

ing cellar doors would at first be alarmed as the fresh air excites the bees and they make considerable roaring but all will be quiet by morning.

Bees wintering almost perfect, as mine did last winter, make but little noise. I have often gone into the cellar when everything was quiet over head, the only noise made by the bees was a sort of a hum sounding like the approach of a wind storm in the distant tree tops. My bees were placed on their summer stands on April 14th, 1894; the temperature then was 54 at the bottom run of hives, but no bees left their hives to make any bother in handling. If the cellar had not been filled with fresh air the night before I could not have handled them without their leaving the hives in great numbers. After placing them on their summer stands, I examined a few of the eighty colonies as I was requested to do by Mr. Post, of Murray, who saw my bees in winter quarters, these, as well as nearly all of them were apparently strong in bees as when placed in cellar, but no brood could be found of any importance, I saw a few capped cells of brood in one comb. I neglected to say that there was about three inches of very fine dry basswood sawdust placed on the cellar bottom at the time bees were put in cellar.

WOOLER, Aug. 1894.

[Hearing from Mr. Post that Mr. Scott had been very successful in wintering his bees and that the conditions were exceptional or rather that the conditions were such that one would not look for the best results. we wrote Mr. Scott for an article and he has kindly replied as above. Mr. Post, who visited the cellars, substantially bears out the writer's remarks as to condition of bees. Mr. Post said after entering the cellar, the bees were so silent he felt sure they were dead, but upon bringing in the light he saw differently. Some of the hive fronts were completely covered by bees.]

## Report Ontario Bureau of Industries.

**BEES AND HONEY.**—There was about the usual amount of swarming in most apiaries, and colonies are reported as remarkably free from disease. Comparatively little honey was made from clover, but there was a good show of linden and the bees made the most of it during the time of bloom. The drouth lessened the supply of nectar in flowers, and the average yield will be less than usual, being but a trifle over thirty pounds per colony. Honey is somewhat darker than usual, but of good flavor.

## Carpenter-Bees and their Nests.

Of the instincts of insects, says a writer in "Chambers's Journal," we find examples to parallel those of the larger animals; by one important test—the construction of buildings and habitations—the sagacity of these tribes outstrips that of all others, and vies, in its way, with the most singular efforts of humanity. Urged by the necessity of the preservation of their species, many whose term of life does not admit of them nurturing their young—which, moreover, are peculiarly exposed to danger—exhibit a foresight truly marvelous and an indomitable perseverance in anticipating wants which they cannot supply at the time of need. In like manner, other insects, in their architectural skill, while they have the interests of their offspring at heart, chiefly or otherwise, as the case may be, keep also their own conservation in view against changes of temperature and natural enemies.

The art of boring symmetrical tunnels in wood culminates with the carpenter-bees, so termed from their carpenter-like capabilities. Numbers of the members of this class are enormous and very beautiful. *Xylocopa violacea*—the generic name signifies a wood-cutter—larger than the largest humblebee, exhibits choice contrast of color in its brilliant, velvety black body, its wings of a rich violet. Several African species claim more than a passing glance from those to whom beauty affords delight: black body, with bronze-green iridescent wings; body black and orange, with iridescent wings; body pale yellowish-green, with transparent wings—these are lovely combinations of hues displayed. England is believed to possess no specimens of these charming creatures. Their tasks are as interesting as they themselves. They show partiality for old posts or railings, or the woodwork of houses which is soft because commencing to decay; but apparently they do not form fresh tunnels save when old ones are not to be had.

The bee usually begins boring obliquely across the grain of the wood, about two days being taken to make the workman's own length; but this may not be so easily done as the remainder, which runs parallel with the sides of the wood for from twelve to eighteen inches. Sometimes an excavation or two suffice, which generally take opposite directions from the opening; sometimes the bee cuts extra galleries, one above the other, using the same opening. Sharp jaws, moved by powerful muscles, are its only tools; and as it descends into the heart of the solid wood the tunnel is swept clean and regular with stiff brushes of hair on