

**Improved Beehive.**

From the earliest historical times the product of the bee has been considered valuable. The land of Canaan was described as a "land flowing with milk and honey," and the works of the ancient heathen poets descanted on the delights of honeyed preparations for the palate. The breeding of the honey bee and the proper contrivances for the deposition of honey have become, in this country, important adjuncts to the means of the husbandman.

The improvement illustrated in the engraving claims to be superior to the hives in common use. Its advantages are, rendering the hive proof against the disastrous and sudden changes of temperature, and the ravages of the bee moth, furnishing a superior breeding chamber, and facilitating the removal of the comb and honey.

The engraving represents the hive partly in elevation and partly in section. It is built of frame work, the uprights and horizontals connected at the corners, to which are nailed, both inside and outside, laths, leaving an airspace between; these laths are coated with plaster, making a perfectly air-tight box in connection with the top. The bottom has, extending around the sides, a moth guard, A, in section, like an inverted U, having the inner leg the

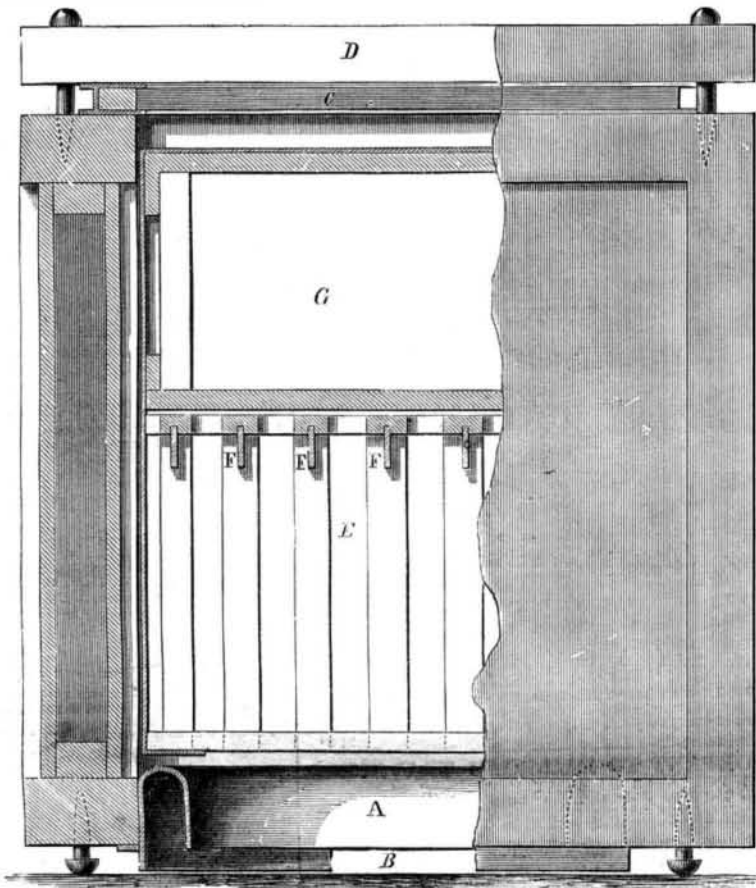
shortest. At B is the door, and the inner surface of the guard is smeared with lard, or some other substance of similar consistency, which effectually prevents the entrance of the moth. The top of the hive is secured by means of a raised rim, C, sheathed with tin, which projects above the rim, and on which the cover, D, shuts down and is fastened by screws.

Strips of leather or rubber may be interposed between the rim and the cover. The brood or comb box, E, is made of thin slats of wood, except the bottom, which is open, and covered with paper pasted on all sides but the top and bottom. This is furnished with strips of tin, F, let in to the top of the uprights and dipped in wax, as an inducement to the bees in forming the comb. By this means each comb is separated, and the strips of comb will always be vertical and distinct. The honey box fits into the space, G, and is of similar construction to the brood box, except that the sides are formed by uprights at the corners, while the top and bottom are of slats. The sides of the box are composed of paper. The

apertures between the top slats of the lower box, and the bottom slats of the upper, afford egress from the lower and ingress to the upper box. By this arrangement it will be seen that the two thicknesses of mor-

tar on the sides inclosing an air space, the hermetical sealing of the top, and the paper sides of the inside boxes, insure a uniform temperature at all times. The comb, and the comb box itself, can be easily divided by a chisel-shaped knife, corresponding in width of blade with the width of the box, and the comb be thus easily removed.

