

# FARMSTOCK

In this edition

Second year layers p. 6

The Israeli Breeders Union p. 10

Why not try Farming? pp. 10&11

Some Rabbit Terms p. 13

**DEC. '69**

Price: One Shilling (1s.)

**STOCKBREEDERS' & FARMERS' MONTHLY**  
**NEWS, SALES & ADVISORY SERVICE ON** ● **LIVESTOCK** ● **POULTRY,** ● **FISHING**  
● **HORTICULTURE** ● **FARMING** & ● **FOODSTUFFS** ETC.

## DEBORDAN COMMERCIAL ENTERPRISES

Manufacturers Representatives, Importers, Exporters  
and General merchants

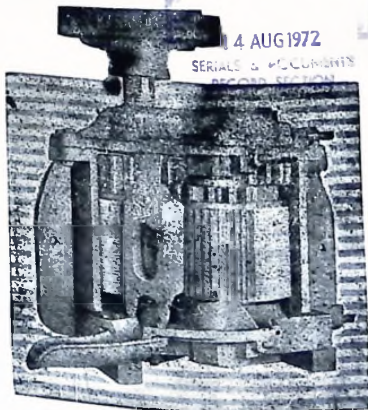
Also representing:  
Agricultural Engineers Ltd. of GHANA.

FOR

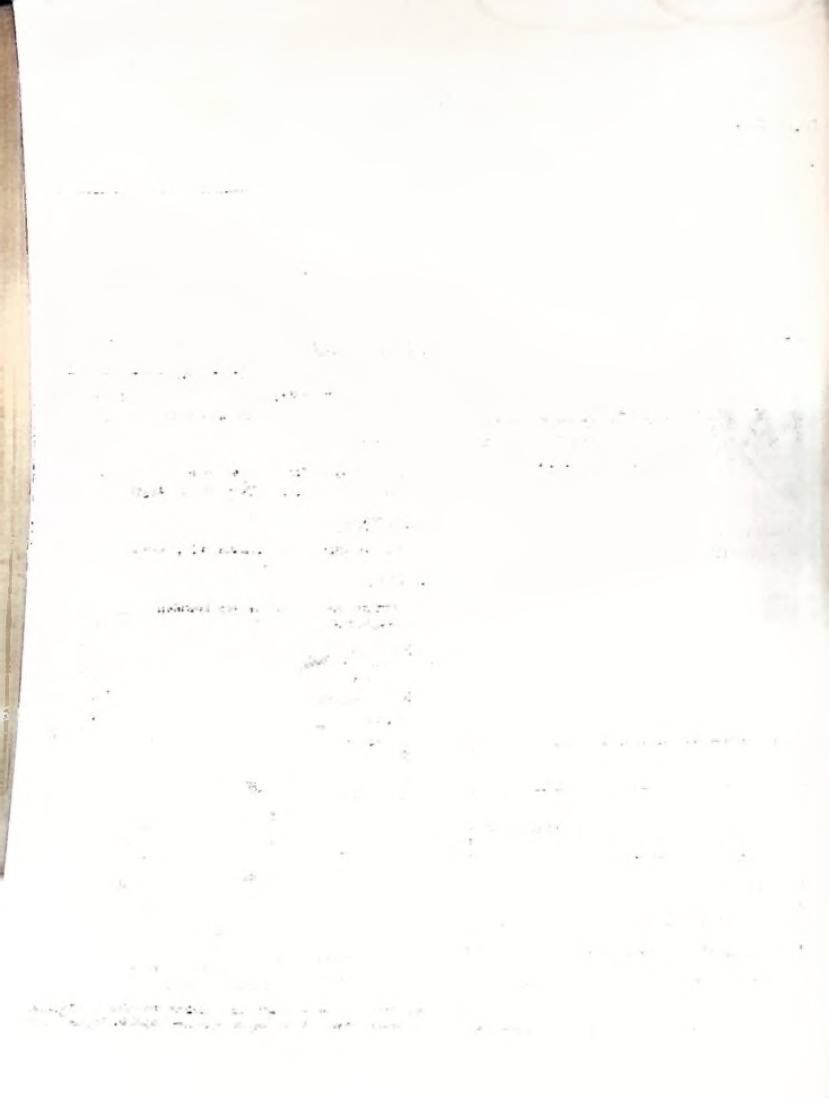
- SUGAR CANE CRUSHERS,
- CASSAVA GRATERS,
- MAIZE & GROUNDNUT SHELLERS
- PALMNUT CRACKERS

For further enquiries contact:-

DEBORDAN COMMERCIAL ENTERPRISES  
P. O. BOX 3494,  
LAGOS.



**THE KUMAR SUGAR-CANE CRUSHER**  
One of the many agricultural implements sold by the  
Company.  
It is ideal for a small business. An enterprising  
person who installs this machine can be crushing sugar for  
customers at reasonable charges.



# FARMSTOCK

MANAGING EDITOR: ABIODUN OJUGBELE

## CONTENTS

### AGRICULTURE:

Crop hand-spray saves cost of aerial spraying	p. 8
Why not try farming ?	pp. 10 & 11
An 'Impossible' dream that came true	p. 16

### POULTRY:

Keeping layers for a second year	p. 6
The Poultry Breeders (Coop) Union - Israel	p. 10

### RABBITRY:

Let us discuss some common rabbit terms	p. 13
---	-------

### DAIRY:

Nothing but the best for this breeding programme	p. 17
--	-------

### GENERAL:

Opinion	p. 4
New Equipment	p. 4
Letters	p. 4
Laughter	p. 12

### INDEX TO ADVERTISERS

1. Dehordan Comm. Enterprises Front Cover
2. Bata Shoe Company p. 7
3. Livestock Feeds Limited p. 5
4. Dizengoff (Poultry) p. 6
5. Dizengoff (Pharmaceuticals) p. 7
6. John Holt Motors p. 11

OPINION

FARM COMBINES

That a single hand cannot lift a load and place it on ones head is an age-long witty statement which still holds water today. Certain endeavours are best done by a group. Some are individualistic and may be possible under extreme privations but resources being usually limited under solo effort, discouragement usually results early. In this age of mechanisation, mechanised farming even under a plant hire system may be prohibitive for a single farmer.

While we do not advocate fusion of farms because of personal will even at the expense of efficiency, it is necessary to act collectively.

A group of adjacent farms may pay for services rendered on all the farms charged together.

Under combines jobs will be more expertly handled and carried out by the co-operators. More capital will be available and marketing will be well planned.

Many have pieces of land dotting the country side. These can be lumped together under a manager instead of leaving such pieces as thickets.

Put under the plough such areas will produce food for the good of all.

LETTERS

SO MANY YET SO COSTLY

Dear Sir,

It does not seem that our country will have a good period again. Why I say this is due to the soaring prices of everything. Our government is so engulged in prosecuting the war that no time is spared to find out if the governed are not facing another war tacitly.

Let us focus our mind on eggs. Prior to the introduction of foreign chicks that produce eggs profusely, there were eggs for the asking.

