

grain and other food. It is a powerful grinding mill, and the food is subjected to the action of two thick muscles placed opposite each other like mill-stones, and by them reduced to a pulp. This mill is the gizzard. Grit assists in the work, and a supply must be provided if the fowls are to be kept in health. Grit is small rough stones, and the more irregular they are the longer will they be retained in the service of the gizzard. Flint is the best material to form grit. Broken earthenware is a capital substitute for it, and is procurable in every household. This should be a consoling thought to the thrifty housewife when a misfortune befalls some of her choicest ware. A little of this material should be mixed daily with the chickens' food, and we will be sure they will get it. People who live near the sea can generally procure large quantities of minute shells (sometimes called marl or shell sand). The chicken run and the poultry yard should never be without this if it can be obtained, as it not only assists digestion, but supplies the system with lime for the formation of bone. Bones and oystershells pulverised are beneficial either for the growing fowl or the laying hen.

FOOD FOR THIRD WEEK—When the chickens are two weeks old the oatmeal may be dispensed with, and buckwheat meal, and ground barley mixed with the maize and bread crumbs. To this should be added some grit, a little salt, once a week, on a dry morning, a pinch of sulphur to assist them in feathering. Mix dry, and add boiling water till the mass crumbles readily. Mix only one day's supply at a time. If the chickens have a grass run it will be unnecessary to chop any more green food for them, but a fresh supply must be suspended daily in the coop or run. And just here let us repeat, "Do not forget the animal food," as failure in feeding is often caused by an insufficiency of this article. We wish to emphasise this, as we are convinced of its great importance. A hen often hatches a large brood at a considerable distance from home, and their only support must be the insects and other animal food which the mother discovers for them until they are able to follow her to the poultry yard. Give it then in any form, but liberally, and if a little labour on their part be required, it will be relished all the more.

ANTHILLS.—Give them an ant hill occasionally, and they will pass a pleasant and profitable hour or two. Earth-worms are easily procured, and are easy of digestion. A large earth-worm will keep a whole brood in exercise and amusement for a long time. We find that chickens at this age derive great benefit if they are allowed into the kitchen garden. They are the gardener's friends, by feeding on worms and insects, which do harm to the growing crop. When they come to be a month old, however, they begin to damage, and should be replaced by a younger brood.

Chickens that have access to a manure heap obtain much good from the animal food they find there and from the exercise which the search for it entails.

VARIETY OF FOOD.—Chickens like a change of diet, and should not day after day have the same food. As they will eat almost any food there is no reason why a variety should not be given them, and we will find if we study their tastes a little, they will thrive all the better. To the above foods may be added rice, barley, potatoes, table scraps, and a little hempseed.

Rice contains a large proportion of starch, and is consequently less stimulating and nutritious than other grains, and should always be used mixed with milk. Uncooked rice should not be given to chickens, as after it is swallowed it swells and might be injurious. It is an excellent food for a change, and should always be given instead of the ordinary food if the brood is suffering from diarrhoea. It should be boiled with skim milk until all the moisture is absorbed and the grains are completely separated. Barley may be given for the evening meal, crushed or boiled with skim milk until dry. Potatoes that have been left over from the dinner should be mashed fine, and mixed with buckwheat meal or oatmeal. This is a food they often eat with avidity. Scraps of bread should be softened with boiling water, and a little of the meal mixed with it while it is hot. Oats is a good food for chickens, and is more nutritious than barley; but should not be given whole until the brood is a month old. Maize should only be given in the form of meal, and is too fattening to be used extensively. A little hempseed should be given during the cold months, as it is very warming, and acts as a stimulant. Chickens in good health should have empty crops in the morning, and if they fly about in all directions when they get their liberty you may be assured the rearing is a success. If at any time they do not feed greedily withhold the next meal entirely, and their appetites will be regained.—W. HAY, in *Poultry*.

BLACK AND WHITE POULTRY.

BY REGINALD S. S. WOODGATE, IN THE *Stock-Keeper*, ENGLAND.

THERE have been from time to time inquiries made in the *Stock-Keeper* as to the difficulties, or otherwise, of breeding black and white poultry. In some of the other English journals as well as the American Press, enquiries have also been made on this subject, many admirers of the whole-coloured varieties and would be breeders and exhibitors of them being of the somewhat universal opinion that black and white poultry for exhibition can be produced