

word of command. He enters the bee-house where order and system reign, and while the busy assistants uncap the snowy comb and set the imprisoned nectar free, by a few revolutions of the extractor, he looks around on the shining cans and portly barrels and when he is told that these are filling up at the rate of hundreds of pounds per day, the startled visitor cannot but exclaim that bee-keeping is indeed advancing in no uncertain manner.

There is another side to the picture, however, as, since we last met in convention many have had to mourn the loss of their pets caused by the extreme cold of the last winter. The remedy, I have no doubt, will be eagerly discussed in this assembly, and while none can control the severity of the seasons, I am satisfied that compliance with a few prime requisites will always enable the apiarist to save such a large percentage of his stock as will permit of a steady increase from year to year. Such, at least, has been the experience of your President during the past ten years. The prime factor in safe wintering I have found to be a sufficiency of honey; young queens; non-intervention after the first of October; placing the stocks in a dry, quiet, frost-proof repository, the temperature of which varies little from forty-two degrees, before severe frost sets in; and free upward ventilation.

A good deal of attention has been given during the past year to labor-saving appliances in connection with hives and it would seem as if reversible frames, cases, and hives were about to be added to the appliances which the wily exhibitor places before the bewildered gaze of the incipient bee-keeper.

Among the discoveries of the past year, I may mention that the preservation of honey has been found to depend on a well known constituent of the poison-sac of the bee, namely, formic acid. This shows us that the sting serves not only as a weapon of defence, but possesses the power of infusing into the stored-up honey an antiseptic substance. Observers have noticed that bees in the hive, even when left undisturbed, from time to time rub off against the comb, from the point of their sting, a tiny drop of formic acid. This excellent preservative is thus, in minute quantities, introduced into the honey, in fact a sufficient admixture is essential to its existence as honey. These facts serve to explain why the stingless bees of South America store up very little more honey than is required for daily use. It contains no formic acid, and therefore will not keep any length of time. Fierbend in 1877 recommended formic acid as a means of preserving fruit from fermentation.

It gives me great pleasure to announce to you

that we now have the CANADIAN BEE JOURNAL an established fact, and from the patronage it has already received, it bids fair to be a success.

I am of the opinion that it would greatly promote the object so many are desirous of attaining (I refer to the *Apis Americana* or the perfect bee of the future), if under the auspices of the North American Bee-Keepers' Association, an Experimental Bee-farm could be established, in which races of bees from foreign countries could be thoroughly tested before being disseminated throughout the country. After having had the Asiatic races inflicted upon us (with a good intention no doubt), we are now threatened with the Carniolan. The Italian race ought to be maintained and cultivated as the best bee America has yet tested generally. I speak thus as, personally, very great loss has been sustained in exterminating the traces of other races from an Italian apiary, after they had been tried and found wanting. Many others have had a similar experience.

I would draw your attention to the desirability of the formation of union among the honey producers of Ontario for the purpose of establishing a foreign market for our surplus product. The appointing of agents in Liverpool, London, Glasgow, Paris and Berlin would be a simple matter, and yet might save our home markets from becoming demoralized in the event of an extra good season.

The Foul brood question has been relieved of the necessity for immediate legislation, by the kindly hand of the frost king removing most of the diseased stocks forever. The discovery of Mr. Cheshire, of England, of phenol as a cure for the dread disease has also greatly lessened the dangers of its appearance in an apiary.

A most favorable opportunity for an exhibit of Canadian honey presents itself in the Colonial and Indian Exhibition, which will be next year under the patronage of H. R. H. the Prince of Wales. This is a rare chance for showing to the world what Ontario can do in the production of honey of a quality which, I am sure will be excelled no other colony of that Empire which girds the globe with the homes of her children.

I would suggest a revival of the Constitution by committee appointed for the purpose. One of the points requiring attention is the payment of the travelling expenses of the executive and other committees that may from time to time be appointed by you. Members cannot be expected to incur expense as well as devote their time to furthering the general interests.

To conclude, notwithstanding an unfavorable season. Ontario again displays under the