

BULLETIN

Official Organ of the S.A. Poultry Association. Amptelike Orgaan van die S.A. Pluimveevereniging.

P.O. Box 1795 · JOHANNESBURG.
Postbus

Registered at the G.P.O. as a Newspaper. Geregistreer aan die H.P.K. as 'n Nuusblad.

Vol. I. No. 11.

August 1938 Augustus

Gratis to Members—Gratis aan Lede.

Redaksioneel : Editorial

ONDERVOEDING.

Hierdie vraag is een wat teenwoordig besonder aandag geniet, en daar bestaan die moontlikheid dat dit harekort aangepak sal word want dit het 'n stadium bereik wat 'n skande is vir enige beskaafde land. Die Unie kan al die nodig voedingstowwe produseer vernameklik die wat essensieel is om siektes te vermy wat veroorsaak is deur 'n tekort aan die nodige bestanddele. Baie van hierdie voedingstowwe is deur boere in sulke hoeveelhede verskaf, dat daar mensigmaal 'n oortruif op die mark is en uitvoer elke jaar nodig is.

Tersyde van hierdie feit en die lae pryse wat sulke bemarkings toestand vergesel, is daar 'n groot skade van die bevolking wat die aankoop van hierdie belangrike voedingstowwe nie kan bekostig nie. Tersyde tyd in te veel gevalle, vind boere dit onmoontlik om koste van produksie te dek. Hierdie toestand duur voort omdat die Goewerment en die publiek weier om die feite te erken. Vir die pers en die Gesondheids Departement om groter produksie en goedkoper voedingstowwe onder teenwoordig omstandighede aan te wend, is alleen om aan te dring op 'n voetsiding van 'n beleid wat boere dieper in die skuld bring, of van die land afdryf. Die verslag van die Gesondheids Departement is dat armoede grotendeels die oorsaak van die tragiese toestand is, maar hierdie feit word nie sterk genoeg beklemtoon nie. Die lae pryse oor die lae pryse wat van die land gedryf is, omdat hulle nie die nodige voedingstowwe, wat hulle nou nodig het, teen 'n redelike prys, kan verkoop nie. Die saak word seker reukend aangepak wanneer goedkoper en groter produksie aangepas word. As dit moontlik is om teen 'n prys te produseer sal produksie natuurlik vinnig groei. Wat dit nodig is, is dat die produsente van 'n redelike prys versker is en om dit te weeg te bring moet verbruikersverenigings met produksiekoste gebelanset word. Om hierdie punt gedring en makke sal diegene wie teenwoordig verstandighede het verander, dit doen.

MALNUTRITION.

This subject is very much to the fore at present, with prospects of some attempt being made to tackle an evil which has been allowed to reach a stage which is a disgrace to any country which lays claim to civilisation. All the necessary foodstuffs and particularly the protective foodstuffs against deficiency diseases, can be grown or produced abundantly in the Union. Many of them are provided by farmers in such abundance that they are at times a glut on the market, while export is necessary each year.

Despite this fact and the low selling price which accompanies such marketing conditions, there is a large section of the community which cannot afford to buy these essential foodstuffs. At the same time, the farmers find themselves unable to cover costs of production in too many instances. This state of affairs has been perpetuated because the Government and the people refuse to face facts. For the Press and the Union Health Department to advocate greater production and cheaper foodstuffs under present conditions is for them to press for a continuation of a policy which forces farmers into greater debt or off the land. The report of the Health Department on this matter does state poverty is largely to blame for the tragic position, but not enough emphasis is laid on this fact. It is overlooked that poverty is to be found among the numerous families who have been forced from the land because of being unable to sell at a reasonable price the necessary foodstuffs they now need. Surely the wrong end of the stick is being examined when cheaper and greater production is urged. If it is possible to produce profitably, output naturally expands rapidly; so what is necessary is to ensure the producer a reasonable return, and to this end consuming power must be balanced with production costs. This is a point we have always maintained and pressed for; perhaps light will come to those who can alter present conditions to meet an urgent need.

Dit is betrouwenswaardig dat die waarde van die eier, as 'n belangrike deel van die daelike dieet, veral van kinders en siekes, nie genoeg beklemtoon is nie. Soos in die geval van melk, het die eier al die nodige bestanddele om die jong diert, vol of kind van energie en groei te voorsien. Die eier is die beste voedingstof vir die beskerming van gesondheid, en dit word verwag dat hierdie feite erken sal word en dat die Kommissie wat die vraag van ondervoeding in die Unie bestudeer, hierdie feite tot die aandag van die publiek sal bring.

Championship and Other Shows.

Reports of the Championship Show held at Pietermaritzburg on the 21st to the 24th of June, 1938, indicate quite a revival of the "Fancy." One thousand five hundred entries secured in three months' organisation, deserves hearty congratulations both to the Natal Poultry Club and to the breeders from all over the Union who rose to the occasion to make the Championship Show such a success.

The Eastern Province Challenge Show held at East London secured 750 entries and the quality was up to that of any other Show in the Union, according to those hard-worked Judges, Messrs. T. B. Cross and A. M. Gericks. The revival in this centre indicates what can be done by the close co-operation between Commercial and Show interests, as the co-operation and assistance of the East London Egg Circle has had no small say in the revival of the local Poultry Society. The policy of the Association would appear to be vindicated in endeavouring to make it clear that the interests of Show and Commercial men are bound up one with another.

No detailed reports, beyond that of the S.A.P.A. Representative, are to hand of the Capetown Show, but we understand that here again entries and quality of exhibits were very satisfactory.

THE FOLLOWING IS A LETTER FROM THE GENERAL MANAGER OF THE SOUTH AFRICAN RAILWAYS AND HARBOURS, RE THE CONVEYANCE OF BIRDS TO SHOWS BY PASSENGER TRAIN.

"With reference to your letter of the 15th ultimo, and enclosure thereto, regarding the conveyance of consignments of poultry consigned to shows, I desire to inform you that instructions have been issued to the effect that cattle trucks should not be used for the conveyance of such consignments in future." (Covered vans are to be used.—Editor.)

Please support advertisers, and mention "The S.A.P.A. Bulletin" when doing so.

It is to be regretted that the value of the Egg as an essential part of the daily diet, particularly with children and sick people, has not been sufficiently stressed. Apart from milk, it is perhaps the only food which contains all the essential elements to provide energy and growth in the young animal, bird, or child. Its protective value cannot be surpassed by any single foodstuff, and it is to be hoped that recognition of these facts will be realised and made public by the Commission now studying the question of malnutrition in the Union.

DO LAYING TESTS MEET PRESENT DAY REQUIREMENTS?

There is undoubtedly a feeling that our laying tests as at present constituted do not meet the requirements of our present day poultry problems. They were instituted when there was a crying need for improvement in productivity so far as eggs was concerned. Has the race for records, the endeavour to increase production, the perpetuation of strains built up on high production parents, been carried too far? In the Union a check on stamina has been kept by the high standard insisted upon before birds were allowed to enter the test and by a final inspection when birds failing to come within reasonable range of breed requirements were rejected. It is maintained by many breeders however, that something is still missing, and that the laying tests are not a fair reflection of what can be found in the home flocks of the competitors. Would it not be fair to count the production of all free birds on the test and allow no replacements, thus any pen losing a bird would suffer heavily? Drastic, and hard luck sometimes, but everybody is running the same risks and chances. Again, does not single penning give rather a better chance for a bird with some slight weakness to come through the test without that weakness having a chance to show itself? The birds on the tests are under mild pampered conditions, a house to themselves, their own rations and no competition or hustling for food, water, perch room, etc. Would a competition with 6 or 12 birds entered as a pen, the total production of the pen to count with no individual records, no allowance for deaths, no replacements, give intending buyers of chicks a better reflection of what can be expected from a breeder under conditions nearer the general run of things? Is there any call for a purely commercial test where cross breeds or birds not intended to come up to breed standards, could compete as purely egg producing machines? These are questions which need stating and answering if we are to move with the times. Perhaps readers of the "Bulletin" will give their views.

Poultry Industry Re-organisation.

Mr. R. Peritt, of Pietermaritzburg, is of the opinion that the principles of the scheme outlined by Mr. Lucas for re-organising the industry are sound. He is in special agreement with the remarks as to the value of records and the increase of disease and mortality as a result of the development of the sale of cheap chicks by so-called breeders who have no regard for breeding and selection. He also considers it essential to have standards of breeding to maintain the highest quality of chicks sold.

CHICKEN REARING IN BROODERS.

By W. A. BARTLETT.

After the chickens have been hatched in an incubator their only requirements for at least the first twenty-four hours are perfect rest and warmth. They will not get the necessary rest if they get light, so keep them in the dark. A box, such as is used to despatch chickens by rail is very suitable, for the natural heat of themselves is sufficient to keep the temperature at the right degree. When from twenty-four to forty-eight hours old, as after a rail journey, the chickens can be placed in a brooder, which should have been running for some little time and carefully tested with a reliable thermometer to ascertain that the temperature be from 90 degrees to 95 degrees according to the state of the weather. This temperature should be gradually reduced by about 7 degrees to 8 degrees per week as the rearing proceeds. There are many varieties of brooders, but I consider that those that have a hover round a stove or over a hot water radiator have proved the most successful. The reason for this is that; if the brooder temperature gets too high, the chickens can get away till they reach the heat they want. As the temperature falls in the early morning hours, generally the coldest part of the day, the chickens get more and more underneath the dome and thus a chill is prevented. When a brooder is enclosed with the exception of the ventilation holes, the babies often get overheated, and when let out in the morning to a much lower temperature, a chill follows with very often dire results.

