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contents

FARMSTOCK

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New Equipment

AUTOMATIC EGG GRADING AND PACKING MACHINE

BRITISH FIRM—BEN NEVIS EGG EQUIPMENT LTD., TROWBRIDGE, WILTSHIRE, ENGLAND—HAS LAUNCHED A NEW AUTOMATIC EGG GRADING AND PACKING MACHINE.

Girls can operate the automatic, high Capacity, loading, candling, grading and packing unit—capable of handling 10,800 eggs an hour.

The eggs, 15 at a time, are passed on a three-track conveyor into a candling unit, where powerful lights and mirror reflection help in the detection of all types of egg fault.

From this stage the eggs move on and are sorted, by weight, into their correct grade. Final stage embraces the stamping of the eggs, which are aligned and collected into rows in the packing head. Here sets of nylon fingers receive and gently place the eggs into automatically conveyed cartons.

The machine is ready for export. The manufacturers will entertain enquiries from overseas.

Please mention FARMSTOCK Magazine as your source of information.

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NEW BRITISH TECHNIQUE IN SEED PLANTING

A MACHINE just produced could prove a great boon to farmers throughout the world. Called the 3-D Drill, it is claimed by the British makers to be the first commercial machine designed for drilling seed direct into uncultivated soil. The 3-D Drill featured at the Royal Smithfield Show at Earls Court, London, recently.

Though primarily designed for sowing cereals and kale, the 3-D Drill has also been successful with other crops such as beans and rape. It will also operate on conventional seedbeds or following minimal cultivation.

Its triple-disc coulter is a special feature, capable of penetrating hard, dry soils and of cutting through heavy trash and deposit seed at a uniform depth with minimum soil disturbance. The small-diameter front disc cuts a narrow slot in the soil, and the larger inclined pair of discs expand this to receive seed and fertilizer.

Normally the front disc is set ½-inch lower than the rear discs ; but this can be reversed to limit penetration in soft soils or in a cultivated seed bed by raising the drawbar hitch or adjusting the position of the front discs.

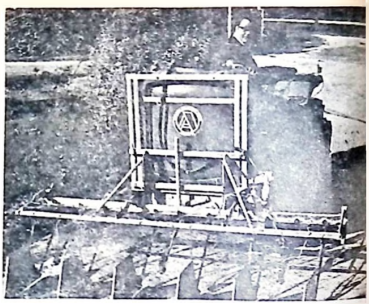
The 15 coulters adjustable are normally set at 7-inch spacing. They are actuated through their springs by a single-acting hydraulic ram operating from the tractor but for overseas use the springs may be replaced by a double-acting ram to allow the use of lower pressure hydraulic systems.

The hopper feeding the 15 rows has a capacity of 35 cu. feet. (or about 18 cwt.), and the ratio of seed to fertiliser can be changed by an adjustable partition.

Capable of working at a speed of 8 m.p.h., the 3-D Drill requires a tractor of 65 horse-power or more.

(*Designers: Plant Protection Limited, ICI House, Millbank, London.*

Makers: John Darbyshire and Co. Limited, Sumercotes, Derbyshire.)



New Attachment Converts Conventional Sprayer For Inter-Row Spraying

This new Sprayro attachment—shown here working on concrete to demonstrate the accuracy of application—has been developed by a British Company to convert conventional crop sprayers to low pressure inter-row units.

The Sprayro is an 8-foot (about 2.4 m.) wide toolframe that carries three Plant Protection Vibrajet nozzles and six crop protection shields, hinged to follow ground contours. Conversion is simple : the conventional boom is removed, the attachment put in its place and connected to the plastic spray tank.

The machine is designed for the application of chemicals for inter-row weed control in such row crops as grass seed, brassicas, dwarf beans and strawberries.

The Sprayro can also be supplied with four Vibrajets—or as a complete unit with tractor-mounted tank, pump and full instrumentation. It was exhibited at the 1968 Royal Smithfield Show held at Earls Court, London, recently.

WORLD-WIDE ATTRACTION OF THE POULTRY SHOW

The International Poultry Show, held at Olympia, London, last December broke at least two records: it was the biggest ever, and it attracted more overseas visitors than ever before.

BY
GEORGE MAY
"OF 'POULTRY WORLD"
LONDON

MORE overseas visitors than ever attended the last International Poultry Show, held at Olympia, London, early in last December. They were admitted free and had their own lounge. The show was the largest since its foundation in 1945.

It had been transferred from the National Hall to the much larger Grand Hall and Gallery, which meant that everyone on the waiting list could be accommodated. More than 130 trade exhibitors occupied 87,540 square feet (8,133 square metres) of floor space.

Among them were leading enterprises from Belgium, Denmark, France, Germany, Italy, the Netherlands and the United States of America.

Among more than 100 additional prizes on offer were those from the National Association of Poultry Packers and the British Turkey Federation. There are, of course, the International Poultry Show championship trophies themselves, and the coveted Ludovici prizes from the Poultry Club of Great Britain.

THOUSAND OF BIRDS A DAY

British representation was wide. The range of housing, equipment and ancillary trades included everything from a chick wing-band to table poultry processing machinery, capable of handling tens of thousands of birds a day.

On the housing side, controlled environment and mechanisation predominated. Manufacturers brought forward their latest completely automated rearing and laying cages which reduced labour requirements.

Those rearing cages included units easily convertible to accommodate stocks from the day-old stage right through to the end of their period of lay. The more orthodox laying cages were in flat-deck, California-type and two-, three- and four-tier upright. Most were fully mechanised and more than one were equipped with automatic egg collecting machinery.

The world poultry industry has come a long way since incubators were measured in 1,000-egg capacity. Today the hatchery-man talks in tens of thousands and uses machines into which he wheels trolleys fully laden, tier upon tier, with hatching eggs.

Several types of these "walk-in" machines were on view at Olympia ; so were the smaller machines suited to the specialised hatchery - man. There were brooding equipment in a wide variety, deriving heat from many sources.

Egg - grading equipment ranged from the smaller type to the mammoth grader with automatic packing. Adjoining stands displayed egg-washing equipment.

Table poultry processing machinery has made tremendous advances in recent years; top manufacturers were at Olympia with their newest machines. There was something for everyone—the smaller producer and the processor whose station input runs into thousands of birds hourly.

Neither had to look far for packaging material suited to his individual needs.

Behind the equipment and housing manufacturers will be the suppliers of feed-stuffs, veterinary, hygienic and medicinal requirements. Stock interests were covered by the many breeders at the show.

BIGGEST DEADSTOCK SHOW

The favourite of all showgoers was the competitive live and deadstock sections. The deadstock classes were claimed to be the largest at any show in the world. They included freshly-killed and oven-ready chickens in the popular market weights and a huge display of turkeys.

Classes were for single birds, pairs and market packs, all competing for trophies.

The livestock included all those pure breeds, which ruled the roost before the advent of the hybrid, and many others whose names were once famous in the poultry show ring.

They probably, were not in the public eye as much as at the turn of the century, but as a spectacle, they still appealed to poultry-keepers of all classes and were always a popular feature at the show.

