

BEEES AND POULTRY,**BEE QUACKERY.**

In most every department of business or professional life, we find a vast amount of quackery. It is generally supposed that the term quackery belongs exclusively to the medical profession; this supposition is erroneous, as a quack is one who pretends to teach or practice that which he does not understand, and a man may be ever so skilful a physician and still be a quack in some other business or profession. In no business save the practice of medicine, has so much injury been done by quackery as in bee-culture. There are some persons who have simply read a work on the subject of apiculture, no matter whether an old or a recent edition, self-suppose themselves to be able to teach the public, and to criticize generally in regard to the best plans and methods, and, that, too, without ever having owned a colony of bees or being sufficiently conversant with their manipulation to be able to distinguish a queen from a drone, to tell a capped brood cell from one filled with honey. To such a practical knowledge of the subject is deemed of little importance, and if they wield a facile pen, they consider themselves fully capable of and are the most ready to criticize the methods that practical men (who perhaps have not the ability to write fluently, yet have experimented largely) have given to the public. By thus criticizing, and by ridiculing ideas of real practical worth, which are somewhat roughly presented, much injury is done, the man of experience is deterred from giving the results of that experience from fear of further ridicule, and the novice is led into mistakes which cause him serious loss, by reason of following the teachings of the quack rather than the man of experience. We all know that a well-written article, clothed in choice language, and filled with beautiful figures and metaphors, is more apt to take than a plain, practical, and common-sense statement of the same matter, but written in a prosy style.

In no one thing is more injury done than by articles on fall feeding. Every apiarist knows that late feeding, if done judiciously, is of great value and importance, but in no one thing is there so great a liability to cause injury, and the greatest care must be taken not only in the choice of food, but in the way and manner of giving and the quantity to be given. To advise generally, that we should feed regularly every day a certain fixed quantity of honey or syrup, may, and in many cases certainly will be the means of destroying the colony thus fed. To the bee-keeper of experience advice when and how to feed is not needed; to the novice the advice should not only be given, but all particulars connected therewith should be given also. The feeding for stimulation which would benefit a strong colony, or even a medium sized one, would most certainly destroy a weak one, consequently general advice on the subject is worse than useless. I, for one, most sincerely hope and trust that the day will come when quacks and pretenders will no more exist in the land, and more especially that our apiaries will be rid of these their worst enemies. I make no personal allusions, and believe that all practical bee-keepers will echo to the full the hope I have expressed.—*J. E. Pond, jr., in Home Farm.*

MANAGEMENT OF POULTRY.

An acre can produce \$600 in poultry, and the capital required returned by the poultry in a short time with profit. With a systematic method of cleaning and feeding, more profit with less labour can be derived from poultry on one acre of land than from the best regulated dairy under the soiling method. An acre devoted exclusively to poultry

will return a greater profit with less cost in labour than ten acres in wheat or any cereal crop. The poorest and lightest of sandy soils are more suitable for poultry than the best pastures, as they are freer from disease. That yards free from grass and clean in every corner, are better than grass runs, has been demonstrated; but shade of some kind should be supplied. No poultry house can be kept absolutely clean without a board floor. In setting hens, the nest should be in warm, dry location in cold weather, and in cool, moist places in summer. In selecting for breeding purposes plumage and points of marking should not give way to robust constitution, vigour and activity. Feeding steeped clover hay and linseed meal assist in the formation of the white of eggs, by supplying nitrogenous matter. The house should be freely ventilated in summer, and warm in winter. All soft food should be freshly mixed. Yellow-legged fowls sell better than those with dark legs. All non-setters lay pure white eggs. No male should run with over twelve hens, a less number is better. Eggs from two-year-old hens are preferable for setting purposes. Exercise should be furnished by throwing a quantity of corn into a bundle of loose straw or hay for the hens to scratch. Keep a good dust bath always. Spade up the ground as often as possible. When a rain is threatened see to the young chicks. Early hatched pullets are the winter layers. Keep no fowl for beauty if profit is the object. Use pure bred males always. Large males bred on small hens produce leggedness in chicks, but small males on large hens produce closer bodies and shorter legs. Never use a male with his own offspring. It is a saving of time to let a hen set in preference to breaking, as hens lay but few eggs when deprived of setting, and go at it in a week or two. Breed your own fowls, and never bring them to your yards from other places. Young chicks, when feathering, undergo severe natural strain on the system, therefore never omit a meal. Use only the freshest of eggs under setting hens. Hot whitewash containing carbolic acid, liberally applied, will kill or keep off vermin. The rough scales on fowls legs are easily removed by a mixture of lard and sulphur and coal oil. Finally be as attentive to fowls as to horses, cattle, hogs or sheep, and be in your yards from morning until night.