The first feed is a sprinkling of fine chicken grain on a board covered with a little clean sand. This should be placed close to the brooder, but not under the dome so that feeding takes place close to the heat so that if the chickens feel cold they can run back for warmth before they get a chill. Boards or a wire screen should be placed round the hover for a few days if the brooder compartment is large.

The chickens eat very little the first few days, but they drink quite a lot of liquid. This consists of milk and water, half and half, for the first week after which a drink of milk should be continued every morning if it be available. On the farm fresh milk is used for the first fortnight and thereafter sour milk can be substituted, but when once the change is made do not alter.

On the second day good wheaten bran is given in addition to the chicken grain, and this is continued on the third day, after which a good chicken mash, fed dry in hoppers, is supplied as well as the bran. Bran has laxative properties and helps to clean up the digestive system and thus stops diarrhoea. One food never used is hard boiled eggs. The last act of a chicken before leaving the egg is to absorb the yolk through its navel, and this is the food supplied to support life until the fledgling in a state of nature is able to follow its mother and pick up its own food with her help. The yolk sac is connected to the stomach of the chick by a very fine tube and the yolk content is drawn on, as the stomach demands. If hard boiled eggs be given there is no such craving and the flow of the yolk ceases. When this happens the tube and yolk sac is absorbed into the system and the unused yolk is left in the body of the chick where it soon becomes decomposed causing acute inflammation. This brings on diarrhoea and other complications and the chicken droops and often dies. Take some of the bodies of the slain, open up just behind the navel and the blackened remains of the yolk can be seen surrounded by swollen veins showing acute inflammation. I am taking an extreme case as some chickens are stronger than others and will probably survive, but I have inspected too many chickens whose deaths have been at least helped by this inflammation to doubt the truth of my deductions. No hard boiled eggs have been used on this farm during the last twenty years. If you want to feed eggs by all means do so, but only after the yolk, absorbed by the chick, has been used up, usually in a week to ten days. Eggs mixed raw in a little mash are far more digestible than when hard boiled.

Direct from the Mill to the Consumer

The Secret of Successful Dairy and Poultry Farming lies in the feeding of only "GOOD CLEAN" feeds. Get your requirements direct from the Mill, and so ensure obtaining the best—also at Wholesale Prices.

WRITE OR PHONE US FOR LOWEST CURRENT QUOTATIONS.

Deliveries are made to suit Customers.

H. LEWIS & CO. (PTY.) LTD.

Grain Merchants and Millers,

106-112, CARR STREET, NEWTOWN, JOHANNESBURG.

Phones: 33-1594 & 13-9864.

Tel. Ad.: "WHEAT."

POULTRY - PLUMVEE.

WHITE LEGHORNS, Australorps and White Wyandottes. Member of S.A.P.A. Breeders' Register, Mrs. A. M. Bartlet, Forgue, Boshoop, P.O. Box 7499, Johannesburg. Phone 42-9987.

DUCKS and AM. BRONZE TURKEYS. Specializing in these Breeds.—Pekin, Imported Black-Campbells; Blue Ribbon Aylesbury and Buff Orpingtons. Full particulars Hahn, P.O. Northlands, Johannesburg.

BROOKHILL POULTRY FARM. Members of S.A.P.A. Breeders' Register and S.P.B.A., England. Now looking orders for R.D.P. and Pedigree White Leghorn Cockerels and Day-old Chicks. All stock supplied bred on the farm. Box 174, Pretoria.

G. HIBBERT, Athlone Farm, Burgyle, Johannesburg. Breeder of Pedigree White Leghorns and Light Sussex. Member Breeders' Register.

MRS. W. F. C. JOHNSON, 49 Forster Road, Walmer, Port Elizabeth. Specialist Pedigree White Leghorn Fanciers. Member Breeders' Register, S.A. Leghorn Club. Harcourt Egg-Laying Certificate, Blue Ribbon Cockerel and Show Bench Awards. Enquiries invited.

IMMEDIATE DELIVERY: White Leghorn Day-old Chicks for sale. L. F. Forryth, Graston Poultry Farm, Howick Road, Pietermaritzburg.

LIGHT SUSSEX. In Glen Laying Test. Total 819 only 14 under 2 oz. Cockerels, Pullets and Eggs for sale.—PHIPPS, Moss River, Natal.

R.J.R. Hatching orders. Day-old Chicks, 64 per 100 Eggs. 35/-; Brood from only selected hens, raised to cocks with excellent egg incubage. Write for further particulars. **NORMAN HARRIS**, Dourybrook.

RHODE ISLAND RED, chicks, hatching eggs from selected stock named pedigree cocks, cockerels. Satisfaction guaranteed. Prices, particulars on application.—**NORMAN SITKEN**, Camperdown.

RACING PIGEONS.—Purchase a copy of THE S.A. RACING PIGEON ANNUAL, 2/6 post free.—Write Box 1258, Pretoria.

SECURA hatched Day-old Chicks from my wonderful strain of succinic and winter layers; made up from Tanscov, Sweden, Bantam and Pouter strains; price 42 lbs. per 100, postage paid in the Union, cash with order; September and October only; Phone 82.—**STANLEY C. WESTGATE**, Rivonia, Johannesburg.

S.A.P.A. Blue Ribbon Winners—(Continued from page 5)

252	P. Kamm.	Breeding Pen—W. Wyandotte.
256	Miss M. Sutton.	Breeding Pen—Derking.
264	W. Bartlet.	Breeding Pen—Minorca.
267	C. W. Bittel.	Breeding Pen—W. Leghorn.
268	S. J. S. Meyer.	Breeding Pen—A.O.C. Leghorns.
299	G. Symons.	Aylesbury Duck.
300	G. Symons.	Pekin Duck.
302	D. Symons.	Pekin Bantam Pen.
313	Mrs. D. M. Galtrey.	Haverty A.C.
314	G. Symons.	Indian Runner.
324	Barker Bros.	White Eggs.
325	Egg Circle.	Brown Eggs.
326	Egg Circle.	Tinted Eggs.
328	Egg Circle.	Care packed for Export.
329	E. G. W. Gray.	Indian Game Bantam.
334	Master L. F. Forryth.	Jubilee Game Bantam.

MISCELLANEOUS - ALLERLEI.



The Best Firm in Johannesburg to send your Poultry, Eggs and other Products to is
C. M. ELOFF & CO. (Pty.), Ltd.,
Herring Market, Newtown. P.O. Box 7111.



The Best Firm in Johannesburg on a Plumvee, Eggs and other products and to send
C. M. ELOFF EN KIE (Edms.), Bpk.,
Moremark, Newtown. Phone 7115.

**Buyers of Only
FIRST-GRADE DRESSED TABLE CHICKENS.
Best Prices Paid.**
THRUPP & CO., P.O. Box 44, Johannesburg.
Phone 22-3131.

1/8 BRAN; 7/- Poultry Food, machine cleaned; Best Meal, 10/-; Bone Meal, 8/-; Super, 6/6 Oyster Shell, 8/-; Laying Meal, 6/6; Chic Chic No. 1 or No. 2, 9/6; all 100 lb. Sowers; Crushed Yellow Meal, 18/6; Trussard Meal, 11/6; All In.; Mixed Bird Seed, 2/6; Yellow or Red Maize Seed, 8/6; 5/-; Mixed Bird Seed, 2/6; Yellow or Red Maize Seed, 1/6.—**COMMERCIAL AGENCY**, Government Contractors, Pretoria.

HARDWOOD CHARCOAL.

BRIST	2/6 per 100 lb.
CHICK No. 1 FINE	1/8 per 100 lb.
CHICK No. 2 COARSE	1/8 per 100 lb.
POULTRY	1/8 per 100 lb.

All less 3% discount for cash orders.
BROOKER CHARCOAL, 2/6 per full metric bag, or 43 lbs. per ton.
All prices f.o.b. Umkahlala, C.W.D. or C.O.D. Apply **HOLLEY BROS., UMKHALA.**

POULTRY FOODS is pellet form entirely the purity and digestibility of fresh home-grown products. Pellets clean, green work, save labour and wastage. Each pellet is a complete meal containing the necessary vitamins and vitamins. Pellets are easily and safely stored. No wonder the Pellet system of feeding has been taken up so enthusiastically. Write for literature and price list.—**THE THREE OATS CO., LTD.**, Harford.

338	W. H. Stevens.	Black Pouter Bantam.
344	W. H. Stevens.	F.O.C. Pouter Bantam.
345	Miss K. Nixon.	Japanese Bantam.
349	W. H. Stevens.	Rose Comb Bantam.
354	Mrs. L. Stevens.	Golden Sealright Bantam.
355	W. H. Stevens.	Silver Sealright Bantam.
361	Master L. F. Forryth.	Modern Game Bantam.
367	G. Houtgelder.	O.E. Game Bantam.
371	W. H. Stevens.	Indian Game—Bantam Pen Bantam.
383	W. H. Stevens.	Black Pouter—Bantam Pen Bantam.
384	Miss J. Stevenson.	A.O.C. Pouter—Bantam Pen Bantam.
388	W. H. Stevens.	Bow Comb—Bantam Pen Bantam.
390	W. G. C. Rieff.	O.E. Game—Bantam Pen Bantam.
410	Miss J. Newall.	Best Junior Table.
420	G. Robertson.	Best Juvenile Exhibit.
460	H. IDE.	Fancy Pigeon.
511A	Wyndham Loft.	Home Pigeon.

Chicken Rearing in Brooders—(Continued from page 3)

The chickens for the first four weeks are fed on dry mash, with occasional feeds of bran, chicken grain and after a week chopped green food such as lettuce, chow-chow (marrow kale), lucerne, etc. Of all these the second mentioned is most liked and every poultryman should grow a patch of it.

The milk or milk and water once a day is continued for eight to ten weeks after which the younger brothers and sisters usually take the full supply.

