, damaged crops, torn gowns, etc.



A merchant calls at the Post Office, Kano City. The trappings of his horse are as traditional as the mud ornament on the walls.

FROM FOREST TO CARPENTER'S BENCH

The Production and Uses of Nigerian Timber

(The following pages touch upon only a few of the many aspects of timber production and use in Nigeria, but will serve to indicate the greatly-increased importance and value which war-time gives to home-produced supplies of this essential material.—Editor.)

IBADAN FOREST SCHOOL

HE opening of Ibadan Forest School on May 1st, 1941, marked an important advance, because this is the first time that technical training in forestry has been made available to Africans. We hope that Ibadan will soon become the centre for forestry education for the whole of British Tropical Africa, just as the Indian Forest College at Dehra Dun is for the whole of India and Burma. Already forestry students are coming from the Gold Coast and soon we expect to have men from East Africa too.



Students and Forest Guards leaving the Lecture room at the Ibadan Forest School.

There are three different courses at the School. Of these, the shortest and simplest is a six-months' one for training foresters and forest guards already in the Department. Then there is a year's course for the grade known as Forest Assistants and a more advanced two years' course for the new Intermediate grade, who will probably be called Forest Supervisors. This two years' course is a biennial one, that is to say, a new class begins every second year. Thus one class will begin in 1942, another in 1944, and so on.

But you must not think that these forestry appointments are nice "soft" jobs. They are not. There is a great deal of hard work involved, long periods out in bush, possibly in the gloomy dampness of the rain forest

or in the intense heat and dryness of the northern savanna forests. Then, too, in some parts of the country the local people dislike all forestry work, simply because they do not yet understand the reasons for it and in such places forestry staff will find themselves unpopular. Nevertheless, for the right type of man it is a most interesting and satisfying job.

Some previous training in science subjects, such as biology, chemistry and physics, is necessary and an aptitude for mathematics is an advantage, but what is most important is that applicants for these posts should be practical men who like an outdoor life—men who can use a matchet as well as a table of logarithms.

Apart from the purely "forestry" subjects studied at the School, such as silviculture, forest management and forest policy, a considerable amount of time is devoted to learning surveying, as much of our work is done in regions for which there are no reliable maps. Botany is also of great importance in forestry work. In forest utilization, we study the uses and treatment of wood and other forest products and in forest engineering the construction of roads, simple wooden bridges and culverts, timber buildings, concrete work and so on. Geology and soil science deal with rocks and the formation of soils and the study and descriptions of different soils. In Forest Law we learn about the laws dealing with forests and forestry work and about court procedure and how to give evidence in court.

But the students of the Forest School do not just sit in Ibadan and listen to lectures on these subjects. Far from it. In each year about four or five months are spent actually in the forest on practical work. As I write, we are out in the Savanna forest in Ilorin Province, demarcating, surveying and recording information about what are called Communal Forestry Areas. These are small areas of bush set aside to ensure future supplies of firewood and other forest products for the people of the village areas in which they are situated. This work puts into practice some of the things we have already learnt in the lecture room about surveying, soil science, botany and law. On another practical course we made thinnings and sample plots in a teak plantation and constructed a new road with a bridge and culvert, to allow heavy lorries to go into the plantations to bring out the teak fuel, which is being used in the Ibadan electric power station. In such ways as this we demonstrate the practical application of the work done in the School and at the same time we do useful work for the Government and for various Native Administrations.

One feature which deserves particular mention is the $2\frac{1}{2}$ months' practical tour which takes place each year in January, February and March. On this the Forest Assistants who are just completing their course at the School are accompanied by newly-appointed men who have not yet had any theoretical training. This gives us opportunity to find out if the new men are suitable and helps to give them an idea of the sort of work they will eventually have to do. It helps to "weed out" unsuitable people, such as the man who accompanied a European officer to bush for the first time and after two or three days remarked, "I detest the bush," and resigned.

At present the School has accommodation for fifteen students (the uniformed staff live in the town and come to School daily), but we hope soon to enlarge it slightly and there is ample room on the site for any new buildings that may be necessary.

As you can judge from the number of different subjects we study at the Forest School, in forestry you have to be something of a jack-of-all-trades, but it is very interesting work and is of the greatest importance to the future of Africa because it is so closely concerned with the proper use of the land, on which all our prosperity and progress depend.



A raft of logs arriving at a saw mill. Two of the raft men's huts can be seen in the middle distance. The cranes are used to lift the logs out of the water and pile them up in the store.

THE NIGERIAN TIMBER INDUSTRY

ANY men are engaged in this industry cutting down, transporting and preparing logs of mahogany, iroko, opepe, abura and other timber. Some of it has been exported but much of it is made up locally into boxes, furniture, huts and other equipment required for military use.

After the trees have been cut down they are sawn into logs and these are then dragged to the nearest river or creek. Here a hundred or more are lashed together to form huge rafts before they start on their long slow journey to the saw mills. Some Nigerian timbers are so heavy that they sink in water. Logs of such timber have to be fastened to others of a lighter type before they can be made into rafts. The men who navigate the rafts make rough mat shelters on the logs and live on the rafts for several months at a time.

The current in the creeks is slow so the men have to work very hard pushing with long poles to get their huge craft to move forward and round bends in the waterways.



Logs of mahogany piled up on the wharf side ready to be cut up into planks by powerful, electrically-driven band saws.



Timber must be carefully seasoned after sawing. Before it is stacked in the seasoning sheds it is exposed for several days in the open.

WOODEN SHINGLES FOR ROOFING

O everyone in Nigeria, a corrugated iron roof is a familiar sight on factories, houses and sheds all over the country. There is much to be said in favour of "pan"; it is weatherproof, light in weight, easily fixed, and, when Nigeria was an undeveloped country, it was the obvious roofing material. But "pan" must be imported into Nigeria, which means that ships must be used to carry it, and in time of war, when every inch of space in ships is required to carry food and munitions so that the people of Nigeria may be fed and clothed and guarded, we cannot afford to waste this shipping space on any materials which we can produce in the country.

Remember, too, that the more things we can make for ourselves in Nigeria, the cheaper they will be and the more local people will be employed in manufacturing them. What, then, have we at hand that can be used instead of corrugated iron?

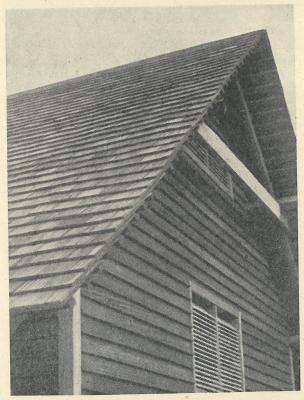
Nigeria is famous throughout the world for its timber, so surely we can make use of this. In America, for a long time past, many people have been accustomed to live in wooden houses built with wooden roofs which last fifty years or more, and although conditions may be more severe here, there is no reason why properly-made wooden roofs should not be just as successful.

The main essential in a roof is that it should be weatherproof, and to attain this in a wooden roof what we call "shingles" are used. These are short pieces of wood about 15 to 18 inches long and five inches wide, with the thickness running from \(\frac{3}{4} \) in. at one end to \(\frac{1}{6} \) in. at the other. They are laid overlapping each other like the scales of a fish, the bottom row laid close together, the next row laid over these so that about two-thirds of each is covered by the shingle in the next row and so on up to the ridge of the roof.

To make shingles successfully, they must be cut on a power-driven circular saw. Experiments have been carried out in splitting the shingles



A small house roofed with shingles.



Part of a shingle roof at the Ibadan Forestry School.

by hand with a knife, and many shingles are so manufactured in the Gold Coast; but these riven shingles are not so satisfactory in Nigeria. Not only is the method slow, but many Nigerian timbers are not very straight

in the grain and, as the knife tends to follow the grain of the wood, the shingles turned out are not flat enough to lie properly.

