



The Apiary.

Bee-keeping in Scotland.

During a recent visit to Glasgow, I was attracted by a magnificent display of top boxes of virgin honey in the window of Mr. Walker of Buchanan Street. On entering the shop I saw about sixty octagonal boxes each containing from 14 lbs. to 30 lbs. of the finest virgin honey comb I had ever seen. There was not a single cell of pollen or bee-bread visible in any one of the boxes; and in excellence of color and regularity of comb I never saw the boxes equalled. They all came from the Ayrshire district, and were worked on octagonal hives made of half-inch pine. These hives are made in separate boxes for the purpose of being storified over one another. Each box contains about 800 cubic inches; two constitutes a hive in winter, but in the spring in order to prevent swarming, another box is added below, and sometimes even four are superposed. When the white clover comes into bloom, the top for receiving the virgin honey is put on, and Mr. Walker's exhibition shows with what effect. I was shown two top boxes taken successively from one hive, a third being partially filled. It must be borne in mind that the Ayrshire bee-masters are about the most skilled practical workers in the kingdom. They have no foolish prejudice for the old-fashioned moth-breeding straw skep; they know from experience that hives made of wood only half an inch thick, will enable their bees to stand the winter, if they have plenty of food stored for their support. Nor must the genial and equable character of the district be overlooked. Ayrshire, as shown by recent meteorological returns, is more free from wet, and of a more uniform summer temperature, than any other part of Scotland, circumstances that would tell strongly on the honey harvest. W. B. Teape in London Field.

Defects in Bee Management.

To the Editor of THE CANADA FARMER:

SIR,—Having for some time devoted much attention to the nature, habits and wants, of the honey bee, I find the present system of bee-keeping, in Canada, very defective so far as I have been able to learn. Not only is there great ignorance with regard to the nature and habits of the bee, but the present system of management, especially winter management, and the use of defective and awkward hives has led many persons to conclude that bee-keeping is an unprofitable business,—a certain failure.—True, some have met with comparative success but it has been attended with considerable labour and attention; more than many are able to devote thereto. That a better system of bee-keeping be adopted, it is necessary first, that the people become educated in regard to the nature and habits of the bee; secondly that better hives be obtained, hives such as give the apiarian perfect control of the bees, bee-comb, &c.; and thirdly that a winter management be adopted, one which will enable the apiarian to overcome the difficulties which are experienced in this cold climate. As to the education of the people, the CANADA FARMER offers a medium through which it may easily be done. As regards the hives, none will ensure the end desired, but those containing moveable-comb-frames, of which several are already introduced into Canada. As regards winter management the plans spoken of on page 87, CANADA FARMER for April 1st, 1861, involves the correct principle; but then, every bee-keeper has not an "old house" in which he does not himself live, and if he has, it requires that the hives be all removed from their stands in the fall, and replaced again in the spring. Yet the principle is correct. Keeping bees too warm, as in a cellar, creates uneasiness, causing them to consume honey, to the loss of the apiarian, and often to their own destruction by generating disease; also, the comb is liable to mould and become worthless. While on the other hand if kept too cold as when exposed unprotected from the sudden changes and extreme cold of our Canadian win-

ters, they are obliged to consume more honey in order to keep up animal heat, and even then often perish from cold and from ice collecting in the combs from the congealing of the breath of the bees, which cannot escape, especially in most of the hives now in use. To meet these difficulties something is needed; and I have as I think succeeded in overcoming them, by means of a Combined Moveable-comb Bee Palace and Bee Hive; for which Letters Patent have been applied for, and which will shortly be introduced to the public.

I here submit an answer to "Question for Bee-keepers," on page 88 of the CANADA FARMER, viz: "Why is it that bees will not always work and fill the boxes placed on the top of beehives?" The question is hardly definite enough to admit of an exact reply, since the reason why bees will not work in some boxes on one hive may not be reason why bees will not work in others. I will therefore give several reasons why bees will not work in boxes. There may be sufficient room for all the honey in the body of the hive, and there are various causes for this. There may be a lack of heat in the boxes. Sometimes the passage to the boxes is too small, and the workers are unwilling to enter when loaded. If allowed to finish work in a box, and cap over the cells before it is removed they will seldom enter another, thinking their work has ended above.

Brooklin, C.W. April 12, 1861

Old-fashioned Bee Management.

To the Editor of THE CANADA FARMER.

