(No Model.)

J. P. HOWE.

BEADING MACHINE.

No. 470,573. Patented Mar. 8, 1892.

Fig. 1.

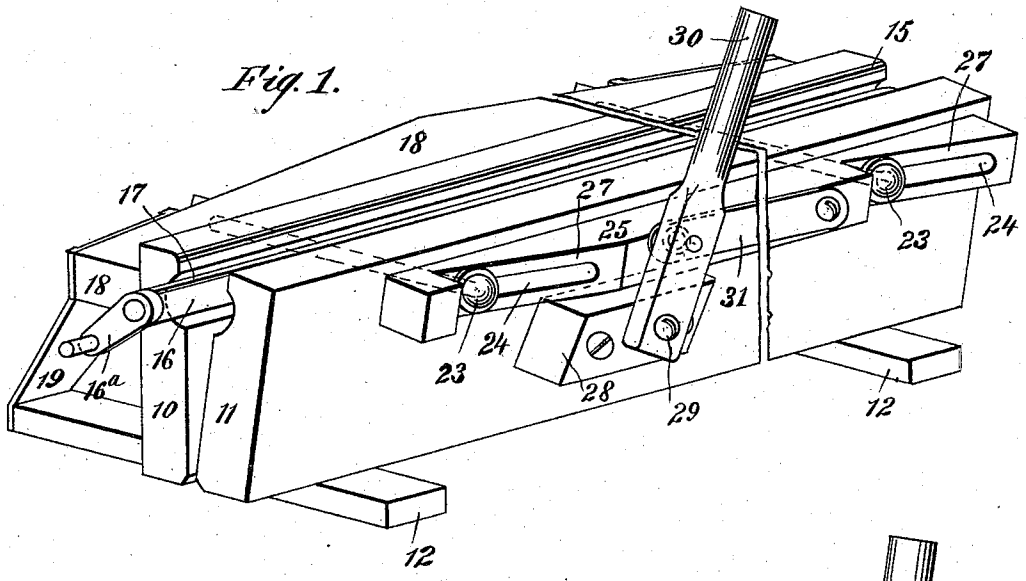
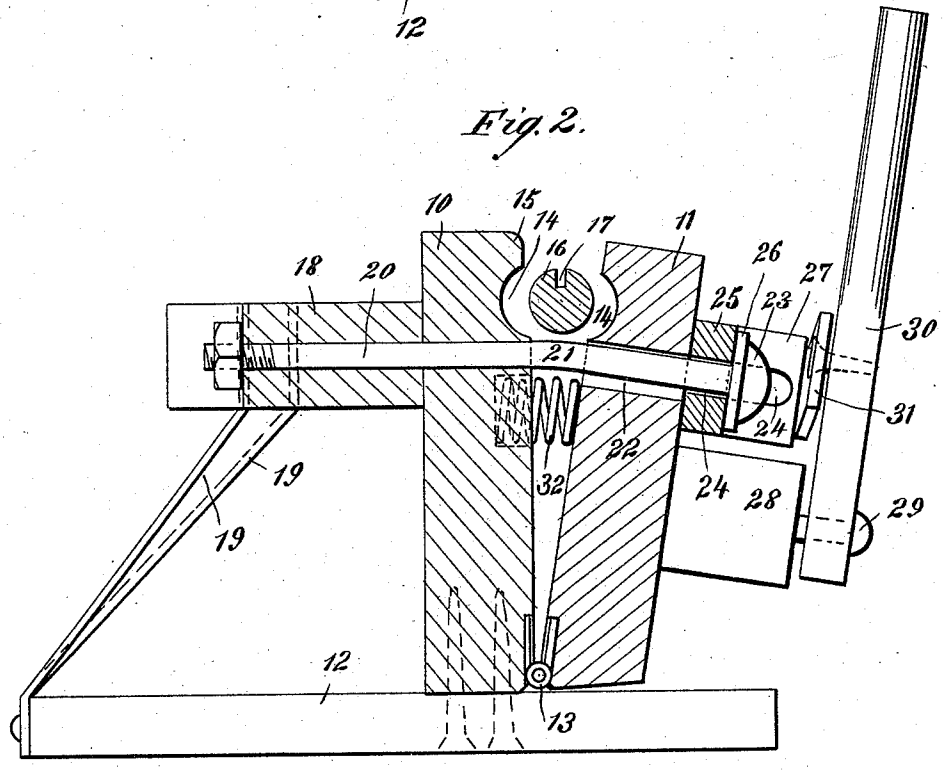


Fig. 2.



WITNESSES:

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JAMES P. HOWE, OF CASS CITY, MICHIGAN.