Larger grains are given from about five weeks old and also a slight change in the mash is made. Remember that a chicken grows rapidly and sheds its feathers several times during the growing period, and consequently at this early stage of its life it requires as much protein in its ration as a laying hen. No fowl can digest its food unless there be a sufficiency of calcium supplied, so be sure to have shell grit or limestone grit always available. Up to five per cent of limestone flour can be mixed with the mash with advantage. In order to make the calcium available, to help digestion, the direct rays of the sun (not through glass) are necessary or else, two per cent of guaranteed Cod Liver Oil should be given in the mash. When building a brooder house, keep the windows very low so that, when open, the sun's rays cover the floor as much as possible. The inside of the window frame should be covered with fine wire netting so that the chickens can be kept in the house with a supply of direct sunshine if cold weather arrives as happens when the south wind blows.

Some people believe in keeping the chickens entirely confined to the house for the first eight weeks, or even longer. This is done to prevent disease from being picked up in the runs, especially if three or four batches of chickens are reared on the same ground, year after year. While agreeing that this intensive method does help to prevent disease, I like to have the chicks in the open at a fairly early age and now have very hard and smooth concrete outside runs to each brooder compartment. These are covered with clean river sand, which is removed between each brood and the run thoroughly disinfected before the sand is renewed. Thus every hatch starts on an equal basis. Very often the cause of later batches not developing as well as their earlier hatched brothers and sisters is that the chicken runs have been soiled by previous batches and disease in one form or another prevents healthy progress.

The main point is to keep the chicks growing steadily and to ensure this it is absolutely necessary that there should be sufficient heat supplied, but over-heating must be guarded against as chills follow and most deaths are probably caused by these than by any other reason. I have seen chickens let out of enclosed brooders in the early morning with drooping wings and listless appearance and the symptoms point undoubtedly to overheating followed by chill.

This is a sketchy article written at very short notice, but I trust that what I have written will be of some use to beginners.

Remember particularly to guard against under or over heating, prevent chills and in this respect be sure that there be no floor draughts. The walls of the brooder should be draught proof to a height of from

30 to 36 inches, although wire netting above that height between the various compartments is permissible. Floor draughts are a fruitful source of chilling.

In chicken rearing as in all other branches of poultry keeping the man or woman in charge is the main factor as observation counts for so much. A system that is a complete success in one farm is sometimes a failure in another and in such a case it is usually the operator that is at fault.

LIST OF WINNERS OF BLUE RIBBONS AT THE 1938 CHAMPIONSHIP SHOW.

S.A.P.A. BLUE RIBBONS.

Class No.	Winner's Name	Breed
1.	De Plessis Bros.	Game.
2.	De Plessis Bros.	Turkey.
3.	Barker Bros.	Malay Game.
15.	E. Lennox.	Indian Game.
18.	H. J. Galbreath.	Jubilee Game.
28.	W. E. Mills.	C. E. Game.
44.	M. Colford.	White Orpington.
51.	Mrs. T. C. Black.	Buff Orpington.
62.	Mrs. G. D. Yeatman.	Light Sussex.
74.	W. H. Hutton.	R.I. Red.
81.	K. Purcell.	Black Australorp.
88.	De Plessis Bros.	A.O.C. Rock.
107.	A. M. Darling.	White Wyandotte.
109.	J. F. Kamm.	Silver Wyandotte.
121.	K. W. Stromack.	Jersey Black Giant.
127.	Mrs. M. Sutton.	Duchking A.C.
133.	W. H. Hutton.	Silkie A.C.
142.	J. Nissen.	Andalusian.
176.	H. Wilson.	Minaura.
182.	F. B. Dinkelman.	Modern Leghorn.
188.	R. Purcell.	S.A. White Leghorn.
189.	A. L. Preen.	Black Leghorn.
194.	L. Campbell.	Team 4 Pullets—Indian Game.
215.	A. H. Peters.	Team 4 Pullets—O.E. Game.
219.	Ireland & Mitchell.	Team 4 Pullets—R.I. Red.
220.	Schmitt & Son.	Team 4 Pullets—B. Australorp.
221.	H. B. Potter.	Team 4 Pullets—Barred Rock.
232.	W. H. Charter.	Team 4 Pullets—W. Leghorn.
238.	W. H. Charter.	Team 4 Pullets—Leghorn A.C.
237.	M. J. Kok.	Breeding Pen—Malay.
238.	W. H. Hutton.	Breeding Pen—Indian Game.
239.	N. C. Harris.	Breeding Pen—Jubilee Game.
240.	Granton Poultry Farm.	Breeding Pen—O.E. Game.
242.	M. Colford.	Breeding Pen—W. Orpington.
243.	Mrs. T. C. Black.	Breeding Pen—Buff Orpington.
246.	A. T. Allison.	Breeding Pen—A.O.C. Game.
247.	R. Purcell.	Breeding Pen—R.I. Red.
248.	Barker Bros.	Breeding Pen—B. Australorp.
249.	Mrs. D. M. Galbreath.	Breeding Pen—Barred Rock.
250.	C. B. Robertson.	Breeding Pen—Buff Rock.
251.	De Plessis Bros.	Breeding Pen—A.O.C. Rock.



for Sol-Hot Brooders
Hearson's
Incubators
Black Leaf "40"
Insecticide

and Everything for the Poultry Yard, including
Green Food Cutters, Poultry Foods, etc.
Call or write for Catalogue

★
JOHN F. MARSHALL LTD.
For Poultry Foods and Appliances.
HEATH'S BUILDING,
Cor. FRITCHARD & VON BRANDIS STREETS,
JOHANNESBURG.

Phone 22-7833

P.O. Box 2262

POULTRY FOOD

A Successful Poultryman must have
BEST QUALITY FOODS AT LOWEST PRICES

WE SOLVE THAT PROBLEM FOR YOU

Write for our Free Monthly Price List.



PHEENIE SAND & CO.

Poultry Food Specialists, Millers and Grain Merchants,

28, PIM STREET, JOHANNESBURG.

Telegrams: "PHEENSAND."

Phone 33-3377.

P.O. Box 5162.

POINTERS ON PROTEIN.

By J. P. GALLAGHER.

A balanced ration is one that meets the entire needs of the bird or animal, not only for maintaining body requirements but for supplying such added elements as will be required for production, as in the case of eggs from hens.

Such a ration must be digestible and contain as little waste material, or material that consumes unnecessary energy on the part of the hen as possible.

Protein is the nitrogenous part of feeds, and makes lean meat muscle, tissue, hide, bone, feathers, horn, etc. Protein promotes rapid growth in young stock and replaced endurance after exhaustive or working energy has been reduced by exertion. There are some twenty different amino acids or "Building Stones" that go to make up proteins, although only eight of these are known to be essential for poultry. It is easily possible to have, for instance, 20% crude protein in a mash and still have a deficiency of "Digestible Protein."

The best digestible protein is **pure white fish meal**. Readers will bear in mind I have said Pure White, as there are certain fishes of the sea which are termed Dark or Black Fish. Herring and Snook are, for example, classed as dark fish, and give an oily fish meal; naturally **pure white fish meal** will not contain any such types of fish.

The protein content of pure white fish meal should not be less than 60 per cent., while the mineral matter will not be less than 20 per cent.

Scientific investigators are able to tell us the quantity and variety of minerals in marine products. Here are a few mentioned by the United States American Bureau of Fisheries: Calcium, phosphorus, copper, iron, manganese, sulphur, magnesium, silver, zinc, silicon, nickel, niobium, lead, tin, barium, boron, chromium, lithium, strontium, iodine, fluoride, chlorine, sodium, potassium, lithium, aluminium, and vanadium. Notable among these is the role played by iodine in the prevention and cure of simple goitre. To some people it may seem hard to understand how there is mineral matter in foodstuffs. To suggest that normal human beings, or even farm animals, can not only swallow but also digest and absorb into their bodies iron, copper, sulphur, lime and similar substances seems to them absurd, yet if a body or joint of meat is "burnt to a cinder" some ash remains, and any chemist analysing such ash can prove it contains these and other minerals. How did they become part of the body if

not through the food? If food fails to provide them they gradually disappear from the body and health suffers. A simple example of this is anaemia, or poorness of the blood which can generally be remedied by iron tonics. Another example is goitre, which doctors say is due to a lack of iodine. Then again, when chlorine is lacking, the stomach cannot manufacture those powerful acids which enables food to be digested and acute indigestion or colic results.

W. Powell Owen, F.B.S.A., tells us in his Complete Poultry Book, a Fish Meal should be **PURE WHITE**, sold under a Brand Name, with tag stating the protein content not less than 65 per cent., minerals about 20 per cent. If you want to grow young, healthy chicks or increase the fertility in your breeding stock and obtain a greater egg yield coupled with larger eggs, then start now by asking yourself if your poultry ration contains an efficient Digestible Protein. Many poultry plants are using Pure White Fish Meal to-day, but many are not. This type of Fish Meal is now obtainable in South Africa, being manufactured at the Gateway of the Union.

From my own experience, 10 to 12 per cent. of Pure White Fish Meal added to the mash gives satisfactory results.

East London and Border Co-operative Poultry Products Ltd.

Mr. Dickinson, one of the oldest members of the Directorate, together with Mr. Lombard, the Government Poultry Officer, will visit the undermentioned centres on the dates given:—

August 12.	Maclear.
13-16.	Ugie.
17-18.	Xuka Drift.
19-20.	Elliot.
22-23.	Indwe.
24.	Back at East London.

The visitors are desirous of meeting all poultrymen interested in marketing, and it is hoped that all in the vicinity of the meetings will make every effort to be present.



