

## THE EGG.

THE poultryman who is after practical results in dollars and cents must study fowls as well and closely as the fancier whose opinion turns on the shade of a feather or the turn of an outline.

Feeding for eggs is one of the most important of these subjects. The following from the pen of Dr. Turtchell of Maine, relating to the composition of the egg and proper feeding to get eggs is of great value. What is an egg? It is an ounce and a half of concentrated food, made up of lime, soda, sulphur, iron, phosphorus, magnesia, oil and albumen. The hen is the mill to grind, the crop the hopper, and the egg the grist. Every particle of the egg, yolk, albumen and shell, must come from the assimilated food through the blood cells. If we feed fat and heat forming food there cannot follow the largest egg production, because

## THE MATERIAL FOR MAKING EGGS

will not be found. Corn contains 86 per cent. fat and heat elements, hence cannot be the perfect egg food. The value of any article is not the cost per hundred pounds, but its power to produce what is wanted. The cheapest egg food is that which will produce eggs at least cost. Again the quantity taken will not settle the question, but rather the amount thoroughly digested and assimilated. If there be an excess, the energies which would go to the forming of eggs are expended in the attempt to take care of and expel the surplus. Thus food consumes food. To a certain extent we may force the storage of albuminous food, but with the danger of overstepping the bounds and causing a weakened and diseased condition of liver and kidneys.

Good second crop clover contains lime for shell material, and albuminoids for flesh and muscle forming in excess of corn; and is equal to wheat as nitrogenous food. Pound for pound it is worth more than corn. Oats, wheat, bran, chopped hay and vegetables must form the bulk of the egg food, leaving corn as our sheet anchor for fuel, to supply animal heat and produce fat.

## A GOOD RATION FOR EGGS.

In my own experience, I found the best results by mixing 25 per cent each of oats, wheat and bran ground together, ten each of corn and linseed, and five of meat scraps. Cooking vegetables or steaming chopped hay, and adding perhaps three quarts of this mixed ration to the bucketful, I would allow the mass to cook all night and feed when warm early in the morning. To-day I must rely more largely on clover. For whole grain I would be governed by circumstances, finding the best results when I reduced the corn ration save in the coldest weather." BUCKEYE.

## AGRICULTURAL CHEMISTRY.

## POULTRY.

R. A. G. Gilbert of the Experimental Farm, Ottawa, while speaking at the meeting of the Poultry Association of Ontario alluded in warm terms to the following article from the *English Agricultural Gazette* and has kindly lent us the copy of that journal containing the article in question.

Attention has often been called to the neglect of poultry by English farmers. Why, it is often asked, should we pay more than £4,000,000 a year to foreign producers of eggs and poultry when our own farmers might easily supply the whole of the demand? We are told in reply that poultry-keeping does not pay. This is probably the case when there is very little knowledge of the principles which should guide the poultry farmer, and but little care is taken with the details of the work. On many farms the breed of fowls has been allowed to deteriorate by perpetual in-breeding. The birds are kept when they are beyond the age of profitable production. The winter production of eggs, and the rearing of early spring chickens, so that the highest prices may be realised in each case, is not made the subject of careful study. Rats are often allowed to derive the chief benefit from the poultry flock.

Scientific information on the subject of poultry is as yet but scanty. The German investigators, from whom we generally obtain our most abundant supplies of knowledge have not occupied themselves with the subject; our accurate information comes at present chiefly from France and Belgium. An excellent beginning has, however, been made in Canada. The Experimental Farm at Ottawa, under the Minister of Agriculture, has had for several years an efficient poultry department, the object of which is to ascertain the best breeds and methods of work, to spread information among the Canadian farmers, and supply them with settings of eggs of the superior breeds. When will an English department of agriculture undertake such useful work? We shall have further to notice by and by a few investigations on poultry, carried out at two of the American experiment stations.

A laying hen is, in proportion to its weight, one of the largest producers of saleable products on the farm, exceeding in this respect even the cow. M. G. Gillekens has compiled a table showing the number and weight of eggs produced annually by a hen of each of the best breeds employed in Belgium. The two breeds giving the largest number of eggs are the Campine and the Hamburg; these produce respectively 225 and