FARM POULTRY.

A. E. SMITH, IN THE POULTRY HERALD.

Poultry receives less attention than any other class of live-stock. It is neglected on some farms because nearly everything else is; but why should thous-ands of our best farmers, some of whom have taken courses in agricultural schools, or colleges, so neglect it? First, because farmers do not realize returns from poultry in large amounts; they fail to provide comfortable quarters, food and care; second, they do not figure the cost and returns and compare results with those of other classes of live stock.

A thrifty person will find poultry raising a pleasant occupation, and one of great profit. One should understand the principles of breeding in order to accomplish best results. That is always a safe business which furnishes the necessaries of life. "We may live without books,—What is knowledge but grieving? We may live without hope—What is hope but deceiving? We may live without love—What is passion but pining? But where is the man that can live without dining?"

Of the necessaries of life the last to suffer are the food-stuffs. Now, poultry products contain a large amount of nutriment in comparison with their cost and are in constant demand in the market, therefore poultry raising is a safe business. While the breed is an important matter, profit or loss depends very largely upon the care given the fowl. Perhaps the easiest and cheapest way to grade up a flock is to secure a good male of the desired breed and each year select, for breeders, hens of this type. A few males each year will still further improve results. Another cheap way is to purchase a sitting or two of eggs each spring, from a careful breeder, securing pure stock to start with. Perhaps the best way is to secure, from a responsible dealer, two or more hens and a male of the desired breed, properly mated. Breeders will sell cheaper in the fall in order to make room for wintering their flock and also to save food.

If eggs, principally, are desired the Leghorns, Hamburgs, or any of the nonsitting varieties, will prove satisfactory. For market poultry the Bramas, Plymouth Rock, Cochins, or some large breed, should be selected. When both eggs and poultry are wanted the so-called general purpose fowls, as Wyandottes and Plymouth Rocks might prove a good choice. The Brahmas, being heavily

feathered, will stand well our severe winters. In warm quarters they lay well all winter and weigh well when marketed. But if the best results in these two lines are expected, nothing short of two breeds will prove entirely satisfactory.

Winter laying can be governed largely by the feeder. The Leghorns are perhaps the best breed in existence for manufacturing eggs, although some of the other small breeds are nearly asgood. To secure eggs freely in winter, we must provide warm houses and suitable food. It is necessary to store away during the summer and early fall such provisions as clover, cabbages, dry leaves, dust, sand and gravel.

Poultry houses should be warm in winter. A warm house will cost more, but the warmer the house the less food is required. Before winter laying can be expected from occupants of a cold len-house much of the food must go to supply warmth to the body and it will be found cheaper in the end to provide warmth by buildings than by extra food.

The plan of the house will depend upon the number of fowls kept. The great danger in keeping large flocks is in over crowding. A few hens with plenty of room having proved very profitable the owner is often tempted to increase the flock and expect a corresponding increase in profit without providing additional room. It has been shown, by practical poultrymen, that the profits are not increased proportionately to the increase of fowls; but too often the reverse is true, for the food is proportionately more while the receipts seldom It is best to allow about advance. eight square feet of floor space per fowl. This may seem like a waste of room, but the experience of leading poultrymen bears out the truth of the estimate.

An excellent plan is to have a shed attached to the East end of the house, open to the South and provided with sand, leaves and other litter, so that on a warm, sunny day the hens may enjoy themselves scratching and rolling in the dust. The house should be divided into apartments and each apartment should have a room partitioned off in the North end for a roosting room, while the South end is used for a feeding room. The roosting room must be made warm by the use of extra boarding and tarred paper. Of course plenty of light must be had and is easily obtained by making the South side of the house chiefly of glass, the windows being double, so the change in temperature from sun-down

till dark will not be too great. In the summer senson, on the farm, when the hens have a wide range, little food need be given. Now, let us study the character of the food at this senson of the year, when the most eggs are produced and then let us draw a lesson from Nat ure and provide similar food. Plant foods, bugs, worms and other insects, constitute the larger part of the spring and summer diet.

Why not provide this plant and animal food in the winter? It is being done by many poultry raisers with excellent results, and the farmers of the state should follow the example. The old plan of feeding all grain is very unsatisfactory. The grains, as a rule, are quite concentrated and thus tend to the expense of laying power. When highly carbonaceous food is fed this extra fat may be acquired, even in a cold ben house.

Chemistry tells us that the egg is made up largely of albumen, in aitrogenous substance. We must, therefore make use of chemistry to determine which foods are rich in nitrogen and which in carbon. With this knowledge we are prepared to feed intelligently and so balance our ration as to supply the material needed in proper form and amount. With the concentrated grains, chopped clover and green cut bones are extensively used. Machines for preparing each have been invented, which make the process of preparation an easy matter. These foods rich in nitrogen and lime furnish plenty of material for the shell and nitrogenous constituents of the egg. Some grain is required to furnish the necessary elements for the yolk of the egg, and a light feed at the evening meal is sufficient for the purpose.

In a warm house there is more danger of over feeding than of under feeding. A good warm meal in the morning composed of nitroginous foods, need not be followed by anything more until evening, when a carbonaceous food should be given, as it imparts heat to the body during the cold night. To induce the hens to take needed exercise, it is well to scatter a little wheat in the cut straw, hay and leaves, which are used as scratching material.

The food must be varied. "Variety is the spice of life." Cut clover scalded and mixed with brangives good results: and cut bone is better mixed with some bulky food—The bone alone being very rich. Pounded sea-shells, crockery and ground glass should be accessible and road dust in a box or barrel should be