PORRITT'S "EVERLAY" STRAINS

Known throughout Africa — 25 Years' Successful Breeding

Our Experience must lead to your Success

BUY THE BEST — — — FORGET THE REST

WHITE LEGHORN — AUSTRALORPS — RHODE ISLAND RED

Now Booking for 1938 Season

Write for our Catalogue and see for yourself the Home of PORRITT'S EVERLAYS. Inspection invited — Satisfaction Guaranteed.

R. PORRITT, Kirkwood Stud Poultry Farm, Maritzburg.

Hoe ek Toetswenners Produseer.

Vraestel graantwoord deur
H. G. AITKEN, Rosebank, Natal.

VRAAG 1: Hoe het u u oorspronklike teeltoenders uitgeleek?

ANTWOORD: Met Australorps het ek 'n begin gemaak met die aankoop van 'n hoendel eiers van een van die dan mees bekende telers, terwyl met Leghorns, het ek 'n Jonghaan en twee Jonghenne gekoop. Vanaf daardie dag het ek daarvan 'n punt gemaak om byna elke jaar nuwe bloed in my teeling in te bring en altyd die allerbeste wat ek kon in hande kry van ons vertroubaarste telers, alhoewel enkele jare gelede het ek nuwe bloed van British Columbia ingevoer met uitstekende resultate. In 1907 het ek nuwe bloed van Engeland ingevoer, en as ek op die nageslag moet beoordeel skyn dit ook 'n sukses te wies.

VRAAG 2: Watter punte word deur u in die uitsoek van teeltoenders as die vernaaemste beskou?

ANTWOORD: Met die uitsoek van teeltoenders is Konstitusie en Standaard vereisten die twee belangrikste sake. My voorkeur is vir 'n voel met 'n groot liggaam, goeie sterk oogkleur en sonder grafheid. Ons vind enkele besonder goeie klein hoenders, maar in meeste gevalle is sulke hoenders geneig om klein eiers te lê.

VRAAG 3: Hoe maak u jonghennetjies groot?

ANTWOORD: Soos die jonghennetjies groot genoeg is om van die kaikenhuis weg geneem te word is hulle in troppe van 80 tot 100 op die vryloop-stabel geplaas. Hierdie getalle word verminder met die ouer word van die hennetjies. Hulle bly op die stabel totdat die karnetjies begin rooi word, dan word hulle in troppe van 150-180 in semi-intensiewe huise geplaas. Vir my is hierdie grootte van troppe groot genoeg. Die hoenders op my plaas word semi-intensief gehou omdat ek die ruimte het, maar ek het geen beswaar teen die intensiewe stelsel nie.

VRAAG 4: Met die uitsoek van Toetswennetjies wat beskou u as die vernaaemste—Errekorde of werkons?

ANTWOORD: Ek beskou produksie rekord en hantering kwaliteite van gelyke waande, maar natuurlik waar twee voels in alle opsigte gelyk is, gee ek voorkeur aan die een met die beste produksie teeling.

VRAAG 5: Hoe berei u u jonghennetjies vir die Toets?

ANTWOORD: Toekomstige Toetswennetjies word op die vry-loop stabel gehou tot swat 4 weke voor hulle weggestuur moet word. Dan vir die volgende drie weke word hulle semi-intensief gehou en van dan af totdat hulle weg gestuur word, word hulle, of in enkel bokke, of in intensiewe huise met valensie in troppe van 20 tot 30 gesit. My keuse is altyd 'n hennetjie wat geleë het voordat die wedstryd begin, maar seide een wat langer as 15 dae in die R is.

Toetswennetjies word op 'n goeie droë mengsel gevoer met 'n klein hoeveelheid natmengsel elke oggend, byvoorbeeld met afgeroomde melk saaragmaak. Dan kry hulle ook swat 2 ons. goeie melies per hen elke dag.

VRAAG 6: Watter ander algemene aanwysing beskou u as belangrik in die produksie van Toetswenners?

ANTWOORD: Lytting word op my plaas nie toegepas nie, en ek beweer dat as 'n teler hierdie saak nie volledig verstaan nie, is dit beter as hy dit nie probeer nie, want behalwe die risiko wat geneem moet word, is dit die moeite nie werd nie. Een punt wat nadruk op geleë moet word is dat wanneer 'n koper nuwe bloed aanskaal moet hy seker wies dat hy dit van 'n vertroubare teler kry en om die toekomstige teler te help, sal ek hom aanraai om hoenders alleen van 'n lid van die Telers-registret te koop en waar moontlik moet sulke hoenders R.V.P. stelseltoenders wies.

Concrete facts with your birds on mash containing 4% —

RELIANCE "ALL-IN-ONE" MINERAL SALTS

You can thoroughly depend on your eggs being FERTILE and securing successful easy HATCHING of strong ROBUST CHICKS.

The material benefits of RELIANCE "ALL-IN-ONE" mixture do not stop here, they go further, and ensure



reared to profitable maturity.

NO DEAD CHICKS. NO SICKLY, RICKETY CHICKS.
Particulars in both languages from

RELIANCE CO.
GEORGE CO.

Box 61



**POULTRY FOODS
and APPLIANCES**

● 40 years experience ●

Write for a copy of our
illustrated catalogue.

STARKE-AYRES

(C. STARKE & CO., Ltd., Incorporating CHAS. AYRES)
MOWBRAY - Cape.

Betaal dit om Pluimvee vet te Maak?

Deur D. J. Strauss.

Dit gebeur dikwels dat diegene wat pluimvee direk van die plaas verkoop instede van hulle eers vet te maak groot verliese daardeur lei. Die algemene boer wat sy surplus hane en swak produseerende henne van die hand sit maak hulle gewoonlik nie vet nie voordat hy hulle bemark.

Dit kan nie verwag word om 'n profyt te maak op hoenders wat direk van die plaas af verkoop word nie. Die mees belangrike faktor wat hydra tot 'n profyt in alle gevalle is die van finale berriding al is dit van suiwer geteelde rasse of spesiale gekruiste hoenders. Dit moet verstaan word dat sekere rasse vir tafel doeleindes moet geskik is as ander.

Dit is noodsaaklik om pluimvee vir tafel doeleindes net so wetenskaplik te teel en groot te maak as in die geval van eierproduksie. Die teel-pen behoort uit die beste hoenders gekies te word en dan wanneer die krukens uitgebroei is behoort hul ook die beste sorg en aanlag te geniet sodat die jonghoenders nie deur makke, siektes of ondervoeding teruggehou word nie.

As tabelpluimvee produksie behoortlik aangepak word sal dit 'n winnende boerdery wees. Daar is dan geen rede waarom die teler as hy 'n poging aanwend om die beste kwaliteit te produseer nie sy winste kan vergroot nie.

Jonghoenders van die plaas weeg ongeveer 3½ lb. sê, hiervan is onttrent 2 lb. been en afval en 1½ lb. eetbare vleis. Teen 8d. per lb. betaal 'n koper 2/4d. vir 'n hoender en verkry sleg 1½ lb. eetbare vleis, dus

kon die vleis vir hom 1/6d. per pond. As die hoender vet gemaak word, kan onttrent 2 lb. by die vorige gewig bygevoeg word en die produsent kry dan 3/8d. vir die hoender instede van 2/4d. en die koper alhoewel by meer betaal kry in vergelyking meer vleis as been en afval. Die verskil in afval is vergelyk aan 75% in die eerste geval en 37% in die tweede.

Met voorwerde- of bak-voeding behoort die hoender binne 14 dae gesed vir die mark te wees. In hierdie tydperk sal elke hoender kos gebruik van onttrent 8d. waarde, en die verskil in die verkoopprijs is ongeveer 1/4d. per stuk. Dus die verskil in die profyt op 'n gewone en vet-gemaakte hoender is 8 pennis, en beide die produsent en verbruiker sal daaruit voordeel trek as 'n hoender ordentlik vet gemaak is.

Van 4 tot 5½ maande kan tabelpluimvee teen 'n redelike wins verkoop word. Die jonghenne word eerste vet terwyl die jonghane later geslag word. Goedkoop vet-maak kos bestaan uit 60 lb. geel mielmeel en 40 lb. vyn semels (Pollard). Gemeng hiervan vir een dag se gebruik hoort met suur afgeroende melk gemeng te word en moet voor gebruik toegelaat word om te verga.

Die waarde van 'n tabel hoender moet op die hoeveelheid eetbare vleis bereken word, en nie op die grootte van die liggaam nie, en daar dit die vleis is wat die verbruiker nodig het behoort hoere die maatskappij van vermaak te beset.

(Tabelpluimvee wat spesiaal geteel en groot gemaak is, behoort die gewig wat deur die publiek geses is, binne 15 weke te bereik. Lewendige gewig behoort dan van 3½ tot 4½ lb. te wees. Die verhouding tussen eetbare vleis en afval verskil met verskeie rasse, dus die voorkeur wat aan sekere rasse bewys is.—Redaksie).



In
the

Building of Your New Home, Timber Plays a Vital Part

Make sure of getting the best by placing your orders with us. Our TIMBER successfully resists the weather, and as time passes its sturdiness and stability increases the value of the property in which it is used.

W. F. Johnstone & Coy., Ltd.

Timber Merchants,
ELOFF STREET SOUTH,
JOHANNESBURG.
P.O. Box 1922. Telephone 27-2121.

KALK BAY FISHERIES LIMITED

for

Cold Storage

of All Descriptions



Phone 44-1477.

P.O. Box 479.

Works, Cor. BERTHA & JORRISSEN STREETS,

BRAAMFONTEIN,

JOHANNESBURG.

Hoe om 'n Hoender Skoon te Maak.

Nadat die hoender gekook is, moet die pterve en al die veerstompies wat in die vel oorbly, verwyder word. Skroei dan om die haartjies te verwyder. Een of twee eetlepels brandspiritus kan op 'n blikkies aan die brand gestook word om mee te skroei, of brandende papier kan daarvoor gebruik word. Draai die hoender gedurig om sodat die vlam by elke deel kan kom.

