

OF INTEREST TO FARMERS

FEEDING GROWING STOCK

Many farmers rely largely upon the range for meeting the needs of their fowls in the summer and fall and as a rule the growing stock are rarely well fed. This is especially unfortunate in the case of the latter, as it means the birds will be stunted in growth and will be one and two months late in coming to maturity. This practice may reduce the cost of feeding, but the annual fall and early winter shortage of eggs probably can be attributed as much to the slow development of pullets, due to insufficient feed, as to late hatching. As a matter of fact, the feeding value of the farm range is greatly overestimated in most instances. While it is a good source of green feed and may supply abundance of animal feed at some seasons there is comparative little else for the birds to secure in a heavily-stocked range. It is not necessary for the farmer to feed extravagantly and he should certainly try to utilize all sources of waste as far as practical, but it is not profitable to carry the practice to the point where the birds are kept in a half starved condition. With the exception of grain fields to which the birds can have access after the crops are harvested, it is doubtful if there is any condition under which it will not pay to provide at least some feed for the fowls. A practical plan, for growing stock in particular, is to supply dry mash and scratch grains in hoppers, placing these where the birds can reach them readily and keep them supplied at all times. There is not the slightest danger of the birds eating more than is good for them, or profitable for the owner. They will eat freely of the scratch grain and dry mash when hungry but they will leave either to glean nearby grain fields or meadows for the added supplies that may thus be secured. The more rapid maturity, fewer losses and better stock that will always be secured where the birds are well fed, are advantages great enough amply to justify the slightly increased cost of feeding. It should be borne in mind also that while more feed may appear to be demanded by the limited hopper feeding method, the actual cost of raising chicks is not necessarily increased. Growing birds that are well fed, that can go to the dry mash or scratch grain hopper to make up whatever deficiencies they find on the range will do much less damage to crops and will take less toll in the feed lot than when they are compelled to steal everything they get.

ARTIFICIAL MANURE

Animal manure is a valuable fertilizer, but the supply is limited and dependence must be placed on other methods in the production of vegetables and other intensive crops. It now seems that an artificial manure may be made that is as valuable as animal manure. It may be made from straw, weeds, crop refuse and other organic materials that accumulate. Thus, instead of burning these materials, one may make a manure from them that can be turned to profit. Weed seeds will be killed in the process and will do no harm. Cabbage stumps, tomato vines and other refuse that rots slowly by other methods and often gives trouble in cultivation, may be reduced to a finely pulverized material by the new method. Many people have noticed that clover and other nitrogenous substances rot quickly when exposed to the weather. Non-leguminous materials, on the other hand, rot very slowly. This question has been under investigation, and it has been found that the non-leguminous materials rot slowly because of a shortage of nitrogen and other essential elements for the bacteria of decay. When these elements are supplied in commercial forms, rotting proceeds rapidly and a good grade of artificial manure is the result. One western experiment station has conducted one of the best experiments along this line in the country. It found that excellent results were obtained from a mixture containing 45 pounds ammonium sulphate, 13 pounds rock phosphate or acid phosphate, 35 pounds limestone, 2 1/2 pounds magnesium sulphate and 2 1/2 pounds sodium chloride per 100 pounds. The materials were used at the rate of 150 pounds to a ton of straw or leaves. The same amounts could no doubt be used with any kind of refuse. The fertilizer material was first mixed with the straw as it was piled in layers, but it was later found that good results followed application over flat-topped piles. The rotting took place in about 3 months in this experiment. About 3 tons of manure were obtained from 1 ton of straw and the cost was about 85 cents a ton.

SILAGE FOR SHEEP

The normal consumption of silage by sheep or feeding lambs will range from 1 1/2 to 3 pounds daily when silage is fed in connection with hay and some grain. It is believed to be undesirable to feed much in excess of 3 pounds daily and the most profitable gains are made where silage is supplemented with legume hay. Assuming a consumption of 3 pounds daily and that these lambs will be on silage for 100 days, would mean that you will need to supply 300 pounds of silage per lamb or approximately 15 tons for 100 lambs. To supply this amount of feed, you will need a trench silo 12 1/2 feet long by eight feet deep and an average width of 12 feet. There is just one caution that should be exercised in feeding silage to sheep and lambs. They are much more subject to digestive troubles from eating moldy or partly spoiled silage than are cattle. Therefore, particular care should be exercised to reject all such silage when sheep are being fed. Care must be exercised in starting lambs on silage. If too much is given at the beginning of the feeding period, the lambs will probably go off feed and scour. To prevent this, offer a small quantity at the start and gradually increase the daily allowance.