The cutting of shingles with a circular saw is a very simple matter, which any machine sawyer can master in a few minutes. A wooden cradle is used, into which a block of wood of the same length and thickness as the shingles is placed and the cradle is slid backward and forwards through the saw by hand, a good operator being able to cut as many as 2,000 shingles a day. If the demand for shingles became sufficiently great, it would make it worth while to purchase the special automatic machines used in America which will cut 5,000 or more shingles a day with practically no supervision.

The laying of shingles is also a simple matter. Slightly stronger rafters and, of course, more purlins are required. A "pan" roof, although it may be waterproof, is by no means sunproof so that for coolness a ceiling must be built under it. With a shingle roof, this is quite unnecessary as such a roof is in itself ample protection against the sun.

A successful shingle roof, however, depends on something more than good sawing and careful laying. Growing trees all contain moisture or sap, and after a tree is felled this sap dries up very slowly, and as it dries the wood shrinks. Very often we see a table the top of which looks perfect when it is new, with each board fitted closely against its neighbour, and yet after a few months we find wide gaps between these same boards. If the wood had been dried before it was used, this trouble would have been prevented; and the same applies to shingles. The moisture must be dried out of them before they are used. Another common sight is to see the wooden posts of a house eaten through by white ants and other pests until only a shell is left. This also can be prevented by treating the timber with preservative, and shingles can be easily treated in the same way and can probably be made to last as long as "pan."

To sum up the pros and cons of corrugated iron and shingles, we have in favour of "pan" the cheapness of it, and the simplicity of laying it. Against it, we have the fact that it is not sunproof, and that it has to be imported into this country, thereby using up shipping space. Also, as it is an import, this country derives no benefit from people being employed in its manufacture.

Shingles are made from local timber, for the cutting of which local people receive payment. They are manufactured by local people, who thus obtain employment and earn money. Once a demand is created, supplies will become available in quantities, and the more shingles are made the cheaper they will become. Shingles are completely sunproof and no ceiling is necessary under them. The length of their useful life will depend on the effectiveness of the preservative treatment, but there is no doubt that they will last for several years at least. The Forest School at Ibadan is roofed with shingles, and so are two new Forestry houses for Europeans, and these roofs are giving every satisfaction.

HOME CARPENTRY

NE of the difficulties of doing carpentry at home is the provision of an adequate work bench. Some people who have been prevented from doing good work at home may care to experiment with the type of bench used by Bauchi E.T.C. pupils for spare-time work. The bench was designed by a Bauchi carpenter named Mairafi, an ex-pupil of the old Bauchi Crafts School, who made a bench of this kind for himself so that he could work at home.



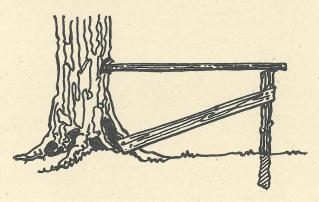
A simple type of carpenter's bench.

The accompanying photograph, taken by Mallam Pindar Biu, a member of the E.T.C. staff, and the drawing, will show clearly how the bench is constructed. The same benches have been in use here for nearly five years now; this is proof of their efficiency, and of the fact that they do no harm to the trees to which they are attached.

In addition to its value as a support, the tree provides pleasant shade for the worker. A bracket is being designed to hang on the tree so that tools may be put down in a place of safety ready to hand. Tools are not, of course, left in the bracket when work is finished.

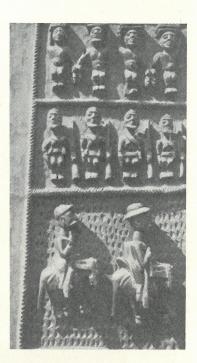
There is no vice, and ingenuity has to be used to overcome difficulties arising from this; but on these benches E.T.C. pupils make long chairs, boxes, shelves, etc., satisfactorily, and with a good finish.

The use of these benches is slowly spreading through the Northern Provinces, as teachers go out from the E.T.C., and the visiting teachers who attended a course at Toro in 1936-38 were shown the bench when they visited the Centre.



Drawing to show method of construction.





Doors intricately carved with figure subjects formed one of the most characteristic traditional uses of wood in Nigeria. The picture on the left shows part of a door carved in iroko wood in the Afin at Ise (Ekiti). That on the right shows part of a carved door now preserved at the Akoto Jubilee School, Ikare.

Photographs by P. A. Allison.

A YORUBA CARVER

By P. A. ALLISON

Forestry Department

PROBABLY one of the finest examples of West African carving in the British Museum is the door from Ikerre (Ekiti), Ondo Province. The door was sent to London for the Empire Exhibition at Wembley in 1924, and was afterwards acquired by the British Museum.

Luckily, a number of works by the same carver still remain in this country. There are several screens and doors in the Afin of the Ogoga of Ikerre, and two doors in the Afin at Ise (Ekiti). Two more doors were exhibited at the Ikare Exhibition of 1939, and were bought and presented to the Akoko Jubilee School, Ikare. One of the accompanying illustrations is from a door still at Ise, the other from one of the doors at Ikare.

The Ise door is of Iroko wood, about six feet high, by something under three feet wide. The figures are eight or nine inches high and are carved in very high relief, the heads and shoulders being carved completely in the round. The central panel shows the Arinjale of Ise on horseback and followed by two attendants, one of whom is blowing on a whistle (Fere); above are shown two of his wives with children on their backs and followed by an attendant; below is a line of naked women, and below them a line of men carrying kegs of gunpowder, and then a line of soldiers with dain guns. The bottom panel shows a woman spread-eagled on the ground with three vultures pecking at her. Down the left-hand side of the door is a double line of human faces, said to represent prisoners of war.

The door now at Ikare shows two Europeans on horseback with Hausa soldiers and prisoners carrying loads, and is said to illustrate the arrival in Ekiti of Captain Ambrose-locally remembered as "Akerele"-who was Travelling Commissioner for the Ondo Province in 1897.

When so much African art remains anonymous, it is interesting to be able to name the author of these carvings. He was an Ise man, by name Olowere; the writer met him in 1937 but he died a few years ago. Luckily a good deal of his work still remains and is being well cared for both in the Afins at Ise and Ikerre and at the Central School at Ikare, but unfortunately Olowere appears to have had no pupils and there is no one in Ise

who carries on the work of this fine Ekiti craftsman.

If the demand for carved house-posts and doors existed to-day, no doubt many good carvers could still be found to do the work. The writer knows of at least one good carver in the Ondo Province who earns his living as a blacksmith. But the rich Nigerian of to-day prefers to adorn his house with a pan roof and indifferently-carpentered Europeanstyle furniture rather than with the productions of native craftsmen. And the permit fee of £3 for an Iroko tree necessitates economy in the use of that wood, so that two-by-four joists now do the work of massive carved pillars.

There is nobody who is not glad of a pan roof over his head in the rainy season, and all agree on the necessity for the preservation of the timber supplies of the country, but it is a great pity if for reasons of national economy and personal comfort a fine artistic tradition should be allowed to die.



As a contrast, here is another example of wood-carving by Nigerian craftsmen. It is a church chancel chair made and carved by the Instructors and pupils of Shagamu Wesley School. Beautiful articles of church furniture can now be made entirely in Nigeria, and there is no need to send overseas for them. This chair is of a type widely used in England and known there as "the Glastonbury Chair," but it has been appropriately modified to suit African use by the palm design of the back panel.

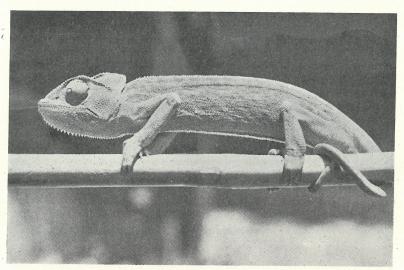
TO PROMOTE WAR SAVINGS



Boys of a Lagos school giving a display of physical exercises during a War Savings Week campaign. As will be seen from a glance at the background, the display aroused great public interest.