Maak 'n sny deur die vel langs die agterkant van die nek, waardeur dus 'n wit plekkie tussen die skouers blootgestel word. Sny die nek by hierdie plek af en verwyder dit, sodat die vel in 'n lang, breë flap oor die bors hang. Hierdie heel nekvel maak dit moontlik dat die hoender van voor af gestop kan word sonder dat dit hoef toegewerk te word.

Nadat die hoender gestop is, word die vel oorgevee tussen die skouers waar die vasgedruk word deur die punte van die vlerke wat nie afgesny moet word nie. Die krop, lugpyp en slakderm moet sorgvuldig van die nekvel verwyder en by die borsopening uitgetrek word. Die hart, longe, maag, afval en lewer word met die vingers deeglik losgemaak in die holte van die lyf sodat dit maklik uitgetrek kan word by die opening wat rondom die aars gemaak is.

Hoe om die serings uit te haal: Sny die vel versigtig deur by die lit of maak 'n sny oor die lengte deur die vel net onder die lit. Op al twee die plekke sal die serings, wat in die beultjies op loop, oop lê. Trek hulle een vir een uit met 'n vlespen of 'n ophindmaald.

Hoe om die binnegoed uit te haal: Ten einde die binnegoed te verwyder, word 'n dwars sny deur die vel net bokant die aars gemaak. Steek eers een en dan twee vingers in en beweeg hulle teen die lyf tussen die lyf en die binnegoed. Nadat al die binnegoed losgemaak is, vat die maag wat naby die borsbeen lê, en deur dit uit te trek, sal al die ander dele volg. Wees versigtig om nie die galblaas, wat aan die lewer sit, te heuk nie, anders sal die gal uitloop en al die dele waaraan die korn sal bitter wees. Die longe en niere lê in holtes, en moet afsonderlik uitgehaal word. Spoel goed uit en maak deeglik droog.

Hoe om die hoender vir braai reg te maak: Maak die hoender skoon en trek die serings uit. Sit die hoender op die vleisbord met die bors na onder. Sny met 'n sterk en baie skerp mes, deur die vleis aan elke kant van die rugbeen van die nek tot aan die struitjie. So word die struitgedeelte, rugbeen en die nek dus uitgesny. Wees versigtig om nie te diep te sny nie anders sal die binnegoed stukkend gaan. Lig die rugbeen versigtig op, steek die vingers in, maak die organe los eers aan die een en dan die ander kant. Lig dan die rugbeen op met die binnegoed daaraan. Skraap en stoot die vleis versigtig van die borsbeen af en verwyder dit en doen dieselfde met die ribbene. Sny die bene af by die tweede lit en sny die serings in die vlerkittie af.

Please support advertisers, and mention
"The S.A.P.A. Bulletin" when doing so.

Hoendersafval: Die afval van 'n hoender bestaan uit die maag, hart en lewer. Knip die galblaas versigtig af met 'n sker. Druk die bloed uit die hart. Verwyder die vet van die maag en sny die maag oop net tot aan die binnevel en trek dit uit. Sny die wit kraakbeen uit. Was deeglik en hulle kan saam met die nek en vlerkpunte gebruik word vir soep, alvabous, pastei of in die vulsel. Die lewer is 'n groot lekkerry en kan as dit fyngemaak en goed gekru is, gebruik word. Dit kan op roosterbrood of toebroodjies gebruik word. Dit ook heerlik in vleissousensels.

(Huisboukundige Seksie, Afdeling Landbou-
onderwys en -uitbreiding, Pretoria).

MAKE YOUR OWN MIXTURES.

Tell us what you want and we will get it direct from the grower for you.

MAIZE, CORN and WHEAT
always available.

KAHN & KAHN (PTY.) LTD.

Maize Brokers and Market Agents,
JOHANNESBURG and DURBAN.

"The S.A.P.A. Poultry Bulletin."

DISTRIBUTION.

The S.A.P.A. Poultry Bulletin is distributed gratis to all members of Clubs, Societies, Egg Clubs and individual members affiliated to the South African Poultry Association.

CORRESPONDENCE.

All correspondence must be addressed to the Secretary, S.A. Poultry Association, P.O. Box 128, Johannesburg.

ADVERTISING TARIFF.

	Cost Per Each Insertion.		
Dayside of page	45	00	00
Evening of page	45	00	00
Quarter of page	12	00	00
Half of page	24	00	00
Full page	48	00	00

Special "headline" - 4 to 12 insertions, 50 per word per insertion, with minimum of 25. 25 per insertion, 1 insertion, 50 per word, with minimum of 25. For "headline" words will be counted as 10 times. Write for Special Tariff for Caron.

CONDITIONS PERTAINING TO ADVERTISEMENTS.

1. While every care will be taken to ensure accuracy of advertisements, no responsibility can be accepted for losses arising from typographical or other errors.
2. Only expressly approved payments are payable monthly, otherwise full terms must accompany the order.
3. "Headline" will be accepted only when such acceptance will be of benefit to the advertiser.
4. All advertisements are subject to being edited before acceptance.
5. New advertisements, cancellation of advertisements, or changing of wording, must reach the Secretary by the 15th of each month preceding the month of issue.
6. All charges to be made payable to "The South African Poultry Association" and must include exchange.
7. The right is reserved of refusing any advertisements without giving any reason for doing so.

S.A.P.A. RINGS—

Have you ordered your rings from your Secretary?
DON'T DELAY.

Grootmaak en voer van Kuikens

Deur

T. B. CROSS,

Lektor in Pluimvee, Landboukolle, Cedars (1927).

Kuikens wat kunstmatig uitgebroei is, behoort nie kos te kry voor hulle ses-en-dertig uur oud is nie. Dit is natuurlik nie dat hulle vir hierdie tyd noodwendig in die droogkas van die broeimasjien gebroei moet word nie, want mits die weer lekker en warm is, kan hulle in 'n beskutte hoekie graat word of in die kunstmoeder, waarvan die vloer met fyn sand bestrooi is wat hulle na harte toe kan oppik.

Daar bestaan verskil van opinie omtrent die beste voer vir kuikens en baie maniere van voergee word as uitstekend voorgeloes. Sommer uit die staanspoor kan 'n mens sê dat die manier van voergee byna net so belangrik soos die voer self is. Boeke kan 'n mens nie sê hoe om kuikens met sukses groot te maak nie; dis net deur gelatige sorg, oefening en ondervinding wat jy dit leer.

Tot kort gelede toe is die eerste maaltyd vir kuikens nie as volledig beskou as daar nie 'n goed-tyngeseyde hardgekookte eier by was nie. In die werklike praktyk vind ons dat dit glad nie nodig is nie en miskien heeltemal onwenslik. Dikwels word aan ons gestel dat die eier goed vir kuikens moet wees omdat dit hul natuurlike kos is: heeltemal so, maar hoekom hardgekook?

Kort voor die kuiken die dop verlaat, word 'n hoeveelheid van die geel deur die liggaam opgeneem en spere daarvan kan vir vyf dae of selfs langer aan die kuikens gegee word. Dis die natuur se voorsorg vir die kuiken en die rede waarom kos vir 'n aansienlike tyd na by uitgebroei is, nie nodig is nie.

Om die kuikens eenmaal of selfs tweemaal op hardgekookte eiers te voer sal hulle niks kwaad doen nie, maar toe moet dit ophoor anders verstop hulle. By die opsy van hardgekookte eiers vir kuikens moet 'n mens ook wat versigtig wees en nie haastig te werk gaan nie. As hier versigtig gevoer moet word, laat hulle dit in 'n kustard-runder gevoer moet word, laat hulle dit in 'n kustard-runder kry, effens afgedroei met growwe hawermeel. Dis baie beter en sekurlik meer veilig vir hulle.

Growwe hawermeel is een van die beste soorte kos om pasitgebroei kuikens vir die eerste paar maal mee te voer en hulle kan die ook maklik oppik. Omdat die van 'n wit kleur is, trek dit maklik hul aandag en gevolg sal die hele trop dit toestroom.

Die Gulle Reël.

"Eetjie kos en bakkeer" is die gulle reël by kuikens voer. As die tyd toelaat kan 'n mens hulle nie so veel maal voer nie, mits hulle nie meer op 'n slag kry wat hulle maklik kan opvreet nie. Onder geen omstandighede moet daar kos op die vloer van die kunstmoeder rond lê nie.

Insat die kuikens mooi groot is (omtrent tien tot twaalf weke oud) is die "droë mengsel" metode verreweg die beste manier om hulle voer te gee. Dit bespaar nie alleen arbeid nie maar voorkom ook ingewandmoelikeit, bygesê natuurlik dat die meel, ens., wat gebruik word van 'n goeie gehalte is. Dis egter nie te sê dat

hulle nie so af en toe 'n bietjie nat of klam kos moet kry nie. 'n Maaltyd eenmaal per dag daarvan sal hulle meer goed doen as andersins, daar die nat kos vir hulle 'n afwasing sal wees en, gemeng met sop of melk, sal dit hulle bepaald goed doen. Maar hier weer is dit noodsaaklik dat hulle elke broekie van die kos opvreet; niks moet rond lê om snot te word of besmet te raak. Ons advies aan die beginner is om sy kuikens net op droë kos te hou totdat tyd en wyl hy meer ondervinding van die saak opgedoen het.

