

bud the bees invariably worked as eagerly as at a drop of honey. This bud-resembling structure was crushed and immediately revealed animal tissue. There were thousands of these bud-like scales on the spruces and from them the bees were busily collecting a liberal store of honey-dew. Some scales, however, apparently produced more of the substance than others, because in some instances globules or dried crystals of honey-dew were noticed, at the base of the insects.

Specimens were sent to Mr. J. G. Sanders of the Bureau of Entomology, who determined the scale to be *Physokermes piceæ* Schr., "a European species which affects the spruce trees and only recently has been introduced into the United States."²

The species is not likely to become a serious pest to the spruces, Mr. Sanders wrote, because of its numerous parasites. Consequently, bee-keepers will probably not be greatly annoyed with the honey-dew it produces as compared with the large amounts from aphids.

During the past summer (1909) the amount of aphid honey-dew stored by bees has been almost unprecedented in all localities east of the Mississippi, and especially northward. Reports in the apicultural periodicals show excessive production in Illinois, Indiana, Ohio, Southern Michigan, Pennsylvania, New Jersey, Maryland, and to some extent in New York and New England. In an editorial in *Gleanings in Bee Culture* Mr. E. R. Root states: "The abundance of honey-dew [and the resulting admixture with pure honey] will make the year 1909 the shortest on a strictly clear white honey, east of the Mississippi and south of the Great Lakes, that we have ever known." He further adds: "Reports continue to pour in, showing that this is probably the greatest year for honey-dew ever known in this country."

² To his knowledge, it has been taken at three points in Massachusetts.

³ Vol. 27, Oct. 1, 1909, p. 388.

GOING INTO WINTER

With Bees on Solid Capped Stores.

Indexed Wm. McEvoy.

Will colonies prepared this way give better results than those having plenty of empty space in the combs for the bees to cluster on. Yes. Because they will winter better, come into spring stronger, build up faster, and gather more honey in the clover season. Crowding the bees up with division boards on all sealed combs, shuts out all brood rearing until near spring. This shutting out of brood rearing until nearly spring gives the bees a long quiet rest, which prolongs their life and during this long period of rest less stores are consumed, and when opened these colonies will be found in the best possible condition for business.

In the fall of 1875, with division boards I crowded the bees up on combs of solid sealed honey in about half the colonies in my apiary, and in all others where they had honey enough, I left them as they were, with the lower half of the centre combs empty, and then packed all on their summer stands. The winter of 1876 was the warmest we ever had in our province, and before the middle of January brood rearing was going on at a great rate in every colony that I packed in the fall that had empty comb for the bees to cluster on. Of course the mildness of the winter had a great deal to do with so much early brood rearing.

The bees in these colonies used up their stores at a rapid rate, and wore themselves out at brood rearing in winter, when they should have been at rest, and in the spring they dwindled down to very weak colonies. The other half of the colonies that I crowded up with division boards on solid capped combs of honey, wintered good, built up fast in spring and gave large yields of honey in the clover season. This experience taught me one of the most valuable lessons that I ever learned, and since then for nearly a

third of a century, bees up on solid caps when preparing the winter of 1904 was a success. In *Gleanings* for 1877, from letters, reports from 50 to 75 dead that were winter stands. Mr. McEvoy, that spring, asking that spring, asking wintered. I wrote him that wintered well, and my apiary against a winter for who would paugh came to my walked through my the bees flew from "Mr. McEvoy, you can yourself over this a winter."

Woodburn, Jan. 11

M
Toronto
Dear Sir,—Referring to the 5th, instant, the exceptionally cold, the 5th, December and February 17.4, the same period years showing as low Taking the four months of 1875, had a mean 11 March in the former much colder than in 1875.

Wm. McEvoy, Esq.,
Woodburn, Ontario.

Indexed

HONEY

F. P. Adams

There is a tendency among American bee-keepers to store honey in wooden boxes, but after a few years ago, bee-keepers in this locality have found it a very dangerous