

served for wood, and the other 150 brought under cultivation as soon as circumstances would admit. This might be done in eight years, at the expiration of which time the field which was first cleared should be broken up early in the spring for summer fallow, to be sown with fall wheat. Each field should receive a summer fallowing in its proper order, so that in the course of 16 years the whole farm will have been subjected to a uniform system of cropping and cultivation. By a judicious rotation of crops and a careful system of husbandry, no summer-fallowing will be necessary but the one we have mentioned, for a century to come.

Want of time and space forbids an enlargement upon these topics at this time.

The Gapes, or Pip.

Mr Bement, in his *Poultry Companion*, has gathered together all the supposed causes of this fatal disease in chickens, which we shall condense in a few lines for the benefit of our young readers. 1. It is attributed to catarrh, similar to the influenza in human beings; producing a thickened state of the membrane lining the nostrils, mouth, and tongue. 2. Small red worms in the windpipe. 3. Breeding from old cocks (which is doubtless an old woman's notion). 4. Scanting the chickens in their food. 5. Giving them too much Indian meal pudding. 6. Want of pure water.

The symptoms of the gapes are so various, that we have no doubt they should be classed as different diseases, the same as physicians do those of the human family. It would be quite absurd to say a child was affected with scarlet fever, when it only had a cold, or that it was suffering with worms, when gasping for breath with the croup; and yet these diseases do not seem at all more distinct to our comprehension, than those mentioned above under the head of "Gapes or Pip." It would be well worth while for some skilful surgeon to investigate these diseases, and write a work upon the subject.

The remedy for the catarrh, is to tear off the scale on the tongue with the nails of the forefinger and thumb, and then push down the throat a large lump of fresh butter which has previously been well mixed with Scotch snuff. But we think two or three spoonfuls of gravy, made with equal parts of butter, honey and vinegar, would be better. To remove the worms, hold the chicken

with his mouth wide open over tobacco smoke from one to two minutes; or what is better and more humane, tie the wings and legs of the chicken to prevent its struggling, take a small hen's feather, and strip it clean excepting a tuft of about an inch at the end, wet this slightly in spirits of turpentine, draw the neck of the chicken out straight, open its mouth wide, seize the tongue gently with a piece of muslin between the fingers to prevent its slipping, and then push the feathers lightly down its windpipe two or three inches and twist it round, and this will bring up more or less worms, and the chicken will usually sneeze out the remainder; if it does not, repeat the operation not more than two or three times the same day, till the windpipe is clear of them.

The gapes are said to be prevented by mixing a small quantity of spirits of turpentine with the food of chickens, wetting up the meal of their food with soap suds, or molasses, or a little asa-fetida pounded fine, or vinegar, in which none has been standing, or snuff, or rhubarb and cayenne pepper, or feeding them with coarse hominy, and a pepper-corn now and then, or a piece of garlic.

Some think that the worm is the offspring of the lice on hens, which we think is impossible; others, that it is more generally picked up by the chicken out of dung heaps, either in the egg, or just after being hatched; others, that they are spawned in the windpipe by the parent worm and hatch out there; others, that the eggs are deposited on the nostrils of the chicken by a winged insect, and then hatch, and find their way into the windpipe.

Chickens are most affected with gapes in wet weather, when worms are most likely to breed; also when catarrhal complaints are most frequent. Keeping them up in a dry warm place during wet weather is a good protection. In addition to this the hen house should be kept clean, warm, and dry, and be thoroughly whitewashed inside and out every spring and fall, with a wash made of lime pretty well sprinkled with salt.

We feel quite culpable in condensing so much from Mr Bennett's excellent little work; yet this should tempt our young readers now to purchase it, for they will find not only this subject but most others regarding poultry fully treated, together with handsome woodcut illustrations of the text. With this work in his library, and strict attention to its precepts, every boy would be able to raise fowls successfully and profitably. —*Am. Ag.*