

crop, then Mr. A. Gill uttered another great truth when he said that the majority of bee-keepers begin feeding too early and quit too soon.

After the close of a honey harvest, or at the end of the season, a great many colonies have enough honey to carry them through to the opening of the coming season of the next year, and a great many do not have enough. Most colonies will have enough to carry them through the winter, but many will be lacking in stores for rearing bees in the spring, unless they are fed. Shall this feeding be done in the fall, or in the spring? With only one apiary, and that at home, it seems as though it did not make any great difference. If there is any preference, I think it would be in favor of spring-feeding, on account of the stimulating effect. Where there are several apiaries, and widely scattered, it is almost impossible to visit them frequently and feed in such a manner as to bring about a stimulating effect similar to that from a honey flow. Cold weather may also prevent feeding in the spring until it is so late that some colonies starve, or slack up in breeding from a lack of stores. For these reasons I should favor the feeding of the bees in the fall until each colony had at least 25 pounds of stores, and this for cellar-wintering. This amount will certainly carry any colony through to the beginning of the next honey season. There will be some equalization of stores needed in the spring, as some colonies consume much more honey in winter than others consume.

In this locality, I am satisfied that much may be gained by feeding all colonies between fruit-bloom and the opening of the flow from clover. I have reference here to a home-apiary, or one that can be visited readily once in two or three days. In this part of Michigan there is a dearth of honey at

this time that lasts from two to four weeks. Even if there is honey in the hive, the bees slack up breeding; that, too, at just the time when they ought to be rearing the workers that will store the surplus from the coming clover harvest. It is not necessary to feed a large amount of syrup at this time. Five pounds to the colony ought to be plenty, unless the colonies are decidedly lacking in stores.

For feeders for this purpose, I know of nothing better than the Alexander feeder shown in the illustration. It is simply a piece of scantling with deep grooves dug in its upper surface by means of a cutter head or a wabbling saw. It is tacked to the back end of the bottom board, its upper surface back until its back edge is even with the back edge of the feeder. The feeder is then all covered by the hive, except about four inches that projects beyond the side of the hive. This projection allows the filling of the feeder from the outside without disturbing the hive. A block is then laid over the projecting end. This keeps out robber bees, or the storm. To keep the feeder snug up against the hive use a crate staple at each back corner of the hive, driving one prong into the feeder and the other into the hive. The illustration shows the feeder made of 2x4 scantling, but I am having 450 made this spring out of 2x6 scantling. The only object in making them wider is that they will hold more. They will then be more desirable for use in feeding large quantities in the fall. Before using the feeders I dip them in hot boiled linseed oil. This prevents their shrinking and swelling and checking.

To prepare the feed I use a ten-gallon can with a honey gate at the bottom. I fill it about two-thirds full of water and then stir in sugar until no more will dissolve. The can will then be about full. To carry the feed to the bees I use a sprinkling can with the rose removed. Go to a colony, remove the block, pour in the feed until the feeder is nearly full, replace the block, and go to the next hive. Simply for stimulative purposes, a pint of such syrup once in two or three days is sufficient.—"Bee-Keepers' Review."