This section had the backing of several specialist breeds societies.

Bantams, as usual in show circles nowadays outnumbered large fowls by two to one; at Olympia they were virtually a show in themselves.

Nearly 900 signatures of overseas visitors from more than 50 countries appeard in the records of the 1966 International show (the 1967 event was cancelled because of foot-and-mouth disease). That number was likely to be well exceeded.

LETTERS

FREE MILK IN SCHOOLS PLEASE

Sir,

YOUR series on Milk is very educative. From the series, one easily gathers how helpful to the body milk is.

Since not every child can win a scholarship, but every child is needed as a citizen one day, is it not more beneficial socially to give every child free milk daily ? The Education Department should bear the cost.

Offa *LERE SALISU.*

FREE MILK IN SCHO... PLEASE

UNPRODUCTIVITY ... LUX AT AGEGE

Sir,

METHINKS time was... to stop the UNP... DUCTIVITY in grand s... at the Government F... Agege.

Nigeria cannot afford... be wasting fortunes on unp... ductivity as at Agege.

I am suggesting the foll... ing measures : a close-u... of the place, turn the wh... of our Agricultural Dep... ment into a self-suppor... Corporation or hand it o... to progressive farmers to r...

Ilaro *O. O. A...*

X X X

FARMSTOCK GOES BREADWISE

Sir,

ONE cannot help prai... the expertise with wh... your article on BREAD ... been written.

This is the first time ... paper delves into our fo... problem. As you have g... breadwise, please find sp... for other foodstuffs to h... us-apish as we are—to get least a warning against ... unbriddled copy-craze.

Ilorin *YAKUB L...*

ARE THERE VET OFFICERS ?

Sir,

SUCH ink has been spil... and a lot of ene... wasted by many who ... been writing to ask for ... whereabouts of Vet Offi... in this country.

Your paper continues ... advise one to contact ... nearest Veterinary Officer ... this or that complaint : ... truly no one has been se... any of such people.

Personally, I want ... Farmstock to find out ... the benefit of all if the Fed... Military Government has ... Veterinary Department at ... If such a department ex... where are those being ... for what there please ?

EBUN KO...

Yaba-Surulere

MONTHLY ADVISORY SERIES

PLANNING A LAYIN UNIT (2)

LAST MONTH'S article discussed planning a laying unit to meet the expected needs of customers for eggs. There are two other important questions to ask oneself when planning the unit apart from " How much can I sell ?" These are " How much money should I invest ? ", and " How big a unit can I manage ?"

" These questions are important because although customer demands fix the maximum size of the unit, it is not always in the best interests of the farmer to try to produce as much as he could sell.

1. It may be possible to buy eggs at some times of year more cheaply than he can produce them. Or his money may be more profitably invested by trading in eggs.

How much money is needed for egg production ? There are three main aspects needing money.

1. Land and services.

2. Buildings and equipment.

3. Birds.

Little need be said here about land and services, but

by

L. J. Elmslie M. A. (Cantab)

Specialising in Agriculture

Technical Director, Ejinaka & Thornber Ltd.

2. He may have some other business in which his money would earn more profit.

3. He may be short of money. It is useless to try to keep more hens than one can feed.

4. There may not be too much room in the poultry farm. Crowding birds on one site can bring disease problems.

5. The people who are looking after the birds may not be too experieneed.

It is better to learn on a few birds rather than many.

All these factors should be considered in planning how many layers to keep and making the farm plan.

they are costly for many farmers. As well as the cost of land there is the cost of any roads, fences and water supplies that may be needed. All should be considered in planning.

Buildings and equipment are the easiest items to cost. The money to be spent can be calculated quite easily once the system to be used has been chosen. The costs and advantages of various systems will be considered in a later article in this series.

Let us only say here that the housing cost for a laying bird should not exceed £1 and that for a grower should not exceed 15/-.

The cost of rearing birds up to the time they come into lay is an important part of the farmers' capital. As well as the cost of the day old chick there is food, labour, medication, litter and other costs which all mount up as the birds get older.

The total money sp each layer before it is enough to meet cum penses will be about 1 very important that the should have that money able at the right time, takes planning.

Continued on page

NEWS

FARMING BRIEFS

SUITAN OF SOKOTO EXCEIS IN AGRICULTURE

THE Sultan of Sokoto has been commended for presenting the best cotton fibre at the last Agricultural Show held in his Emirate.

The Emir received a tray of "Three Rings." He later enjoined all farmers to make use of modern equipment to help them in mass production of their cropos.

FARMERS ASSURED

THE farmers of Southern Eastern State have ended a conference. One of the speakers Mr. S. Udo-Inyang, Commissioner for Finance and Economic Planning, assured the farmers of the support, morally and financially, of the State Government

PROGRESS AT BORNU ROACH

Substantial and encouraging results have been reported in the Bornu Cattle and Breeding Ranch at Gombole about 21 miles after Moidu, gun

This project is assisted by the U. S. A. I. D. and covers 20'000 acres. It is hoped that when the project starts full operation about 400 animals will be available for distribution as main stock to other farmers annually.

CROP FORCASTING

THAT crop forecasting will enable the Nigerian produce Marketing Company Limited to plan successfully the sale of produce has been stressed by Mr M. A. Akintomide, Permanent Secretary, Western State Ministry of Agriculture & Natural Resources.

The remark was made at the sessions in the to week s e c m Ministry of a officers of i n a r for senior.

4 MILLION POUNDS TO BOOST AGRICULTURE

A sum of £4 million pounds has been set aside by the Federal Military Government for improving agriculture generally throughout the Federal.

The Federal Commissioner for Agriculture and Natural Resources, Alhaji Yahaya Gusau made this disclosure rec ntly at Kadun. the capital of the North Central State where he was on a tour.

The Commissioner disclosed that part of the money would be available as loan to farmers while heavy agricultural equipment to mechanize mass production of food for the Republic would also absorb some of the money.

In view of this mammoth scheme, all the State Commissioners of Agriculture are conferring regularly to discuss their peculiar needs under the overall interest of the Republic.

U. S. SCIENTISTS FIND NEW SOURCES OF FOOD

U. S. Scientists are perfecting a new food product obtained by the combination of soybean and banana. The combination is dried and ground to powder. The product is a good food for babies.

It has been established that the soybeans helps in absorbing some of the water content of banana which in itself is a good carrier of protein - the main food in soybean.

✦ American agronomists are also improving on a process of producing good GARI (Nigerian's most popular food stuff) from potato.

FARMING SCHEME FOR YOUTH

Youths who have graduated from the Free Primary Education Scheme are to benefit from a big and attractive Farming Scheme by the Western Statee

The first hint of thy project was given recentl, by Mr. B. O. E. Amon-Acting Controller of Agricultural services in the West tern State Ministy of Agriculture.

The aim is to stem the steady exodus from farmsteads for other occupations in towns. Comparative analysis of incomes from farm occupations and other jobs has been made to assure the beneficiaries of of what better chances they would have on the farm.

SEND US NEWS

with pictures about life in your FARM.

