to keep all frost out. The hives should be so constructed as to allow the cover to be opened for the sunshine of fine winter and spring weather. The sunshine will serve to dry the packing over the cluster, warm up the bees generally, and help them to prepare for another cold snap. My first colony has yet to die under protection of a double-walled hive, with four inches of fine clover chaff at bottom and sides, six inches on top, and a southern aspect. Let no beekeeper who leaves his bees out in this latitude, neglect this plan, for good honey in connection with it will save the bees.

If bees are to be wintered in the cellar, let it be a dry one; if not perfectly dry, see that the temperature is kept at from forty-five to fifty degrees, Fahr.; otherwise you had better winter outside. Take your bees into the cellar about the middle of November, or on the first fine day after, when everything is dry. Don't allow any sleet or snow to accumulate and freeze upon the hives, and don't cellar the hives in that condition, or permit such accumulation to melt in the cellar and create damp there. One winter I left all my bees out until frost had accumulated inside the hives, and when I carried them into the cellar the frost melted and ran down the combs, so putting the bees in very bad shape for winter. Since then I take them in before frost enters the hive, and they do better. Many left their bees out late last fall, fearing that honey dew might cause them some trouble, and that late flights would help to shorten the period of confinement, thus placing their bees in very bad condition to stand the late rainy season. Their loss was consequently very great. Many carried their bees out early, —even in early March,—which was very hard upon bees already in bad condition, with the result that in this locality fully two-thirds died before the first of June. All honey dew was removed from my bees, and nothing but good food allowed, and taken into the cellar about the middle of November. As a result, I am happy to say that my winter loss only amounted to two, which had lost their queens, nor was there any dwindling. After nearly four months in confinement, lacking only ten days, I was rewarded with four thousand pounds of honey; whilst my neighbors, who left their bees to feed on honey dew, leaving them out late in the fall, and taking them out too early in spring, have no honey whatever, but have to replace their loss in bees.

Take care of the bees.

Yours etc,

FRANK COVERDALE.

Walton, Ia.

FOR THE CANADIAN BEE JOURNAL.

EXPERIMENTATION WITH FOUL BROOD.

The Ontario Agricultural and Experimental Union have for the past year been making an effort to solve some of the disputed questions in regard to foul brood. The society has been extremely fortunate in securing the services of Mr. John J. Mackenzie, analyst for the Ontario Bureau of Health, a gentleman who is eminently fitted for this work. He has studied in Germany and other countries along the very line required for this important work. Mr. Mackenzie has kindly given his labors free, and the Committee on Apiculture has given him every information in its power from the stand-point of beekeepers, and paid all other expenses in connection with the investigation. I dare not forestall the results of the work done, and which we intend to continue, but may say they are important, and they will surprise the majority of beekeepers throughout Canada — yes, throughout the world. The Ontario Agricultural and Experimental Union will meet at the Ontario Agricultural College, Guelph, on Dec. 22nd and 23rd next. The report on Apicultural Work, with the discussion, comes up on the 22nd. The meeting will be at a time when reduced holiday rates can be secured on all railroads. Prof. L. H. Bailey, an eminent horticulturist of Cornell University, Utica, N.Y., and Professor F. T. Shutt, chemist, Dominion Experimental Farm, and many others, will be at the meeting, making it an unusually interesting one. The meeting will be open to the public, and I hope we