

BEES AND POULTRY.

AFRICAN BEES.

I keep two apiaries at a considerable distance from each other, to one of which my gardener, a coloured Malay, attends, and the other a Kafir labourer. At first they were generally stung when passing too near the entrance of a hive, but now they pass and re-pass with impunity. They work with the bees more frequently than I do; and yet, when either of them assists me in his own apiary he receives more stings than I do. This I ascribe to the gardener using snuff in his mouth very freely, and to the Kafir's very pronounced odour. To test the recognition of the bees I once requested the Malay and Kafir to change clothes with each other and wear thick veils over their heads and faces. They did so, and assisted me first in the apiaries to which they were respectively in the habit of attending, with the result that they received no stings, but when either began to work with the bees in the apiary he usually did not attend to he was so stung about the hands that he had to beat a hasty retreat, while I remained uninjured, although not veiled. The two men are almost of the same size and build, so that if the bees had any power of general recognition they would probably (as some of the other servants did) have mistaken the one for the other. I can, therefore, only account for the conduct of the bees by the unpleasant, and to them strange, odour. At my request the gardener discontinued the use of snuff in his mouth for some time, and during that time he was not stung more than I was while working with bees, but if the Kafir stands before the entrance of an unaccustomed hive he is remorselessly stung. I may add that Cape bees are very much more vicious than European ones seem to be, and that, if not skilfully handled, they will unmercifully sting their most familiar friends. On one occasion a bunch of carrots was left near the gardener's apiary, which so enraged the bees that they stung him and every one else they came across, and very nearly stung a cow to death at a distance of about a hundred yards from the apiary, and on another occasion a horse, still wet with sweat, trespassed too near a hive, with the result that the whole apiary was in an uproar, and some of my children and servants were stung, the chief victim being a Malay girl, who used to apply quantities of scented pomatum to her hair, and who was severely stung on the head.—*Nature*.

POULTRY AT LARGE.

Only exceptionally is a hen at large anything less than a nuisance. Nor is she usually any greater source of profit than if confined within reasonable limits. Hens at large lay in secret, out of the way places, in the grass, where the mowing machine will break the eggs, under buildings, where only rats, cats, skunks, weasels and hens can go. Then they sit and bring off broods at unseasonable seasons, which are much more likely to be caught and destroyed by foxes and hawks than if kept within civilized limits.

We like the plan of having an orchard and poultry yard one and the same, and the larger the orchard the better for the poultry, and the less likely they will be to fly out, if the enclosing fence is what it should be. Hungry hens of the light breeds will fly over a pretty high fence to get where there is food, but the heavier kinds, if well fed, may be kept in a large enclosure with a comparatively low fence. A four-foot picket fence around a half-acre pear orchard has proved an almost perfect protection to all outside crops, from such fowls as the Asiatics and Plymouth Rocks, and for general purposes there are few better breeds.

There may be times when a flock of hens may be of use running at large, to pick up insects or scattered grain that would otherwise be wasted. They may well be let loose just at night to eat grass, if their enclosure is very small; they frequently may do no harm in very early spring or late fall, but there should be a yard on every farm where they can be confined, and this should be their home at all times. It will be found much less work, less costly and less annoying to keep fowls enclosed in a suitable home of their own, than to keep them "shoo'd" out of the garden, out of the barn, off from the carriages, off from the piazza, doorstep and lawn, where the children like to roll and tumble. So while we are sighing for a cheap, light fence to surround our flower beds and kitchen garden, let us sigh a little louder and have one to go around the poultry yard, one that will keep hens in and skunks and other predatory animals out. But until such a fence is offered, plain, pine pickets will accomplish a good deal, if they are strung round a liberal area, and the fowls are well supplied with what they need to keep them healthy and also profitable to their owners. It is poor poultry farming that does not double the investment, or pay one hundred per cent. profit annually on first cost.—*N. E. Farmer*.

DO BEES REMOVE EGGS?