Publication is free

FROM

MOVEMENT OF STAFF, MARRIAGES, BIRTHS & NAMING CEREMONIES, TO PROGRESS YOUR

FARM

PRODUCT INFORMATION

TYLAN

THE product TYLAN containing the antibiotic Tylosin Tartrate has proved to be very effective for the control, treatment and prevention of Chronic Respiratory Disease (CRD) and Pleuro-pneumonia-like organisms (PPLO) in chickens and is equally effective against infectious sinusitis in turkeys.

The product is available in two forms—the injectable form and the soluble form.

Tylan Injectable

This is the injectable form. At the first signs of CRD in chickens it is recommended that TYLAN be injected subcutaneously just back of the head at the rate of 25 mg per kg of body weight. All chickens in the infected flock should be treated whether they show symptoms or not.

Since some irritation occurs at the sight of injection, intramuscular administration should be avoided, particularly in broilers. If no improvement of the chickens is noted in five days the diagnosis should be reconfirmed.

TYLAN SOLUBLE

The soluble form is added to the drinking water for chickens at the rate of 1.5 gm per litre at the first signs of CRD in them. This should be continued for a period of one to five days, depending on the severity of the condition. The TYLAN medicated water should be offered as the only source of liquid.

A fresh solution should be prepared every three days. If no improvement of the chickens is noted within five days after the initiation of treatment, the diagnosis should be reconfirmed.

(1) TYLAN Injectable

Only sterile water should be added to the bottle to reconstitute the Tylosin for use. All care should be taken that contamination of the contents does not occur at the time of adding the diluent or during the time of injecting the chickens. After reconstitution, TYLAN Injectable should be administered within 24 hours.

All equipment used for injection of Tylosin should be sterile and chemically clean. Swab the injection area with disinfectant before the injection. Use preferably an 18 or 20 gauge, 12 mm needle and inject the Tylosin solution under the loose skin of the neck immediately behind the head.

Avoid intramuscular injection. CHICKENS SHOULD NOT BE SLAUGHTERED FOR MEAT WITHIN 72 HOURS AFTER TREATMENT WITH TYLAN INJECTABLE TO ALLOW ALL TRACES OF THE ANTIBIOTIC TO BE ELIMINATED FROM THE TISSUES.

(2) TYLAN Soluble

A fresh solution of Tylan Soluble should be prepared after three days. To ensure adequate drug intake, no liquid should be accessible to the chickens other than the TYLAN medicated water.

CHICKENS TREATED WITH TYLAN SOLUBLE IN THE DRINKING WATER SHOULD NOT BE SLAUGHTERED FOR HUMAN CONSUMPTION WITHIN 24 HOURS AFTER CESSATION OF TREATMENT TO ALLOW ALL TRACES OF THE ANTIBIOTIC TO BE ELIMINATED FROM THE TISSUES.

Storage

Both TYLAN Injectable and TYLAN Soluble are very stable in the dry form and need no special conditions other than cool, dry storage. Excessive heating should be avoided.

Caution

Do not use TYLAN Soluble or TYLAN Injectable in Layers producing eggs for human consumption.

Distributors are :

Abdul and Company Limited, Private Mail Bag 1077, Yaba.

Telephone : 44144.

32b, *Herbert Macaulay St. Yaba.*

SHORT ARTICLES

ON ANY KIND

OF DRUGS FOR

LIVESTOCK

POULTRY

FARMING CROPS TREES ETC.

HORTICULTURE

Are accepted free on this page

FARM POULTRY MANAGEMENT (1)

FARM poultry flocks are kept principally for egg production. If farm flocks are obtained from bred-to-lay stock and are properly managed, they can maintain a high rate of production throughout the year.

Speciality meat-type birds-capons and roasters-are particularly suited to farm production. Broilers usually cannot be grown on the farm as economically as they can be grown commercially.

PROFITABLE POULTRY MANAGEMENT

A farm flock can be profitable if the poultryman—

* Maintains a large enough flock so that he uses labour economically.
* Produces a high-quality product-market eggs, hatching eggs, or speciality meats.

Starts with high-quality birds.

* Uses good feeds.
* Keeps the poultry house clean and dry.
* Employs sound management practices.
* Employs sound marketing practices.

SIZE

The trend is toward larger farm poultry units. There are many small flocks, however, that contribute to farm income.

The exact size of the poultry flock that is economically feasible is influenced by other farm enterprises, as well as by the geographical location and distance to markets. Guides to minimum flock sizes for efficient farm poultry production are listed below.

A laying unit should have a minimum of 1,000 birds.

Hatching eggs cost more to produce than market eggs. The added expenses inslude the costs of :—

* Raising and keeping cockerels.
* Providing special (breeder) feeds.

are scientifically bred to produce meat efficiently. Commercial production is on a yearround basis ; less than ½ percent of our Nation's total poultry meat production comes from farm flocks as a by-product of egg production.

Continue on page 19

Mr. S. Kojo Plange is a big poultry breeder in Ghana. He is shown here tending a flock of chicks.

A breeding (hatching egg) flock should have at least 1,000 pullets or hens ; a capon or roaster flock, 2,000 birds ; and a broiler flock, 5,000 birds.

Larger flocks usually are more economical.

HATCHING VERSUS MARKET EGGS

Market eggs may be sold to whole-sale or retail outlets. Fertile hatching eggs usuall are sold directly to hatcherie y s.

Most farm breeding flocks produce hatching eggs under contract with a hatchery. The hatchery may specify the strain or cross of the breeding flock. It may provide pullet or cockerel chicks or both to be used as breeders.

* Blood-testing birds for pullorum disease and fowl typhoid.
* Increased feed consumption, particularly of broiler parent stock.

To justify these costs of production, hatching eggs must sell at a premium over market eggs.

MEAT PRODUCTION

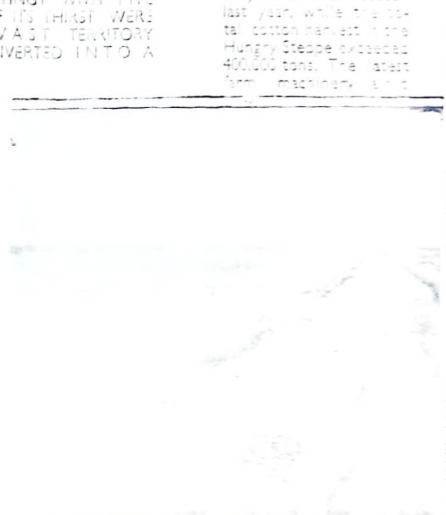
Before undertaking the production of meat chickens, a poultry man should determine how and where his birds will be marketed.

Broilers (young chickens for frying, broiling, or roasting) once were largely a byproduct of egg production. Today's commercial broilers

THE RUSSIANS ARE BATTLING WITH NATURE TO CREATE COMFORT FOR THE ELDERLY

IRRIGATION CONSTRUCTION PROGRAMME

NATURE HAD ENDOWED SOVIET CENTRAL ASIA WITH PLENTIFUL SUNSHINE AND FERTILE SOIL, BUT WAS STINGY WITH THE MAIN THING—WATER. IF ITS THIRST WERE NOT SATISFIED, THIS VAST TERRITORY WOULD HAVE BEEN CONVERTED INTO A LIFELESS DESERT.