Droë kos moet in bakke gevoer word wat so gemaak is dat daar geen verkwisting is nie. Die kuikens sal, as hulle kan, in die bakke klim en die voer binnekant ontkrap en net hier en daar 'n pikkie gee met die gevolg dat baie van die voer gemors sal word. Of die bakke die hele dag oopgehou moet word, is 'n punt waartoe verskil van opinie bestaan, maar daar die laaste maaltyd van die dag uit graan moet bestaan, is dit wenslik om die bakke by twee uur in die namiddag te verwyder sodat die kuikens hul kroppe goed vol kan vreet.

Droë Kos vir Kuikens.

Die volgende droë mengsel vir kuikens is bevreemend bevind:—

Een tot Drie Weke.

- 1 inhoudsdeel growwe hawermeel.
- 1 inhoudsdeel koringsemels.
- 1 inhoudsdeel pollard.
- 1 inhoudsdeel mielmeel.
- ½ inhoudsdeel kweefmeel, vis of vleismeel.

Drie tot Ses Weke.

- 2 inhoudsdele koringsemels.
- 2 inhoudsdele Sussex gemaalde hawer.
- 1 inhoudsdeel pollard.
- 1 inhoudsdeel mielmeel.
- ½ inhoudsdeel kweef of vleismeel.

Ses tot Twaalf Weke.

- 2 inhoudsdele koringsemels.
- 2 inhoudsdele pollard.
- 1 inhoudsdeel Sussex gemaalde hawer.
- 1 inhoudsdeel mielmeel.
- ½ inhoudsdeel kweef of vleismeel.

Gewoonlik word 'n sekere hoeveelheid fyne meel of oorblyfsels van vorige kos, wat die kuikens nie kan of nie wil vreet nie, elke aand onder in die bakke gevind. Om dit weer te gebruik, kan dit met melk gemeng en die volgende dag aan hulle gevoer word.

Bakke vir droë kos moet so gemaak word dat hulle min, rot en ook vogreëf is. Daar is baie soorte bakke op die mark, maar dis nie nodig om hulle te koop nie; growwe petrolblikke en kassies is uitstekend vir die doel.

Net die beste soorte meel moet gebruik word omdat meel van 'n swak kwaliteit of geskimmelde meel baie goue ingewandmoelikeit veroorsaak. Behalwe bevoegde kos, moet 'n bietjie vars beenmeel twee of driemaal per week ook gevoer word. Dis een van die beste diervoedsels vir kuikens, maar miskien nie maklik op die platteland verkrygbaar nie.

Vyn gruis moet ook altyd beskikbaar wees, sook gemaalde houtskool. Laasgenoemde kan na goedvinde met die droë kos in die bakke gemeng word.

Grasvoer.

Om kuikens gesond te hou is grasvoer baie noodsaaklik, dit moet vars gevoer word tenminste eenmaal 'n dag of meermaal indien moontlik. Lusern is uitstekend (niks is beter) indien verkrybaar. Uit die groentetuin (niks is beter) indien verkrybaar. Uit die groentetuin kan 'n mens egter baie grasvoer kry wat anders verlore sou gaan, n.l. wortel-en-siekte, prei, kool, slaafblare, ens. Wilgerblare is ook baie nuttig vir hierdie doel.

Die hoofsaak is egter om iets vars, groen en sappig te voer en baie van ons gewone uitkruis soos knapskerwel en maatsie sal goed wees as daar niks anders is nie. Hawer, koring, ens., kan 'n mens laat uitloop vir kuikenvoer in die middel van die winter wanneer daar streper niks anders te kry is nie.

Gras.

Behalwe begraasende kos, is 'n seker hoeveelheid graanvoer ook nodig. Om hulle tweemaal per dag daarmee te voer, sal genoeg wees—al om 11 v.m. en 3 n.m. of later volgens die tyd van die jaar. In ander woorde, hulle moet dit laaste in die dag kry. Goëe graanmengsels, gegrapeer in drie groottes, kan op die mark gekoop word en is oor die algemeen betredigend, maar kan ook as volg opgemaak word vir kuikens tot drie weke oud—

- 1 inhoudsdeel vyngelrekte mielies (grof).
- 1 inhoudsdeel vyngelrekte koring.
- 1 inhoudsdeel vyngelrekte kaffiekoring.
- 1 inhoudsdeel vyngelrekte marna.

Vir Kuikens van Drie tot Ses Weke Oud.

- 1 inhoudsdeel vyngelrekte mielies (grof).
- 1 inhoudsdeel vyngelrekte koring.
- 1 inhoudsdeel vyngelrekte kaffiekoring.
- In twee duim-vyn krapgoed.

Vir Kuikens van Ses tot Twaalf Weke Oud.

- 1 inhoudsdeel gelyke mielies.
- 1 inhoudsdeel kaffiekoring.
- 1 inhoudsdeel koring.

Gewoonlik word 'n groot hoeveelheid graanvoer gemors—druwe en ander wilde voedsel vreet daar baie van. Tussen baie van die gekoepde mengsels is daar graan soos bokwiel wat die kuikens seker oppik.

Die graanvoer moet ook beskou word as 'n middel om die jong kuikens oefening te laat neem en moet dus na die eerste drie weke in krapgoed gegee word wat dikker gestrooi moet word, namate die kuikens groter word. Oefening dra baie by om mooi sterk kuikens te vorm, wat vinnig groei, en dit help ook om siektes af te hou.

Water.

Hoe gou jong kuikens water moet kry, is ook 'n punt waartrent verskil van opinie bestaan. Vroeg in die voorjaar, wanneer die weer koel is, is die moet van die derde dag heiltemeel gou genoeg, maar in middel-September, wanneer die dag warm is, kan water met veiligheid die tweede dag gegee word. Ons weet van bome met kuikens wat vyf dae sonder water was, maar hulle is in die koelte gebou.

As water egter eenmaal gegee is, moet dit altyd beskikbaar wees, dit moet in 'n kuikenfontein wat 'n ronde pan bevat gegee word, wat sal voorkom dat die kuikens in die water saambindel.

Fontein wat rondspits bo-op is, is beter as fontein wat bo-op plat is, want die kuikens sal nie op hulle kan klim nie en die fontein en water met hul nie bemors. Skoon water moet tenminste eenmaal per dag gegee word.

Melk.

Niks is beter vir groeiende kuikens as melk nie, maar ongelukkig is dit gebreukelike die bome- en grootmaaktyd gewoonlik skaars. As net 'n beperkte hoeveelheid beskikbaar is, is dit wenslik om dit met droë kos te meng en hulle eenmaal daarmee in die voormiddag te voer. 'n Mens moet versigtig wees om nie meer te voer as wat hulle net mooi kan opvreet. Die klam kos sal 'n afwisseling in die daaglikse dieet wees en die kuikens sal dit graag vreet.

As daar baie melk is, moet die hoeveelheid daarvan enigermate verminder word. Melk moet in eenmaal- of erdbakke gegee word, omdat die melk soos ysterware laat roes. Die bakke moet van die fonteinstee wees anders sal die kuikens hulle met melk bemors en taai en vuil word.

Hokke.

Die kuikens moet so gou moontlik op die grond gestrooi word, en hoe vaster en skoner die hok, hoe beter. By 'n groot hunderboerdery moet 'n stuk grond spesiaal vir die kuikens uitgehou word en na dit lang is aan die einde van die begraasingsseisoen, moet 'n mens dit laat ruste die volgende seisoen. Hierdie hokke is beter as hulle met gras begroei is, selfs al is die gras droog soos dit baie moontlik in die winter en vroeg in die voorjaar sal wees. As die kuikens in 'n kampo of hok gebou kan word waar iets groen groei, soveel te beter.

Niks is beter vir jong kuikens as insigte nie en dit kan hulle alreeds kry op plekke waar plante groei.

'n Hok met lusern beplant sonder idaal wees maar is nie altyd moontlik nie. In hokke waar geen gras groei, moet die grond van tyd tot tyd omgebarst word anders sal dit suur en besmet raak wat siekte sal bring. Droë lug en sonskyn help baie om kieme dood te maak en siekte af te weer.

Wanneer die oppervlak van die grond in die hok hard is, kan die kuikens nie 'n stofbad maak nie, en help om hulle vry van louse te hou en gevolglik van siekte. 'n Mens moet probeer om die hokke so daardie moontlik te verander.

Koelte.

Die natuurlike koelte van lewende bome, net plante, ens., is baie beter as koele wat op 'n kunstmatige manier verskaf word. Beskutting teen die warmte van baie nodig, tussens noodsaaklik, in hierdie deel van die wêreld.

Waar geen koele verskaf word nie, sal kuikens 'n aansienlike tyd van die dag sit en geen oefening neem nie, waardeur hul groei baie teruggethou sal word.

Mielies, sonneblomme, ens., kan in die hokke die getruk van kuikens geplant word en opklimmend langs die omheiningdraad. Aan die ander kant kan veel koele ook weer skadelik wees, daar die kuikens gereinig sal wees om klam te lye en lig en lug sal te veel

Nie te veel Kuikens Byrekaan.

Om kuikens met sukses groot te maak moet 'n mens oppas om nie te veel van hulle byrekaan te hou nie; alhoen kuikens van dieselfde oorspronk en grootte moet byrekaan gesit word in die kunsmoders en hokke.

Meeste pluimveeboere laat meer kuikens uitstreef as wat hulle voer plek het, en die dikwels die oorsaak dat baie van hulle doodgaan. Dit baie beter om 'n klein aantal gesonde heenders te lê as 'n groot boel wat nie wra goed vir die pot is nie.

Uitsing.

Van die dag wat die kuikens uitkom moet 'n mens begin om hulle uit te seek en enige mismaakte of krippel kuikens moet sonder versuin doodgemaak word. Die uitsoekproses moenie hier eindig nie, maar elke dag moet 'n mens kyk of daar nie 'n swak of sieklike kuiken is nie en hom uithaal. Othou dat die gesondheid van die ander kuikens tot 'n groot mate hiervan afhang.