THE SENSES OF BEES.

Sir John Lubbock recently read to the members of the Linnean Society an account of his further observations on the habits of insects made during the past year. Two queen ants which have lived with him since 1874, and which are now, therefore, no less than eight years old, are still alive and laid eggs last summer as usual. His oldest workers are seven years old. Dr. Müller, in a recent review, had courteously criticised his experiments on the colour-sense of bees; but Sir John Lubbock pointed out that he had anticipated the objections suggested by Dr. Müller, and had guarded against the supposed source of error. The difference was, moreover, not one of principle, nor does Dr. Müller question the main conclusion arrived at or doubt the preference of bees for blue, which, indeed, is strongly indicated by his own observations on flowers. Sir John also recorded some further experiments with reference to the power of hearing. Some bees were trained to come to honey which was placed on a musical box on the lawn close to the window. The musical box was kept going for several hours a day for a fortnight. It was then brought into the house and placed out of sight, but at the open window, and only about seven yards from where it had been before. The bees, however, did not find the honey, though when it was once shown them they

came to it readily enough. Other experiments with a microphone were without results. Everyone knows that bees, when swarming, are particularly, and have been ever since the time of Aristotle, supposed to be influenced by clanging-kettles, etc. Experienced apiarists are now disposed to doubt whether the noise has really an effect; but Sir John suggests that even if it has, with reference to which he expresses no opinion, it is possible that what the bees hear are not the loud, low sounds, but the overtones at the verge of or beyond our range of hearing. As regards the industry of wasps, he timed a bee and a wasp, for each of which he provided a store of honey, and he found the wasp began earlier in the morning (at four a.m.) and worked on later in the day. He did not, however, quote this as proving greater industry on the part of the wasp, as it might be that they are less sensitive to cold. Moreover, though the bee's proboscis is admirably adapted to extract honey from tubular flowers, when the honey is exposed, as in this case, the wasp appears able to swallow it more rapidly. This particular wasp began work at four in the morning, and went on without any rest or intermission till a quarter to eight in the evening, during which time she paid Sir John 116 visits.

PREPARING FOR MARKET.

Much of the profit of poultry-raising is absolutely thrown away by carelessness in fattening and preparing for market.

When the frame-work of a chicken, the bones and muscles, are built up, the cost of putting on an additional pound or two of nice, juicy meat is comparatively little. What folly then to send to market stringy fleshed, sinewy-legged fowls. Purchasers cannot be expected to give good prices for poultry of this sort.

If farmers do not have grain of their own raised to spare, it will pay to buy it for the purpose of putting their fowls in good marketable condition. This may provoke a smile, but it is true, nevertheless. We have known persons who have had all their feed to buy to make money raising chickens.

But poultry, however well fattened, may be spoiled in dressing. There are some persons who still scald their fowls in dressing and by this means lessen its selling price by so much per pound. The excuse for scalding is that it is easier and saves time. To which we answer that it does not save time when a person has learned the proper method of picking dry. And certainly every poultry-keeper should learn to put up all his products in the best manner, endeavouring to suit as far as possible the demands of his own market, and even the fastidious eyes of his customers.

There are minor matters also that should receive attention, such as not feeding fowls for at least twelve hours before killing, carefully removing all pin feathers, washing all filth from legs and feet, wiping off all blood from the carcass and then putting up in neat clean packages.

KEEPERS of poultry often make a mistake in reserving too many breeding hens. A great many chickens can be raised in the course of the season from a flock of twenty-five.

The farmer's flock of poultry should be composed of choice specimens only, the very best of the season's raising. Why should he save the best wheat, corn and potatoes for seed and not select the best fowls for breeding?

Fowl houses should be so constructed as to be cool in summer, warm in winter and dry all the time. The latter point can be secured by having a good roof, and an earth floor raised six inches or a foot above the surrounding surface.