square near the top of the room, and through these openings the pipe ran. Size of the pipe was 6 inches, the balance of the openings of course allowed a circulation of air from one to another.

A stove called the "Tribune" and manufactured by Wm. Buck, Brantford, was placed in the first room and near the cellar door which communicated with the outside, and through this door the fresh air from the outside had access. The air in its natural course by means of the openings around the stove pipe passed from room to room, and finally in the fourth room passed out by means of a similar opening in the chimney, the same chimney into which the regular pipe entered. This chimney had in addition, entering it, a pipe from the stove used in the living room above.

The fuel used at first. was wood, but the pipe was too hot and irregular and it resulted in more or less odour from the pipe, particularly the last portion which became cool before entering the flue. Stove coal was used and the fire kept up for 3½ months, stove coal was the size and 2550 lbs. used.

There were 70 colonies in No. 1, 75 in No. 2, 80 in No. 3, and No. 4, 75. The bees were put in No. 1, Oct. 26th; No. 2, Nov. 21st, and No. 4, Nov. 22nd.

In the records (with one exception) the variations in temperature were very slight. The night of Feb'y 14th, the fire went out and next morning the cellars registered as follows:—No. 1, 38 degrees, No. 2 and 3, 40 degrees, and No. 4, 42 degrees. You will notice that the temperature was raised by the bees as it passed from cellar to cellar. There was a wet and dry bulb thermometer in each and the temperature half way between the floor and ceiling was as follows:—

	Dry.	Wet.
No. 1.....	46	43
No. 2.....	45	43
No. 3.....	45	43
No. 4.....	46	45

The difference in temperature of top and bottom of No. 2 was three degrees, in No. 4, six degrees. In No. 4, there was a fire in the room above, in No. 2 this was not the case. I draw attention to this as some may not consider these variations sufficient when taking the temperature of a cellar. You will notice that No. 1 and 4 dry bulb both stood at 46 degrees, but the wet in No 1, the first cellar into which the pure air passed, stood at 43 degrees and No. 4, at 45 degrees. into this air went, after being through the other three cellars, the added moisture we would expect, it being expelled by the bees in the previous cellars. Misture and temperature was taken, but how about the impurity. I think I can give you several practical indications of this, at least the weight of evidence tends to show that pure air is an important factor.

The bees in No. 1 cellar appeared to be quieter than in No. 4, leaving a lamp burning for even a half-hour in No. 1 the bees never flew to the light, in No. 4 although they did not fly to any great extent to the light there was a tendency in this direction. In fact all through the winter they were more restless in the last cellar, and to prevent great injury to the bees, fresh air from another source was allowed to enter No. 4 cellar.

There was no perceptable difference in the first three cellars, the bees could be seen clustering quietly in No. 1, some of the hives were within 7 feet of the stove. A thorough inspection was made March 19th, the contents of the hives were examined at the entrance, and upon lifting cushions and quilts, when possible, not the slightest indication of mould or dampness could be detected. Only two colonies showed the least sign of dysentery, and these had bees whose queen had shown symptoms of the same disease the winter before and were kept purposely to see if they would have the disease again.

No. 1 cellar contained 60 colonies with bottom boards as on their summer stands and entrance full width. Fifteen had 2 inch rims placed under the brood nest. No. 2 contained 50 hives with the back ends of the hives 3 inches higher than the front, and the brood chamber ⅜ inch from the bottom boards and 25 colonies with 2 inch rims under the brood nest. No. 4 had 75 colonies, all the back of hives raised ⅜ inch from the bottom boards. All the hives were covered with a cloth, and over the cloth one inch of sawdust. The bees were placed on their summer stands April 7th, 8th, 9th and 11th. As to method of adjusting entrance and bottom boards, there appeared to be no great difference in results. With the exception of several starved and mice destroyed colonies, every one came through alive and in good condition. The indications of good wintering were:—

1st. Their quiet condition.

2nd. Bees clustered compactly.

3rd. Individual bees did not fly to the light from the stove, lamp or outside door through which the fresh air had access.

4th. There was no brood in the hives when placed on their summer stands.

The air passing from cellar to cellar is not a condition to be desired. but it served as a splendid object lesson to the bee-keepers of the country, and emphasized the desirability of having pure air as no other experiment could. A similar experiment was