Afsandering van die Hase en Hense.

By die ligte rasse, n.l. Utility Leghorns, Anconas, ens., moet dit so gou moontlik gedoen word, gewoonlik wanneer hulle vier of vyf weke oud is. By ander soorte, veral Wyandottes, is dit dikwels baie moeilik om die geslag te onderskei totdat die kuikens drie of vier maande oud is. Afgesien van die feit dat die hense meer ruimte moet hê, is die hase veral van die ligte rasse, gesig om die grootste deel van die kos op te vreet en die hense van die bakke af te hou en andersins luttig te val.

Tenye 'n hoenderboer reeds 'n reputasie het as teler van 'n goeie klas hoender, is dit baie teydelagtig of by meer as 'n paar hase moet grootmaak. Ligte rasse is nie goed vir tafelebruik nie; tersens is hulle selde die kos word wat nodig is om hulle groot te maak.

Tonepik.

Hierdie siegte gewoonte kom nogal baie voor by suurbroeiende kuikens en kan ontstaan deur verskeide oorsake. Dit vind byvoorbeeld plaas waar kuikens vir die eerste maal uitgesit word en een toevallig 'n ander een se tone pik, hard gesig om bloed te trek. Wat ook dikwels aanleiding daartoe gee, is waar daar, as gevolg van die tone-pik, 'n bietjie bloed op die voet bly sit. Kuikens het 'n natuurlike voorliefde vir dielike produkte en as hulle eenmaal bloed gepose het sal hulle geen kans laat om dit te kry nie.

'n Ander oorsaak is wanneer hulle hul tone of voete teen die kosbak knip en dit op die manier serraak. Enige kuiken wat op die manier beser is of deur owerblijg tone-pik, moet sonder versuin verwyder word.

Belangrike Punte.

Kunsmoders, hokke, voer- en water-bakke moet gereeld skoon gehou word. Die kuikens moet so dikwels moontlik ondersoek word ingeval inspekplae soos rooier, sandfloorie, ens., moontlikheid veroorsaak.

Verander die hokke van die kuikens van tyd tot tyd; verandering van omgewing doen wonders; moenie te veel kuikens in hokke of kunsmoders saambondel nie; soek al die swak en sieklike kuikens uit en verwyder hulle; othou 'n hên sonder sterkte en konstitusie is swak. Sonder die hase van die hense af so gou dit moontlik is om die geslagte te onderskei.

Moenie bang wees om iets raais of bietjie verandering in die gewone kosprogram van die groeiende kuikens aan te bring nie.

'n Mens kan nie kuikens uitsluitlik op boek kennis grootmaak nie. Boeke kan jou byvoetbeelde nie se wanneer jou kuikens begin kwyn of verandering van hokke nodig het nie.

Oefening is noodsaaklik vir die kuiken sowel as die hên, en kraggoed sal hulle hardie ordening gee. Laaste, maar nie minste nie, moet othou word dat kuikens net soveel aandag en sorg op 'n Saterdagagtermiddag en 'n Sondag as op enige ander tyd nodig het.

Mortality in Farm Flocks.

By "Pen."

Usually, no particular notice is taken when an odd fowl dies on a general farm, interest is only shown when an epidemic breaks out, and large numbers die.

As soon as several fowls die in quick succession, or when the general health of the flock is not satisfactory, immediate and thorough investigation should be made. If these steps are not taken, there is always the danger of some serious disease breaking out, and even if it does not cost the farmer most of his flock, it is possible that production will be seriously affected, so that his farming will be run at a loss.

Expensive equipment is not necessary, but interest and attention are essential to the economic success of poultry farming on the general farm as on the commercial poultry plant. All must be cleaned regularly with some good disinfectant to safeguard against the outbreak and spreading of disease. It is essential to keep the incubator clean, as there are so many diseases which attack newly-hatched chickens.

It is important for good results from eggs which are hatched by a hen that the hen should be quiet and calm in the nest and, to ensure this, it is necessary that she should be free of insects. Before a hen is placed on eggs, she should be dusted with some good insect powder, and then again just before the eggs hatch. Sodium fluoride may be used in place of proprietary insect powders.

Foster mothers and chicken pens should always be kept clean to avoid further mortality due to worms, Coccidiosis, or Bacillary White Diarrhoea.

The houses or sleeping quarters of growing or full-grown fowls should be kept free from fowl-ticks (wrongly called tampan) and houses should be built without racks in the walls or woodwork. It is advisable to paint all the woodwork regularly with some coal tar preparation or with equal parts of tar and old motor oil, which have been melted together. In spite of the general opinion that it is very difficult to rid a house of fowl ticks, with perseverance any place can be cleared of insects.

Fowl ticks cause the disease known as Spirochaetosis, and even though many farm flocks are immune to this disease, still the continual loss of blood, due to ticks, undermines the constitution of the birds, with the natural result that production decreases greatly. Any new fowl coming from a clean farm, is killed almost immediately by one of these ticks.

There is no known cure for this disease, so every effort must be made to rid the place of the cause.

In order to destroy this plague, as well as louse and redmite, the perches should be treated every ten days with one of the well-known 40 per cent. Tobacco extracts, such as "Blacklead 40," until the pests are cleared away. A small amount of this extract should be painted on to the perches, just before roosting time. The warmth given off by the body of the fowl causes the tobacco extract to evaporate and the fumes penetrate the feathers, killing the parasites.

Worms are the cause of the greatest mortality among farm fowls, and no better advice can be given than that all young fowls, at about four months, should be treated with Carbon Tetra Chloride, and once again when most of the birds are in the moult. Carbon Tetra Chloride is not expensive, and is recognised as the best cure for any kind of fowl worms. When it appears that the fowls are suffering from worms, this remedy can safely be used.

The dose for fowls over four months is 2 c.c. Carbon Tetra Chloride and 3 c.c. Liquid Paraffin, while for chickens under four months, the dose should contain less Carbon Tetra Chloride and more Liquid Paraffin, so that the dose is always 5 c.c. e.g. month old chickens should be given 1 c.c. Carbon Tetra Chloride and 4 c.c. Liquid Paraffin.

Experience shows that in the Union there are very few fowls on general farms which do not suffer from worms, and it is a plague to which every poultry farmer should give his earnest consideration.

Coccidiosis is not confined to birds alone. It is fairly general among animals too. Each year shows great losses to the poultry flock due to this disease. As a preventative against this disease, all chicken coops should be kept spotlessly clean.

A symptom of Coccidiosis is that the chickens stand around sleepily with drooping wings, and the excreta frequently contains blood, especially with young chicks. When holding a post mortem it is seen that there is an inflammation of the small intestine, while the blind gut is enlarged and dark red in colour. The other organs are usually normal. As a treatment in the case of an outbreak, Epsom Salts should be given as a purgative. To every 400 chickens from 4 to 6 weeks old, 1 lb. of Epsom Salts should be mixed in the soft food, while for full grown fowls, the quantity should be 1 lb. to 150 birds.

To combat this disease strict measures must be used. First of all the chicken houses and pens must be cleaned daily, and all refuse and litter must be burned, and for at least two years no chickens must be raised on contaminated soil.

Roop, which owes its origin to an ordinary cold, can be prevented, if precautions are made to see that the fowls do not sleep in draughty or badly ventilated houses. Roop is very infectious, and the fowl that has it should immediately be moved away from the other birds. As a cure for Roop, the following should be bought from the chemist:—

- 1 oz. Permanganate.
- 1 oz. Copper Sulphate.
- 1 oz. Iron Sulphate.
- 1 oz. Alum.

Dissolve this in a wine bottle of water and use for cleaning the eyes and nostrils.

Chickenpox is very common among fowls and turkeys. The symptoms are usually easily recognised by the warts on the comb, wattles and face of the fowl. This disease is combated by a vaccine obtainable from the Veterinary Department.

Bacillary White Diarrhoea is a disease which has spread over most of the Union with the result that the mortality due to it is very great. Every effort is being made by the Veterinary Department to fight this disease and with the co-operation of the South African Poultry Association, the Department has drawn up a scheme for the testing of flocks, and, if stud breeders make use of it, it should eventually help greatly in reducing the mortality among farm flocks.

Too many fowls die annually on our farms, and the position could be greatly improved. It must be remembered that every hen that dies, means a monetary loss.

Should there be disease or death among the flock, the first step to be taken is to remove the sick bird or to kill it, then the contaminated place should be cleaned as well as possible. If there is any doubt as to the disease, the birds should be dosed with Epsom Salts, and one or two sick fowls, plus a letter describing all the symptoms should immediately be sent to the Director of Veterinary Services, Onderstepoort, District Pretoria. Such fowls can be sent at the expense of the Government, and a letter will be sent to the owner giving him full particulars about the disease and the means of curing it. There are also a number of Government Pamphlets dealing with the most important diseases which are obtainable from the Agricultural Department, Pretoria.

CHAMPIONSHIP SHOW 1938.

S.A.P.A. BRONZE MEDALS.

Class No.	Winner's Name	Breed
2	De Ploos Bros.	Turkey.
3	Durbin Bros.	Malay.
14	R. Lammox.	Indian Game.
15	H. J. Galtrey.	Jalisco Game.
18	W. E. Mills.	O.E. Game.
20	R. A. Taylor.	Light Sussex.
41	Inland & Mischley.	R.I. Bantam.
75	R. Pevitt.	Assamery.
83	M. J. Stalder.	Barred Rock.
98	R. Pevitt.	Buff Rock.
99	A. M. Doering.	White Wyandott.
107	G. L. Forrest.	Silver Wyandott.
111	W. H. Helton.	Silkie.
120	B. Wilson.	Miscra.
176	V. B. Dicksman.	Modern Leghorn.
182	O. Symons.	Ashebury Duck.
209	C. Symons.	Pekin Duck.
201	C. Symons.	Indian Runner Duck.
210	C. Symons.	Javanese Bantam.
248	Miss K. Nixon.	O.E. Game Bantam.
267	G. Houtgarde.	Fancy Pigeon.
472	V. C. Pieterse.	