But now that eggs are even mass-produced an egg still costs as much

as 6d each and this is even the putrifying local guinea fowl egg.

The good and scientifically mass-produced egg is hard to come by for the humble.

How can anyone be sure of a

good day's meal under these frustrating circumstances? No meat, no fish, no jam, no gas! I share the opinion of many that the time is up that we should have some able group to look after the production and distribution of food.

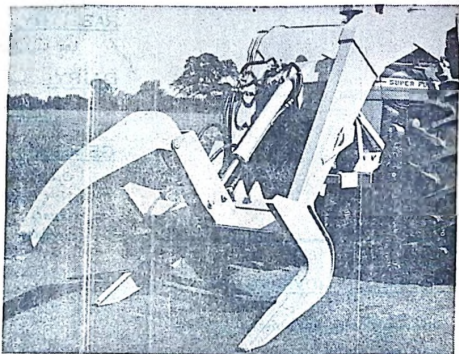
Many will never be able to own a car or much more a house of their own; still many more will never be able to rent a flat or rooms with conveniences because no programme can attain such for a teeming and populous country as Nigeria. But the Government can ensure good food for every citizen by means of subsidising farming and evenly distributing the harvest.

Times there were when one wished to die and part with all talk of this nil, that nil.

Lokoja Luke Yorje

Continue on page 9

New Equipment



New British Multi - Purpose Log Grab

This new log grab, capable of lifting timbers ranging in diameter from 4 inches to 30 inches, has been developed by the British firm of Bomford and Evershed and will be on view at the Royal Smithfield Show opening at Earls Court, London, on December 8. It is designed as an attachment for the Sapper-Bomford loader as fitted the County H54 and 754 tractors.

An important feature of the grab is that the tines mesh with each other thus preventing any material losses and giving more power to the 'bite'.

Attachment is by three pins to the loader hoists and crowd ram. An extra control valve unit and hydraulic piping is supplied for operating the independent action clamp arm ram.

Maximum lifting capacity to the full discharge height of 10 feet 4 inches is 2,800 lb. with a tip angle of approximately 20 degrees. Tip angle at ground level is about 105 degrees and roll back at ground level around 10 degrees.

Manufacturers: County Commercial Cars Ltd., Albert Street, Fleet, Hants, England

Advertisement

## PRODUCE MORE EGGS FOR XMAS

WITH

## TERRAMYCIN EGG FORMULA

Do you want more eggs during this Xmas season when egg prices are highest throughout the year? Yes! You must take advantage of this upward swing in the price of eggs because you need more money during this festive season.

*But how can you boost up your production when we are now at the onset of the dry season which always imposes stress on your layers? From your personal experience, you know that stress always disrupts the normal life of your layers, predisposes them to increased infections which consequently lead to drops in egg production.*

Therefore, your answer lies in the correct use of Terramycin Egg Formula.

Why do you need Terramycin Egg Formula? Because it is the only product specially formulated to give your layers the vital tonic which will increase and maintain your egg production.

In addition, it contains Terramycin which ensures that stress does not arise while simultaneously, disease problems are kept at bay.

Therefore you must adopt this Terramycin Egg Formula programme now.

Here is how to make it work for you:

- (a) If your pullets are at the point of lay, use 1 level teaspoon to 2 gallons of water for the first 4 weeks, and continue after this at 1 level teaspoon to 10 gallons of water.

This will prevent point of lay mortality, enable your pullets to peak earlier, attain a higher peak, and sustain it longer.

- (b) If your layers are at end of lay, use the same 1 level teaspoon to 2 gallons of water till culling.

You will reap the reward of increased production of large eggs, characteristic of layers at the end of the laying cycle.

- (c) During stress periods, e.g. very hot days, intensely cold harrattan nights, use 1 level teaspoon to 2 gallons of water until conditions im-

prove. Then continue at 1 level teaspoon to 10 gallons of water.

- (d) At any other time, use 1 level teaspoon to 10 gallons of water continuously.

This will enable your layers to reach and surpass their bred-in potential and so give you maximum profits during this Xmas when you need money most.

Terramycin Egg Formula is a worthy investment that always pays rich dividends. Invest in it today, tomorrow may be too late.



## KEEPING LAYERS FOR A SECOND YEAR

BY L. J. ELMSLIE (M. A. Cantab)  
Technical Director, Ejinaka & Thornbers Ltd.

IN FORMER TIMES MOST LAYING BIRDS WERE KEPT FOR AT LEAST TWO YEARS OF LAY, AND INDEED ONLY SECOND YEAR HENS WERE USED FOR PRODUCING HATCHING EGGS. SCIENTIFIC AND COMMERCIAL CHANGES HAVE NOW MADE IT MORE PROFITABLE TO REPLACE LAYERS AFTER A SINGLE YEAR OF LAY, OR PERHAPS JUST A FEW WEEKS MORE, BUT OCCASIONALLY THERE WILL BE TIMES WHEN IT PAYS TO KEEP LAYERS ON FOR A SECOND YEAR EVEN NOW.

ONE REASON FOR KEEPING THE BIRDS ON COULD BE A SHORTAGE OF DAY OLD CHICKS FOR REPLACEMENTS. ANOTHER COULD BE A HIGH PREMIUM FOR LARGE EGGS, AS SECOND YEAR BIRDS PRODUCE A GREATER PROPORTION OF BIG EGGS THAN DO FIRST YEAR BIRDS.

Birds which are to be kept on should be force moulted at the end of the first year. Moulting is the natural process of the bird shedding its old feathers and growing a new set. This happens naturally once a year - in non-

tropical countries declining day length at the end of summer starts the moulting-but can be caused to happen at any time by anything which upsets the bird enough.

Small upsets may cause partial moulting, of the neck feathers only, or of only some birds in the flock. Very unsuitable systems of keeping birds, such as large cages at high density may cause continuous moulting.

Force moulting is the causing of the birds to moult all at the same time by keeping them without water and food for 24 hours, and feeding an unbalanced ration for some more days. The

### MONTHLY ADVISORY SERIES



### NEW HYBRID HEN LAYS ONLY BROWN EGGS

The Sykes Brown hen - a new hybrid developed in Britain and reputed to lay only brown eggs! The breeders claim the bird can produce large brown eggs at the rate of 245 a year under average farm conditions, and 275 in a laying year. Fifty-five per cent of these eggs grade out large, while 45 per cent are standard grade.

The hybrid is a uniform dark chocolate in colour and took 6 years of search to develop at the cost of £250,000, involving the use of the breeders' £60,000 computer. During rearing, 98 per cent of the chicks survive as 95 per cent of the birds when in lay.

The Sykes Brown hen converts medium-energy food efficiently (42.41 ounces per bird per day) and weighs 5.3-5.6 lb live weight at the end of lay. It is said to reach 50 per cent efficiency of production at 23-25 weeks of age and reaches peak production by 30 weeks. Other advantages include high disease resistance, fast feathering, docile temperament and negligible broodiness.