Another aspect of the same event.



A Chameleon.
(Photograph by W. H. Large, Post and Telegraphs Department.)

ARE YOU COLOUR-BLIND?

By A. G. TAYLOR
Lecturer, The Higher College, Yaba

HE animal eye sees objects owing to the stimulation of a cup-shaped layer of tissue called the retina. It can easily be shown that even in the most perfect human eye the outer area of the retina, that is the band next the rim of the "cup," is completely colour-blind and can only perceive shades of white, grey and black. The intermediate area of the retina can distinguish only blue and yellow, while the restricted central area, corresponding to the base of the "cup," is sensitive in addition to green and red. Thus we are able to distinguish the colours of the spectrum lying between violet and red, i.e., lying in the visible band, but though we can demonstrate the presence of rays lying above the violet ("ultra-violet") and below the red ("infra-red"), the human eye cannot perceive them.

Many people cannot see all the colours in the visible spectrum. Some are unable to distinguish between green and red; a few cannot distinguish between blue and yellow, and rare cases are reported of persons who cannot distinguish any colours. The former are said to be partly, and the latter completely, colour-blind.

Scientists are trying to determine the stage in evolution at which colour sense was first developed, and to estimate its value to the individual, and to the survival of the species, etc.

That animal colouration is beneficial is still a controversial subject: some hold that colour is accidental, the pigments being the result of the rate of chemical reactions in the body, and the final colour produced being neither detrimental nor beneficial to the creature in its struggle for existence.

If the animal is itself colour-blind, and its enemies, and the creatures on which it preys are also colour-blind, then their arguments would hold good, but if the prey or enemies are not colour-blind, it remains to be proved by experiment whether there is any advantage to the individual or species in having a particular colouration, or the ability to alter its colour to suit its surroundings.

With these and other questions in mind, scientists are continually asking various members of the animal world the question, "Are you colour-blind?"

Experiments have proved conclusively that many insects, particularly those which frequent flowers, have a more or less well-developed colour sense. In Nigeria, there are two families of animals which feed almost exclusively on such insects, and which have developed to a remarkable degree the power of altering their own colour to match their surroundings. These are the tree-frogs and the chameleon.

Do these creatures distinguish the colours around them, and then change their own to suit? Perhaps; but experiments with other animals show that it is not necessarily so, and to decide we must first discover what gives the chameleon its colours, and why it is possible to change them.

A section through the skin shows a layer of colourless tissue, and imbedded in this are numerous small spherical cells called chromatophores or pigment cells, which contain different coloured pigments. The chromatophores can send out branches running parallel to the surface of the skin, thus displaying the maximum amount of pigment, or contract into minute spheres so that their colour does not influence the hue of the skin. The expansion of one or more kinds of these chromatophores accounts for all the plant colours varying from bluish-green to yellow, to reddish brown, to brownish black or to pale grey, which can be reproduced by the chameleon.

Many creatures can change their colours—frogs, fishes, molluscs, etc., and the change is always brought about by means of chromatophores, but the forces which control the changes differ.

For many months I watched a trout in a pool in the Roberton burn, a tiny tributary of the River Clyde in Scotland. The trout was blind in both eyes, and had a favourite spot between a root and the slightly-overhanging bank, where it normally lay in wait for any worm or grub brought down by the current. Its body was the light yellowish brown characteristic of that species of Clyde trout, with the exception of a vertical and almost black band about the middle of the body, and corresponding to the position where the shadow from the root usually fell on its body. During the same months I kept a trout of the same species in an aquarium in my garden. The sides of the aquarium were painted white, and slowly the trout assumed a greyish white colour all over. I next placed a stick painted white near the inlet to the aquarium, and the trout lay behind the stick most of the time, waiting for the worms which I used to send down through the inlet. In a few days this trout also had a black vertical band on its body corresponding to the shadow thrown by the stick, although the stick itself was white.

The reaction of the chromatophores of these two trout was therefore due to the direct stimulation of the reflected light and not to the trout's appreciation of the colour of the surroundings, the parts exposed to white light becoming white, and those in shadow turning dark. This is a simple type of experiment showing that colour change may be due to direct stimulation of the chromatophores by light.

Tree-frogs are capable of considerable colour changes, from bright leaf green to dark bark-brown. Sunlight has a direct effect on the colour of the tree-frog, but in some tree-frogs there is another factor. It has been found that if certain species of tree-frogs are put on a green surface which is rough like bark, the frog will slowly change to the colour of bark, and if

put on a bark-coloured surface which is smooth and cool like a leaf, the frogs will turn green. Normally this would be the correct reaction and touch, not the character of the light, is responsible for the change. The colour and the intensity of the light also have an effect, and in natural surroundings the cumulative action of light and touch brings about an almost perfect blending of the colour of the tree-frog with that of its surroundings.

Careful experiments with the chameleon have shown that there are two other means of controlling its colour, and of these the most important is vision. The chameleon's independently-swivelling eyes can look up, down, backwards and forwards, and at will its colour steadily alters in response to what it sees. A blind chameleon is not successful in matching its surroundings, though its colour will vary to a certain extent in response to reflected light.

To see a chameleon stalking a fly is to see an artist in deception taking advantage of his victim's weakness, an eye designed to detect movement and colour rather than form, near objects rather than distant. With outthrust head, body rocking like a gently-disturbed leaf, colour changing to suit every alteration in its surroundings, the chameleon slowly advances till within six or eight inches, when the tongue shoots out and back, with the fly adhering to its sticky bulbous tip, but so quickly that the act is difficult to detect.

Pick up the satisfied and bright green chameleon from its perch amongst the leaves, and there will be a startling change. In an instant, the entire skin goes dark, the frightened lizard puffs up its lungs with their tubular extensions which give the lungs the appearance of rubber gloves, and having doubled its volume, hisses with all its might. So effective is the change in appearance that few people are bold enough to catch this entirely harmless creature in their unprotected hands. Fear or anger, therefore, is the other means which causes colour-change in the chameleon.

When we talk of colour vision, we normally think of the colours of the visible spectrum, ranging from violet to red, but recently it has been suggested that some creatures may be able to see in the infra-red or ultraviolet bands. It would be a great advantage to night-hunting creatures if they could see infra-red rays.

We say loosely "cats and owls can see in the dark," but if their eyes can only use rays in the violet-to-red band of the spectrum, they are quite unable to see in the dark, though their eyes, being specially adapted for night vision, may be able to see when there is so little light that we would say it is quite dark. Owls have been known to catch mice in a totally dark room, and this has been explained by saying that owls hunt by ear and by scent. Recently experiments were carried out to discover if an owl could find food in total darkness when there was no question of sound or scent being effective.

A living rat, a dead rat, a newly-killed chicken and one that had been dead long enough to become cold were placed in separate sealed glass jars so that no sound or smell could escape. The jars were put in a completely dark room and an owl was released. By means of indicators it was found that the owl visited the jars containing the live rat, and the warm but dead chicken, but did not visit those containing the cold bodies of the dead rat and chicken.

If this experiment can be confirmed it will show that the owl can see the infra-red rays given off by warm bodies, and so if this bird were possessed of the intelligence with which it was once credited, it might sit on a branch at night watching us pass in the darkness, and say to itself: "I wonder if those dull red creatures stumbling about down there are colour-blind?"

POTTERY WORK FROM KADUNA

POTTERY made in Nigeria varies very much, both in quality and design. In the Southern Provinces, some of the best pottery comes from Ikot Ekpene; in the Northern Provinces, the pots and bowls

made at Ilorin are strong and well made.

Much of the Ikot Ekpene pottery is highly decorated with applied clay work, whereas that from Ilorin is usually given a plain black or red finish.

