

ject for which the pigs are being fed. If for prize animals then the number left on a sow should be less than for ordinary feeding purposes. About eight for a matured sow would be a good number. The pigs will be stronger and much better.

The last two weeks before farrowing the sow's feed should be of good quality and not too bulky. After farrowing her feed should be light for a day or two. A slop of middlings and skim-milk makes a good food for her. Increase her food gradually and give a little oilcake or linseed meal once or twice a week. As soon as the young pigs are about three weeks old they will begin to eat a little. It is a good plan then to have a pig creep for them similar to a lamb creep. In this put shallow vessels with milk, ground feed or soaked wheat to induce them to eat. Keep them well supplied and keep pushing them along. Nothing will increase the flow of the sow's milk so well as a liberal supply of bran. When the young pigs are about six weeks old it is time to think of weaning them, but this should be determined by the way they are eating and growing rather than by their age. Weaning should be done gradually. Reduce the feed of the sow, and feed the little fellows extra. After a week or so take away two of the best pigs, then later another two and so on, leaving the poorer ones a little longer. The sow can thus be dried up without any injury to her udder.

Get the young pigs on a nice piece of clover as soon as possible. There is nothing equal to it for growing pigs in the summer and making profitable pork.

FEEDING GRAIN TO LAMBS.

Teach the young lambs to eat grain as early as possible. The lambs are inquisitive little fellows, and a snep-herd can soon teach them to lick meal. The best way to give lambs their meal is in what is called a lamb creep. The lamb creep is a small enclosure opening off the pen in which the lambs are running. The opening into it is only large enough to admit the lambs. Place a trough in it and keep it supplied with meal for the lambs to eat. The best feed for the lambs is a mixture of oats, bran, and linseed meal, equal parts of each by weight. Corn is too fattening for young lambs, and does not provide sufficient growing material. The lambs can use large quantities of bran without any injury. The oats may be fed whole; if ground the lambs will leave some of the hulls.

Sheep are very particular about their feed. They want the best. They will leave food that has been nosed over by other animals. So a little patience will have to be exercised in getting the lambs to eat. Remove any meal they have left and give a fresh supply. Keep everything clean and sweet for them. If the lambs are still in the sheds feed them meal night and morning when the sheep are fed. After all the chores are done see if the lambs have eaten up their grain; if they have, give them some more. By the time they are eight weeks old they will eat one-fifth of a pound a day. At ten weeks old they will consume one-quarter pound a day, and at twelve

weeks a good lamb can get away with half a pound of grain.

When the lambs go out to pasture make a creep in the pasture field and continue the supply of grain regularly, gradually increasing it. The result will be that the lamb will pass through weaning time much better and ultimately be ready for market weeks earlier than lambs that have had no grain. If they are held until those that have had no extra grain are ready they will be fully a quarter heavier, and worth that much more.

FEEDING GRAIN TO BREEDING EWES.

If the ewes have dropped their lambs before the grass has advanced far enough to be pastured, they will require liberal feeding so as to encourage as liberal a flow of milk as possible. They should have as much succulent food as they will eat and from a pound to a pound and a half of bran and about two pounds of hay each per day. A heavy flow of milk can only be maintained by good feeding while the ewes are in the sheds.

When the ewes go out to pasture, and this should be as early as possible, the grain ration should be continued until the soft, early grass has given place to a more substantial one. When this condition of grass is reached, the experiments of Professor J. A. Craig at the Wisconsin Experiment Station go to show that it does not pay to feed grain to the ewes with the idea of assisting them to do better for their lambs. The experiments, which were repeated three years in succession, show conclusively that it does not pay, and that though the ewe may lose a little in weight she can easily pick that up again after the lambs are weaned if she has good pasture. Of course, with thoroughbred stock it might be a breeder to feed a little grain to hold his ewes in a little better condition, but that is all that would be gained.

CHEAP EGGS.

HOW TO PRESERVE THEM.

Eggs are now bringing less than ten cents in country places; what to do with them is the question. Many farmers eat them, because they say they are so cheap they are not worth taking to the store to trade with. Many thrifty city housewives lay in a large store of eggs at this season and preserve them for future use when eggs are bringing a high price. Many farmers' wives might take a lesson from them, and preserve twenty-five or fifty dozen eggs for winter use. The eggs laid during the winter could then be sold at a much higher price.

Experiments have been made in Germany, by Director Strauch, of the Agricultural School in Neisse, with various methods for keeping eggs fresh. At the beginning of July twenty fresh eggs were treated by each method and examined at the end of February. The following is a summary of the experiments and the results:—

Kept in brine: All unfit for use. Not decayed, but unpalatable from being saturated with salt.

