

H. A. KING.
Improvement in Machines for Making Comb-Guides for
Bee-Hives.

No. 115,066.

Patented May 23, 1871.

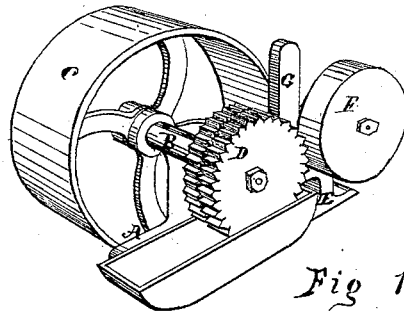


Fig 1.

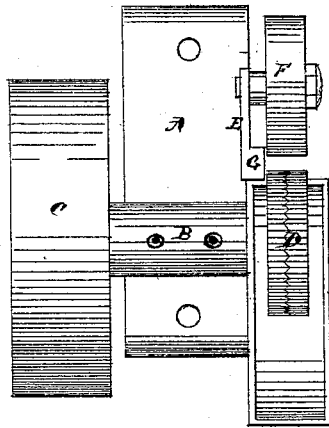


Fig 2



Fig 3

Witness

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IMPROVEMENT IN MACHINES FOR MAKING COMB-GUIDES FOR BEE-HIVES.

Specification forming part of Letters Patent No. 115,066, dated May 23, 1871.

I, HOMER A. KING, of New York, county of New York and State of New York, have invented a new and useful Machine for Making Honey-Comb Impressions on the bars or strips of wood which form the comb-frames for Bee-Hives, the object being to furnish a comb-guide for the bees to commence building upon.

In the drawing, Figure 1 is a perspective view, and Fig. 2 is a plan view, of the machine. Fig. 3 represents a piece of a bar having the impressed wax on one of its surfaces as it comes from the machine.

A, Fig. 2, is a plate, upon which is placed working parts of the machine, having cast upon it an upright bearing, B. Within said bearing is placed a short shaft, having on one end a driving-pulley, C, and upon the other an impression-wheel, D, which consists of two wheels having their peripheries cast or cut in the form of triangular teeth; and the inner surfaces of the two wheels which come together at the rims are cut, in like manner, to the peripheries, and secured together so that the two corrugated surfaces mesh together, bringing the the raised portion of the teeth of one wheel opposite the sunken portion of the other, so that the impression made by the wheel resembles a part of the cells of honey-comb. A support, E, cast on one side of the plate A, has a plain wheel, F, which can be adjustable a suitable distance from the wheel D corresponding to the thickness of the strips to be pressed, and a guide, G, against which the strips slide, causes them to keep in the right direction as they pass between the wheels.

Beneath the impression-wheel D is placed a dish, H, in which the wheel dips, the object of which is to contain a quantity of vinegar or other suitable acid to wet the wheel so that it shall not stick to the wax, but will leave a sharp and smooth impression.

The operation of the machine is as follows: The strips of wood, being coated on one side, are passed through between the wheels D and F with the coated side next to the wheel D; the machine, being in motion, carries them rapidly through, making an impression in the wax resembling one-third of two honey-comb cells, one abutting to the other, making a guide or commencement for bees to begin building upon.

The impressions may be made by having straight dies in a horizontal press; but for convenience and for rapidly impressing the strips I prefer the wheel-dies.

By this means worker comb-guides are speedily and readily made.

Having thus described my invention, what I desire to secure by Letters Patent is—

1. The dies or wheels D, constructed as described for making comb impressions, substantially as and for the purpose set forth.

2. The manufacture of comb-guides by means of dies D, the impression surface of which is kept wet with acid to prevent the adherence of wax, substantially in the manner described.

H. A. KING.

Witnesses:

GEO. W. TIBBITS,
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