Breeder: Sykes International, Warminster, Wiltshire, England

process consists of two stages. First dropping the old feathers, and secondly growing the new feathers. After the new feathers are grown the bird resumes laying, which had stopped at the beginning of the moult.

After the birds have grown their new feathers egg production rises to a peak, and eventually gets less again in the same way as in the first year, but with the following differences.

- (1) Egg production per bird is less, about 80 per cent of that in the first year
- (2) Egg size is bigger
- (3) Food consumption is similar to what it was at the end of the first year. That means that the average for the year is higher.
- (4) Shell quality is good just after the moult, but on average is not quite as good in the second year.

Continue in next column

## POULTRY

DAY OLD CHICKS, LAYERS & BROILERS,  
INCUBATORS, BROODERS, METAL CAGES  
& HOUSES DRIERS, SILOS, HAMMERMILLS  
FEED MIXERS, EGG GRADERS ETC.

INSTALLING & RUNNING IN.

FREE ADVISING & PLANNING

### DIZENGOFF

WEST AFRICA (NIGERIA) LIMITED,  
28, CREEK ROAD, BOX 342.  
TEL. 42080, 42089, APAPA.

BADAN: 9, Magazine Road, P. M. B. 451B, Tel. 22678  
BENIN: 2, Ibiwa Street, P. O. Box 206 Tel. 452.

year as in the first.

(5) Production and shell quality are much better from birds which are force moulted than from those which are kept on laying without a rest, and profits are higher too.

From these points one can see that birds which have done well in their first year are the ones most likely to do well in their second year, so the flock to keep on is one which has done well already. A flock which has not done well in its first year is very unlikely to do well in the second, and therefore should be sold off rather than force moulted.

Force moulting should begin about 68 weeks of age, a little sooner or later according to the performance of the flock and the farmers need for eggs. First it is necessary to go through the birds individually, keeping only the best for moulting and the second year. Non-layers, sick, waxy, or backward birds should not be force moulted, but sold off as table birds instead.

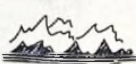
To carry such birds through the unproductive moult period would just be a waste of money as there is no chance of them doing well in their second year, and some of them may even die. Perhaps 10-15% of the birds may be culled at this stage, depending on the quality of the flock. The culling must be done before moulting begins since it is impossible to cull a flock properly once moulting has begun.

The method of getting a good moult is as follows:

- (1) Keep the birds without water for 24 hours exactly.
- (2) Leave the birds without food for the same 24 hours but do not feed them until they have been without food for a total of 48 hours.
- (3) Feed ground corn only for 3-4 days, or until the feathers are dropping rapidly.
- (4) The birds must now be fed a good ration to grow new feathers and to build up reserves of calcium in preparation for the second

Continue on page 9

# TOUGH AND RUGGED! EVEREST boots



Sizes 6-11  
35"

by  
**Bata**  
THE SIGN OF GOOD SHOES



# Crop Hand - Spray Saves Cost of Aerial Spraying

BY COLIN REID

A SMALL HAND-SPRAY WORKED BY A BATTERY AND COSTING ABOUT £5 BUT GETTING RESULTS FOR PROTECTING CROPS AND PLANTS ALMOST AS GOOD AS SPRAYING FROM AIRCRAFT HAS BEEN INVENTED IN BRITAIN.

It is going into production first with a view to meeting demand in developing countries.

In a trial in Sudan the inventor, Mr. E. J. Bals, sprayed 16 acres (6 475 hectares) of wheat in one hour. This comes near to the rate of spraying from aircraft.

Demonstrations are to take place in developing countries where the cheapness and good results of the use of the invention are felt to be needed.

The inventor has also developed two large kinds of his spray. One, an engine-operated machine is expected to cost about £45. The other, which can be fitted to a tractor, he intends to sell at under £300.

His inventions are being backed by Britain's National Research Development Corporation (N.R.D.C.), the government authority which, after a good deal of test work, has approved for manufacture a number of British inventions, since used all over the world.

## FINE AND EVEN DROPS

In the normal way, plant and crop-killing pests are sprayed from aircraft. They use killing substances dissolved in water squirted at high pressure through nozzles at rates of up to 200 gallons per acre (2,275 litres per hectare), sometime unevenly.

The secret of Mr. Bals' invention is that it squirts out finer and more even drops of liquid. These not



The crop hand-spray under demonstration

only cover a wide area but spread the effect over plants and crops very evenly. Some of the insect-killing sprays to be used will have concentrated forms of liquids, so will be able to cut down the amount used.

British experts believe that oil is a much more useful carrier of pest-killing substances than water. This is because oil does not wash off the leaves when it rains and does not evaporate before it reaches the plants in spite of tropical heat.

America and Canada where much interest is being aroused. A consumer demand is expected in the developing countries of South America and Africa.

## Enquiries:

The firm making the spray is Micron Sprayers Ltd., of Bromyard, Herefordshire, with temporary works at Phillips Street, Birmingham 6, England.

## DIZENGOFF W. A (NIG.) LTD.

PHARMACEUTICAL DEPT.  
28, CREEK ROAD, APAPA.

CYANAMID INTERNATIONAL  
Agricultural & Veterinary  
Products

A - D - VIT Vitamin & Mineral  
Additives for:  
Chicks, Broilers, Breeders  
Layers & Swine.

ALL KINDS OF VETERINARY PRODUCTS  
GERMICIDES AND INSECTICIDES.

"Plants and pests are water-proof but they are not oil-proof," explained Dr. M. S. Barber of the N.R.D.C., "so we are recommending the use of oil-based pesticides."

Mr. Bals has recently been visiting the United States of

ALWAYS

ADVERTISE IN

FARMSTOCK

## TAKE AN ANNUAL SUBSCRIPTION OF

### FARMSTOCK

TO IMPROVE YOUR BUSINESS

It's only 12/- for a year post free.

Contact:-  
Circulation Manager  
P. O. Box 79, EB,  
NIGERIA

YOUR

V. I. P.

To everyone in business there is a V.I.P. Finding him is a problem.

To you the seller your V.I.P. is your BUYER. How does he find you?

A variety of readers and BUYERS for that matter are attracted to our CLASSIFIED ADVERTISEMENT column.

From among them a particular one will be looking for the very thing you are offering.

That one is your V.I.P.

Advertise to get him

See page 14 for Rates. Advertisements should reach us a month before the date of publication.

Continued from page 6

### LAYERS

laying year. Feather growth needs protein, particularly the amino acid cystine, which plays an important part in the chemical structure of the keratin of which feathers are made.

The ration during moulting should therefore contain a good quality protein with a high level of cystine. Any good growers ration, but not one of the "pullet developer" type, is suitable, and should be fed from the time the feathers are seen to be falling until five weeks after the start of the moult, when it is time to return to a complete layers ration.

Egg production begins about 8 weeks after the beginning of the moult, so that by feeding a layers ration from the fifth week the birds have time to build up a sufficient reserve of calcium before laying begins. However if limestone grit or oystershell is available it is quite a good plan to give  $\frac{1}{2}$  ounce per bird on the day corn feeding is begun. This will allow the birds to correct any deficiencies they may have at the end of lay.

