

wide, but the present-day tendency is to use full sheets in each frame: First, to be sure of getting evenly built combs; second, to prevent the building of drone-cells. There are many conflicting theories as to how the bees decide when they shall build drone-comb, but this much seems to be true: A swarm provides worker-cells at first so that the queen may start laying, and will build no other kind for twenty-one days. If she can use each cell as fast as it is made; but at the end of that time the cells first occupied are again empty, hence she may be unable to keep the new ones full, and then the comb-builders may turn their attention to drone-comb. When there is too much of this—a patch as big as the palm of one's hand is enough for any hive—it should be cut out, in the hope that it will be replaced by worker-cells. The best way, however, is to start right by using full sheets of foundation in each frame. The cost is about 10 cents a sheet, which is soon saved, since there will be no army of drones eating up much more than that value in honey, besides helping to arouse the swarming fever in the minds of the workers.



Fig. 22. Embedding wire in foundation.

The sheet of foundation is inserted into a narrow groove cut in the under-side of the top bar, then held in position by a wedge alongside of it. This wedge must be driven in very tight.

In a fine specimen of a finished frame the comb is attached to the bottom bar and the two end bars; but, unfortunately, such fine examples are not as common as they might be. Now, a comb filled with honey and brood weighs several pounds, so that there is quite a strain on the upper part; furthermore, if it be tilted from the perpendicular it is apt to break and drop out of the frame. To hold it securely in position the frame is usually wired. For this purpose the end bars are pierced with three or four holes, through which the thin wire is strung. Of course, the wiring is done before the foundation is put in. An unwired frame should never be run through the extractor.

The operation of wiring is a very simple one. Where three wires are to be used, begin by driving in half-way a couple of tacks, one beside a hole next the top bar, the other alongside the hole nearest the bottom bar at the other end of the frame. These