

## Does It Pay to Keep Old Hens?

BY G. L. WOOD.

THE general plan among breeders is to keep the hens through their first year for eggs and to use them the second year for breeders. This is almost an established rule and only exceptionally good hens are kept over the second year. These are the ones with extra egg records or are either good pullet or cockerel breeders. Such hens have been kept as long as 10 years, and their owners insist that so long as they can get hatchable eggs from them they use them. This, of course, is an exception, and occurs with every breeder. But how long shall the average hen be kept? Shall we as a rule continue to dispose of the hen in the second year?

The trapnest has made possible some interesting data along this line.

### Egg Production.

Bulletin 135 of the Utah Experiment Station, gives the results of a study in annual egg production. This is based on the records of a flock of 7-year-old hens and their progeny, and figures given are very interesting. For example, a White Leghorn hen, and her comparative egg record for six years was started with 103 eggs. Under the usual system of judging layers, this hen would have been discarded as a drone, but the next year she came back with 197, and repeated with 188. In her fourth year she fell down to 72, yet in her sixth year she laid as many eggs as she had when a pullet. It is a question whether it paid to keep this hen after her third year, but such records are necessary in order to learn definitely about such things.

The cost of renewing the flock is considered one of the greatest drawbacks to the poultry industry, the authors estimating the cost of a pullet—probably up to laying age—at from 50 to 60 cents.

The average productive life of hens cannot be estimated at this stage of their work, but for the strain used in their studies was thought to be about four years. The range of individual egg production in their flocks was found to be from 100 to 160 in the first year, from 105 to 140 in the second year, and from 100 to 130 in the third year. After the third year the production remained fairly con-

stant at about 90, with a variation of not more than 10 or 15 eggs per year.

### High Record.

The flocks giving a low first year record gave a comparatively high record the second year, and those giving a high first year record gave a low one in their second year, but the three-year average of all flocks was remarkably constant. This led to the conclusion "that an unselected flock of hens of a given strain has a certain potential laying capacity in its first three years, and that it makes very little difference how many eggs are laid in either of the first two years as the balance will be produced in the other two."

The records beyond the third year indicated that there is very definite laying capacity for old hens, and that there will not be much fluctuation from year to year. The average individual production for all flocks was 124 eggs in the first year, the same number in the second year, and 112 in the third. The conclusions were also reached that nearly all the longer-lived hens in a flock will lay over 500 eggs, the majority will lay 600 or 700 and individual records up to 1000 may be expected.

### Average for Flock.

An average for the flock of 127 eggs per year for three years is unquestionably profitable and indicates good constitutional vigor. It was found that in flocks making high first-year records the second and third years' records were low and that in those making low first year's records the records of the second and third years were high, but the high layers of the first year continued to be the highest producers.

The 10 hens making the highest second year's record gave a higher three-year total than the 10 making the highest first-year record. More hens made their highest year's record after than during their first year, and three made their highest record in their fifth year. Nearly all the hens in these flocks whose total production has been extremely high have made low or medium first-year records. "From these studies it appears that the three-year average is the most reliable index of the value of a given individual."

## How to Sell Eggs for Hatching

BY G. L. WOOD.

THERE are many poultry breeders who will have eggs for sale this Spring and who are wondering just how they are going to find any buyers. Many of these breeders have extra good stock and may have been in the blue in the Winter shows, and have eggs that would give a needed improvement to many flocks. But how to get in touch with the buyer is the question. It takes more than good birds and blue ribbons to get your goods on the market, and one must get on the market and get there strong if he is to get anything but pains for his dreams and his labor.

### Men Who Succeed.

Did you ever stop to think that the men who succeed in any business are the biggest advertisers? These men have no particular desire to spend large sums of money with the papers. If it were possible for them to get the business without it they certainly would do it. Advertising is strictly a business proposition. It is the medium which brings the buyer and seller together, and the price is based

upon the number of people the particular advertising firm can serve.

The poultry business is no exception to the rule that applies to any other business.

### Advertising Necessary.

There is no possible way to succeed without using advertising space of some kind or another. The large poultry breeders in the East whose plants will invoice over \$100,000, have run their ads. continually month after month for 15 years without a break and will continue to until they go out of business. An easy way for them to retire will be to drop their advertising and their competitor will attend to the rest.

