

Modern bee-keeping is based on this vacancy, for until the Rev. L. L. Langstroth discovered that the bees will fill up a space less than $\frac{1}{8}$ inch wide with propolis, and build comb in one larger than $\frac{1}{8}$ inch, a movable frame was impossible. A beespace then is one that is not less than $\frac{1}{8}$ inch, nor more than $\frac{1}{4}$ inch. It is important that this fact be remembered, for it has much to do with practical bee-keeping, and is the reason why it is better for the bee-keeper to buy factory-made goods than to attempt makeshifts of his own construction.

The inside of a frame is filled with wax comb, which is made up of an innumerable number of cells, at least 3,000 on each side. In these cells is stored the food



Fig. 10. Examining a Frame.

supply of the colony; in them are laid the eggs from which develop the young bees, the whole time from infancy to maturity being spent in such narrow confines. Then in the cold days of winter, when all activity in the hive practically ceases, when the individual members huddle close together to keep each other warm, each empty cell may be filled with an insect so that no space shall be unoccupied. The interior of a bee-hive is a wonderful utilisation of a limited area, down to the minutest detail, and it is hard for most people to realise that in a capacity of about 2 cubic feet as many as 50,000 bees will carry on all the activities of their life, for here is at once a pantry, kitchen, incubator, nursery, living-room and bedroom for them all.