BEADING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 470,573, dated March 8, 1892.

Application filed October 6, 1891. Serial No. 407,845. (No model.)

To all whom it may concern:

Be it known that I, JAMES P. HOWE, of Cass City, in the county of Tuscola and State of Michigan, have invented a new and improved Beading-Machine, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of machines which are used for making beads on eaves-troughs and similar articles; and the object of my invention is to produce a cheap and simple machine which will make the beads accurately and rapidly, which may be easily operated, and which is constructed in such a way that it will not warp if made of wood and will not easily get out of repair.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both the views.

Figure 1 is a broken perspective view of the machine embodying my invention, and Fig. 2 is a vertical cross-section of the same.

The machine is provided with fixed and movable jaws 10 and 11, the jaws being of similar construction, and the fixed jaw 10 is secured to base-pieces 12, and these base-pieces form the support for the machine. The jaws are hinged together at the bottom, as shown at 13, and near the top each jaw is provided with a semi-cylindrical groove 14, the two grooves being adapted to register, and the upper edge of the fixed jaw 10 is rounded slightly, as shown at 15, so that by bending the sheet metal forming a trough over the edge 15 or the square edge of the jaw 11 the metal may be more or less rounded, as desired. A roller 16 extends longitudinally through the grooves 14, is provided at one end with a crank 16^a, by means of which it may be turned, and is also provided with a longitudinal groove 17, in which one edge of the metal to be operated on may be inserted. On the back side of the fixed jaw and near the upper portion of the jaw is secured a double wedge-shaped brace 18, which, if the jaw is made of wood, will prevent it from warping, and this brace is connected at the ends with the base-pieces 12 by metallic braces 19. Near the ends of the fixed jaw 10 are bolt 20, which extend through the brace 18, through the fixed jaw, and through recesses 22 in the swinging jaw 11, and the bolts are bent downward slightly, as shown at 21, so that they will conform approximately to the movement of the jaw 11. The bolts are secured at the back side of the machine by nuts, and the front ends of the bolts terminate in heads 23, and the bolts are held to move in the longitudinal slots 24 of the slide-block 25, which slide-block is held to move horizontally on the movable jaw 11, and in order that the block may slide easily beneath the bolt-heads the bolts are provided with bearing-washers 26. The slotted portions of the slide-block 25 are recessed, so as to form wedges 27, which wedges have the same inclination, and the wedges are adapted to slide beneath the bolt-heads 23, and thus force the jaw 11 against the jaw 10. Beneath the slide-block 27 is a block 28, which is fixed to the jaw 11, and pivoted on a bolt 29 in the block 28 is a lever 30, which extends upward from the pivot and connects by means of a strap 31 with the slide-block 25. It will thus be seen that by swinging the lever 30 the jaw 11 may be forced against the jaw 10 or may be separated therefrom. The jaws 10 and 11 are normally pressed apart by a spiral spring 32, which fits in a recess in the fixed jaw 10 and presses against the jaw 11.

To operate the machine, the edge of the metal to be beaded is inserted in the groove 17 of the roller 16, the jaws 11 and 10 are clamped together by means of the lever 30 and the wedge connection above described, and the roller 16 is then revolved by means of its crank, thus winding the metal upon it and providing a bead.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A beading-machine comprising a fixed and a movable jaw hinged together and having registering grooves, a roller provided with a longitudinal groove and held to turn in the jaw-grooves, and a block sliding along the outer side of the movable jaw and having its outer face inclined, and a transverse bolt or

bar extending from the fixed jaw into engagement with the said inclined face, substantially as described.

2. A beading-machine comprising a fixed and a movable jaw hinged together and provided with registering grooves, a brace secured to the back of the fixed jaw, bolts extending through the fixed jaw and through recesses in the swinging jaw, said bolts having heads at their front ends, a slotted slide-block having inclined faces to engage the bolt-heads, a lever for moving the slide-block, and a grooved beading-roller held to turn in the jaw-grooves, substantially as described.

3. A beading-machine comprising a fixed jaw having a groove near its upper edge, a brace fixed to the back of the fixed jaw and connected by braces with the base of the machine, a swinging jaw hinged to the fixed jaw and having a groove near the upper edge to register with the groove in the fixed jaw, a slide-block held to slide on the movable jaw and having inclined faces thereon, bolts secured to the fixed jaw and extending through the swinging jaw and slide-block, a lever pivoted on the swinging jaw and having an operative connection with the slide-block, and a revoluble beading-roller held to turn in the jaw-grooves, substantially as described.

JAMES P. HOWE.

Witnesses:
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