The accompanying illustrations show pottery work from the Kaduna district. The little figures of animals are intended for ornaments. They are about eight inches high and are made of baked clay brightly coloured. The big pots carried by the man were also brightly coloured and are of a type that has a ready sale in Kaduna market.

It is interesting to note that the potter's wheel is unknown in Nigeria, all pots, even the largest and most complicated, being built up entirely by hand without mechanical assistance. European potter has recently joined the staff of Achimota College on the Gold Coast, and under his direction Africans have been instructed in the use of the potter's wheel and in the art of glazing. This has given rise to an important new industry,



including the manufacture on a commercial basis of water-coolers, and tiles for roofing houses.

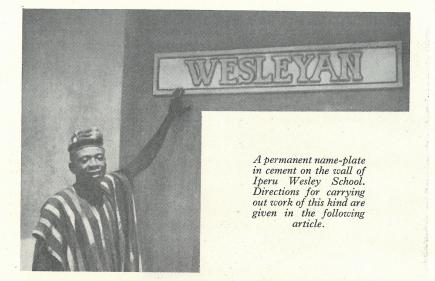
There is an excellent opportunity for progressive young men or women to establish similar industries in Nigeria.

There is no reason why locally-made tiles should not replace imported corrugated iron ("pan") and glazed cups; plates and bowls that could be made in Nigeria might well replace foreign-made enamelled ware.

NIGERIA'S SPECIAL CONSTABULARY



Many young Africans joined the Special Constabulary and are giving excellent help to the regular Police forces. This young man, an ex-pupil of the Government College, Ibadan, serves in the Special Constabulary at Ijebu Ode.



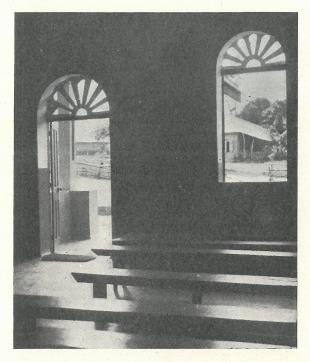
THE VERSATILITY OF CEMENT AND CONCRETE

N articles published in previous issues of *Nigeria* some examples have been given of the numerous uses of cement and concrete both in the construction of buildings and for separate objects of various kinds. We have recently secured photographs of further examples of products of this useful and extremely versatile industry in various parts of Nigeria.

As an example of work in cement, an illustration is given here of a permanent cement nameplate on the wall of the Iperu Wesley School, and the following are the directions for carrying out work of this kind:—

The area of the cemented wall to be covered by the nameplate is slightly roughened by tapping with a light hammer, or rubbing with a rasp. Two strips of wood $\frac{3}{4}$ in. square are then nailed to the wall, using a spirit level, the distance apart of the two strips being exactly that desired in the finished panel. A mixture is prepared, dry, of three parts fine white sand, and one part cement. The sand should, prior to mixing, be passed through a fine sieve, as any rough particles will spoil the finish of the letters. Add water to the mixture until it is of the consistency of a stiff paste, and throw on to the wall between the wooden strips, pressing it into place with a trowel. Using a ruler or other smooth piece of wood, held vertically and pressed on to the face of the wooden strips, scrape off, with a slight see-saw motion, the surplus cement, and add more where the surface is lower than required.

Leave the slab to half set, usually taking two to three hours, varying with the weather. In this interval, prepare your design on typewriting paper, pasting pieces together, and taking care to make the finished piece the exact size of the cement slab. At the expiration of the two to three hours' interval, lay the paper over the slab, and using a sharp hard pencil or pen nib, trace over the design so that a slight impression is left on the surface of the partly-dried cement. The amount of pressure required will be found by experiment. Remove the paper, when the outline of the name and frame will be clearly seen on the cement slab. Next, using thin wire nails, of one inch length, hammer a nail through each letter, in two or three places, selecting the thickest part of the letter always. The nail will penetrate





Ornamental roundheaded (fan-shaped) windows at Ilishan Wesley Church. The window-tops are of concrete and are built up from sections by a method to be described in a later article.



the original wall, and the head of the nail should be hammered one-quarter of an inch below the surface of the cement, and all trace of it covered over, using a penknife to make a neat job.

Now, with a penknife, cut along the edges of the letters, back to the original wall, scraping away all surplus cement. A little practice will show when the cement is in the best condition for cutting. Should it peel away and sag, longer time is required before cutting. If it has been left too long, this will be obvious by the hardness of the material. Speed with this operation is essential, as the cement is continually hardening, and the whole operation must be completed in the shortest possible time, consistent with good clean work.

Keep a little mixed cement handy in a matchbox, and in case of a faulty cut or slip, mend the damaged part and proceed as before. The edges of many letters, of course, can be cut with the aid of a ruler, giving a straight clean finish. Leave the work for several days, and then brush over with a stiff brush to remove all loose particles. Minor repairs can also be carried out at this stage, using a penknife and the mixed cement. To give added effect and greater legibility, from a distance, the flat background can be painted with limewash, the surface of the letters with, say, buff distemper, and the edges with a darker colour, say grey or blue. The final effect is pleasing and permanent. Specimens have been in use for 20 years, the only attention being occasional renewal of the distemper.

Another photograph shows the ornamental tops of round-headed windows to improve the appearance and ventilation of churches. These are carried out in concrete. The main lines of the design are those of a semicircular fan and correspond to the design of what are, for that reason, always known as "fanlights" commonly used over the doors of houses built in England during the eighteenth century—the style of the Georgian period. The examples shown in our illustration are to be seen at Ilishan Wesleyan Church. They are built up from sections, and we intend to give details of the mode of making them in a later article.

(Top picture)

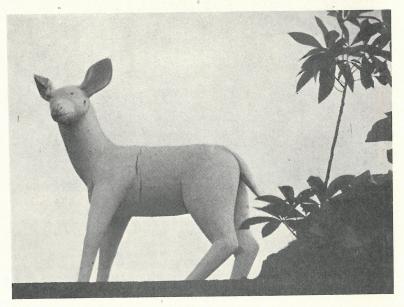
In this picture of the bungalow of Sister Winifred Shovelton at Shagamu is seen a bay window carried out entirely by the Mission craftsmen. Note also the rounded steps, cast ornamental flower pots and cast edging tiles in cement.



(Bottom picture)

Many of the larger Wesley Schools in Ijebu have their own School badges in such forms as a well-known African animal or bird. These are carved in wood by the School's carving instructor, are painted with a special plastic cement to render them weatherproof, and are mounted on the gatepillars. The one pictured is the deer, or agbonrin, the badge of Ilishan Wesley School.





Another view of Sister Winifred Shovelton's bungalow at Shagamu, showing rounded steps of cement in course of being scrubbed.



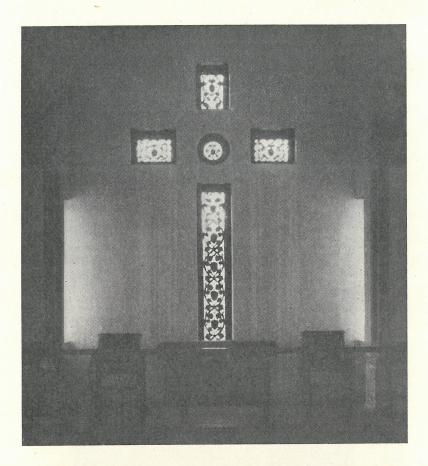


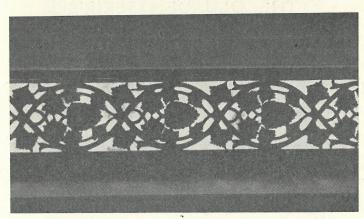
Yet other examples of work in similar material may be seen in the picture of a part of the bungalow of Sister Winifred Shovelton, of Shagamu. The cast flower-pots of ornamental design, as well as the cast edging tiles and rounded steps should be noticed in this photograph.