Continue on page 8

TREE FARMS

By Sam W. Morr
U. S Feature Write

STATES MORE THAN AGO THERE WERE NATION'S TIMBER- GRAVE DANGER OF BECAUSE OF HEAVY TTINGS AND FOREST

inspect their woodlands and render them other assistance. Many tree farmers open their forest lands to people for recreational uses such as fishing, camping, hiking and hunting.

MANAGEMENT

The certified tree farmer is one who knows how to manage his forest successfully, to protect it adequately from fire, insects, diseases and destructive grazing. He is constantly alert against harmful insects and diseases the greatest enemies of timber and the most difficult to control.

The tree farmer removes decayed, deformed and diseased timber to keep his woods healthy. He uses improved planting, seeding and fertilization. He produces more selective, vigorous and desirable species of trees.

He thins his overcrowded stand of trees to give the remaining trees more room to grow and more sunlight to absorb. When he harvests, he either leaves trees for the next cutting, or promptly reforests the areas by direct seeding or by planting the harvested acres with seedlings.

Depending on variables such as climate, region, timber site and markets in the area, a tree farm can earn for its owner a return of three to six percent per hectare per year. One large diameter mature walnut tree, for example, can bring as much as £6000. An average size walnut tree can net the grower £500 or more. Tree farming, of course is no get - rich - quick scheme, but incomes are helping owners to pay off mortgages, finance the college education of their children, build new homes, or by additional land for agricultural use. "said J. C. McClelland chief forester of the American Forest Institute.

Aside from their interest in income, tree farmers know they are managing a valuable resource that is contributing importa tly to the nation's wood supply needs.

VALUABLE CONTRIBUTION

Not only are trees being grown for the making of thousands of wood products, but tree farms are helping to meet the public's demands for outdoor recreation.

"Populated areas are getting cleaner more plentiful water from forest lands.

"Forested areas are stabilizing the soil and saving it from erosion.

"Wildlife is better able to survive and multiply in the shelter of managed forests.

"Cattle and sheep in pine forests are yielding more meat They are fenced out of hardwood stands.

"Woodlands are beautifying the rural landscape for people to enjoy.

As long as wood is a renewable natural resource, and trees can be planted and grown as an agricultural crop, sawmills, pulp mills, paper and paperboard plants, plywood mills and wood products factories can expect a bountiful yield of wood to meet their needs in the next few tecades, most foresters believe. The only question is how much forest land will be lost to other uses.

UTILITY

More than 5,000 consumer items of everyday use are made of wood. The mand for them will gro the population increases, the need for more wo will simultataneously bec greater.

It has been estimated the consumption of plyw and pulpwood in the 20 years will double toe demand.

Besides providing lu for construction work, are sources of products as furniture parts, pap for books, magazines newspapers, packaging shipping containers, ad resin additives, rayon phane, photographic plastics, lacquers, and other chemical product

There seems to be an less number of product

Continue on page

Logs floatin' in the Lagos Lagoon ready for the sawyer's bit. These logs are just from thick bush without replacement.

THE FLY PROBLEM (2

AND ITS CONTROL

by Our Sanitary Correspondent

IN the preceding issue which was the first of these series the menace and life cycle of a fly was discussed.

In this issue, the life span, the habitat and species of flies are discussed. Read on please :

A popular misconception is that small flies grow up to be big flies. T is is not true. They only represent undernourished individuals or a different kind of fly altogether.

There are four different stages in the fly. The eggs are deposited in moist organic matter. Each female can deposit from a few hundreds to 2,000 eggs during her lifetime. The eggs hatch into tiny larvae or maggots which feed on the organic material.

The maggots grow rapidly and then turn into inactive forms called pupae. These pupae then change into adult flies which start the cycle all over again. This life cycle may take from a week to several months depending upon the kind of fly, the time of year, the temperature, humidity, and available food.

Where do flies come from ?

If you live in town—flies may be hatching right in your own backyard. Almost any moist organic material can produce flies. Check to see if you have any of these fly-breeding places :

- Garbage cans with holes or improperly fitting lids.
- Moist bedding straw.
- Dead chickens and animals.
- Manure and offal.
- Waste organic material in drain ditches.
- Urine or blood-soakde soil.
- Unharvested or discarded fruits or vegetables.
- Walnut hulls and fruit pits.

Flies from open garbage dumps, fruit or vegetable waste disposal sites, manure stock piles, or dairies may be effectively controlled through proper management practices.

Fly problems involving such sources may require co-operative action by public health and agricultural agencies, city or state authorities, industries, local residents, and farmers before a satisfactory solution can be reached.

o you know that ?

- There are approximately 85,000 different kinds of flies in the world.
- There are several thousand different kinds of flies in Nigeria.
- There are several hundred kinds in any one Nigerian locality.
- Only about 20 different flies are of public health importance in our country.

Of these, the ten most important kinds are :—

1. House Fly (Musca domestica)
2. Lesser House Fly (Fannia canicularis).
3. Stable Fly (Stomoxys calcitrans).
4. Black Garbage Fly (Ophyra aenescens)
5. False Stable Fly (Muscina stabulans).
6. Greenbottle Fli (Phaenicia spp.)
7. Bluebottle Flies (Ca phora spp.)
8. Black Blow F (Phormia regina).
9. Flesh Flies (Sarc phaga spp.).
10. Vinegar Flies (Dro phila spp.)

House flies are able travel as much as 20 mi and frequently do fly up 4 miles from their point origin. Other kinds of fl can and do travel distances great as 30 to 50 miles.

What can you do about Flie

Fly control depends stopping the flies before th get started. This can be do by making it impossible them to develop. As lar require warm, moist orga material to survive, the answ lies in proper handling disposal of these materials.

In the next and final inst ment, the prevention of breeding, control of lar pupae and adults will discussed to end up with use of insecticides.

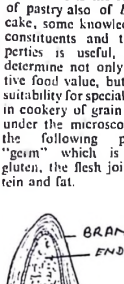
WHAT IS BREAD (2)

An analysis of BREAD by Our Dietician

BREAD AS PART OF A MEAL SHOULD NOT ONLY BE NUTRITIOUS BUT ENJOYED AS WELL: TO THIS EXTENT BREAD CAN BE PREPARED IN VARIOUS WAYS AND SHAPES TO SUIT DEFFERENT PALATES AND PLEASING TO THE EYE AS WELL.

Some enjoy the crusty part of bread and others the white of bread, hence the popular French roll which is crusty and crunchy and the ordinary white bread which has plenty of white i.e., the inside of the bread.

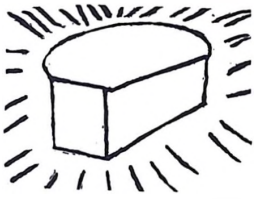
As flour is the foundation of pastry also of *bread* and cake, some knowledge of its constituents and their properties is useful, as these determine not only the relative food value, but also the suitability for special purposes in cookery of grain of wheat under the microscope shows the following parts—the "germ" which is rich in gluten, the flesh joining protein and fat.