SIR,—Of all the topics so ably treated in your valuable journal, the subject of practical bee-keeping is the one most congenial to my taste, and I think that no country is better fitted than Canada to bring bee-keeping to the greatest perfection, and to obtain a large return for the time and money invested. I have studied the habits of bees and experimented in order to find out the best mode of making them profitable for the last forty years, so that my views are founded upon actual practice. I am altogether, in favour of the swarming system, that is, putting swarms into proper-sized hives adapted to their number, the season of the year, and other considerations, and my mode of getting the honey is by killing the bees. I know that there are many who think this utterly absurd, and liken it to killing the goose that laid the golden egg, but in my opinion it is not so. There are plenty of hives that are not worth killing, but are excellent for keeping; others again are too good and heavy, and unfit for keeping, and with the latter there are often other reasons for killing, such as having too old a queen, &c. This system is nothing new, but is the oldest, and as far as I have ever seen, the most profitable. Protecting the bees by bee-houses, patent hives, and other plans of recent origin, are all very fine to look upon but are they as conducive to honey-making as the simple and cheaper mode? I say no! Take, for example, a bee-house or patent hive, in which we will suppose the bees to have been wintered over; they will get strong and amass a large amount of honey. If some of this is taken away, you may be actually robbing the hive of what it will require. If in a patent hive, whilst the boxes are full of honey, the other main part of the hive is full of young hatch, which prevents the bees putting any store there, and before they are all out the season is over. You have taken away the honey, and they have nothing but empty cells. I don't say this is the case always, but it requires a great deal more judgment to know how to take or withhold than in the other way, and even if it may succeed, as only one queen can be in any hive, the whole is dependent on her living. You have no change of queens in the latter method, unless she dies, and if this takes place in winter the whole colony will dwindle away. Of course, the small hives are subject to some casualties, but by carefully keeping hives that have young queens, they are not so liable, and even if some die you are almost certain of average success. You will have one to kill and two to keep over. The second year you commence with two to one of the bee-house keepers or on the patent hive plan.

Hamilton, March 11th, 1861.

J. F.

NOTE BY ED. CANADA FARMER.—Our correspondent is rather sweeping in his condemnation of patent hives and modern plans of bee-keeping. No doubt there have been many worthless hives which, by ample advertising and other means, have been made to sell, but have not fulfilled the promises of the sellers or the expectations of the buyers. But it is hardly just to condemn them all. We know no good reason why there is to be no advance in practical bee-

keeping, and why the old methods are to be always pursued. We certainly regard the moveable-comb principle of making hives as a great improvement, nor do we think our friend has made out a very strong case against the boxes. We are inclined to think that if we were to give a really good modern hive a fair trial he would not argue for the obsolete practice of killing the bees for their honey.

How the Bees have Wintered.

To the Editor of THE CANADA FARMER.

SIR,—The past winter has been unusually severe for bees. Spells of warm weather have been succeeded by periods of intense cold. The consequence has been that of twenty or thirty apiaries which I have visited in South Oxford and Norfolk during the past fortnight, only two or three have escaped without loss. Most unfortunate have been the patrons of a "patent" hive which was vended through this part of the Province some two or three years since. Of these, some who had last fall a stock of 20 to 40 families, find themselves this spring almost without any. The notably bad success of this hive causes it to merit description, as an illustration of what a hive should not be. Three boxes—each containing about 1,000 cubic inches or one half of what Quinby says a hive should contain in lat. 42°—are arranged upon one stand, with a space between them of say 2 inches, small tubes of wood or tin communicating between them for the passage of the bees. The consequence of this arrangement is, that while in warm weather, when the bees are lively, they can make their way to any part of the hive, and will probably fill two or three of the boxes, as soon as cold weather approaches, they follow their natural instinct and cluster into one of them for warmth, and after devouring its contents, die of starvation, with an abundance of honey frost-locked in the other apartments.

The only person using these hives that I have visited who escaped without loss, is Mr. R. Williams, just south of Mount Elgin, and his bees were in a *tear-dry cellar*, only being brought out once during some fine day about midwinter, to allow a discharge of accumulated feces. Mr. Schell of this place has wintered some 30 or 40 stock successfully in the open air, but his hive is compact in its form, and thus economizes heat, and places food within reach at all times.

Ingersoll, April 8, 1861.

Correspondence.

DEVON CATTLE.—John Laing, of Puslinch, wishes those who have had experience with Devons, to give their opinion of them through our columns, and particularly to state their dairy qualities.

PERENNIAL HYBRID CLOVER.—H. C. T. A. enquires, "could you inform me where Perennial Hybrid Clover is to be had, and at what price?"

ANS.—J. Fleming & Co., of this city, have it for sale at 20 cents per pound.

RULES OF MEASUREMENT ENQUIRED FOR.—A correspondent asks: "How is hay in the bay or stack measured?" Also, "The length, breadth, and depth of wheat in a granary being given, how do you calculate the number of bushels?"

WEIGHING CATTLE BY MEASURE.—We have received a number of communications on this subject, discussing the methods which have already appeared in our columns, and propounding new ones. It is impossible for all to appear just now, and in the meantime, we must "adjourn the debate."

AGRICULTURAL PAPERS IN NOVA SCOTIA AND NEW BRUNSWICK.—"George Young," of Ormstown, C. E., is informed that the *Colonial Farmer*, published at Fredericton, N. B., is the only Agricultural paper in existence, so far as we know, in the Eastern Provinces mentioned by him. It is an excellent periodical of its class.

HOW TO LAY DRAINS IN QUICKSAND.—A correspondent asks, "What sort of drain will suit best in quicksand, where it will run in as fast as you dig it out? The stream of water running from it would fill a three-inch drain tile. There is a good fall. Will those who have had experience in making such drains, please give the results in THE CANADA FARMER?"