THE POULTRY HOUSE

Summer is the logical time to make any alterations in the poultry house that may be necessary or to make needed repairs, as well as to build whatever new houses that may be needed. Aside from the ordinary items of repairing that demand the attention of poultry flock owners, there is one that is coming more and more to the attention of these flock owners. That is the matter of insulation of houses. Insulation with some sort of building or insulating board not only helps to keep a poultry house warm in winter, but also helps to keep it cool in summer. It takes about four weeks to hatch turkey eggs.

ance until they are on full feed. Lambs weighing 50 to 60 pounds should consume about 1.5 pounds of silage per head per day when receiving grain and hay in addition. Larger quantities of silage can be fed, but some protein supplement, such as linseed or cottonseed cake, should be added to balance the ration. A fattening ration for lambs that gave excellent results at the Indiana experiment station is as follows: 1.33 pounds corn silage, 1.11 pounds clover hay, and 1.11 pounds of a mixture of four parts shelled corn and 1 part cottonseed meal. In wintering ewe lambs, silage should form an important part of the ration, and when fed in conjunction with a good legume hay it not only keeps the lambs in good condition but furnishes a good growing ration.

IMPROVED SWINE BREEDING

A method of swine improvement has been developed in Denmark and is being adapted to meet the conditions in this country. This promises to do for swine breeders what milk and butter records have done for the dairy cattle breeders and what speed records have done in guiding the standard and thoroughbred horse breeders. In other words, we are developing a method of more logically determining the productive ability of our swine. In a number of states, steps have already been taken to find a way for the swine breeders to work real improvement in their herds. A national committee, appointed last fall by the National Swine Growers' association, is at work on a swine record of performance. They hoped to locate the individuals and strains of swine which will produce more desirable carcasses, and to do so on a lower feed requirement than the present. One western experiment station last year tested 10 litters of pigs sent in by farmers. Four pigs were taken from each litter—two barrows and two gilts. These were all fed and handled in exactly the same manner so as to bring out differences in the inherent ability of the pigs to gain rapidly and economically, and produce high quality carcasses. This first test brought out some interesting differences. One litter of pigs gained an average of 1.53 pounds a day and another only 1.33 pounds. One litter required 436 pounds of feed for each 100 pounds of gain and another took only 361 pounds. The difference in feed was about 17 per cent. The margin per pig over feed cost was over a half more in some litters than in others. When the pigs were slaughtered and carcasses examined, it was found that some were much superior to others in quality and in percentage of the more valuable cuts of pork. Since the work was started at the station, two counties have taken up the testing of litters within the county. In these tests we see the start of putting into practice methods which may work for the swine breeder much as the cow-testing associations have worked for the dairymen. At the close of the county tests, these farmers who have entered litters will have a far more accurate measurement of the producing ability of their sows than they have ever had before. These tests which we are conducting says an expert swine grower in charge of the experiments, are based on the Danish system. When I visited that country recently they told me that they had greatly reduced the quantity of feed required for 100 pounds of gain through their swine-testing stations and, at the same time, had vastly improved the quality and uniformity of the carcasses.

CURING CLOVER

There is some uncertainty as to the best method of curing clover or alfalfa hay. For many years, the cooking and capping of hay was considered the best way to cure it. It was argued that hay cured in this way was more nutritious. It is well known that when hay is exposed to a few heavy rains, from 25 to 50 per cent of its nourishing property may be taken away. Constant handling destroys the leaves which is the most nutritious part of hay. Science, however, has thrown more light on the subject of feeding and we have a new factor to be considered. When hay was cured in the cock and under caps it was rich in the element vitamin A. We now know that vitamin D is important because it assists in the assimilation of minerals. This vitamin is captured from the sunlight. By leaving hay in the swath and then with a side delivery rake roll it into a windrow, this important vitamin is increased. There also is another factor to consider, labor. Through the use of the side delivery rake and the hay loader it is possible to handle the hay faster and with less man labor. Further, the hay cures quicker when rolled in a windrow and it doesn't take as long handling this way before it is ready to go into the barn. Everything considered, it has been found that curing hay in the swath and the windrow not only provides a better quality of hay but saves much labor.

