

sections may be used with perfect satisfaction without the aid of separators. Where they are used in cases on the metal  $\perp$  rests, the cases may be partially filled at the beginning or at the end of the season, as desired, and where a few unfinished sections are left they may be placed over the centre of the brood chamber in centre of case, and two "followers" used to close up at each side of section, in order that they may be finished out. These "followers" are made thus: Take thin boards, cut slots in them deep enough to fit down on tin rests; these will slide backward and forward to enlarge or contract the space required. By this means a few unfinished sections may be completed, whereas if full cases were put in they would not be finished. These "followers" may be made by any novice, the only precaution required is to have them the same height as sections, and same length as case inside, and having two or three saw cuts in them. We may also remark that narrow sections will be filled and capped over much sooner than wide ones, and where narrow sections are used throughout the season, if rightly managed, there will be fewer unfinished sections in the fall of the year; the narrow ones will be completed so much sooner that there is much less difficulty in having the unfinished ones filled out. There is also the extra strength of corner, which is valuable in shipping.

## CONVENTION NOTICES.

ONTARIO BEE-KEEPER'S ASSOCIATION, at Toronto, during the Industrial Exhibition, between September 10 and 20, 1885. Exact dates will be given hereafter. Jacob Spence, Sec., Toronto, Ont.

NORTH AMERICAN BEE-KEEPER'S SOCIETY, at Detroit, Mich., on December 8th, 9th, and 10th, 1885. W. Z. Hutchinson, Sec., Rogersville, Genesee C., Mich.

MICHIGAN STATE CONVENTION, at Detroit, Mich., on December 8th, 9th, and 10th, 1885. H. D. Cutting, Sec., Clinton, Mich.

LISTOWELL BEE KEEPER'S ASSOCIATION, at Queen's Hotel, Listowell, Ont., May 16th, 1885. Geo. Brown, Sec.-Treas., Molesworth, Ont.

## QUERIES AND REPLIES.

UNDER THIS HEAD will appear each week, Queries and Replies; the former may be propounded by any subscriber, and will be replied to by prominent bee-keepers, throughout Canada and the United States who can answer from experience, as well as by the Editor. This Department will be reserved for the more important questions, others will be answered in another place. We hope to make this one of the most interesting departments of the JOURNAL.

### SPRING DWINDLING.

QUERY NO. I.—What is the cause of Spring Dwindling, and what course of procedure would you take to prevent it?

G. M. DOOLITTLE, BORODINO, N. Y.:—Protected confinement with an overloading of the intestines. Often flights in winter will prevent it.

DR. C. C. MILLER, MARENGO, ILL.:—I have not had much experience with spring dwindling and don't know any better way than to consider it part of the wintering, and act accordingly. I doubt if a colony which has wintered in fine shape is likely to dwindle.

H. D. CUTTING, CLINTON, MICH.:—I have but very little trouble from spring dwindling and cannot give the cause. To prevent, would pack in any good non-conductor in the fall before any cold weather sets in. I find from past experience that colonies packed early come through with more bees and in better condition than those packed later in the season.

PROF. A. J. COOK, LANSING, MICH.:—Cause, bad wintering, and thus few and feeble bees in spring. I would prevent by arranging to winter well. I would palliate by confining, by use of division board, the bees to just what combs they would cover, and possibly by adding brood and bees from stronger colonies, and by stimulative feeding in spring.

S. CORNEIL, LINDSAY:—I believe spring dwindling is caused by the air in the hive being made foul by the breath of the bees while they are confined during the winter. From this cause they get sick and if they do not have dysentery they become so run down in health that they are not in that robust condition necessary to carry them through the hard work of spring. Let the hives be at all times surrounded by "air as pure as it blows on the hill tops," and let the ventilation of the hive be such that there will be a constant change of air, without draft perceptible to the bees, and without reducing the temperature of the cluster below 70°. I have had no spring dwindling since I aimed at having these conditions.