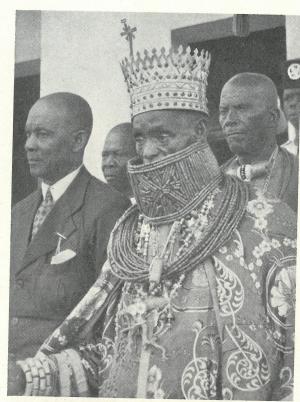
The manufacture of lime is a new industry now well established at Ebute Metta, near Lagos. It provides work for many men and has brought a valuable new source of income to creek-side villagers. The fishing communities for many miles around collect cockle

It is a common sight to see great piles of these heaped up on the lagoon sides awaiting canoe transport to the lime works, where they are heated to a high temperature in special kilns. Several of these kilns are seen in the photograph. The intense heat changes the shells to a fine white lime that makes excellent white-wash and distemper of a quality far superior to the imported product. Nigerian-made distemper can now be supplied in many pleasing colours.





A cruciform Window at Ilishan Wesley Church, carved in pierced teakwood by Hindu craftsmen in South India. The design is the grape-vine pattern, which stands up in high relief on the inner side. It is a beautiful example of expert craftsmanship, and its import to Nigeria was designed to encourage the skill of our local carvers. The lower picture (turned horizontally for convenience of reproduction) gives an enlarged view of the long central panel.



Ginuwa II, the Olu of Itsekiris, Warri Province. His crowns, coral bead necklaces and mouth screen are referred to on the next page.

THE OLU OF ITSEKIRIS

By Major R. L. Bowen, M.C. Resident, Warri Province

INUWA II, the Olu of Itsekiris, was installed on February 7th, 1936, after an interregnum of 88 years, the previous Olu, Akengbuwa, having died in 1848. The interregnum was due to dissatisfaction with the then regime, a number of sudden deaths in the Royal Family and disputes as to succession.

Originally, the Itsekiris came from Benin; the first Olu, Ginuwa, was a son of the Oba who fled from Benin in 1480 and settled at Amatu on the Dodo River, south of Forcados. After a short sojourn there, he migrated to Ijala, where he died. His successor, Olu Ogbowuru (Prince Ijijen) and his party later moved to Iwere, now known as Big Warri or Ode-Itsekiri, which has been the Itsekiri headquarters ever since and where the present Olu resides. It is about four miles from Warri by river. The present Olu is the seventeenth in the dynasty.

The Itsekiri people now inhabit an area of land from Warri along the Warri and Benin Rivers to the boundary with Ondo Province and the seashore between Escravos and Benin Rivers. In former days they were in touch with Portuguese traders and missionaries. The ninth Olu, Oyenakpagha, was, in fact, taken to Portugal and educated there about 1640.

The Olu has three crowns as follows:

(a) One made of coral beads—which was the original.

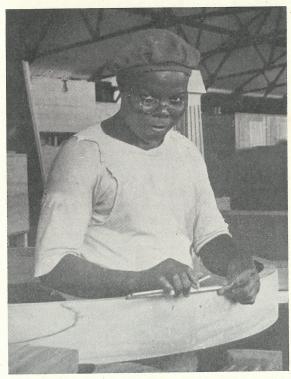
(b) One made of silver, and with a cross, for the Olu after his conversion to Christianity and return from Portugal. This is the crown the Olu is wearing in the photograph, and is believed to be of the 16th or 17th century.

(c) One that appears to be made of bronze with a cross for the

converted Olu's Queen.

The Olu also wears around his neck a number of coral-bead necklaces, and in addition a sort of mouth-cover made of a golden damask; this is believed to be a substitute for the original silken screen behind which the Olu-in-Council used to speak through his spokesman, as in the early days it was forbidden to see his mouth.

In the present day, the Itsekiris have their own Native Administration with the Olu-in-Council as the Native Authority. There are 49 members of the Sub-Tribal Council and there are seven Area Councils which are subordinate Native Authorities. I am indebted to Chief William Moore's History of Itsekiri for much of the above.



An African craftsman in wood. This master craftsman is engaged on the construction of a large, oval-shaped mahogany table for use in an officers' mess.



Oputa II, the Obi of Aboh.

OBI OPUTA OF ABOH

By Major R. L. Bowen, M.C. Resident Warri Province

PUTA II, the Obi of Aboh, was installed in 1916 and celebrated his Silver Jubilee in December, 1941. He is the 17th of the dynasty. The people of Aboh originally came from Benin and emigrated for reasons of expansion about 1500 A.D. under the leadership of the first Obi, Ogwezi, son of the Oba of Benin. They settled on the banks of the Niger River about 150 miles from Forcados. The Obis became very powerful over the area between Abarra to Ase on the Niger and exercised real suzerain rights.

The present Native Authority is the Obi-in-Council, and there are 21 Clan Councils which are subordinate Native Authorities. The Abohs still occupy an area from Abarra to Ase on the River Niger. The Obi wears a red gown (which is said to be traditional, though the origin is not known), and a beaded crown received originally from Benin.

The following is an extract from the Aboh Intelligence Report written

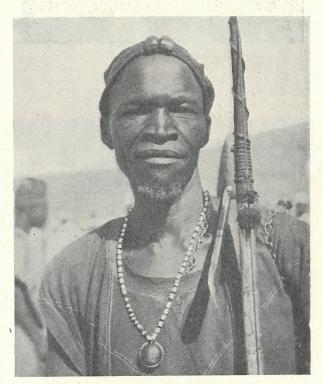
by Mr. G. B. Williams, which may be of interest:-

"In 1830 the Landers were taken prisoners at Asaba and were handed over to the Obi. They wrote of Aboh: 'The city is immensely large, contains a vast population and is the capital of a kingdom of the same name.' In 1841 the Trotter and Allen Expedition stated that the Obi's sovereignty stretched from Oniah Okke opposite Onitsha to Onya below Ase.

Mr. I. T. Palmer states that one of the reasons for the Obi's power was that the Ijaws from Patani and below were in the habit of raiding the villages on the Niger and its tributaries and that only Aboh was sufficiently powerful on the water to prevent these raids. As the price of protection,

the villages had to acknowledge the Obi's overlordship.

The first European visitors to Aboh were the Landers, who on their voyage in 1830, which finally determined the course of the Niger, were captured at Asaba and taken as prisoners to Aboh. In 1841 a treaty was concluded with the Obi by the Trotter and Allen Expedition by which the slave trade and human sacrifice were to be abolished, European traders to be unmolested and British vessels to be allowed to navigate the Niger free of tolls. In 1854 Macgregor Laird opened a factory at Aboh. In 1862 this was looted by the people and in consequence the town was bombarded by H.M.S. Espoir. In 1883, in consequence of further outrages, H.M. Ships Sterling, Alecto and Flirt bombarded the town and put ashore a landing party. A stern resistance was put up and hundreds of the inhabitants were killed, the British losing three sailors killed. To this day, there are in Aboh a number of the shells which failed to explode. After this the Aboh gave little trouble to the Europeans, although they continued for some time to make punitive raids on the villages which were trying to throw off the Obi's rule."



A Hausa Hunter. On his left shoulder he carries his bow and narrow-bladed axe; suspended from a chain worn round his neck and inserted in his cap are amulets containing verses of the Koran.

NIGERIA EXTENDS HER PRODUCTION OF UTILITY GOODS



A fine collection of soft brooms made in Nigeria to replace the expensive imported article. Good progress has been made in the local production of hand brushes, scrubbing brushes and hard yard brooms. A pioneer firm engaged in this work is the Nigerian Jisi Ike Company, P.O. Box 17, Aba, Nigeria.





Two Scout portraits from Kano City. The left-hand picture shows Mallam Wada, the Scoutmaster of the "Emir of Kano's Own" Troop of Scouts. He is a master at Kano "Middle" (Secondary) School. The right-hand picture shows a happy member of the same Troop. See next page for further notes on Scouting in the Northern Provinces of Nigeria.