The cost of moulting is fairly high. If the birds are out of production for 8 weeks and eat 4 ounces of feed a day at 4d. a pound that will cost 4/8 for 14 lbs. of feed per bird. In addition there is the cost of labour and the room the birds are taking up while not producing.

However it is quite certain that if birds are to be kept for a second year force moulting will improve their performance and profit after the rest.

And if both day old chicks and eggs are in short supply the second year's lay may pay handsomely.

The following figures are an example of how birds can be kept for a second laying period.

### AGE OF BIRDS

0-20 weeks Rearing  
20-48 weeks Laying, first year  
Say 200 eggs per bird, or 20,000 per 100 point of lay.

48-56 weeks Moulting, second year starts with about 75 birds for every 100 which started the first year. 10% may have died, and another 15% then culled before the moult, and sold off

56-96 weeks Second year lay. Eggs per bird expected in a full year would be 80% x 200, but if the second year is not quite completed we could expect about 136 in 40 weeks of lay, 10,200 from 75 birds.

The 100 original birds have therefore produced 30,200 eggs half as many again as they would have done if sold off after the first year. The second year eggs cost more as the example shows. On the other hand the eggs are bigger, and if the price is right and chicks are scarce they may be profitable.

### EXAMPLE COSTING TO SHOW PRODUCTION COSTS OF FIRST AND SECOND YEAR EGGS

FIRST YEAR		SECOND YEAR	
Point of lay cost 100 x 15/-	1500	1500	1500
Feed, 48 weeks at 7d	2800	2800	2800
Total cost	4300	4300	4300
Less culls sold 90 at 6/-	540	540	540
Cost of eggs	3760	3760	3760
Eggs produced, number.	20,000	20,000	20,000
Cost per 1,000 eggs in shillings 188/-			

Readers will understand that these figures are not intended to show all the costs

Continued from page 4

### LETTERS

YORUBA FARMSTOCK Dear Sir,

In recent times, I have come across a few copies of your good paper FARMSTOCK. It is such a good material which should enjoy wide patronage but the main handicap of our people is English. Can't a Yoruba edition of FARMSTOCK be produced.

Oyo

Ayan Jemilade  
May be a Yoruba edition will see the light of day sometime but what of the other Nigerian languages then if a Yoruba edition begins to circulate.

Editor

I'LL QUIT IF

Sir,

I am a school-boy. Every holiday my parents always send us to the farm: we work from morning till night.

When we get yams or maize my parents say they are going to Lagos.

Please Mr Editor, tell them in Lagos, work in the farm is hard, if people want food, they should send machines, if I leave school and we have no machines, I will come to Lagos too and leave hard work,

Epe

O. Rufai

### COSTS OF FIRST AND

SECOND YEAR	
450/- 75 old hens at 6/-	450
350/- moult at 4/8	350
2000/- 40 weeks at 8d	2000
2800/-	2800
402	67 at 6/-
2398	
10,200	
235/-	

happens, and give an idea of how big the difference in costs is likely to be.

From now on and from time to time, we shall spotlight the activities of CO-OPERATIVES in other lands with a dual purpose namely to help Nigerian farmers understand the working of such systems overseas and (most important) apply the principles here. This month therefore, we start with an Israeli Cooperative.

**THE COOPERATIVE: OVERSEAS (ISRAEL)**

**THE POULTRY BREEDERS UNION: ITS AIMS AND FUNCTIONS**

BY OUR SPECIAL CORRESPONDENT

THE NAME IMPLIES, THE POULTRY BREEDERS UNION IS AN ASSOCIATION OF ISRAELI CO-OPERATIVE POULTRY FARMS WHICH PRODUCE BREEDING STOCK. THE UNION INCLUDES ALL BREEDERS, FROM THE HIGHEST LEVEL TO THE COMMERCIAL LEVEL, AND ALL FORMS OF POULTRY: CHICKENS, TURKEYS, DUCKS, AND GEESE. The Union (which we all henceforth call by its Hebrew name, Igud) comprises 126 members from the various parts of cooperative and collective settlements, kibbutzim and moshavim. These farms represent approximately 85 per cent of Israel's total poultry breeding capacity.

**AIMS**  
The Igud has the following principles functions:  
1) To maintain and improve the technical and professional level of its member farms.  
2) To efficiently market both in Israel and abroad the produce of its members.  
3) To achieve the first aim, the Igud maintains a professional and veterinary department staffed by a full-time veterinary doctor and field

advisors. In conjunction with the Israel Poultry Growers association the Igud maintains a full time geneticist. The Igud carries out random-sample field tests for broiler, and its farms comprise 95 per cent of the participants in the government-run random-sample tests at Acre.

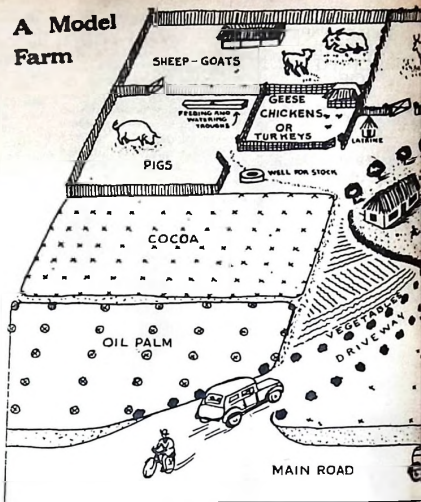
**ANY FARM WHICH DOES NOT MEET THE HIGH STANDARDS SET BY THE IGUD, OR WHICH DOES NOT COMPLY WITH THE INSTRUCTIONS OF THE PROFESSIONAL AND TECHNICAL DEPARTMENTS, CAN BE EXPELLED FROM THE IGUD.**

**SALES**  
The sales division of the Igud, located in its main offices in Tel. Aviv, consists of 60 men and women who are engaged in selling and coordinating shipments. The Igud processes and handles approximately 40 million hatching eggs and another 35 million goes to export, mainly to Europe (Italy, Austria, Greece, France, Spain, etc.) and to Iran. The Igud sells to seven African countries, to several Far Asia, and also to North and South America.

To promote and facilitate this growing export, the Igud has established subsidiary companies and cooperating enterprises overseas:

Continued on page 15

**A Model Farm**



**WHY NOT**

Asks A. K. OLUTO

**OUR COUNTRY NEEDS MORE AND BETTER FARMS IN ORDER TO MEET THE HEAVY DEMANDS OF HER OWN PEOPLE AND FOR THE EXPORT OF FARM PRODUCE. THIS MONTH I SHALL TRY TO ANSWER SOME OF THE QUESTIONS THAT PEOPLE ASK WHO ARE INTERESTED IN SETTING UP THEIR OWN FARMS.**

**CAPITAL**

In farming as in any other business, you can start with little capital, and by hard work, you can earn a very good living. But more capital has its advantages in that you will be able to invest in better land, modern implements and farm machinery.

