J. H. Bassler,

Bee Hive.

No. 90,984. Patented June 8, 1869.

Fig: 1

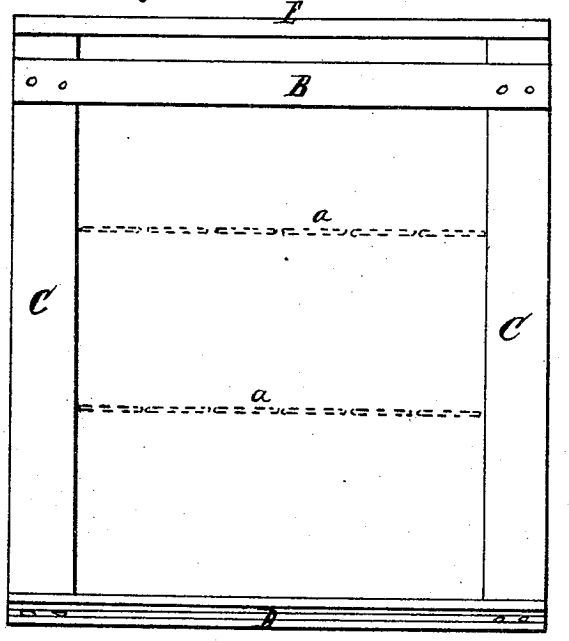


Fig: 2

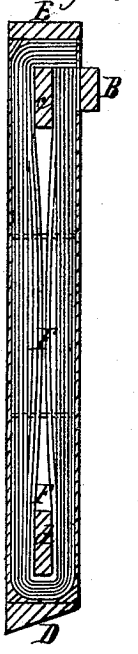


Fig: 3

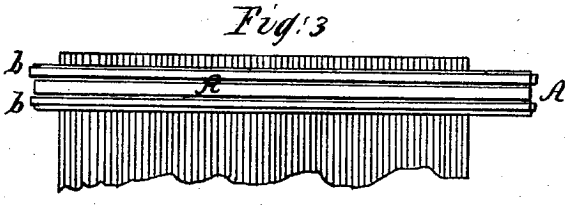
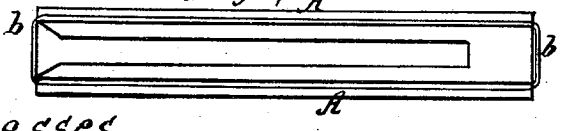


Fig: 4



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J. H. BASSLER, OF PINE GROVE, PENNSYLVANIA.

Letters Patent No. 90,984, *dated June* 8, 1869.

IMPROVEMENT IN BEE-HIVES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, J. H. BASSLER, of Pine Grove, in the county of Schuylkill, and State of Pennsylvania, have invented a new and useful Improvement in Bee-Hives; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents an outside view of one side of my improved bee-hive.

Figure 2 is a vertical longitudinal section thereof.

Figure 3 is an edge view of a clamp employed in the making of the sides.

Figure 4 is a plan view of such clamp.

Similar letters of reference indicate like parts.

This invention relates to a new manner of making the sides of bee-hives, and to the application of certain ingredients used for that purpose; and consists in a novel manner of constructing straw sides for the hives, and of a novel cement applied thereto, and composed of the ingredients hereinafter enumerated.

The straw sides of the hive are made as follows:

Two cast-iron V-shaped clamps, A A, are fastened to a board about twice as far apart as the hive or the panel to be made is to be high.

The straw—rye straw is preferred—is fitted, with the ends through the clamps A, it being inserted at the open ends of the clamps.

When the clamps are filled so far that a matting of the requisite width is produced, such matting is or may be tied, by means of strings *a a*, as indicated in fig. 1.

By means of wires or bands *b b*, that are fitted around the clamps A A, as indicated in figs. 3 and 4, the straw can be prevented from slipping out of the open ends of such clamps.

The matting, which has the requisite width, is laid on the outside of one of the sides of the hive, so that one end reaches above the top of the said side.

A slat or bar, B, is then nailed, with its ends to the posts or supports C C of the side, and holds the upper part of the mat, clamping it against a cross-bar, *c*, formed in the frame of the hive, as shown.

The top part of the mat is then cut off flush with the top edge of the bars B and *c*, as shown in fig. 2.

The bar B serves also to support the cap or top box of the hive.

The mat is then drawn around the bar *d*, arranged near the bottom of the frame, and is then brought up on the inside, and the bottom bar D of the frame nailed on.

Then the mat is laid over the bar *c*, and the top piece E of the frame nailed on, so that it is now firmly held in the frame. The end of the mat is now cut off flush with the outer edge of the top bar E, as shown in fig. 2.

The straw portion is now ready, the inner and outer face of the straw side is coated with a cement, which is made of the following ingredients, in about the proportions named:

Water-slaked lime, five parts.

Curds of milk, thirty-five parts.

Sand, sixty parts.

A hive thus provided with the cemented straw sides, protects the bees against the heat of summer and the severe cold of winter, as the manner of winding the straw around the frame of a side leaves a dead-air space, E, all along each side of the hive, (see fig. 2,) and for the further reason that straw is a bad conductor of heat.

The cement is inexpensive, and quite effectual in preventing the moth from lodging in the hive, and also in protecting the straw from the inclemency of the weather.

If, in the course of time, the outer coating of cement should become injured by the influence of the weather, a fresh coating can be easily applied while the bees are in the hive, the smell of the cement not annoying them.

The inside coating of cement will always remain good, as the bees give it a coating of wax, which protects it from air and moisture.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. A side for a bee-hive, formed of straw-matting, as described, covered with cement, and so contructed that a dead-air space, F, is formed within it, substantially as herein set forth, for the purpose specified.

2. The composition for cement, herein described.

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