Members of the "Emir of Kano's Own" Scout Troop.

THE SCOUT MOVEMENT IN NORTHERN PROVINCES

The pictures show Scouts of the Kano City Scout Troop. This Troop is the very first Scout Troop of Northern Provinces and it is composed of boys of the Hausa, Fulani, Arab and other Northern races. The youngest son of the Emir of Kano and the sons of the Chiroma of Kano are very keen Scouts. As this was the first troop to be formed in Kano City, the Emir allowed it to use his name; thus it is known as the "Emir of Kano's Own" Troop.

Since this Troop was started, similar troops have been formed at Argungu, Kaduna, Jos and Zaria; and Scoutmasters are training Rover Crews at Kaduna and Bauchi.

The Sultan of Sokoto is a very keen supporter of the Scout Movement.





Adebisi, the African midwife in charge of the Iperu Maternity Centre.

THE IPERU MATERNITY CENTRE

THE loss of child life in all parts of Nigeria is appalling, amounting in many places to anything from 40 to 80 per cent of the children born. Chief causes are unskilful and dirty methods of delivery, the lack of proper equipment and appliances, superstitious and ignorant practices of long-standing, insufficient and irregular feeding of babies, diseases of parents, dirt and flies in the home. Happily all these ills are easily remediable, and increasing and gratifying attention is being paid, in many parts of Nigeria, to maternity and child welfare work. Maternity Centres are being opened, often being built by the people themselves, under guidance from the Administrative Officer, the Medical Officer or the Missionary. African girls show remarkable aptitude for and skill in midwifery, and an increasing number are under training in the Government, Native Administration and Mission Hospitals.

The midwife shown in the accompanying picture was trained in general nursing at the Ilesha Hospital for three years, followed by a further year of specialised midwifery training. She passed her Government examination, was graded as midwife 2nd grade, and licensed to practise in certain provinces. She is now the midwife in charge of the Iperu Maternity Centre which, together with that of Ikene, is run under the auspices of the Ijebu Methodist Church. Her work begins with the regular inspection of the women at the Centre, prior to the birth of their babies. Much valuable advice can be given to the future mothers in these visits, and tests carried out by the nurse, and information gained by her, which will do very much to ensure a normal trouble-free delivery. The expectant mothers

seen each week by Adebisi number from 200 to 300. Cases which are considered as likely to be abnormal (happily a very, very small proportion) are instructed to attend the nearest hospital, where medical advice and treatment are readily available. Many lives of both mothers and babies are being saved by this wise precaution, whereas, in deliveries apart from the Centre, the difficulties would not be known, and would only be realized too late, resulting often in the death of both mother and child.

Women usually come into the Centre two or three days before the expected birth of their babies. Here they are provided with a simple bed, have facilities for taking their bath, and are given any final treatment considered necessary by the midwife. Food is usually provided by a member of the family, who also attends to their comfort.

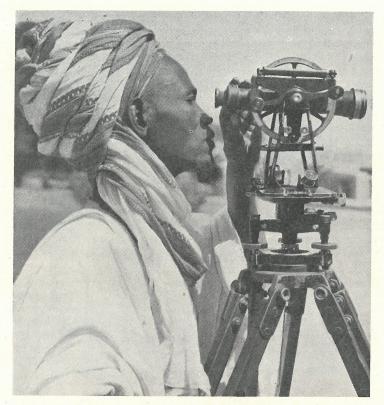
The delivery is carried out in a special room of the Centre, under careful, clean conditions. The baby is washed and weighed and given a cosy little cot by the side of the mother's bed. Advice and demonstrations of the care of eyes, nose, ears and skin are given, also of the need of regularity of bathing and feeding. Mothers usually leave the Centre three days after the birth of their babies, if necessary taking with them a few simple remedies, provided at cost price, from the Centre.

The after-birth care of the babies is the final responsibility of the midwife. On a special day of the week appointed, mothers bring their babies from their homes for weighing and inspection. This service is most important. Weekly weights are recorded in a separate book, kept by the mother. A steady gain in weight is essential to true well-being. Any failure in this respect is at once detected, and happily the cause is in most instances easily remedied, often by the addition of some article of diet of the mother. The babies thus gain a good start in life. Mothers know to whom they can go in case of sickness, and the habits of regularity and cleanliness acquired in contact with the Centre are invaluable in after life.

Teachers and schools can play a great part in popularising these Centres. Every large town and group of villages should have its own Centre. But seek the advice of a responsible person before building. Each Centre should be related to a hospital for supervision and the treatment of abnormal cases. Valuable advice can be given concerning sites, types of building, materials, etc.

The Centre at which Adebisi was working at the time our picture was taken reported 198 deliveries in 1941. The fees charged vary from place to place, but a fair average would be 5s. delivery fee, in most cases plus a small monthly payment for ante- and post-natal care. Midwifery offers a useful and honourable career to many more young African girls, which career happily need not cease on marriage, and it is sure that an increasingly large number of them will choose this sphere of service to their country and people.





An expert native surveyor of the Native Administration Survey Department, Kano, using a theodolite.

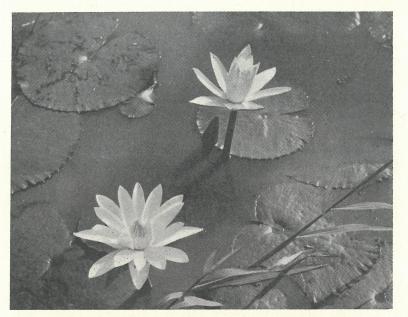
A RECORD PAIR OF ELEPHANT TUSKS

N July 4, 1941, there was found a few miles from Owo a remarkable pair of tusks showing marks of fire and of age. This was the day when the new Olowo took his seat for the first time as President of the Owo Native Court of Appeal. In local belief, the finding of ivory augurs a successful reign for the Olowo, and the discovery of a unique pair on such a day was hailed as a splendid omen.

The measurements and weight were:-

midde di circa di di margina mar	10.	
	Tusk No. 1	Tusk No. 2
Length (on outside curve)	7 ft. 2 ¹ / ₄ ins.	7 ft. 3 ins.
Girth	16 ins.	$16\frac{1}{2}$ ins.
Weight	59 lbs.	$63\frac{1}{2}$ lbs.
The biggest tusks previously recorded Records of Big Game, 1928 edition) are	from Nigeria	(Rowland Ward's
Length	6 ft. 10½ ins.	6 ft.
Girth	$17\frac{1}{2}$ ins.	$17\frac{1}{2}$ ins.
Weight	65 lbs.	$59\frac{1}{2}$ lbs.
The Olowo's tusks are thus in le	noth the record	for Nigeria (and

The Olowo's tusks are thus in length the record for Nigeria (and probably in weight, too, allowing for the years that they appear to have lain buried).



Large white water lilies growing in a pool at Badagri. If the unopened buds be gathered in the daytime and quickly placed in a flower vase or bowl filled with water, they remain firmly closed until 6.30 or 7 in the evening. If they are kept in the dark between sunset and this time they slowly open and make a magnificent decoration for a supper table. They continue to get more and more open until far into the night, giving out a sweet perfume.

The flowers remain open until about 10 a.m. the next morning when they close and return to bud form. The process of opening and closing is repeated for several nights in succession.

KATSINA ALA AS SEEN BY AN IJAW

By V. A. D. KEMMER

Headmaster, The Middle School, Katsina Ala

ATSINA ALA is a village of some three square miles with a population under 1,000. It is situated on the north bank of the River Katsina, an affluent of the Benue, and lies 73 miles south-east of Makurdi, the Provincial Headquarters. It once was the seat of the Tiv Divisional Headquarters, which is now at Gboke, a place only 25 miles distant.