The fact that you have little capital should not keep you back, however. What you will need most of all is enthusiasm, confidence in the future and willingness to work hard. If the outlay will be too much for you alone, you can make it a joint venture with enthusiastic friends

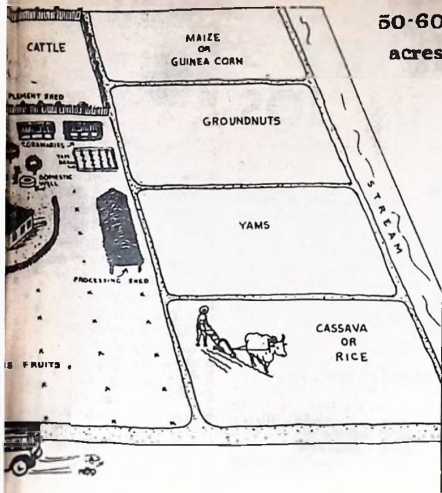
or raise loans

**LAND**

In some areas it is possible to buy land for farming purposes. Land is also leased or rented to individuals or families who own land. The local authority, in your area, will tell you how to find out about this.

In choosing your farm, be sure the land is fertile. Look to see what kind of plants are already growing on it. Check with the nearest Agricultural advisory office. He will know whether the land will be good for farming.

The land should have



50-60  
acres

simple kerosene or pressure lamps will provide good lighting for your house and farm buildings.

#### TYPE OF FARMING

In order to produce all the types of food which we need or healthy living, most farmers practise mixed farming. Mixed farming includes both the cultivation of the soil and the rearing of animals.

If one decides to raise animals (sheep and goats, for example), it is advisable to pick them from a good breed in the locality in which one is farming. In this way one will avoid the big problem of diseases and pests. Besides, the atmosphere will not be strange to them.

Far too many farmers depend on hunting for their supply of meat. This is a foolish practice. They should keep a few heads of sheep

and goats from which they could slaughter, take a little for food, and salt or dry the rest of it for future use.

This is the way the salted meat you buy in the market is prepared.

A wise farmer will produce his own meat. He will also have his own chickens, eggs, vegetable, and other food crops. He will be able to eat well and to invest in better living.

#### TECHNICAL KNOWLEDGE AND EXPERIENCE

Visit good farms in your area. Some farmers will be glad to advise you. You can also work as a farm labourer under a good farmer to gain experience. There are also good books on farming that you can read; they will be helpful. Choose the book that tell about the kind of

Continue on page 15

## RY FARMING ?

Our Farming Correspondent

uncontaminated, continuous, clean water supply, even in the dry season, either from high water level wells or streams. Your farm should be near a good market, and it must have good transport facilities to nearby markets and towns.

Your farm should be compact; that is, the whole farm area should be enclosed within one ring boundary. For a start you need between 50 to 60 acres divided up as shown in the accompanying diagram above.

#### LIVING QUARTERS

This is most important. You must live on your farm. Your house and other farm buildings must be in the centre of your farm. You must have a road leading through your farm right to your house.

In all the highly developed countries, this system is followed. It makes possible continuous and detailed observation and supervision, which are necessary in all agricultural work.

#### TYPE OF HOUSE

If you are starting off with reasonable capital, a simple, modern block or brick house is good. It should have a water supply and good sanitation.

If you do not have much capital, a mud or bamboo hut with waterproof roofing, concrete floors, and adequate ventilation is good enough for a start and will cost a lot less than a block or brick house. Grass lawns and flowers around the outside of any house will make it attractive.

If you cannot have a supply of electricity to start with,

## JOHN HOLT MOTORS



FORD TRACTORS • EQUIPMENT



J. ALLEN & CO. LTD.

BRANCHES AT

LAGOS, APAPA, IBADAN, BENIN,  
WARRI, KANO, KADUNA, JOS, ZARIA.

AGENTS FOR

RANSOMES EQUIPMENT,  
NEW HOLLAND GRASS MACHINERY,  
PARROT IRRIGATION.

## BENUE/PLATEAU TAKES A BIG FORWARD LEAP

# 20,000, POULTRY FARM OPENS IN JOS

The commencement of a huge poultry business in Jos has been announced. The Company - Highland Farm - is to begin operations with some 3,000 layers which

are expected to feed Jos and environs with about 10,000 eggs weekly.

This is an attempt to boost the State's economy in particular and Nigeria's generally according to the Managing Director - Mr. Ayo Kehinde. At the head of a team

of 50 farm workers is Dr. C. A. Ogunbuyide formerly of Veterinary Research, Vom, a qualified agronomist who had studied in India, Britain and Denmark. He is the Farm Manager. He specializes in animal nutrition, animal breeding and parasitology.

## YOUNG FARMERS MEET

A three-day annual meeting of Young Farmers Clubs has just ended near Lake Natu at Bakura Farm.

This was disclosed by the Assistant Agricultural Superintendent, Malam Adamu Warina release issued recently by the Ministry of Natural Resources. The meeting which was attended by three delegates from each of the sixty Young Farmers Clubs in Sokoto Province, and some delegates from Niger Province and Agricultural Extension Staff was designed to promote mutual understanding and to exchange ideas on the work of clubs.

The release added that delegates had lectures on club activities, crop production, poultry and several other subjects.

## 'PAY GOOD PRICE' - GOV.

The North Western State Military Governor, Police Chief Superintendent Usman Faruk has called on the management of the Northern States Marketing Board to reconsider the current price offered by the Board farmers for their shea-nut produce.

Chief Superintendent Usman Faruk was in his office exchanging views with the Chairman of the Marketing Board, Alhaji Idris Gana, Etsu Paregi, and the General Manager, Alhaji Ahmadu Kurfi who called on him at the Government House recently.

The Governor observed that the present low price of £16 per ton offered by the Board has led the farmers to sell their produce at higher prices in the black market. He also accused some un-

scrupulous Local Buying Agents who, he alleged, were collaborating with some other dealers to 'smuggle' agricultural products outside the country. Governor Faruk described the practice as highly unpatriotic which, he added would have adverse effect on the country's economy.

The Governor said that his Government would cooperate fully with the Marketing Board to curb smuggling practice of agricultural products by Local Buying Agents or any other body concerned.

Replying, the Chairman thanked Governor and promised that the Board would try to boost agricultural production and offer more attractive remuneration to farmers.

## Clans Offer Land

VARIOUS CLANS IN OGOJA DIVISION HAVE OFFERED DIFFERENT PARCELS OF LAND TO THE STATE GOVERNMENT FOR AGRICULTURAL PROJECTS.

THIS IS IN RESPONSE TO THE GOVERNMENT'S RECENT APPEAL TO COMMUNITIES AND INDIVIDUALS THROUGHOUT THE STATE TO SET ASIDE ENOUGH LAND FOR THE EMERGENCY FOOD PRODUCTION PROGRAMME SOON TO BE LAUNCHED IN THE STATE.

