

writings. But keeping bees is but a secondary pursuit, fruit culture being his hobby, as will be seen from the following sketch from the *Canadian Horticulturist*, to which paper we are indebted for the loan of the engraving:

One hundred and one years ago Mr. Dempsey's grandfather, a United Empire Loyalist, settled at Albury, Prince Edward county. Fond of fruit culture, he brought seeds along with him, from which he started a nursery, principally of apple trees, some of which are still living and bearing fruit upon the old homestead. Cider was made in large quantities from this orchard in early days, and during the war of 1812 proved highly profitable business, bringing him high prices by the hogshead.

Thus, growing up among orchard trees, Mr. P. C. Dempsey early developed a taste for fruit culture, and in the year 1857, finding the confinement of office work too great for his failing health, he decided to devote his whole attention to horticulture.

Soon after, hearing of the good work being accomplished by the Fruit Growers' Association, he became a member, and was first elected a Director in the year 1873. A fluent and easy speaker, he was always heard with interest by all in attendance, and honored by his election, in the year 1875, to the position of Vice-President; and in 1880, and again in 1881, to the highest gift in the power of the Society to bestow, viz., that of President.

Mr. Dempsey was sent to the Centennial Exhibition, in company with Colonel McGill of Oshawa, in charge of our exhibit of Canadian fruit, the medals from which are still in possession of our Association; and in 1886 he was employed by the Dominion Government, in company with Mr. A. McD. Allan, to have charge of Canada's fruit exhibit at the Colonial and Indian Exhibition.

The subject of this sketch is also favorably known in horticultural circles in Canada as a hybridist, having devoted much attention to this interesting study, and to the practice of the art. To his success in hybridizing, the Burket grape, the Trenton apple, the Dempsey pear and the Dempsey potato all bear lasting testimony. The Trenton apple, now five or six years fruited, has been offered in the Belleville market, and also brings Mr. Dempsey a fancy price; the Dempsey pear, a real acquisition, is the result of a cross between the Bartlett and the Duchess some twelve years ago. It partakes of the excellences of both parents, and is in season just before the latter.

We hope that Mr. Dempsey, and all others of a kindred spirit, may long be spared to brighten our meetings with their good cheer, and to impart to the enquirers the results of his long experience in fruit culture.

For the CANADIAN BEE JOURNAL.

VENTILATION OF BEE HIVES.

THE ventilation of hives seems to be little understood as yet, as little understood, even, as does that of our dwellings.

It is not cold that kills our bees; neither is it impure air; these questions have been fully decided time and time again by actual tests. No matter what theory may say, tests tell the story, and they combat effectually theories as generally understood. The heat contained in the interior of the hive is created and maintained by the bees themselves, and that, too, while they are in a state of partial hibernation. I wonder if any one has ever ascertained how small a cluster a large colony of bees form themselves into in extremely cold weather? I have myself, and have found very large colonies contracted into a cluster not more than five inches in either diameter. Now, such a cluster would find ample air for purposes of sustaining life in a hive nine inches deep and wide, one foot long, if an entrance half-inch wide six inches long is given. I know this, for I have tested it in several instances.

Taking the above as facts, my ideas in regard to ventilation have undergone a change during years past. I use the ordinary "L. hive" with a quarter-inch entrance full width of hive, ventilated wholly from the entrance. Over the frames I leave a one-inch space to allow the bees to intercommunicate from one frame to another without breaking the cluster, which cluster, by the way, is their only means of creating heat.

Over the tops of the frames I place absorbing material, not for purposes of ventilation, but to allow excess of moisture to be imperceptibly carried off. Here in eastern Massachusetts I find my bees live through our severest winters, in single-walled seven-eighth-inch hives with no other protection from cold than a wind-break on north and west sides. Let the advocates of this, that or the other method of ventilation give us their tests as proofs sustaining their theories, and I for one shall be better satisfied, as I am of the opinion that as yet we know no more of ventilating bee hives than we do of dwellings or public buildings.

J. E. POND.

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