Katsina Ala carries some recognition on the Roll of Towns of the Northern Provinces to the extent of being mistaken for the "Babbam" Katsina of the extreme north. Obviously this error arises from the similarity of the two names; but the fact is that, like the Israelitish Nazareth, Katsina Ala's insignificance is swallowed up in her importance as a growing produce centre.

The present inhabitants comprise a handful of Hausa and Fulani emigrants from Kano, Bornu and Niger with a mixture of Jukuns, Tivs and Turus from outlying districts. When the town started to grow, it was due to traders and their servants who came to settle hoping for huge profits

from the Munshis with whom they had started to trade. As traders, they could not unite well enough to form a permanently-growing community; many of them leave when they are either bankrupt or enticed by more lucrative prospects. The majority, however, of those who have remained have formed a mixed Hausa community which talks a pidgin dialect of Hausa.

Now, what makes Katsina Ala important? Traders and European firms attract to the town a lot of people who buy their merchandise; and in turn sell their farm produce. One of the products is benniseed which, before the war, was a big item of Italian trade in the world's markets. The almost unceasing hooting of lorry horns, the whistling of steam launches, the influx of traders from North and South of the Province, and the general hurry and bustle here and there during the benniseed season, which lasts three months, is such that life seems as active as in an industrial centre. But with the fall of the river activity ceases; the launches can no longer operate because the river is shallow and full of sandbanks.

This is like winter in the Tundra, when the southward journey begins and all life migrates thither—men, lorries, launches all return to their homes or bases and life becomes almost moribund.

Now come at intervals the cattle traders, who pass through the town with their herds, thus creating small scenes of activity and providing a source of income and food for the inhabitants by paying tolls for crossing the river and supplying meat for the community.

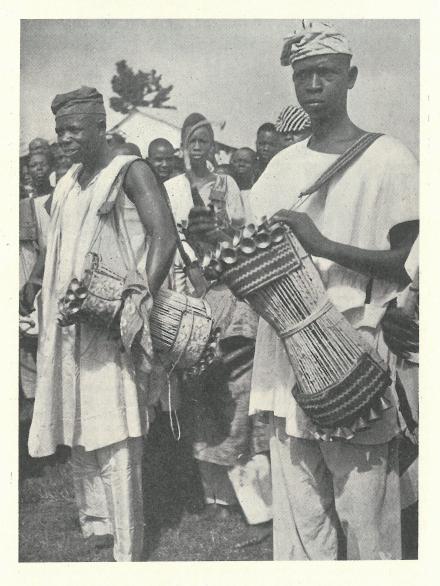
As a foreigner working among Tivs and a southerner drawn from the great wilds of mangrove swamps near the estuary of the Brass River, I view Katsina Ala as a spot of great interest, and one with a bright future. Katsina Ala provides sport for the gun. Nearly all the species of geese from the spur-wing, hot-nose and Egyptian goose to the black-throated diver, are found in varying flights on the banks of the river from November to June. After the burning of the bush from February to March, teeming herds of deer and other species of buck are found roaming about the fields and they provide a spectacle well worth seeing even when the chase proves abortive. The guinea fowl is as common as the partridge. Hippopotami, one of which is on the sandbank as I write, are found in the pools up and down the river and sometimes in the lakes during the mid-rains. They, too, provide an interesting record on the pages of the sportsman's diary. Here, then, is a place for the sightseer and holiday-maker.

The only commercial fishing is done by the Turus—a people said to have come from the South. They speak a dialect of Tiv mixed with other languages. They are a passive type of fishermen, who wait for fish to come to their traps instead of going to look for them and so, even with a river at its door, Katsina Ala has scarcely any supply of fish except smoked fish brought from Ibi. But only a month ago a Nile perch weighing a little over 128 lbs. was caught by the Senior Education Officer in one of the pools near the town. This is evidence that the river has fish for sport if not for trade. Many other Europeans will agree who have had their hooks in this river.

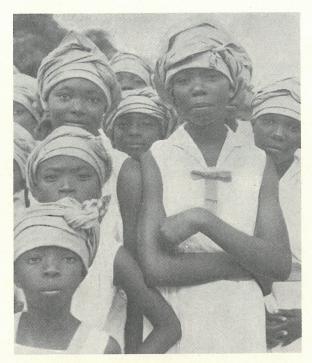
Again, with a Native Administration Middle School serving as a provincial training centre at Katsina Ala and drawing from the various districts the sons of people of different customs and religions, Katsina Ala cannot be without some degree of influence on the Province as a whole.

It is left now to be proved whether a place of this nature with a vast farming hinterland and a growing population has a bright future. I think it natural that with a steady increase in the production of benniseed an increased and more active population may result; also, with a central school which enrols many boys from the Missions, it will not fail to produce the type of men which Tivland expects to see.

THE DRUMS OF AFRICA



Typical native drums and drummers at Shagamu.



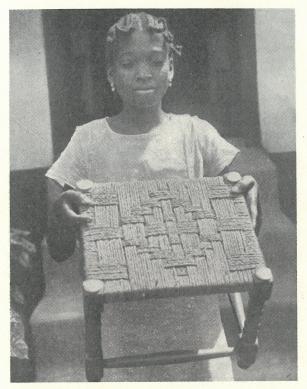
A group of students at the Shagamu Girls' School.

EDUCATION OF GIRLS IN NIGERIA

HE education of girls in Nigeria has sadly lagged behind that of the boys. Very few mixed elementary day-schools have as much as one third of the total scholars girls, whilst a proportion as low as one tenth is not uncommon. This disproportion is wholly bad for the future of Nigeria. It serves to perpetuate polygamy, a lack of true home life and of community of ideas and ideals between husband and wife. Book-learning and literacy, although an essential part of our education in such schools as the Shagamu Girls' School, are by no means all that are taught or learned.

The Shagamu School is a boarding school only, so that the maximum contribution is made to the life, habits and characters of the girls, who at present number 96, ranging from kindergarten to standard 7, with two years of student teachers in addition. The student classes comprise girls from Lagos, Ibadan, Abeokuta, Ilesha, Ijebu, Arochuku and the Cameroons. Their course is for two years, after which they sit for the Government Elementary Teacher's Certificate, and are posted to their local day-schools.

The influence of the lives of resident European and African teachers, together with that of an African matron, is of great value. Furthermore, regular habits are formed, and there is adequate time for rest, sleep and exercise. The diet is carefully balanced and the health of the girls is uniformly excellent. There is a strong practical bias in the training, which covers needlework, Yoruba cooking, laundry, housewifery and child welfare. The girls wear simple and characteristic dress. Nigeria needs scores of such schools.



A rush-seated stool made at Shagamu Wesley School.

ADAPTATION OF LOCAL MATERIAL TO CRAFT WORK

NE of the most healthy developments in African craft work of various kinds—resulting partly from the shortage of imported materials in war-time, but having its roots in deeper causes than those of the moment—is the increasing use of local materials.

In many cases, this tendency is not only desirable from the economic point of view but has led to a distinct improvement in the quality of finished articles, particularly in the direction of giving them greater durability.

As one example of this movement, the photograph reproduced above shows a rush-seated stool made in the craft section of Shagamu Wesley School. Such stools were formerly made, as regards their seating, from imported sea-grass, but local grass from the creeks is now used, dyed with various vegetable dyes and plaited. Strand for strand, the local article is stronger than that made from imported materials, although not quite so smooth in finish.

For present-day visitors to Nigeria from other countries, our picture has the additional interest of showing one of the distinctive local styles of hair-dressing. These show great variety and in many cases a strong feeling for beauty of line. Several illustrations of this subject were published in Nigeria No. 18.

LONGMANS

By C. E. Eckersley, M.A.

ESSENTIAL ENGLISH

A Progressive Course for Foreign Students. With many Illustrations and copious Exercises.