The "endosperm" has a large proportion of starch, the "outer coating of brain" is preponderantly made of mineral matter and cellulose.

In milling, the whole grain is broken up and the parts seperated, and by the mechanical process of sifting, they are blended in varying proportions to produce varieties and different grades of flour.

In *wholemeal* flour the three parts of the flour have been retained, while in *white* flour the bran and certain portions of the germ are eliminated thus lessening the utrient value considerably. Thus we have three chief classes of flour, i.e., the ordinary household and patents, wholemeal and fine pastry flours such as Vienna or Hungarian, the last two types are richer in



starch but poorer in gluten and are more suitable for fancy breads than the first type.

As a result of the present condition of living, the baking of bread has ceased to be an essential duty of the house wife. But "white bread" being about the only variety of bread common in this country, readers may be interested to know more about other varieties and the type of flour used in making them.

In the process of making bread, a raising agent is added such as yeast (a popular agent) and other raising agents like :—

1. Baking powder.
2. Cream of tartar.
3. Butter milk or sour milk with bicarbonate of soda.
4. Vinegar or lemon juice and bicarbonate of soda and
5. Palm wine (a recent addition over the last century).

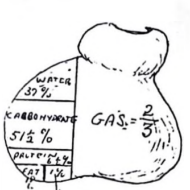
Bicarbonate of ammonia is used commercially, but is apt to impart an unpleasant flavour. Whichever raising agent is decided upon for used, a process of fermentation takes place whereby carbon dioxide and alchohol are produced causing the dough (the mixture of flour before being put into the oven) to swell.

Three main types of flour have been discussed, whole meal, white and Vienna or Hungarian flour. Some types of bread made from them are illustrated in the following recipes.

BROWN BREAD (WHOLE MEAL FLOUR)

A. *Proportions*

14 o; whole meal flour.
14 oz wheaten flour.
1½ Teaspoon salt.
1 teaspoon castor sugar.
¾ pint tepid water or milk and water.



(The diagram is a representation of the composition of loaf).

METHOD

Fine, coarse of mediu wholemeal may be used, lighter loaf is made with ha wheaten and half wholeme flour, and the bread may b made by setting a sponge c by the following metho without a sponge.

1. Sieve flour and salt int a warm basin, add th whole meal : cream th yeast and sugar, add th tepid liquid, strain thi into the flour.
2. Mix and knead thorou ghly until smooth.
3. Set to rise for 1 hou then knead slightly on floured board.
4. Form into two loave and put into warm flou red tins, "prove" in warm place for 1 minutes.
5. Bake in a hot oven fo about 45 minutes.

Unfermented or Bakin Powder Bread

B. *Proportions*

1lb flour

½ Teaspoon salf of mil or water.

1 large teaspoonful c baking powder.

Method

1. Sieve flour, salt ar baking powder togethe
2. Add sufficient liquid t eat to a soft dough.
3. Handle as quickly a possible, shape neat and turn on a floure baking tray.

Continue on page 21

WHAT IS MILK? (3)

THE DIGESTION OF MILK

by MILKMAN

MILK clots when it enters the stomach. This is due to the action of an enzyme-rennin. The clotting of milk converts the caseinogen into insoluble casein. The casein clot contracts into a tough mass which is subsequently digested. Infants secrete little pepsin in the stomach; the clot is digested in the small intestines. The biological significance of this clotting is not known but it is reputed to make milk less easily digested.

It can be partially prevented by diluting the milk with water, thus reducing the concentration of calcium which is necessary for the formation of the clot. Clotting can also be prevented by the addition of sodium citrate.

Both these means have been much used, but whether they increase the digestibility of milk is doubtful. Milk is, in fact, readily digested and absorbed, especially by infants and growing children.

Cow's milk–owing to its high protein content and its content of phosphate and citrate–exerts a strong buffering action, thus lowering the acidity of the gastric juice. It is perhaps for this reason that milk is often so effective in reducing the pain caused by a peptic ulcer and the associated hyperacidity.

MILK PRODUCTS

Soured and fermented milks–In many countries, milk is drunk sour or curdled. Various bacteria are used for this purpose. All these bacteria cause a breakdown of the lactose in the milk with the formation of lactic acid.

The natural method of preparation is to boil the milk and somewhat reduce its volume. After cooling it is inoculated with a small portion of the previous day's milk as a starter. The souring takes about 24 hours. Condensed and reconstituted dried milk can be used for the purpose. Commercial preparations of the bacteria cultures are also available as starters.

Sour milk yoghurt contains all the protein fat, calcium and vitamins of the original milk. It is a safe preparation in countries where standards of diary hygiene are low, for the original milk is sterilised by boiling. There are many traditional forms of sour milk which are appreciated as national drinks.

Yoghurt is made in Greece, Romania, Hungary, Bulgaria, Turkey, the Caucasus and neighbouring countries. Cow, goat, sheep or buffalo milk may be used. If the milk has been much concentrated by boiling, the yoghurt is diluted with water for drinking and is then known as doogh in Afganistan and Iran, or eyran in Turkey.

If souring is allowed to take place when the milk is warm (about 55° C.), a preparation known as laban is formed, which may contain a little alcohol from yeast fermentation. Kefir is a sour milk made in the Caucasus with yeast, with some an alcohol content. Kowmiss is a popular Russian drink prepared from mare's milk, which is rich in lactose.

It may contain up to 3 percent. Alcohol. Yoghurt, as usually prepared and obtained in Britain and the U.S.A., can, however, be safely consumed by the strictest teetotaller.

The great Russian scientist Metchnikoff at the end of the nineteenth century conceived the idea that yoghurt was an elixir of life. His theory was that the putrefactive bacteria present in the large intestine produce toxins that shorten life.

He thought that by taking yoghurt, the milk souring bacilli would become dominant in the intestine and oust the normal putrefactive bacteria. He himself took yoghurt regularly and established it as a fashion in many European cities. There was not a shred of evidence to support Metchnikoff's theory which is now quite discarded. Yoghurt is a nutritious and pleasant food, but has no unique nutritive properties.

Dahi is a sour milk preperation made in innumerable Indian homes. Whole milk is brought to the boil and then allowed to cool to about body temperature and kept at this heat in an earthen vessel. A small amount of yesterday's dahi is added as a starter.

When cool, dahi, is a delicious drink, especially in the hot weather, although perhaps an acquired taste for Europeans. The butter fat may be removed from dahi by churning and used to make ghee. The remaining sour milk is known as lassi and is also a popular drink.

Buttermilk is a term which may be used in Europe for a variety of products. In Holland and Denmark it is prepared when sour cream is churned into butter, and is a popular drink.

Curds are the clotted proteins formed when fresh milk is artificially inocula with rennet (a commer preparation of rennin, p pared either from ca stomachs or vegeta sources).

