

more productive, and better in every respect than the common kinds. When I took some of it to mill for cakes the miller complained that it would not go through his buckwheat sieves on account of its enormous size and wanted to know where in earth I got it. And the cakes it makes, spread over with honey instead of being soaked with pork gravy, are fit for gods or men, and angels or women, (which perhaps means about the same thing.) But this is a digression—a pertinent one, however, for buckwheat, like the fruit tree and clover plant, yields a double crop—one of honey and one of grain.

In conclusion, I may draw attention to one other fact from the economic standpoint in favor of bee culture as an important branch of agriculture. Every bushel of grain and pound of meat which we raise and sell off the farm represent and carry away with them a certain amount more or less of our agrarian capital, or, in other words, the fertility of our soil. Not so much with the sweet nectar of the flowers, which would be mostly wasted in the air were it not ingathered by the bees. When you sell 20 bushels of barley for \$10 (and you can hardly get that unremunerative price for it) along with the barley you part with certain of your soil elements, which means more or less impoverishment of your land; but when I sell 100 lbs. of honey for \$10 the transaction involves no corresponding impoverishment—that is, I have saved and gathered what would have been otherwise practically lost. I am, therefore, a more profitable producer of wealth in the body politic and the body industrial than either the agriculturist proper, the horticulturist, or the stock-raiser. This economic fact, together with that other fact, that pure honey is the most palatable and wholesome sweet made in the whole laboratory of nature or art, ought to place apiculture in equal rank with, if not ahead of, every other branch of agriculture.

Moved by Mr. Hodgins, seconded by Mr. Haycock, that a vote of thanks be tendered to Mr. Pringle for his excellent paper on bee culture. Carried.

The President.—What has been your average income from sales of honey and bees per year from say 20 colonies?

Mr. Pringle.—My average returns per colony for a number of years by spring count, by that we mean in the spring before they begin to swarm, has been about 50 lbs. I have taken 100 lbs. per colony, but on the average about 50 lbs. At 10 cents, that means \$5 worth of honey.

Mr. Kennedy.—What kind of bees do you keep?

Mr. Pringle.—I have kept the different races

of bees for some years. First I kept the native bee, the brown or German bee, which is the usual bee kept in this province. It cannot reach the nectar in the red clover except in a very dry season when the heads are small. I have tried the Italians and they can reach it unless the heads are very large, their tongues being longer. I know of no other bee that would do as well as the Italian. I may say that during the last two or three years the honey product of Ontario has been quite a failure as it has been throughout many parts of the world. The secretion of honey in the flower requires a certain temperature and if it is too dry or too wet it is equally unfavorable, and on account of the partial failure for the last two or three years the price has been a little higher than usual. There is a very erroneous impression in the public mind with regard to feeding sugar to bees for the purpose of making honey. Bees can be wintered on sugar syrup successfully, but we don't feed sugar to produce honey because we cannot get honey by feeding sugar to the bees, they cannot manufacture sugar into honey. While sugar and honey are nearly the same there is the difference that one is the nectar of flowers and the other is just sugar. We can feed syrup from No. 1 sugar to winter them on and they will winter successfully on that and it is often done by the best bee keepers in the province because we find our stocks sometimes short, and we have to carry them through, but the better way is to leave enough honey with them. I am not in favor of feeding sugar at all but if they are falling short it is better to feed them sugar syrup than to feed them bad honey. I think if you take the trouble and expense of feeding sugar altogether into account I don't think it is profitable to take away the honey and winter your bees on sugar, as you can winter them successfully on buckwheat honey that is not worth quite as much as the light grades of honey. I winter my bees almost every winter on buckwheat honey and I find it is a good winter store. Some people think it is not as good as the light honey but my experience is the contrary, it makes perfectly wholesome winter food. As to the adulteration of honey, some nine years ago a professor of science in the States made the assertion in the Popular Science Monthly that comb-honey was manufactured; that the comb was first made by machinery and then filled in, the whole thing being done without the mediation of the bees at all. That gentleman has done more harm to the industry throughout the world than any other slander that has ever been uttered. It