HOG HEARTY DRINKER

It has been demonstrated many times by experiment stations as well as by thousands of producers that hogs do better and makes larger gains from a given amount of feed when they have constant access to water. Normally a hog drinks only small quantities at a time, but it likes to drink often. It will drink several times during one feeding period when it can run to a self-feeder at will. When the feed is thrown on the ground or on a feeding floor where the individual hog must eat in competition with a large group it is not likely to stop for water so long as there is grain to eat. But when it can run to a self-feeder it soon learns that there will be plenty of feed left when it returns. Then it begins to eat more deliberately and to drink several times before it has satisfied its hunger.

try keepers are believing that houses should be ventilated better than they have been in the past, and many believe that some sort of heat should be supplied. In either of these cases insulation is highly desirable. It is therefore worthwhile to consider in connection with any building operations that are planned for this summer. The more comfortable a house can be made, at the same time a good circulation of air is maintained, the less likelihood there is of troubles with rook and colds next winter.

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Chain Stores Show Increased Earnings

CHICAGO—An analysis of the investment possibilities of chain stores, prepared by F. A. Brewer and company, reveals that almost every branch of retail trade is represented by systems of chain stores.

Chains selling groceries lead by a wide margin in the number of separate stores. The largest company has 17,000 stores, and some of the other grocery concerns have branches ranging in number from 5,368 to several hundred.

Other chains deal in drugs, tobacco, shoes, furniture, women's apparel, general merchandise by mail order, candy, meat and automobile accessories. There are several big restaurant chains and a growing number of "luncheonette" systems, usually in conjunction with drug stores.

The survey covers 68 different chain store systems. Fifty of them report increases in net earnings during the first half of 1929, compared with the same period last year. The increases range from two-tenths per cent by a restaurant chain to 312 per cent reported by a chain dealing in apparel for men, women and children.

The prices of chain store shares, in every one of the 68 systems, show a considerable decrease from the highs of the year. One issue is selling at 64.7 times the earnings for 1928. This figure ranges over a wide range for the various systems, down to 5.9 times earnings for a radio and sporting goods chain.

Rail Giants at Gripes

From New York World. Seemingly to mind the days when Commodore Vanderbilt, Jay Gould and other bold spirits were fighting for railway empires may soon be re-enacted when the battle of the Eastern trunk lines for the additional links needed for their projected consolidation begins in earnest. For two years there has been much preliminary skirmishing, and the combat thickens.

The Van Swearingens of Cleveland and the Taplins of Pittsburgh are now waging a fight for control of the Wheeling line. The proposed joint acquisition by three of the Eastern trunk lines has been denounced by the Interstate Commerce Commission as being without its previous authorization and also in violation of the Clayton act. The Van Swearingens have also a working agreement with the Baltimore and Ohio which seems to be aimed especially at preventing the Pennsylvania from obtaining any of the properties they desire for their own consolidations. For a time these groups appeared to have isolated their points of view, but Pennsylvania about two years ago joined forces with L. F. Loree, president of the Delaware and Hudson, who then had ambitions to establish a fifth trunk line in eastern territory. Mr. Loree finally abandoned this project and dropped out of the picture in the Lehigh and the Washburn to the Pennsylvania, which then emerged from its isolation stronger than ever.

And now Mr. Loree has again appeared on the scene and is contesting before the Interstate Commerce Commission the acquisition of the Buffalo, Rochester and Pittsburgh by the Baltimore and Ohio. What project he has up his sleeve this time is not yet disclosed, but evidently he intends to make more trouble for the Van Swearingens and Baltimore and Ohio allies. When the Interstate Commerce Commission has been at work on a consolidation program of its own, which it expects to publish later in the year and to hold hearings on it so as to obtain the opinions of railway executives and other experts as to the groupings which will best serve the public interest. Evidently big developments are in the making, and the outcome may radically change the railway map in the eastern territory.

Misused Police Zeal

From Baltimore Sun. Everyone in and around Los Angeles is in favor of sun tan except, apparently, the police authorities. Since the sun-tan vogue hit that exalted city the police have been trying to break it up. They have raided the beaches regularly and in force, seeking to bring the dermal exposure down to the limit they have set.

Up to yesterday their efforts had been nearly futile. A cop is a conspicuous object. Six cops are six times as conspicuous. So when the law in its majesty appeared on the beach, the bathers simply hitched up their fallen shoulder-straps and thumbed their noses, figuratively, at the foiled officials. But policemen, and especially Los Angeles policemen, are a resourceful lot. They finally set two of their number in a vacant house and armed them with spyglasses. Seven others hid themselves behind a friendly sand dune. A system of signals was arranged whereby the watchmen in the house could communicate with the main body. For hours there was no action. Then, moved by the heat of the sun, a few men and maidens slipped down their shoulder straps. The watchful dicks observed this scoff-lawism, signaled their brethren, and the raid was on. The majesty of the law was duly upheld—and eight Californians, including a man and his wife, were hauled off to the hoghouse.