The medium makes some difference. Just now the farmer and the man in the small town is the best prospect. The farmer the country over will do more to improve his stock this year than he has ever done before. He is getting fully awake to the fact that the best stock pays and the breeder who can get in touch with this large prospective trade, even in a small way to start, will get his share of the business.

While this is quite an item of expense and would not pay with a small machine yet in a big plant it is paid for several times over by the saving of the duplication of the small machines, as well as by the economy of the fuel and labor.

One of the unique features of the plant is a turning system, by which compartments holding 10,000 eggs are swung on a pivot and the eggs turned by inverting the entire compartment. This enables one man to turn 100,000 eggs in less than two minutes. The temperature is regulated to a tenth of one degree, while water sprays regulate the moisture to a similar nicety.

### Father Knew.

Small Boy—Father, what is an equinox?

Fond Parent—What in the world do you go to school for? Don't you study mythology? An equinox is a mythical animal, half horse, half ox. The name is derived from the Latin "equine," horse, and "ox." Dear me, they teach you absolutely nothing that is useful nowadays!

## When Luxuries Become Necessities

FIFTEEN years ago the man who owned an automobile was looked upon as a man of great wealth and the machine as a luxury far beyond the reach of the average mortal. But today the automobile has become a farm necessity. A score of years ago telephones in farm houses were almost unheard of and were more for amusement than for service. Piano players, phonographs, kodaks, motorcycles, electric light, water under pressure, gas ranges and many other articles that go to provide household comforts of today, were, only a few years ago, unavailable for farm use, or if they were obtainable, they were for the luxury-loving few who would afford them.

But needs are often felt before they are expressed, and needs in the farm home are no greater than in the city home. Farmers must provide for their own homes. In the cities many of the comforts are available for the asking. But there is no luxury or comfort of the city that is not available today for the rural home, and in most cases at a lower cost than is paid for the same comfort in the city.

The first cost of any convenience is, of course, much greater for the farm home, as it is necessary to install the plant and then operate it. Electric lighting systems, for example, require the purchase and installation of the machine for generating the electricity; storage batteries for the accumulation of reserve power and an engine for operating the plant. This costs money, but the operating cost, plus the interest on the investment, is lower than the cost for the same amount of power supplied by large plants in most cities.

It is no longer the height of folly for farmers to think of making use of some of the many devices which go to make the home more comfortable. In fact, the situation is the other way around, and it is only the shiftless man who does not care to give some consideration to modern appliances for lessening the labor and increasing the comfort of the home.

Every device which goes to supply convenience in the farm home and make it even more comfortable than a city flat, is to be obtained from advertisers in farm papers. Not every issue has all these advertisers represented, but if any reader wants any modern appliances, from an electric light plant, sanitary closet or septic tank, to a water pressure system or refrigerating plant, let him write the Editor, Oregon-Washington-Idaho Farmer. The luxuries of yesterday are the necessities of today and there is no use in trying to think otherwise.

## Double the Wheat and Oat Crops

Money must be made by better farming; it is common sense to see grain drilled only 3 inches apart, not 6 inches or 7 inches between rows—means much better seed distribution, better surface covering with crop, less wasted land, better saving of moisture, crowding out the weeds and many other advantages; one maker of 3-inch drills guarantees 25% or better increase or no pay for the machines. Fetzer & Co., of Springfield, Ill., claim in a dry year the yield has been increased four times more per acre, besides making a good stand of clover where the clover with wheat was dried out with 7-inch rows. Write today for the proof and guarantee and free printed matter.

## Hatch 150,000 Chickens at Single Time in Texas

THERE is a chicken hatchery at Port O'Connor, Tex., where 150,000 chickens are hatched at one time. Perhaps the most remarkable feature of this plant is the fact that all the eggs, together with room for candling, chick-packing and all engines, fans and equipment, occupy but a single floor, 16 by 50 feet. Furnished with common incubators, such a room would have just about the same capacity in three weeks as this plant has in a single day.

This wonderful economy of space and cost is attained by placing the eggs in superimposed trays like the type cases in a printer's case rack, or the trays in a fruit dryer. This idea has been tried before, but was not a success on account of the hot air rising. In the present instance, this difficulty is overcome by forcing a continual current of air from a centrifugal fan through the hatching chamber, which serves to keep it at an even temperature throughout.

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