Whey is the fluid t separates from the clot making curds. It conta most of the lactose in original milk, and a l lactalbumin, but almost casein or fat; its nutri value is therefore small.

Butter is discusse in this chapter.

Cream contains all fat and usually from third to half of the pro and lactose in milk. Fr time to time the Br Government has laid d standardsfor the minimum content of cream.

The famous Devons cream or clotted cream prepared by heating the in special pans. This br about a rapid and effec separation of the fat. De shire cream may contain per cent. of fat.

Skimmed milk is milk f which the fat has been moved in the making butter or cream. It is a product of the butter ind and since it is readily di large quantities of the product are available on world market.

JOHN PLOWMAN,
Fellow of the Guild of Agricultural Journalists writes on

ADVANCES IN BRITISH PIG BREEDING

ALTHOUGH BRITAIN IS A SMALL COUNTRY IT HAS A GREAT VARIETY OF INDIGENOUS BREEDS OF PIGS, EACH WITH ITS OWN SPECIAL CHARACTERISTICS , AND THIS HAS BENEFITED BOTH ITS FARMING INDUSTRY AND THAT OF MANY OTHER PARTS OF THE WORLD.

In some cases, breeds now reduced to small numbers in Britain have proved so valuable under different conditions that they provide the main blood of pig populations thousands of miles from their original home.

Thus has happened, for instance, with the Tamworth. Only a handful of herds, retained by enthusiasts, remain in England, but the breed has become important in Australia, Canada, New Zealand and the United States The Berkshire, too, has lost much of its former favour at home but has established itself in America and elsewhere. Others, such as the National Long White Lop-eared, the Lincolnshire Curly Coat and the Gloucester Old Spot are now rarely kept on a commercial scale in Britain.

DOMINATING BREEDS

The need for a white-skinned pig for the Wiltshire type of bacon cure has been a big factor in the decline of coloured breeds, though some are still retained for their good breeding characteristics, especially for crossing purposes.

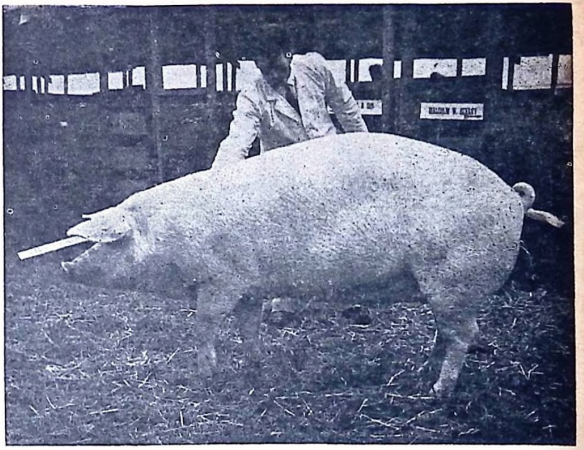
Two breeds dominate the British pig industry today, the large White and the British Landrace, both of which are all-white.

The large White is not only the biggest breed in the United Kingdom but it is probably the most widely distributed in the world. This is unquestionable because there is such a range of strains within the breed that a type can be selected to suit virtually any climatic conditions. It is derived from the British Yorkshire breed, by which name it is better known in most other countries.

The British Landrace has sprung to prominence in little more than ten years, largely due to its length and leanness, features that are so situable for bacon production, and it is now the country's second most popular breed. It has also been used to improve the indigenous Welsh. This

LEAN BACON AND PORK

It may be a matter of has been so successful that the Welsh has come to occupy the third most important place in Britain.



A 'Champion' sow owned by Mr. Malcolm W. Exkey seen beside her,

personal preference which breed is chosen by the pig keeper–whether he breeds or buys his stock–but ultimately his choice will be dictated by economic considerations.

If he is a breeder, he will seek high performance from his breeding stock as well

Continue on page 21

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RUSSIANS

Continued from page 1

Dozens of model workers' settlements with all the necessary cultural and welfare establishments and enterprises have sprung up here.

Another 120 million rubles will be invested this year for the further development of the steppe-land.

Until recently, the Central-Asian republics and the Transcaucasus were considered the traditional irrigation-farming regions, and practically all irrigation construction work was concentrated here. At present the picture has changed considerably.

Alongside with continued irrigation work in the old areas, the volume of agricultural development will be increased in arid regions of the Russian Federation, the Southern Ukraine and Moldavia, also in the Northern Caucasus, along the Volga and in western regions of Kazakhstan.

Large bases are being created here for the production of commodity grain. Much irrigation work is being carried out in the Far East for the production of rice, vegetables, fodder and other crops.

In the next decade the country's irrigated area will increasing by 7-8 million hectares and the drained area by 15-16 million hectares, while the total reclaimed land will reach 37-38 million hectares in 1975 against 15 million in 1966.

Continued from page 8

PLANNING A LAYING UNIT (2)

After 24 weeks of age egg sales exceed current expenses, and the amount remaining invested in the bird is reduced, until at the end of the laying year the farmer has got back his initial investment and a profit besides.

The total capital invested in birds, apart from land, services and buildings, depends on the farm plan as well as on the number of birds to be kept. Under Plan A (*see December issue*) the rearing house is shared by three lots of layers.

Also only ⅓ of the birds are at point of lay at any one time, and the farmer gets back some of his investment in those which start laying first before he has to meet all the expenses of the next batch. For example think of three flocks of 100 birds each on Plan A (*see January issue*)

1 flock being sold at end of lay = 4/- per bird gain × 100 birds.

1 flock at 52 weeks old = investment repaid by egg sales.

1 flock at 32 weeks old = 12/- still invested in these birds.

1 flock growers 12 weeks old = 10/- per bird invested so far.

Total investment in birds (4/-, & 12/-, & 10/-) × 100 birds equals £80.

Three laying houses at £1 per bird = 3 × £100 = £300,

One rearing house at 15/- per bird = 1 × £75 = £75

Total invested = £455 birds and buildings.

On Plan B (*see January issue*) the most expensive time for the farmer is when the second lot of birds are 24 weeks old. To have the same 300 layers on Plan B needs 2 laying houses each of 150 birds and two rearing houses each of 150 birds.

Flock 1: 32 weeks old = 12/- per bird invested.

Flock 2: 24 weeks old = 17/- per bird invested.

	£	s.	d.
Total invested in birds (12/-, & 17/-) × 150 birds	= 217	10	0
Laying houses, 2 × 150 bird houses at £1 =	300	0	0
Rearing houses, 2 × 150 bird houses at 15/-	225	0	0
Total invested in birds and buildings	= 742	10	0

Plan B is therefore quite a lot more expensive for the same number of birds than Plan A and is only worth using if higher profits, due to higher prices, can be got by using it.

Continue from page 11

POULTRY

tender-meated, heavy-weight chickens are higher than the corresponding costs of raising broilers. Therefore, roasters and capons sell at a higher price per pound.

The market for roasters and capons is relatively undeveloped, but has a good potential. Farm production of these speciality products should increase significantly in areas where consumer demand can be built up, i.e near schools, colleges, a university or a hospital.