Patented Feb. 13, 1866. For further information

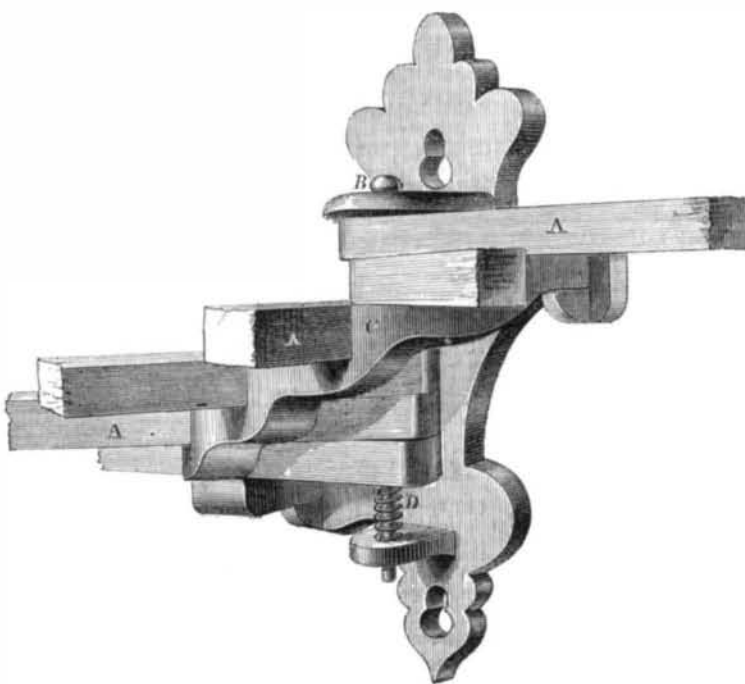


**TAYLOR & COX'S BEEHIVE.**

address Edwin Cox, Jordan, Wis., or John Hobart, Monroe, Wis.

**Improved Towel Rack.**

The unstable character of the common towel rack or clothes-bar used in the dressing room, and the unhandy form of the common clothes-horse, with the



**HOTCHKISS'S TOWEL RACK.**

space it occupies when spread, renders this neat improvement a very useful article. Its structure and operation can be readily understood by the engraving. It is designed to be secured to the wall by

screws, and when not in use the bars, A, are swung back out of the way. By simply moving them on a common pivot, B, the bars can be extended at varying angles and are supported by the ledges, C, and held in place by the spiral spring, D.

Patented May 15, 1866. For further information address M. D. Hotchkiss, Sheboygan Falls, Wis

**THE SEWING MACHINE AND THE SHOE MANUFACTURE.**

A recent number of the *Shoe and Leather Reporter* contains an article on the results of the application of the sewing machine to shoemaking. While allowing for celerity and facility of production, it insists that the quality of the work is inferior to that produced by the old hand-sewing. It says:—

"The sole-sewing machine has no strength of tension, no power of 'pull,' if we may so express it, and added to this defect, is the very faulty distribution or incorporation of wax with the thread, which, it appears, is a part of the business of the machine to attend to. Little or no wax is applied. This sole-sewing machine necessitates another defect. The upper has to be nailed to the inner sole. In a week after wearing, these nails begin to work through the shoe, and cut the stocking, and generally in thirty days, if there has been wet walking, the outer sole rips, although scarcely worn, and the shoe is ruined; for no ordinary shoe repairer can well re-sew a machine-sewed sole. He must own just such a machine to do it, and not one shoemaker, so called, in a thousand, can afford it."

Another difficulty in making the sewing machine equal the work of the human hand, is the necessity of having the thread much smaller than the perforation of the needle. In sewing leather, especially, the thread should completely fill the space made through its substance by the needle. This can be done only by drawing, or tension, which the *Reporter* thinks the sole-sewing machine is incapable of exerting to a sufficient extent. It is certain, whatever may be the reason, that machine-sewed shoes are much inferior to those sewed by hand by an honest and conscientious workman. The prejudice against them is strong and increasing. It appears that an improvement is needed in these shoe machines which will enable them to compete with hand labor in the durability and value of their work as they now do in the rapidity of execution. Let our inventors look to this matter.



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