Announcing this in Ogoja recently, the Divisional Officer for Ogoja, Mr. Damian Atuaka, said he has received

letters from Akajuk, Kakwagom, Iruuan and Echumofana (Easte Ymola) clans, offering from 5,000 acres to six square miles of land each, to the Government for the proposed scheme.

He said that many more clans, communities and individuals have indicated their willingness to offer more land to the State Government.

## NEWS

### FOUR AGRIC SHOWS START IN WEST

Some four Agricultural Shows have been arranged to take place in the Western State between this month and next February. The Shows will feature a number of agricultural implements and products.

The first of the Shows starts in Durban School Oyo, (Nov. 20 - 22) followed by the second in Remo Plantation, Ikenne (Dec. 18 - 20). The third is at Ile Oluji Farm Settlement near Ondo (Jan. 15 - 17 1970) while the last will be at Fajuyi Memorial Recreation Centre, Old Race Course, Ibadan, (Feb. 16 - 21 1970).

The Shows are planned to enable farmers in each locality to meet and discuss common problems. But much more important is the competition which will stimulate better production.

The display of agricultural machinery will also be of interest to the farmers who will see how gainful farming can be done without tears through the help of such implements.

## Let us discuss some common rabbit terms

BY A. K. OLUKOTUN

In discussing rabbit, we will always come across some words that we may not have come across while dealing with some other animals. In this article I will try and explain as simply as I can some of such words as they apply to rabbit keeping.

**HUTCH**- The word hutch is used for describing a cage in which a rabbit is housed - usually such cage is designed to provide housing and comfort for the rabbit. The minimum floor space desirable should not be less than 3ft by 4ft in base and not less than 2ft in height for each adult rabbit.

young ones we say it kin-lies

**LITTER**- The young ones that a rabbit gives birth to are called litters. The number given birth to is often refer-

doe after 6-8 weeks described as weaners.

**ROASTERS**- Rabbits bred for table and weighing 6 lbs - 10 lbs and above

**FRYERS**- Rabbit meant for table and weighing



red to as in the case of six - 'Six in the litter'.

**GESTATION PERIOD**- This is the period during which the breeding doe carries its pregnancy - usually 30-32 days.

**RABBIT FUR**- The fluffy hair attached to the rabbit skin is called the fur. Rabbit fur has good market value.

**WEANING**- This is the process by which the young rabbits are separated from the nursing doe at usually six to eight weeks.

**WEANERS**- The young rabbits called litters separated from the

1½ to 2½ lbs are described as fryers. People who like succulent meat find this to be very tasty.

**RABBIT PELLETS** This is the feed made specially for feeding rabbit and containing varying ingredients. The constituent of the pellets varies depending on the manufacturer and is usually about 3/16 in diameter and 1/8 long.

**CANNIBALISM** - Sometimes a doe kills its young ones for no apparent reasons and in some cases of nutritional deficiency, the

*Continue on page 15*

## RABBITS

Why not make money during your tax periods. An out-house, a disused garrage or empty backyard can fetch you extra money from rabbits.

**HYBRID**

**NORFOLK**

**WHITE**

Fast breeding English rabbits produce more than any other breed. Pamphlet on feeding & care given with each order.

### MINIMUM ORDER:

10 rabbits of 9 females and 1 male.

For more details on price & delivery arrangements please contact

**FARMSTOCK (Rabbits)**  
17, Abeokuta Street,  
P. O. Box 79, E.B.  
Lagos State, Nigeria

**THE BUCK**- The male rabbit is called the buck, and is identified by the conspicuous presence, in the adult rabbit, of a pair of testis. The young buck can be identified by a tube-like projection in centre of a small slit

**SEX DETERMINATION IS EASY AT EIGHT WEEKS OLD**

**KINDLE**- When a female rabbit gives birth to

## ADVERTISEMENT RATES

<u>INSIDE PAGES</u>	1-5	6-11	12 or more
Full Page	£30	£29:10/-	£29
Half Page	£17:10/-	£16:10/-	£16
Quarter Page	£10	£9	£8
<u>COVER PAGES</u>			
Back Cover	£40	£38:10/-	£38
Inside Front Cover	£35	£33:10/-	£33
Inside Back Cover	£32:10/-	£31:10/-	£31
<u>FRONT PAGE SOLUS</u> (6" x 8")	£50	£47:10/-	£42:10/-
<u>SINGLE COLUMN INCH</u>	25/-	22/6d	21/-
<u>LOOSE INSERTS CHARGES</u>	£20	£19	£18

Plus £1 : 5/- per 1000 inserting cost.

### CLASSIFIED ADVERTISEMENT

Rate 6d a word. Minimum Order 5/- prepaid. Discount 5%, 7½% or 10% for 13, 26 or 52 insertions. Advertisement must reach the Head Office three weeks before the date of issue.

Note: These rates are for Black & White. Additional charge per colour is £10

### MECHANICAL DETAILS

Type Area 10 x 7 ½ sq inches

Size of Magazine 11" x 8 ½ sq inches

### FOUR COLUMNS

Column width 1 ½ ins., 3 ½ ins., 5 ½ ins., 7 ½ ins.,  
Column length 10 ins.

Serious: 85 for cover pages 65 for inside pages (Half-tones) matrices and stereos accepted except for cover advertisements.

Print Order: 9000. Copies Sold 6000.

The Circulation Manager,  
FARMSTOCK,  
P. O. Box 79, Ebute-Meta, Nigeria.

COUPON

4 months (7s 6d)

1 year (12s)

Tick the applicable

Please send me for the next.....months a monthly issue of  
FARMSTOCK, commencing from.....

I enclose.....for the period please.

Date .....

Name & Address.....

Continued from page 13

## RABBITS

young ones may be devoured. Cannibalism is practised by bucks where they are in a herd and are struggling for supremacy over a doe. In the process of struggling, the bucks may bit each other's testis off. Cannibalism is a bad characteristic which can be stopped by culling (removing) the rabbit with bad characteristics (culprits).

### QUESTION POINT:

**Q. I LIKE LOOKING AT RABBITS IN THE CAGES BUT I AM ALWAYS AFRAID TO HOLD THEM BECAUSE I AM AFRAID I MAY BE BITTEN.**

**A. RABBIS DO NOT BITE, RATHER THEY SCRATCH WITH THEIR CLAWS AND THIS MAY BE SO PAINFUL THAT YOU MAY BE FORCED TO DROP THE RABBIT BUT IF YOU LEARN TO HANDLE THEM PROPERLY, YOU WILL ENJOY HANDLING RABBITS**

Continued from page 11

## FARMING

farming that is done in your area.

Go to see the local agricultural advisory officer; he will do all he can to help you, and will advise you well. Finally, find out what services and training your government offers for men who wish to start farming.

A good farmer must be physically fit. He must have good intelligence and a methodical mind, and he must be ready to work hard. Life is good and full for the man who really determines to be a successful farmer.

## WITHOUT ANY DIFFICULTY

### HANDLING RABBITS

**SMALL RABBIT.** Lift small rabbits by grasping between the hips and the ribs. Never

by the ear or neck.

