

son's work in the spring. They, too, are active when many others, owing to low temperature, remain quiet. Pages could be written along this line, but the above will throw a gleam upon a picture which becomes, under proper light, to the student of nature a delightful study.

And what does the bee-keeper do for our country? The great problem during agricultural depression has been, how shall we make our farms more productive? This question has several aspects, but the side of particular interest is, how can we produce the most dollars and cents with the least capital, and take the least from the soil? An analysis of Prof. Robertson, shows how greatly the fertility of the soil is reduced in point of plant food by all farm produce. Again, the capital required is an important item, important because the interest on capital must be allowed for, and upon the amount of capital depends the amount of minor expenses, such as taxes, wear and tear of buildings, insurance. This must be deducted to get at the true profit. If you have one hundred head of dairy cows, they practically displace some other crop upon the farm, or they prevent the selling of some other crop from the farm, which to some extent is the same thing. Or, where you have wheat, you cannot grow an oat crop at the same time, and so on. But the bee-keeper increases the wealth-producing powers of the country. One hundred hives can be put in a very small compass, and aside from the room they stand on, the farm can be made to produce just as much as before, the bees availing themselves of the natural flowers in the vicinity. More than that, the bees assist the clover-seed and fruit-grower, as has already been shown, and therefore increase the wealth-producing powers of the country, apart from the honey gathered, to that extent. But some one will say, how much does the honey crop draw in the way of plant food? Here again bee-keeping makes the best showing. The honey is made up entirely of constituents supplied by the atmosphere, and draws nothing from the soil. One hundred hives, in a good locality, and under skillful management, will, one season and another, produce as much as the average hundred acres. One hundred colonies of bees, with necessary appliances, are worth, say \$80. How much is the farm and stock worth?

It may be argued that men fail in bee-keeping. So they do, but men fail in everything; and to succeed in this, one must exercise thought, have experience, or acquire it slowly by a gradual increase in the number of colonies kept, and not only have one's own experience, but try to learn from

the experience of others, which is most readily done through the press. In the past there has been too much an idea that all that is required to be done is to get the bees and take the honey. As far as the above goes, whatever is worth undertaking by an intelligent and diligent person has set upon it a premium which prevents everyone from succeeding in it, and bee-keeping in this respect, is the same as many other undertakings.

Do not let it be understood that I disparage dairying. I am a strong advocate of dairying, but I am giving some of the benefits the country derives from keeping bees. Others might be mentioned, but let us take only one more.

The bees are benefactors to everyone who eats honey. Honey is nectar gathered from flowers. This nectar is a pure saccharine substance with certain essential oils in it. The bees in the slow process of gathering the nectar, as they pass from flower to flower, add to it secretions from the head glands, making it undergo the first stages toward digestion. The nectar is spread in cells in the comb and a current of warm air is passed over them. This current is charged with formic acid by the bees, which enables the honey to ripen with out fermentation.

The honey when ripe gives us a most wholesome food, unless sweets of all kinds are injurious. For children it is a delicious food. For the adult it is equally beneficial. Our house is never without honey, and it is a staple article upon our table. During the prevalence of la grippe, our house suffered not from its ravages, and I have heard the same from many who constantly use honey. Dr. A. B. Mason, of Auburndale, Ohio, says: "There are five in our family. We always have honey on our table; two of us eat honey at every meal, while the other three rarely touch it. The three abstainers have had the grippe; the other two have not. This will be enough to point out that the honey bee is a very useful creature.

Now as to law. Bee-keepers have organized a "Bee-keepers' Union," and one of the duties of this union is to prevent unlawful infringements on the rights of bee-keepers. There are now and again attempts to persecute bee-keepers. Generally they arise out of spite or personal feelings. Bees are sometimes an inconvenience. When they can gather no natural stores, they are likely to try and get at any sweets exposed not only in the immediate neighborhood, but within a radius of several miles, and in the fall of the year those preserving or cooking sweets should be careful not to expose such. As far as cider mills and the like are concerned bee-keepers are looking