Book I. 3s. 6d.

Book III. 3s. 6d.

Book II. 3s. 6d.

Book IV. 5s.

A MODERN ENGLISH COURSE

FOR FOREIGN STUDENTS. An Intermediate Book. With Illustrations

3s. 6d.

A CONCISE ENGLISH GRAMMAR

FOR FOREIGN STUDENTS
With Illustrations.

2s. 9d.

AN EVERYDAY ENGLISH COURSE

FOR FOREIGN STUDENTS
With Illustrations.

2s. 9d.

BRIGHTER ENGLISH

A Book of Short Stories, Plays, Poems and Essays. With Exercises.

3s.

ENGLAND AND THE ENGLISH

A BOOK FOR FOREIGN STUDENTS

An Anthology mainly from leading modern English authors, revealing England and English life and character. With Exercises.

4s. 6d.

ENGLISH FOR THE ALLIES

Specially written for Soldiers, Sailors and Airmen of the Allied Nations.

Book I. 1s. 6d. net.

Book II. 5s. net

All these books are soundly based on the most modern research in vocabulary selection and language teaching and have behind them the author's long experience in writing and in practical teaching.

LONGMANS, GREEN & Co. Ltd., 43 Albert Drive, London, S.W.19

BOOK REVIEWS

Living Names. By John Walton. (A series published by the Oxford University Press at 15s. each.)

Sir Richard Livingstone, discussing the chaos of our secondary school education, refers to the following passage from Plato's account of the education of a Greek boy: "When he has learned his letters and is beginning to understand what is written, they put into his hands the works of great poets, and he reads them sitting on his bench at school; and they contain many admonitions and stories and praise of famous men of old, which he is required to learn by heart, in order that he may imitate or emulate them or wish to become like them." He goes on to say, 'I should like to see every child carry away from school portraits of a few great men . . . as standards for judging and touchstones for testing human character."

Living Names might well be adopted by our training colleges, and the upper parts of our Primary and Central Schools, and middle forms of our Middle Schools for the purpose of introducing our scholars and students to those who by their work and character have set standards of conduct for all time.

The first three volumes of the series are Six Reformers, dealing with Wilberforce, Sir Robert Peel, Elizabeth Fry, Florence Nightingale and Dr. Barnardo; Six Explorers, dealing with Marco Polo, Christopher Columbus, Captain Cook, Captain Sturt, Dr. Livingstone and Captain Scott; and Six Physicists, Galileo, Newton, Davy, Faraday, Kelvin and Curie. It is probably sufficient to say that the reviewer, having recently read Blaikie's Life of Livingstone, and Chamberlin's selection of Livingstone's Letters, and Madame Curie's biography, written by her daughter, found pleasure in reading the shorter biographies contained in the little books under review. The format of the books is in the usual excellent Oxford Press taste, but the absence of portraits is a disappointment which we hope may be remedied in the rest of the series.

Other volumes in the series are Six Biologists and Makers of India.

POSTS AND TELEGRAPHS

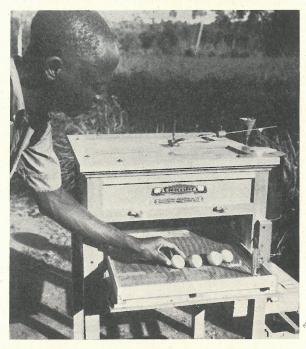
SAVINGS BANK

Save your money in the Post Office Savings Bank, it is safer. Interest reasonable. Withdrawals at a moment's notice. Telegraphic withdrawals permissible

PRIVATE LETTER BOXES

Rent a Post Office Private Letter Box to ensure early and convenient delivery of your letters. A Private Letter Box allotted to an individual for the use of himself and household may be rented at 10/- per annum.

G. GOTTSCHALCK & CO.



Preparing an incubator at the Government Farm, Agege. (An article on hatching eggs in incubators was printed in No. 17 issue of "Nigeria")

We can help you to live on the country and be self-supporting by supplying you with poultry, dairy and agricultural equipment.

INCUBATORS
CHURNS AND SEPARATORS
FARM TOOLS

Phone : 015

Telegrams: "HARDWARE"

ABEOKUTA-IBADAN-MINNA-ZARIA-GUSAU-KANO-JOS-PORT HARCOURT Education

:: R

Recreation



The Royal Cinema, one of the popular Lagos cinemas of The West African Picture Co. The Company and the Education Department are now co-operating in the display of educational films for school children

THEATRES at :-

LAGOS, IBADAN, JOS, KANO, ABEOKUTA, KADUNA, ZARIA, ENUGU, PORT HARCOURT, ACCRA, & KUMASI

The West African Picture Co.

FOR ADVERTISING SPACE IN THIS MAGAZINE

write to

The Editor, "Nigeria,"

Education Department Headquarters,

Lagos, Nigeria, West Africa.

'Phone: Lagos 006. 'Grams: "Edspec, Lagos"

or to the Advertisement Representative:
30 Moorend Rd., Cheltenham, England.
'Phone: Cheltenham 3218



NEWSPAPERS from ENGLAND

Although supplies are difficult these days and there is sometimes a short delay before regular dispatch can begin, W. H. Smith & Son are still able to accept orders to post newspapers and magazines overseas.

Enquiries should be addressed to:
W.H. SMITH
& SON

Strand House, Portugal Street, London, W.C.2

REEVES'

ART MATERIALS.

THE DOG



BRAND



WE have pleasure in announcing that in spite of war conditions we can still manufacture our famous No. 20 Paint Box which was brought out especially to meet the needs of Teachers in Art Instruction. This box contains twelve pieces of

colour in Metal Pans and a reliable quality brush and has the great advantage that all of the pans can be refilled when the need arises at a very moderate cost. Supplies are, of course, limited, but we are doing our utmost to keep up shipments.

POWDER Tempera Colours introduced into Nigeria a few years ago have had a great success in the instruction of Art, and we are still able to supply these although we have reluctantly been obliged to slightly reduce the range of colours and only pack in two sizes of containers.



THE C.M.S. Bookshop, Lagos, who stock our products, will be happy to advise you on up-to-date prices, particulars of supply, etc., and give you all possible help in procuring goods of our manufacture.

REEVES

REEVES & SONS, LTD., DALSTON, LONDON, ENG.

GRIFFITHS, McALISTER LTD

THE TROPICAL OUTFITTERS

LONDON AND LIVERPOOL

KIT AND EQUIPMENT

Owing to War Conditions, Restrictions of Supplies and other difficulties, we regret we are unable to render the same quality of service our clientele were always accustomed to, but we can assure both old and new customers that their esteemed orders will be given the best possible care and attention.

INSURANCE OF ALL KINDS — INCLUDING «WAR RISKS. NEWSPAPERS AND PERIODICALS.

Books of all Descriptions-FICTION, SCIENTIFIC, MEDICAL, &c.

London:
10 & 10a Warwick Street,
Regent Street, W.1.

Liverpool: 29 & 31 Manesty's Lane.

Established 1880.

PERRY & CO., LTD. LONDON and BIRMINGHAM

THE CENTURY-OLD PENMAKERS



No. 19

No. 87





No. 1922

PERRY PENS RENOWNED FOR DURABILITY AND SMOOTHNESS MADE IN THE LARGEST PEN FACTORY IN THE WORLD

For prices and samples apply to:-

36 LANCASTER STREET, BIRMINGHAM, 4

An Announcement

- The name John Holt has been connected with West Africa in an unbroken association for the past eighty years.
- Progress and the development of trade in West Africa have gone steadily forward hand in hand, and when the new tasks which peace will assuredly bring in its train are more clearly defined and understood than is possible to-day, we hope to play our part in helping West Africa to achieve even greater progress.

JOHN HOLT & Co. (Liverpool) LTD.

West African Merchants & Shipowners

Royal Liver Building LIVERPOOL, 3