**MEDIUM & HEAVY WEIGHT.** Hold by the fold of skin over the shoulder and support the back with the palm of the other hand

**ITALY:** Anak Italia-Tabor, Italian-Israeli Hatcheries near Rome, is one of the largest and most modern in the area. From this hatchery the Igud distributes to many other European countries, including Eastern Europe.

### S. AMERICA

Anak-Sudamerica is a joint company founded in Buenos Aires, franchised farms and hatcheries investors. This company has established multiplying farms and hatcheries in South America and they receive the primary feeding stock from Israel.

**U. S. A.:** Poultry Breeders International Toms River, New Jersey, is the representative of the Igud in North America, and they are primarily engaged in the sale and distribution of Israel parent stock.

## THE WORKING SYSTEM

Although it is essentially a commercial firm engaged in a highly competitive business, the Igud maintains its unique cooperative character. The governing body is the annual general meeting of all the member farms, and this body is the final authority.

This general meeting elects an advisory council of 20 members which meets intermittently during the year to hear the reports of the directors and to take broad decisions when necessary.

The activities of the Igud are supervised by the executive committee of seven members which meets once a week. Day-to-day business decisions and functions are managed by two full-time directors.

As in all cooperative associations of this nature, there is a control committee of three members to guarantee that all is in order according to the constitution.

The Poultry Breeders Union includes 17 broiler pedigree farms and 8 egg-layer breeding farms. All work is done in close cooperation.

These breeding farms supply the breeding stock for the multiplier-flocks. More than 120 farms producing hatching eggs are associated with the Igud.

### THE BROILER STRAINS

The Igud developed two different broiler crosses, because it has to meet a wide range of environmental and market demands, which is too much to expect from a single genetic combination.

For markets that emphasize broad-breast, classical broiler conformation and yellowish skin pigmentation, the right broiler is Anak-Cornish. For intensive operation and competitive conditions, where it is necessary to emphasize a fast growth rate and low production costs for markets that place a premium on light skin and perfect conformation, the right broiler is "Anak"

making sure the legs face upwards or away or sideways to your body. Never by the hind legs.

With a number of practice you would soon become an expert.

### Laying Strains

## YANIV, YARKON, YAFFA

The trade mark of these three excellent egg layers is Isra Hen, the superior egg layer.

**YANIV** - The light white bird for highest net profit. Lays a white shelled egg, has the most efficient egg production and a very high livability.

**YARKON** - The most popular egg layer of Israel. It has the highest egg production, an exceptional livability, and a tinted shell. The Yarkon is a strain-cross between the Yaffa male and the Yaniv Female.

**YAFFA** - Exceptionally docile, very productive reddish-brown layer with large brown eggs. The ideal egg layer for range farming and for markets demanding brown eggs.

**TURKEYS** - The royal white broad-breasted turkey is a strain-cross between an extremely broad male and a fast growing female. This all white turkey gives an extraordinarily high meat yield and can be slaughtered at an early age.

*The Poultry Breeders Union has made a name for itself in the international poultry market thanks to successful performance of its stock and its willingness and ability to meet the market demands and to satisfy the needs of the growers.*

# An 'Impossible' Dream That Came True

by Sam. W. Morris, U. S. Agricultural Writer

**SUMMARY** The cooperative Farm Credit System, started 51 years ago with federal financing, has finally become totally farmer-operated and farmer-owned. It consists of 37 banks and 1,100 cooperative credit associations, and serves 900,000 farmer-members and three million members of cooperatives. It provides credit tailored to meet the needs of individual farmers and help them keep pace with rapid scientific and technological advances in agriculture. The Farm Credit System: supplies about one-fifth of all the agricultural credit in the United States today.

**"IT WAS A BIG DREAM—AN IMPOSSIBLE DREAM  
I—BUT IT HAS COME TRUE.**

**THIS WAS THE COMMENT OF A LEADING AMERICAN BANKER AS HE REFERRED TO THE COOPERATIVE FARM CREDIT SYSTEM (FCS), WHICH HAS AT LAST BECOME EXCLUSIVELY FARMER-OPERATED AND FARMER-OWNED AFTER A 51-YEAR FINANCIAL PARTNERSHIP WITH THE U. S. GOVERNMENT.**

Consisting of 37 banks and 1,100 cooperative credit associations, the Farm Credit System came under sole control and ownership of farmers on December 31, 1968, when it paid about £70 million to retire the remaining Government-held capitals.

The System, which serves 900,000 farmer-members and three million members of cooperatives, supplies about one-fifth of all the agricultural credit in the United States today. It provides farmers with about £500 million credit annually, has about £6000 million in loans outstanding, and has a net worth about £1000 million.

"The Farm Credit System," said R. B. Tootell, governor of the Farm Credit Administration, an independent government agency had supervised FCS, "is one of most important assets American farmers had today

## ASSURANCE TO FARMERS

"It assures farmers and their cooperatives adequate amount of credit on terms suited to their individual needs because the System channels investment funds from the nation's financial

markets to the capital-hungry rural areas where it is needed more and more.

"Success of the Farm Credit System has been due largely to the ability to set the pace for other lenders. Because it is operated by farmers for farmers, the System is always under pressure to adapt the terms to agriculture's ever changing needs.

Other lenders tend to follow the lead of the System in order to remain competitive.

"The rapid rise in the productive efficiency of U. S. farmers has been due, in large part, to the fact that the Farm Credit System has led the way in providing credit to farmers. A ready supply of credit has enabled farmers to substitute large amounts of capital, much of it borrowed, for labour as new technology has become available.

"A half century ago very few people believed farmers could become their own bankers. Farmers have proved it could be done."

U. S. agriculture is now using more than about £2,500 million in credit compared to about £10,000 million just 10 years ago. Of the £25,000 million, the

Government's first credit programme, the forerunner of what is today the large cooperative credit system of the world.

Agriculture, America's largest industry, has always required ever-increasing amounts of capital to keep pace with the tremendous advances in science and technology and to raise the productive efficiency of farms to feed not only the U. S. population but millions of hungry people in food deficient countries.

## NEEDED HELP

The Farm Credit System has been a major factor in obtaining the credit farmers needed to remain in the business of growing food and fibre. It has played an important part in enabling farmers generally, not just favoured few, to quickly adopt the latest agricultural advances.

"Credit, tailored to the needs of the individual farmer, is an important agricultural tool in the United States—a tool supplied by organizations that farmers now own completely," Mr. Tootell said.

"This total control and ownership is a truly significant accomplishment. It is an example—proving to the entire world—that people working together, with Government sympathetic to their needs, can achieve a dream many once believed to be unattainable."

Farm Credit System supplies about £6000 million to farmers and cooperatives.

Since 1950 the use of credit by American farmers in traditionally capital-short rural areas has increased almost five times. Economists predict farmers will double their current usage of credit money by 1980.

## THE SYSTEM

The System, consisting of 12 Federal land banks, 12 Federal intermediate credit banks and 13 banks for cooperatives, acquire its loan funds by selling bonds and debentures to the investing public.