Please support advertisers, and mention "The S.A.P.A. Bulletin" when doing so.

Report of the Poultry Technical Committee for Great Britain.

(From The Veterinary Record).

In the Veterinary Record of February 12th, 1938, there appeared an editorial dealing briefly with the report of the Poultry Technical Committee for Great Britain which had just been published. The N.V.M.A. Advisory Committee on Poultry Diseases has now considered the report in detail and, following the recommendations of the Advisory Committee, several resolutions were discussed and adopted at the last meeting of Council, N.V.M.A.

The report, taken as a whole, must be acknowledged as an excellent analysis of the present unsatisfactory state of the poultry industry and we have at last an official account of the causes which have led up to the position in which the industry finds itself. One can have nothing but the highest admiration for the Technical Committee concerning the task it has accomplished.

Our chief concern is with regard to the relationship between the veterinary profession and the poultry industry. Let us admit at once that we as a profession may not have given as much attention to the welfare of poultry as we have to that of other domesticated animals. One of the reasons for this is the rapid growth of the industry and, to some extent, the economic value of the individual fowl has also had an influence. On the other hand, however, it must be admitted that the veterinary profession has played a very important part in contributing to the knowledge of specific infections in poultry for it can be rightly claimed that much of the research into such conditions in this and other countries has been the work of members of the veterinary profession. The result of such researches is shown in the comparative ease with which some of the well-known infectious diseases are being controlled to-day.

It is very evident, however, that the knowledge concerning nutrition, breeding, methods of management, etc., cannot be said to be in the same advanced state as that of specific disease and it is apparent that much more research into these subjects must be carried out before the poultry industry will be in a position of security. It is true that these subjects have been studied by competent workers but it would appear that still more concentrated efforts are required because of the highly artificial life which poultry are required to live for economic reasons.

It is gratifying to note in the report that the Technical Committee in its control scheme has considered veterinary inspection, for it shows that the committee is of opinion that the veterinary profession can be used to deal with diseases of poultry. The committee, however, only visualises the employment of veterinary surgeons when disease is already suspected in a flock. We feel that much more use can be made of the profession and that it is the duty and the right of the profession to play a leading part in the building up of healthy flocks in the country. The Technical Committee point out that the number of veterinarians possessing a specialised knowledge of poultry diseases is extremely limited and suggest that specialised courses of instruction, comprehensive in character, should be arranged. While we cannot agree entirely that only so very few members of the profession

have a knowledge of poultry disease, we are convinced that the time has arrived when the veterinary colleges must pay much more attention to the study of poultry husbandry and the control of poultry diseases. With this end in view the N.V.M.A. Council passed a resolution at its last meeting in which the attention of the various veterinary colleges and the R.C.V.S. was drawn to the necessity of further opportunities being given to veterinary students for training in poultry subjects. In order to meet the requirements of the control scheme in which veterinary practitioners are to be used, the N.V.M.A. strongly advises its members to obtain the latest available knowledge both on poultry husbandry and on disease control. Letters have been addressed to all Divisions of the N.V.M.A. pointing out the necessity for the arranging of courses for their members and veterinary colleges have also been approached on the subject. We are happy to be able to state that the various veterinary colleges have given reassuring replies. We would draw attention to a course in Poultry Husbandry and Disease Control, held during 1936 under the auspices of the North of England Division of the N.V.M.A. and we feel that if similar types of courses could be held in the near future at several centres, including veterinary colleges, veterinary surgeons attending them would receive a comprehensive training in the subjects.

We are not in entire agreement with the Poultry Technical Committee concerning its inspectorial organisation. The committee recommends the setting up of a Commission with many duties, one of which concerns the inspection of flocks in connection with the suspension or withdrawal of registration of distributing centres of chicks, eggs, etc. It is suggested that the area inspectors should be "well qualified in poultry husbandry, competent to detect external symptoms of ill-health in a flock and to judge of the general suitability of birds for breeding purposes," but "they would not have specialised veterinary knowledge." If the inspectors find evidence of disease, then a veterinary inspector would be called in. The N.V.M.A. visualised a type of area inspectorate and detailed its views to the Poultry Technical Committee in its written and oral evidence. The view held by the Association is that each area should be under the control of a veterinary officer for the inspection of poultry in health and in disease and that each veterinary officer should have under his direction a panel of veterinary practitioners (part-time) and a staff of full-time lay poultry inspectors "well qualified in poultry husbandry." A resolution to this effect has been sent from the N.V.M.A. to the Ministers of State concerned and we have been assured that the matter will receive consideration.

In connection with the Poultry (Stock Improvement) Commission for Great Britain and the Advisory Councils for England and Wales and for Scotland, suggested by the Poultry Technical Committee, the N.V.M.A. has made representations for the inclusion of members of the veterinary profession for, while the main duties of these bodies must largely be administrative, the assistance of members of the veterinary profession should be of considerable value.

The N.V.M.A. has the interests of the poultry industry very much at heart and will spare no efforts, through its members, to ensure the success of the scheme formulated by the Poultry Technical Committee if and when it is brought into being.

A WORD ON LOYALTY

By W. CALLENDER-EASBY.

It is a known fact that, with the exception of a few isolated examples, the co-operative movement in South Africa is not a success. Although this may be attributed to several causes, there are in my opinion two main reasons for this, viz., mismanagement and disloyalty, and it is the latter reason upon which I wish to write.

In every business there are certain fixed charges or overhead expenses which have to be paid whether the business concerned is just paying its way or is making handsome profits. There is a certain volume of business which must be done to maintain the handling costs at a minimum per unit. By spreading the standing charges over a large and increasing turnover the cost per unit is more than proportionately reduced, and although the other charges will increase they will do so in a decreasing ratio to turnover, i.e., if the business in any way makes use of specialisation.

From the above it follows that if co-operative societies are to be a success a large turnover is essential, and this can only be assured if every member gives his loyal and whole-hearted support to the business, and not only gives his support but takes sufficient interest to induce his friends and neighbours to become members as well.

Most of the co-operative societies in South Africa are agricultural, and with the trying conditions under which farming is carried on to-day, price, with the farmer, is of paramount importance. Competition, too, is to-day so keen that there may be three or four firms offering a certain farmer different prices for his product. The difference in price offered often proves

Poultry Farmers!—Organise!!

JOIN THE
NATAL CO-OPERATIVE EGG CIRCLE LTD.
AND PROTECT YOURSELVES.

Full particulars from
Head Office: P.O. Box 1606, DURBAN, Natal.

ORGANISEER.

Die organisasies hieronder aangegee maak 'n beroep op u vir u ondersteuning. Sluit nou aan en bevorder u belange soos as die van die bedryf.

- Suid-Afrikaanse Pluinveevereniging.**—Sekretaris, Postbus 1795, Johannesburg. Ledegeld, 7/6 per jaar.
- S.A. Pluinveevereniging Teluergistes.**—Registrateur, Postbus 1795, Johannesburg. Ledegeld, £1 is. per jaar.
- S.A. Australorp Breeders' Club.**—Sekretaris, N. W. Ayson, "Dallennan," Hornsey Weg, Mowbray, K.P.

a strong temptation to the short-sighted member who sells to competitors and thus helps to break down the foundation of his own business. He loses sight of the fact that only by maintaining a large turnover of his own business will it be able to pay him top prices. If he remains loyal he will gain to a greater extent, as by doing so he is eliminating competition between himself and his fellow farmers. There is no doubt that there are many advantages of marketing through one channel.

There is no excuse for the member of a well managed co-operative society to be disloyal, and once he has joined up as a member he should adhere to the rules and play the game. On the other hand, the member may have a legitimate reason for being disloyal. It may be said that mismanagement and disloyalty go hand in hand, and very frequently the cause of disloyalty is mismanagement. As already stated, price is of paramount importance, and no business can pay good prices and declare a dividend at the end of the trading period if it is badly conducted. Every effort should be made to keep expenses as low as possible, and waste should be eliminated. It should always be borne in mind that the business is that of its members, and their interests should come first, as only by giving members satisfaction can their loyalty be relied upon.

S.A.P.A. BREEDERS' REGISTER.

Order your stock including Registered Stud and Flock Cocks and hens from Register members. List of members free from REGISTRAR, P.O. Box 1795, Johannesburg.

ORGANISE.

The organisations listed below appeal to you for support. Join now and further your interests and those of the industry.

- South African Poultry Association.**—Secretary, P.O. Box 1795, Johannesburg. Subscription, 7/6 per year.
- S.A. Poultry Association Breeders' Register.**—Registrar, Box 1795, Johannesburg. Subscription, £1 is. per year.
- Capetown and Peninsula Poultry Club.**—Secretary, W. F. Klein, Esq., P.O. Box 569, Capetown. Subscription, 10s. 6d. per year.
- S.A. Minorca Club.**—Secretary, W. W. Bartlett, Esq., P.O. Box 7499, Johannesburg. Subscription, 6/- per year; Initial fee, 2/6.
- Sussex Poultry Club.**—Secretary, Miss M. O'Gearty, P.O. Box 318, Johannesburg. Subscription 5/- Entrance Fee 5/-.
- S.A. Leghorn Club.**—Secretary, L. Herbert, Box 208, Capetown. Membership, 5/- per annum. Half book Standard and advice free. Join now.
- S.A. Bantam Club.**—Secretary, O. B. Sheard, 72 B. Swifin's Avenue, Auckland Park, Johannesburg. Subscription, 5s. per year.