COSTS

Feed is a major expense in poultry production. It amounts to about 55 percent of the total cost of producing market eggs, 65 percent of the cost of producing meat-type birds, and 55 percent of the cost of producing hatching eggs.

The age and breeding of chickens determine their purchase price. Highest purchase prices are charged for ready-to-lay pullets. Day-old sexed pullet chicks sell for 25 to 30 percent of the cost of ready-to-lay pullets of the same breeding.

Normal expenses of a farm flock—in addition to feed and birds include housing, equipment, vaccines and drugs, fuel, electricity, labour, taxes, interest, and depreciation.

Accurate records are essential in figuring costs and determining efficiency. Records also can be used to improve operations.

THE FARM LAYING FLOCK

Start the laying flock with top-quality, healthy birds that have been developed for a high rate of production throughout the year. With proper management, bred-to-lay birds produce eggs of superior size and quality.

Before buying birds, decide whether you want white or brown eggs. The colour of the eggshell does not effect food value, but it does influence the market price. In some countries white-shelled eggs sell for slightly more than brown-shelled eggs. In others, where brown eggs are preferred, the situation is reversed.

Birds that weigh 4 to 4½ pounds at maturity are considered light-weight breeds. They usually lay white eggs. White Leghorn first-generation strain crosses and crosses of inbred lines are the most popular light-weight varieties for laying flocks.

Medium-weight breeds usually lay brown eggs. Popular medium-weight egg-laying breeds are New Hampshires, Plymouth Rocks, Rhode Island Reds, and first-generation egg-production crossbreds.

EGG-LAYING TES

Random-Sample Egg duction Tests are cond in many countries. tests are designed to p a reliable guide to the p mance of laying stocks c for sale by breeders vatcherymen. The tests hide information or important economic of poultry.

SOURCE

Large commercial he ries have taken over mc the hatching formerly on the farm or at community hatcheries, most cases, farm hatchi no longer profitable. Com cial hatcheries sell da chicks of high quality fo than it would cost to pro chicks in a farm incubate

Get your stock from nearest source that c birds with the traits you v The shorter the distance birds must travel to the f the fewer your losses.

It is a good idea to inv gate the local reputatio well as the breeding, sa tion, and managem practices of the hatcher grower before placing order for chickens.

To find out more al the kind of birds suitec your needs, talk with state agricultural agent poultry specialist, or secce poultrymen in your area.

GETTING STARTE

Begin planning for the f at least 6 months before want the chickens on farm. Select the age of t that are best suited to production timetable, houses and equipment local conditions. Order ch at least 4 weeks in advar order started pullets at 1 3 months before you them; order ready-to-la pullets at least 6 mo ahead.

Continue overleaf

Continued from overleaf

POULTRY MANAGEMENT

Plan to keep only one age of bird in a flock at one time. If you must have birds of several ages on the farm, keep each age group separated to help reduce diseases.

BABY CHICKS :

Baby chicks usually leave the hatchery when they are 1 day old. They normally require heat during the early weeks. They sometimes are vaccinated, dubbed, sexed, and debeaked at the hatchery.

Straight-run chicks cost less than other ages and types of live birds. Straight-run birds are boxed at random as they come from the incubator; normally, about half the chicks are pullets and half are cockerels. When space and labour are available on the farm, cockerels of medium-weight breeds may be grown as meat-type birds at the same time that pullets are grown as layers. Sometimes, cockerels of superior strains are raised as breeding stock.

Sexed chicks are sorted after they leave the incubator into lots of pullets and cockerels. Sexed pullets of light-weight breeds cost more than twice as much as straight-run chicks ; sexed pullets of medium-weight breeds—while usually not as expensive as light weight breeds—cost more than straight-run chicks.

STARTED BIRDS

Sale of started birds are increasing. These chickens, whichshave been brooded and no longer need supplemental heat, require less equipments and less care than younger bird.

In many sections of the country, started pullets are available from growers who specializein their production. There should be an understanding between the buyer and the grower concerning the strain or cross of the started pullets, the type and number of vaccinations, the kind of feed, and the disease history of the birds.

Started pullets usually are sold between 6 and 8 weeks of age. Individual lots may vary with seasonal needs for heat. Their high purchase price reflects the costs involved in getting the birds through brooding.

Ready-to-lay pullets are sold at 16 to 20 weeks of age. They begin to lay almost as soon as they reach the farm. Ready-to-lay pullets sell for more than any other age group of similar quality birds because they have been raised through their unproductive month.

NUMBER

Plan to fill your laying house without overcrowding. In determining the number of birds you need, allow for normal losses from diseases, natural causes, and culling.

For each 100 layers you want in your flock, start with—

* 220 straight-run chicks (day old) or
* 110 sexed pullets (day old) or
* 105 started pullets (6 weeks old) or
* 100 ready-to-lay pullets.

HOUSING

Birds of different ages always should be housed separately.

The trend is toward raising poultry entirely in confinement. Two systems may be used :

* Floor housing (sometimes called litter or "loose" housing).
* Cages.

Floor housing allows birds to move freely on the floor of the poultry house, or inside pens that divide large floor areas into manageable units. This system may be adapted to brooding, growing, and keeping any type of poultry flock-layers, breeders, broilers, capons, or roasters. It is particularly suited for farm flocks.

Cage raising methods are best adapted to situations where land is limited. Laying hens in cooler areas can be housed in cages if :—

* The house is well insulated.
* Ventilation is controlled.

The house is filled to capacity so that the hens' bodies provide the necessary heat to maintain a minimum temperature range of 45° to 55° F.

The cage method is not always economically sound. Flies and excessive odour can be a problem with cages.

Continue from page 13

TREE FARMS

can be made from wood, Mr. McClelland said. "A few years ago, when pain relievers and paper clothing joined this list, it was believed that saturation point had been reached. Not so.

"To add more glamour, durability and usefulness to an already versatile material, research chemists are bombarding plastic-impregnated wood with atomic radiation to make it almost indestructible.

"Scientists are treating wood so that it will be more resistant to fire and attacks by fungi and insects. Giant arches and timbers are being built by glueing small pieces together in presses.

"Research discoveries have proved that health and vigour can be bred into trees, and that it is possible to grow forests of bigger sturdier trees of better quality in a shorter time than ever before.

"Studies of wood are providing us with thousands of useful and beautiful products which are continually being improved. Wood awaits only the magic of more research to exploit its almost unlimited potential in the modern world."

PRECIOUS RESOURCE

Wood is such a precious resource that very little of it is being wasted today. In some operations, as much as 90 percent of the fibre finds its way into useful products. Leftovers in the logging and milling processes, once burned or abandoned to rot in the woods, are now providing more than 50 percent of the pulpwood used for making paper.

Formerly, logs are made into lumber, the bark is removed so that all unused slabs, trimmings and edgings may be cut into small chips and made into pulp, paper or pressed-wood products called hardboard, particleboard and fibreboard.

Now, bark is converted into insulating material, cloth ing, mulch or fertilizer.

Sawdust and shavings may be compressed into fuel logs and fuel briquettes."