The System is often described as "the bridge between Wall Street (the nation's major financial district in New York City) and the farmer."

The U. S. Government, which initially capitalised the Farm Credit System, had a peak capital investment in it of about £320 million in the 1930's.

When Congress passed the Farm Credit Act of 1916, creating 12 Federal land banks, it established the go-

## ORGANIZE A FARMERS CLUB

IN YOUR AREA AND INFORM FARMSTOCK

We shall help build it

# nothing but the best for this breeding programme

by  
**ANDREW TOWNLEY**  
*Milk Marketing Board, Surrey*

## 200 BULLS ON ONE FARM



About two-thirds of the cattle born in England and Wales are sired by artificial insemination and about 1,750,000 of these insemination - or 80 per cent. - are carried out by the Milk Marketing Board, which has the largest A. I. stud in the world.

How does the board choose its bulls and ensure that it gives the best possible service to the farmer?

Obviously, only better than average bulls are used for A. I. To illustrate the A. I. programme, think of an imaginary but typical dairy bull. His story really started before he was born, when a Milk Board livestock officer was studying details of milk-recorded herds. The officer spotted that a particular cow was giving above average milk yields with good butterfat content.

The cow's owner agreed that she could be used for breeding. An independent panel of farmers studied the cow's conformation and records and gave its O.K. The cow was then mated to a top Milk Board bull. So, even before the bull calf's birth, records and conformation had played their part.

### INSPECTED AND APPROVED

Shortly after a bull calf had been born it was bought by the Board and inspected by a Milk Marketing Board veterinary officer. After a satisfactory report the calf was despatched to the board's calf rearing unit.

Visiting breeders inspected him and after two rigorous move him to one of the board's 23 A. I. centres for his test inseminations. During this period his semen was used to inseminate up to 300 dairy cows. This resulted in a sufficient number of his daughters themselves giving birth to calves, and



Examining the quality of semen under a microscope at a Milk Marketing Board artificial insemination laboratory.

Ministry of Agriculture veterinary inspections he was approved to begin test inseminations.

Tests up until now had shown that the bull was a satisfactory type, but it was still not known whether or not he could pass on his characteristics to his progeny.

The next step was to the amount of milk produced by these cows as well as a great deal of other information was carefully recorded.

The testing is elaborate and takes a long time. In fact from the time the bull's first insemination was completed until daughter records became available was some four-and-a-half years.

During that period there were several ways of accommodating the bull - one of the many hundreds of animals owned by the board but temporarily unwanted. He could have been loaned to a farmer to keep and maintain him for the necessary period. Or he could have been "laid off" in premises rented at the Royal Agricultural Centre of England.

But in the event, our bull was despatched to a special lay-off farm owned by the board. This centre, in Yorkshire, can accommodate up to 200 bulls. It was the first farm in Britain to keep large numbers of mature bulls. To the surprise of many, the bulls seldom give more trouble than a herd of cows. In fact the bulls, which are turned out to grass in groups of 20, surrounded by high-tensile wire fences, soon settle down to a steady routine.

To return to the bull: finer enough of his daughters were milking they were inspected by a panel of practical breeders. When later records showed they were milking well, the bull was at last sent to an A. I. centre and his desirable genes were spread as widely as possible through cattle of his breed.

So much care was taken in the selection of one bull because the board, like every other organisation involved in A. I., realises the tremendous impact which even one bull can have on the national herd. Semen from one bull can be used to get as many as 50,000 cows in-calf. Improved techniques ensure not only that all the semen is

Continued from page 17

## BREEDING PROGRAMME

used to the best possible advantage but that it can be stored and used long after the animal's death.

Although most of the board's stud consists of dairy bulls, every year beef bulls are used for more than 500,000 inseminations. The same meticulous care is taken over them.

In fact, the Milk Marketing Board has a beef progeny testing station which provides extensive progeny test information on the beef bulls in its A. I. stud.

## ACCESS TO BEST BULLS

In all, British breeders and A. I. organisations invest huge sums of money every year in testing bulls to assess their breeding value. British Semen Exports Ltd. has access to many of the best bulls in Britain. This company exports semen from pedigree dairy or beef bulls to many parts of the globe.

As an extra check, every export of semen is licensed by the Government, who are responsible for investigating and approving the breeding history of the bull and the place where his semen is processed and stored.

Frequent checks are made on semen in store to ensure that the quality is maintained up to the time it leaves the country. Bulls are certified free from brucellosis, vibriosis and trichomoniasis. Government veterinary certificates provided to show freedom from foot-and-mouth disease.

The result is that through the company, semen can safely be bought from the best breeding stock in Britain — and many people feel that means the world!

# LAUGH !!!

"Laugh and the whole world laughs with you, frown and you wrinkle your face alone."

*ON THE day of the championship football match, thousands of vehicles inched to the stand of the stadium. Police waved the cars in and parking attendants squeezed them into narrow spaces. By the time the game was under way, officials were congratulating one another on the way they had handled the traffic.*

*Then they heard someone crying. It was a woman sobbing at the wheel of a parking car, with her frightened children in the back seat. They asked her what was wrong. "All we were trying to do," sobbed the mother, "was to go to the shop for some bread."*

x x x

*An arrival at the Iddo Terminal of the Nigerian Railway Corporation, Malam Tanks was lucky to get a porter who went out of his way to help him with his many luggages. As he went out from the railway station he said to the porter. "I am very happy about the way you have helped me with my luggages."*

*I should have given you some monetary reward, but I see written on your cap N. R. C. meaning, 'not receiving cash'. "Sorry sir, you've got it wrong," said the porter promptly. "It means, never refuse cash."*

x x x

*THE KING sat in his lounge watching the preparation for an execution. Then the jester opened the door quietly and came in, and as he was going slowly towards the king, the monarch roared at him in anger. "It is of no use coming to me, I shall never grant any of your requests today." Said the king.*

*Instantly the jester prostrated before the king and said "I implore your imperial majesty to put to death at once that scamp of my," pointing to his cousin.*

*The king, thus caught in his own trap, was obliged to set the condemned man free.*

x x x

*A game hunter loaded his gun, then took his aim at a large hawk and shot it through the side. From the tall palm tree the bird crashed to the ground with a heavy thud. A man said to him, "you could have saved your cartridge, the fall alone could have killed the bird."*

x x x

*ONE MORNING my husband shared a bus seat with a pretty young woman who was wearing a scent that struck him as particularly appealing. "I beg your pardon," he said, "but would you mind telling me the name of your perfume? I'd like to buy some for my wife."*

*After looking him up and down haughtily, she told him. Then, rising to leave the bus, she added, "wouldn't buy it for her, if I were you. If you do, all kinds of strange men will be trying to talk to her."*

x x x

*A MARRIED man is a bachelor who didn't notice when a girl closed the escape hatch.*

x x x

*A GANG of clever robbers was busy counting piles of banknotes, booty from a successful bank raid, when one of the counters gasping for breath muttered, "Stop counting, lifting up the bank and ask how much is missing....."*