

to the east, and another to the west, with wired lattices, and shutters to close in very cold weather. Roosting perches or rails should be placed in convenient situations in the poultry-house; and they should not be round, or smooth, but nearly square, and somewhat rough, of a size suitable to be grasped by the claws of the fowls. It is important that every part of the building should be finished close without crevices, to prevent the entrance of vermin, and the inside should be frequently white-washed with hot lime; it is necessary to observe that the utmost cleanliness is necessary in a poultry-house. The litter of the nests and the dung should be frequently removed, for no poultry can thrive where this is neglected; the brick floor should be washed every week. Coops for fattening are likewise requisite, with a trough before for food. Nests are sometimes fixtures, and may be built against the wall, either in one tier or several, according to the number of fowls, and the size of the house. When there is more than one tier, each of those above the ground must have a projecting shelf at the bottom for the fowls to reach the nests by, and a slanting board leading to it with slips of wood nailed on. Moveable nests are also occasionally useful. These nests should be well cleaned out with hot-lime-water after every hatching, to destroy the fleas which infest poultry, and which are not only annoying to them, but also to visitors. It is sometimes necessary to separate some fowls from the rest; such as those which are diseased, which are liable to be ill-treated by the rest, as also strangers, and fowls of particular breeds. Coops and cages are useful for this purpose, which may be made in various ways. Pens also may be provided, made of lattice work, each for a cock and four or five hens, to be in during the day to enjoy the fresh air, and yet be protected from bad weather; and these may serve instead of a poultry-yard, when but a few fowls are kept. Places for shelter in case of rain are necessary to be provided; in short it is of great use to make their abode not only healthy, but agreeable to them, in order that they may remain stationary and quiet, and lay and sit when it is desired; as fowls, if they are dissatisfied with their position, are apt to lay in secret places, where it is not always easy to discover their eggs. Among other conveniences in the poultry-yard, there should be small plots of grass or clover planted here and there, if there is space enough; and a few heaps of gravel, sand, or ashes, for the fowls to roll themselves in and cleanse their feathers from vermin.

Poultry eat a great variety of food, all kinds of grain and seeds, and preparations made from them; also most sorts of vegetables, raw or boiled; and they are fond of a certain quantity of animal food, raw or cooked; insects and worms, grubs and maggots, they search for, and devour with avidity, and some persons collect these on purpose for them. Potatoes form some of the most economical food, but it is essential not only that these should be boiled or steamed, but that they are given warm, for fowls dislike them if cold. In many houses there are many well-known scraps and refuse that will serve for fowls, such as crumbs of bread, fragments of pies and puddings, and bits of meat and fish, and vegetables, such as lettuce, endive, cabbage, spinach, turnips, carrots, chickweed and grass. It is generally necessary

to give them some kind of grain, as wheat, barley, oats, rye, buckwheat and maize, or meal made from them made into a paste with water. Rice they are fond of at first, but soon tire of it; and much oats, Mowbray says, is apt to sour. Peas and beans are best boiled, and some recommend boiling barley also, but that does not appear to be necessary.

Fowls do not judge so much by taste and smell as by the eye in distinguishing their food, which, when first swallowed, passes into their crop, and after being there macerated goes into the funnel stomach, and then into the gizzard, in which, being a strong sac of the nature almost of gristle, the food is subject to a powerful trituration, as in a mill; this appearing to answer the same purpose as the teeth of Quadrupeds. To assist this effect, fowls pick up and swallow many small pebbles and stones; and it is proper to lay some of them about in the place where they are kept. It is proper likewise to scatter some lime rubbish, as this earth is necessary to supply the calcareous matter which forms the shell of their eggs. The water given to them should be of the purest kind, for foul or bad water is sure to create disease.

The expense of feeding chickens to a condition fit for the table, according to a statement in the 5th vol. of the *Agricultural Magazine*, would appear to be very inconsiderable, independently of the trouble and attention required. It is there stated that three pounds of meal of any kind, that will not cost above a penny a pound, made into a paste with water, is sufficient, with such scraps and crumbs as may be easily set aside in a house, to feed and fatten a chicken from the time it bursts its shell till it is fit for the table. It is also said that old fowls, even though fed with food for which money proportionate to the just market value must be paid, will, by their eggs, pay annually at least three times the cost of their subsistence, besides the advantage of the manure which is afforded. If highly fed from the nest chickens will be always fit for the table; and pullets which have been hatched in March will lay plentifully through the following autumn and winter, and may be got ready for the table in February, when their laying is finished. High breeding shows itself not only in the size and flesh of the fowls, but in the weight and substantial goodness of their eggs.

One of the principal objects in the keeping of poultry by a private family is to have fresh eggs. The time for the hens laying eggs depends much upon the warmth in which they are kept, and therefore, in general, on the season. Cold retards or prevents this, and hence the scarcity of eggs in winter. There are two periods of the year when poultry lay most: these are spring and autumn. The approach of the time for laying is denoted by the hens cackling, which she does three or four days before she begins: and she then appears very restless, seeking about for a place to lay in, which after some time she will choose: but she will require to be well watched, and means must be employed, to induce her to lay in one of the nests prepared for this purpose, for want of which she will be apt to go to some inconvenient place, and it sometimes happens that it is difficult to discover the eggs; but after she has settled herself, she will return again to the same nest. There is a con-