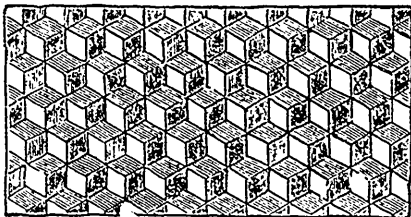


the spirit for comb building. The proper way to encourage them to do so is to take out a comb of brood, and place a comb with medium brood foundation the body of the hive. The upper storey should now be put upon the hive, and in it the frame of brood and two or three frames of foundation, with extra thin foundation. I like to put these frames over the centre of the brood chamber, with a division board at each side, and make all snug and comfortable by means of quilts and cushions. These frames I remove as soon as the bees attach the foundation to the sides and partially build out the wall. It is astonishing how many combs, under favorable conditions, can be brought to a stage sufficiently strong for the bees to utilize in swarming. Under the above conditions extra thin will answer. Of course the medium works well here also, and it is the kind I use for the purpose. Care must be taken not to leave the combs long enough for the bees to store any material amount of honey in them, and not to leave them long enough for the queen to deposit eggs in them. Those who are not skilled in beekeeping must be very careful not to enlarge the hive when it should not be done; it may lead to chilling the brood, and this means a serious setback to the colony.



Comb Foundation.

We now come to the more difficult task of drawing out foundation in full colonies, or with swarms. The best method of attaching foundation is, probably, by means of a machine which melts the edge of the foundation, and the melted edge drops upon the frame and attaches itself firmly to the top bar. Machines of this kind are, however, rather expensive for a man keeping a limited number of colonies. Two to three dollars is the price. The next best plan is to nail the foundation in with a strip of wood. Frames are made of the above design, but the little strip must not be pinched too tightly against the opposite surface of the wood, or it will so nearly cut the foundation in two that it will be likely to break the sheet along the top bar. With a medium brood this foundation can be used almost anywhere, except with a swarm, and not break. There is, however, a tendency to sag, and this is especially true if the frame is deeper than the

Langstroth, such as the Jones, or combination. The hive should be shaded from the heat of the sun during warm summer weather. This will prevent many a sheet of foundation from breaking down; and with the above precautions and a well ventilated hive no breaking down should occur. When swarms have to be put on sheets of foundation, the foundation, with the ordinary beekeeper, should be wired to give support to the foundation, and the swarm should not immediately be put upon the sheets of foundation, but upon empty frames, and towards evening, as the bees quiet down, the empty frames can be, one by one, replaced by sheets of foundation. Every one should use full sheets of foundation; but if they cannot make this outlay, to get the best results in the end they should not make the mistake of putting a swarm on half sheets. It is better to put in a very narrow strip of foundation unless you can afford the outlay of a full sheet.

SECTION FOUNDATION.

In section foundation we again have various grades of thicknesses and weights. First, there is a section ten square feet, then a light section twelve square feet, and an extra light section fifteen square feet. Prices of these are 6cc., 62c., and 65c. per pound, respectively, the price of foundation per section being about $\frac{2}{3}$ c., $\frac{3}{4}$ c., and $\frac{3}{8}$ c. A decided advantage in price is here shown for the thin foundation.

Some of the very best beekeepers are quite divided as to whether the thick section foundation is thinned out by the bees, or whether it leaves a "fish-bone" in the comb. This subject requires investigation. This, however, we know, that comb honey quite frequently has a thick sheet of foundation in it, and it is not likely to become thicker in the process of reconstruction by the bees. Take the thinner foundation, and avoid the heavier. Again, opinions are divided as to what gives the best comb honey; but there is not much difference of opinion about this. It pays best to use full sheets of foundation, twelve or fifteen square feet to the pound, inasmuch as the quality of the comb will not be sufficiently depreciated to make any perceptible difference. What we would like to get in comb honey is this foundation with a deeper side wall, and yet with the base no thicker than the natural one, and the side wall as nearly like the natural as possible, or, at least, no thicker than it is now left by the bees after building out comb foundation. If a machine can be made to turn out such a product, a great step will have been made in advance in the production of this important article.