Conservation of wood even includes the mechanical filling of knotholes in plywoods, thus turning former leftover wood into consumer products.

Continued from page 15

BREAD

4. Bake in a hot oven for 30 minutes.

NOTE: This is not as digestable as fermented bread, but is a pleasant change to bread raised with yeast.

Vienna Bread

Proportions :

1 lb Vienna flour, 1 Teaspoon Castor Sugar.

1 oz butter, ½ oz compressedyeast.

1 Teaspoonful salf, ½ pint milk.

1 egg.

Method

1. Sieve flour and salt into a warm basin and rub in the butter.

2. Cream the yeast and sugar, warm the milk, add the beaten egg and mix with the yeast, strain into the flour mix and beat to a smooth dough with the hand or large wooden spoon, until the dough leaves the sides of the basin clean.

3. Cut dough across the top, cover with a cloth, and set to rise in a warm place for about 1 hour.

4. Trun on to a floured board, knead lightly, and form into fancy shapes, rolls, twists, horseshoes etc.

5. Put the bread on a greased and floured tin, and set it to "prove" in a warm place for 15 minutes.

Fancy shapes of Vienna bread

1

2

3

6. Brush over with beaten egg and bake in a quick oven for about 20 minutes when sufficiently baked the rolls should be nice brown and light.

For best results in baking bread an even and steady temperature should be maintained in the oven and the oven should not be too cool nor too hot, the flavour of bread is spoiled if the ingredients are not fresh and of good quality.

A recipe for white bread has been omitted as this is common enough Of course the shape of the bread can be varied as we have in the cottage loaf, and a fresh loaf from the oven with a spread of butter can be tasty.

Continued from page 17

PIG BREEDING

So the scientists have built-on and greatly extended the work started by the great British livestock improvers of the eighteenth and nineteenth centuries. Experimentation in feeding and housing, recording schemes and progeny testing have all contributed to the overall improvements in pig performance. Artificial insemination (A.I.), which is playing an important part in cattle improvement in Britain, is also being used with notable success to upgrade the national pig herd.

NEW SCHEME

The Pig Industry Development Authority (P.I.D.A.), now part of the new Meat and Livestock Commission, operates progeny and boar testing and A. I. stations, and many commercial concerns are engaged in various aspects of research aimed at producing better, more profitable pigs.

As the general level of pig population has improved, ideas of quality have become more closely defined and grading more stringent. For this reason, a new scheme including a more comprehensive form of testing was introduced by P.I.D.A. just over a year ago. The Accreditation Scheme, as it is called, has the aim of making available to the whole industry "pigs which are genetically capable of producing better carcases more cheaply."

The scheme classified herds with a high level of recorded performance as either Elite or Accredited. Out of a total 213 herds participating at present, 38 Large White and 23 Landrace have Elite status. In the Accredited section, 82 herds are Large White and 51 Landrace.

Boar performance is tested through progeny groups of four litter mates, two boars, one castrate and a gilt. The latest report on the scheme shows that boars from the Large White test groups had an average food conversion of 2·93 compared with 3·09 for the Landrace. Large Whites also had a slightly better average daily liveweight gain of 1·58 lb. (0·711 kilogrammes), compared with 1·52 lb. (0·684 kilogrammes) averaged by Landrace.

On the other hand, the Landrace produced longer carcases and their killing out percentage was marginally better. It was concluded that the Large White boars were less variable than the Landrace.

SPECIALIST PRODUCERS

Already, the scheme is producing tested boars whose male and female progeny are improving standards in herds all over the country. One estimation suggests that the benefits of the scheme will become apparent throughout commercial herds within two years and that a sow considered poor in 1972 will have a better performance than today's average.

Pig production in Britain has become a highly specialised enterprise and cannot be undertaken lightly if the producer experts to succeed.

The national breeding herd now stands at some 721,000 females and 36,000 boars, producing 12,500,000 pigs a year for slaughter. As in the dairying industry, there is a trend to larger herds owned by fewer but specialist producers. Now nearly 30 per cent. of pigs are kept in herds of over 500 compared with 12 per cent. eight years ago.

Ever since the British pioneers of constructive breeding began to improve the physical and economic characters of pigs, other countries have shared with the home industry the fruits of this work. There can be no doubt that this will continue to be the case in the more rapid advances that are being made today.

M

LAUGH . ! ! !

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

TWO children, Asu (6) and Efi-boy (4) had an orange given to them by their mother to share between themselves. Asu was to do the sharing. Their mother had told them several times previously that anyone of them who had anything to share with the other must retain the smaller portion for himself and give the bigger portion to his brother.

Efi-boy reminded Asu about this and said, "So you must give me the lion's share of the orange." Do you really want the lion's share of the orange?" asked Asu. "Yes, of course," replied Efi-boy. Instead of cutting the orange into two as he originally intended, Asu sat down quietly and ate it all alone.

With tears in his eyes, Efi-boy went to their mother and made the complaint. "Asu" called the mother, "why didn't you give Efi-boy part of the orange?" "Mummy" replied Asu, "he wanted the lion's share of the orange, and since lion's don't eat oranges, he had no share."

WHEN Lord Bessborough died some years ago. The Times published in error the obituary of Lord Desborough. Somewhat taken aback, Desborough telephoned the, newspaper to report that he had just read his own obituary. A grand voice replied, "I see, sir. And where are you speaking from?"

* * *

A BUSINESSMAN explains why Lagos men love the really short skirts worn there. "At last, men on the buses during the rush hour can get seats," he said. "The girls are afraid to sit down."

* * *

ONE SATURDAY afternoon my wife and I were gardening when we saw a removals van arrive next door. Grubby as we were, we hastened over to greet our new neighbours. The following week, they invited us to a house-warming party.

As we dressed, I watched in fascination as my wife put on her hairpiece, struggled into a girdle, painted her lips, applied eye shadow and false eyelashes, varnished her finger-nails and popped in her contact lences.

Finally, she looked into her mirror and said with a satisfied sigh, "Well! Tonight they're going to see the real me!"

* * *

WHEN the people down the road returned from their holidays, their little daughter was heard to exclaim, "Look, Daddy, you forgot to turn off the grass!"

X X X

TWO friends who had been without food throughout their journey, finally arrived, and were waiting in a cafe to be served. Presently the waiter came in with a dish of yam cake, one side of which was badly burnt. The waiter placed the dish on the table between them with the burnt side facing one of them.

Ayo, who was facing the burnt side of the yam cake thought for a while and then said to his friend "By the way, Olu! do you know what the scientists are trying to do now-a-days?" "No," replied Olu. "Well," said Ayo, "they are trying to turn the world upside down like this." As he said so, he demonstrated by turning the burnt side of the cake now to face his friend.

Olu stared at him, stared at the cake the burnt side of which was now facing him, then stared at him again, and asked, "By the way, Ayo, are you now a scientist?" "No" replied Ayo. "Well! eave the blooming world where it was," said Olu, turning the cake back to it's original position.

AN arrival at the Idd Terminal of the Nigeria Railway Corporation, Mallam Tanko 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."