The story is interesting in itself. But it occurs to us that it would be more interesting if it were accompanied by statistics telling how many robberies and other serious crimes were committed while these nine moral cops operated against the sun-tanners.

Q. Who founded the Youth's Companion? E. N. F. A. The Youth's Companion, which is soon to be merged with and known as The American Boy, was founded over a hundred years ago by Nathaniel P. Willis, Sr.

Develop 295 Varieties Of Late Keeping Apples

NEW YORK—An apple breeding record is reported to the American Association for the Advancement of Science by W. T. Macoun, dominion horticulturist of Ottawa, Canada.

More than 30 years ago, he says, there were only five known late keeping apples that could be depended upon for hardness at Ottawa. Now there are 295 resulting from breeding work at Ottawa.

Convention Planned to Determine Man's Rights

A society which calls itself the "World League for the Rights of Man," proposes to hold a convention in Vienna, Austria, next year, when the following proposals will be discussed. That: Divorced wives not be entitled to alimony before the lapse of three years after divorce. Divorced wives to forfeit the right to bear the names of their former husbands; and to resume their maiden names. In paternity suits blood tests and anthropological examinations to be required. Mothers of illegitimate children capable of earning a living to be obliged to contribute to the maintenance of their children in proportion to their incomes. Fathers of illegitimate children to be given certain legal rights in them, as well as responsibility.

Butter Production

Whether Uncle Samuel has been slightly concerned of late about his gift and is changing his diet or whether it just happened, production of butter in the United States fell off 29,000,000 pounds in 1928, as compared with 1927. Still the figure shows rank as the second high production year of history.

Where the dairy industry made up most of this loss, however, was in ice cream and evaporated milk, both of which showed substantial gains.

Breakfast

During the Shore day festivities of the Ellis convention here, Andy, the famous restaurant man, was among those present. It was during a lull in the rush of visitors that Exalted Ruler Brown of 300 showed Andy a clipping about a hen adopting a litter of pigs.

"Well," said Andy judiciously, "I don't see anything unnatural in the association of ham and eggs."—Los Angeles Times.

New Film Marvel

The rotoscope, a machine invented in London, will take slow motion pictures of objects revolving at a rate of 500 revolutions a second and slow them down to one revolution a minute. Test pictures taken by this means reveal that drops of water are spherical, lightning a single intense spot of light, and that the flame of an ordinary gas jet fluctuates considerably instead of remaining steady, as it appears.

Keep school shoes looking new

Watch scuffs disappear at the touch of the duster. Clean, smooth color comes back to faded shoes. More than 50 marvelous shades—sovents. Colors for black, brown, tan and white shoes—a neutral polish for others.

BARTON'S DYANSHINE SHOE POLISH



Losses

"Work teaches a girl the value of money." "Still, you can learn something at bridge, too."

A young man was arrested for hitting a girl on a bench—must have taken her for a sand witch.

Lucky Fellow

"How did you come to beat your wife?" "Quite by accident! She usually beats me."

In a controversy between two women there is much to be said on both sides.

Traffic cop gets summons

Even he can't get away with it



"DON'T try to put anything over on Nature," is the way a cop would express it. "Sooner or later she'll get you. Give you a ticket and lay you up in a place where you'd rather not be. Even cops can't get away with it. Like everyone else, if they don't pay attention to the warnings they get a summons that lands them in the doctor's office."

"What the doctor advises is Nujol. Says Nujol will regulate you just like you regulate traffic. Keep things from getting in a jam. And the doctor is right. Just ask the healthiest men on the Force. If they need Nujol—with all the exercise they get—what about the fellows that roll by in their cars?"

"Just take a tip from me. You may have the best intentions in the world. But everybody gets tied up at times. Nature can't always take care of things without help."

"Our Medical Chief tells me that Nujol isn't a medicine. It contains absolutely nothing in the way of medicine or drugs. It's simply a pure natural substance (perfected by the Nujol Laboratories, 2 Park Avenue, New York), that keeps things func-

Nature's law O. K.

tioning at all times as Nature intends them to. Normally, Regularly, If not only keeps an excess of body poisons from forming (we all have them), but aids in their removal."

Start Nujol today. It won't cost you much—not more than the price of some smokes. Worth a try, isn't it? You'll find Nujol at all drugstores. Sold only in sealed packages. Get some on your way home today.



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IF Lydia E. Pinkham were alive today she would be 109 years old. Her descendants continue to manufacture her famous Vegetable Compound and the integrity of four generations is behind the product. By accurate record, this medicine benefits 98 out of every 100 women who report after taking it. You can be almost certain that it will help you too.

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