

5. To prevent egg-eating, which follows the laying of eggs with soft shells.

6. By the regular feeding of meat and keeping the fowls in active exercise to prevent feather eating, generally caused by the omission of both.

7. To prevent the acquiring of the bad practices named, the cure being very difficult.

8. To furnish the hens, as nearly as possible, with what they can pick up for themselves when running at large outside, such as : insects, in the shape of ground meat ; grit (to aid digestion), in the shape of gravel and broken oyster shells ; lime, in the shape of ground oyster shells ; green stuff, in the shape of clover hay (steamed), cut short and mixed in soft feed, carrots, cabbage, turnips, &c.

At noon, when grain was given, oats were fed in small quantity.

For the afternoon ration wheat was given, with barley (occasionally), mixed in equal quantity. Vegetables, such as carrots, mangels and turnips, were kept always on the floor of the pens. Very little cabbage was fed during the winter.

The rations, as aforementioned, were fed to the following stock in the main building :—

	Pullets	Hens
Plymouth Rocks	11	12
Brahmas	—	10
Langshans	—	4
Buff Cochins	—	8
White Leghorns	10	9
Wyandottes	9	4
Andalusians	8	6

Among this stock will be noticed numerous hens, some of them old hens, so-called because they were over two years, and kept for breeders and sitters during the coming season. As there was no alternative, they were placed with the pullets, a practice to be avoided when possible, for the reason given in report of last year, "that the ration which would go to eggs in the pullets

would likely make the hens too fat to lay."

The effect in eggs of the rations on the pullets and hens is given as follows :—

	From 9th Dec.	Jan.	Feb.
11 Plymouth Rock pullets . .	74	105	50
5 " hens	25	18	15
9 White Leghorn pullets . . .	81	112	124
8 " hens	16	20	18
9 Wyandotte pullets	29	50	99
4 " hens	15	22	15
5 Buff Cochin hens	17	40	22
4 Langshan hens	7	21½	5
8 Brahma hens	4	13	11
9 Houdan Hens		2	10

It may be said that the showing is not a good one for the number of stock, but it must be borne in mind that the feeding was only experimental. The result, however, is striking proof of the great value of pullets over old hens as revenue producers, under the same conditions as to housing, care and feeding. The superiority of young stock over old has long been known to experienced poultry keepers, but the fact is appreciated by comparatively few farmers. The conclusions to be arrived at from the experiments are :—

1. That no hens should be kept over two years. Because, after that age they moult so late that the prospective profit is eaten up before they begin to lay.

2. No soft-shelled eggs were laid by the pullets, showing that they are not as likely to do so as the old stock ; that the daily mixing of coarse sand, fine gravel and sifted oyster shells in small quantities has a preventive tendency.

3. That no eggs nor feathers having been eaten, to date of writing, the regular supply of ground meat mixed in soft feed is to be recommended.

4. A small quantity of salt was mixed daily in the hot morning ration, but as it created looseness among the Brahmas, Cochins and several Plymouth Rock hens, its use was given up.

5. The feeding of vegetables, viz., carrots, mangels, turnips, &c., &c., in generous quantity, had the effect of keeping the hens in excellent condition, and is necessary for the production of eggs.

6. Scattering the grain food among the straw and chaff always on the floors of pens, kept the fowls (particularly the young ones) active. This grain food should not be fed in too great quantities.

AS MUCH RANGE OR ROOM AS POSSIBLE.

While on the subject of winter laying it may be stated that the layers do better when they can enjoy as much freedom as possible. Many farmers have their poultry houses so situated that with very little trouble or expense they can so arrange as to allow their fowls, access to a barn, stable or enclosed shed, where gravel, sand, coal ashes or other substances may be found for the hens to scratch in. Fowls so situated are not likely to give trouble in the way of eating eggs or feathers or laying eggs with soft shells. But there are others, and perhaps the great majority, who can only allow their laying stock limited quarters from the time of shutting in until the warm spring sun makes bare the earth again. It is to such persons that the results of the experiments enumerated above and the experience gained as to the breeds which stand confinement best will be of most value.

BREEDS WHICH HAVE LAID BEST IN WINTER.

The experience of the past four winters proves that the breeds which are often stated to be the most unsuited to cold climates lay the best. It is often said by the inexperienced, or the prejudiced, that fowls with large combs are not suited for winter layers, because their combs will freeze. If anyone wishes to make revenue from his winter eggs he must not keep his lay-