

likes particularly about this arrangement is that its use will compel many men who never touch a frame to handle their bees at least twice a year, and so see their actual condition.

A little thought will suggest that for this system of bee-management an eight-frame hive is better suited than is a ten-frame one. When the former is the standard of the apiary the hive will be $27\frac{1}{4}$ inches long; when the latter is used the length will be $32\frac{1}{4}$ inches. The winter case designed for an eight-frame hive is equally available for the protection of a ten-frame hive, but when two supers are used they must be eight-frame width. It is suggested that at the start any one interested should be content to make one or two according to the specifications given later, but to view them mainly as winter protecting cases, giving one or both a trial through the honey-flow.

Since there should be at least a couple of inches of packing above the frames, the walls of any winter case are generally made 3 inches deeper than the sides of the enclosed hive. Mr. Hand in his design consistently followed out this idea; hence it followed that in the summer, when the case was used as the hive proper, there was left a vacant space of 3 inches under the frames. In hot regions the space is rather an advantage than otherwise, but after trying out deep spacing under the



Fig. 25. Case for winter and spring protection. The case complete is in the centre. To the left is shown the under-side of the bottom board, while its upper surface is presented above the complete case. To the right 's the under-side of the cover. The bridge leans against the case.

frames for many years, the writer decided that about 1 inch the full width of the hive is usually enough in British Columbia on account of our cool nights. To fit this condition, and to make the case available for the protection of section supers when comb-honey is wanted, the case has been designed in two parts—one the hive proper; the other a 3 inch extension to be placed below in the winter months, when the body is functioning as a protection case.

Any one desiring to try out a case should order the following bill of lumber. Cedar is recommended for the sides, cover, and bottom, but for the extension body, sides of cover, binding-cleats, bridge, and spacing-cleats fir will be more suitable.