Do bees remove eggs from one cell to another? This question is answered by Mr. A. Pettigrew, in the *London Journal of Horticulture* in this wise:

Yes, certainly. This I have known and witnessed for fifty years. I have often seen eggs, laid by queen bees before being removed from their hives, set in other cells after their removal, and have known such eggs become queens, thus proving that they were not the eggs of fertile workers. Queen excluders then, so much talked about at present, cannot be of much use. No, they are valueless; for if bees determine to breed in any part of a hive queen excluders will not prevent them. Last September a correspondent of a journal wrote that one of his colonies lost its queen when the combs were filled with honey, brood and eggs. He removed the frame of honey, and gave them a frame of empty comb in its place. The hive was examined four or five days after, when there were found several queen cells on the empty sheet of comb. As it contained no eggs when placed in the hive, he saw that the bees had taken them from one comb to another. Eight queen cells were erected and filled on the empty sheet. He adds: "There can be no mistake about this, for I took the empty frame from my honey room, where it had been laid six or seven weeks." If more evidence is wanted it may be found in the fact that in many instances—I might venture to say in all instances of breeding in super—the bees first prepare in the cells for the reception of eggs; and experienced men on examining supers can tell where the eggs will be deposited. Bees are the masters and determine these matters themselves without consulting queen or queen excluders. It will be well for bee keepers to remember these facts."

EGGS FROM EUROPE.

Two hundred thousand dozen eggs have been received at New York from Europe during the past nine months. The importations have ceased until the middle of September, when they will be resumed. The home supply is so large during the summer months and the risk on imported eggs so great that for the ensuing three months none will be brought from the other side to place on the market here. The eggs that come to this country are shipped from Germany and Denmark

principally, and also from France. Italy and Turkey were two great egg producing countries, but the shipments to the United States are not made from them. The eggs come packed in straw, in long cases containing 120 dozens each. The only difference between imported eggs and those produced in this country is, that the former are somewhat smaller and the shells perhaps a trifle harder. The eggs are consigned on commission, and sold at from one to two cents less per dozen than domestic eggs. The lower price is on account of the size. A member of a general produce house recently said to a newspaper reporter that in time eggs would doubtless be sent from China to San Francisco. Poultry raising is an extensive industry in China. Eggs would keep as long as six or eight months, although that was of course too long, and there were no difficulties about transportation in the way. The cheapness with which eggs can be produced in China made such a thing possible. Fowls are kept on the boats on the rivers, and, in fact, everywhere. Enough eggs could be sent from China to supply the whole United States.

THE CHOICE OF BREEDING FOWLS.

A correspondent, writing to the *Country Gentleman*, says: "In choosing breeding fowls, care should be taken to discard all which manifest any weakness, choosing only those that are strong and healthy. If the broods had been much afflicted with the gapes the year before, it is well to reject any known to have survived the attack, although they may not show any signs of debility whatever. Not that it is hereditary, or that the distemper is catching. Hold that any fowl is weak which shows all the signs and symptoms of the gapes, although with careful nursing and surgical operation they may withstand the disorder and survive. The vigour is impaired, and there remains only sufficient for the fowl itself, and none to impart to the offspring. Early eggs are apt to become chilled when first set. This is another cause of failure to hatch. The first ten days is the most critical period of incubation. Later than this the shell becomes tougher and harder, the inner skin thickens and protects the rapidly increasing embryo, which at this stage begins to show life.

"It is often the case that full-grown chicks do not break from the shell, although the chick is strong in the unchipped shell and cries lustily. However, it dies in the shell the following day. This is frequently the case with eggs from old hens. I have attributed the cause of this to too much heat and a lack of moisture. At the start the shell of the egg is thick and strong, and the increased strength that is added from incubation makes a wall so strong that it resists all the efforts of the young chick. These eggs should be set on the ground."

POULTRY ACCOUNT.

We have always kept fifty to a hundred chickens, and let them take care of themselves. I never knew whether it was profitable or not. We never sold many eggs. In the spring, when eggs were plentiful and therefore cheap, we sold some, and occasionally sold a few spring chickens to hotels in town. We had all the eggs we wanted to use, and all the chicken meat we could eat, and we never inquired farther. Last year I kept an account of "profit and loss," and was agreeably surprised. We had ninety-four hens in the spring, and I began to care for them, systematically, April 1st. We gathered and sold \$100 worth of eggs, and raised over 200 young pullets ready for winter laying, or at least very early in spring. We sold, also, \$88 worth of chickens in the market. My wife has the \$188 in her pocket-book, and nothing will convince her now that chickens are not profitable.—*Cor. Ohio Farmer*.