	Per cent. spoiled.
Wrapped in paper	80
Kept in a solution of salicylic acid and glycerine	80
Rubbed with salt	70
Packed in bran	70
Coated with paraffin	70
Painted with a solution of salicylic acid and glycerine	70
Immersed in boiling water 15 seconds	50
Treated with a solution of alum	50
Kept in a solution of salicylic acid	50
Coated with soluble glass	40
Coated with collodion	40
Coated with varnish	40
Rubbed with bacon	30
Packed in wood ashes	20
Treated with boric acid and soluble glass	20
Treated with potassium permanganate	20
Coated with vaseline and kept in lime water	20
Kept in soluble glass	All good

The most useful of them all is the one given second to the last in the list. It is, however, unnecessary to coat them with vaseline.

The following receipts for making pickle for preserving eggs have been extensively tried and can be recommended. The eggs, however, must be perfectly fresh, and let down into the pickle with a dish when they will settle to the bottom. Packed in this way, if in a cold place, the eggs will keep fresh for months:

1. To a pailful of water add $\frac{1}{2}$ lb. of slacked lime and $\frac{1}{2}$ lb. of salt. Make up enough to cover the eggs in whatever vessel is used.

2. Add three-quarters of a pound of nitre to half a barrel made up of half a pound of slacked lime to a pailful of water. The nitre is used instead of the salt.

3. Pack the eggs in a barrel, and cover them with a good lime wash well stirred and strained. The eggs require washing when taken out of this pickle.

If the lime pickle is too strong it is apt to harden the white of the eggs, and sometimes to give the eggs a limy taste. To prevent this some advocate rubbing the eggs with lard before putting them in the pickle.

4. Another method recommended by some is to take a dozen or so at a time, and dip them five seconds in boiling water containing about five pounds of common brown sugar per gallon of water. The eggs are then placed on trays to dry. The hot water causes the formation of a thin skin of hard albumen next to the inner surface of the shell, while the sugar effectually closes the pores of the latter. When cold, the eggs are packed in a mixture of one part charcoal and two parts bran.

As a packing material for transportation, a mixture of eight parts of bran with one of powdered quicklime is of great value.

GIVE THE BOYS SOME LAMBS.

It is a good plan to give the boys on the farm a direct interest in the stock. There is nothing that will bind the boys to the farm as thoroughly as owning something of their very own. Where a lamb has to be raised by hand let one of the boys have it for his own if he will care for it. If so fortunate as not to have to raise any by hand, let the boys have one each out of the flock for themselves and teach them how they should be cared for, and thus interest them in the work of the farm.

Let the boys realize that the lamb is their own, not simply called so. When the lambs are sold give them the price of the lamb. Don't let it be "Bob's lamb but dad's mutton." That

is a sure way to drive the boys off the farm. If the lambs are kept in the flock give the boys the increase and the wool. They can thus be taught early lessons of industry that will benefit them all their days. The farms want young capable feeders; train the boys to be intelligent feeders and good stockmen.

The same line of work may be extended to other interests on the farm. Take the boys into partnership and interest them in your work.

CONDITION OF CATTLE IN THE STATES ON THE PACIFIC SLOPE.

The last report from the states of Oregon, Idaho, Wyoming, Utah, Nevada, Colorado, New Mexico, Arizona and California, show that the condition of the cattle is none too favorable. Throughout these states the stock-raisers are anxiously watching the weather. California is suffering from a prolonged dry spell and thousands of cattle are starving. The cattle are quarantined for Texas fever, with but a very scanty hay ration to carry them through the storms of April, and cold weather will pile their bones against the wire fences. In Colorado the snowfall has not been up to the average and there will be a very serious shortage in crops unless heavy spring rains fall over a very large area. Down in Arizona it has also been dry with much wind, which has done much harm to the ranges. A great many of the cattle are not in as strong flesh as usual, but there are fewer of them to handle and pastures and water may hold out. Utah has been more fortunate and the cattle should come out in good flesh next fall.

Prices for stockers out there are high. Texas stockmen are asking \$20 apiece for yearlings and getting it. The buyers, however, are not the northern men, who usually purchase most of the stock, but men from Kansas, Nevada, and Colorado. The northern men will not have anything like a full quota to market in 1898, less in 1899, and very few in 1900.

It is reported that on the whole the cattle are not in average condition, which is supposed to be due to the lack of moisture over a great section of the west. This foreshadows an unfavorable summer season with hot winds in the corn belt. The only thing that will prevent this is a general soaking rain lasting for several days. It is almost too late to expect such a rain now. On the other hand there is a decreased number of animals to handle, and less pasture and water will suffice, so that what cattle there are on hand may come out in good condition in the fall. It is estimated that the shortage of cattle in these states will amount to 30 per cent. of an average crop.

FERTILE versus INFERTILE EGGS.

Much has been written and said about the advantages of having infertile eggs for sale. The chief reason for advocating infertile eggs is their better keeping qualities. The keeping quality of infertile as against fertile eggs was tested by Mr. L. G. Jarvis, at the Ontario Agricultural College during the season of 1897. The results were in favor of the infertile