(No Model.)

J. H. POPE.

HEELING MACHINE.

No. 588,936. Patented Aug. 24, 1897.

Fig. 1.

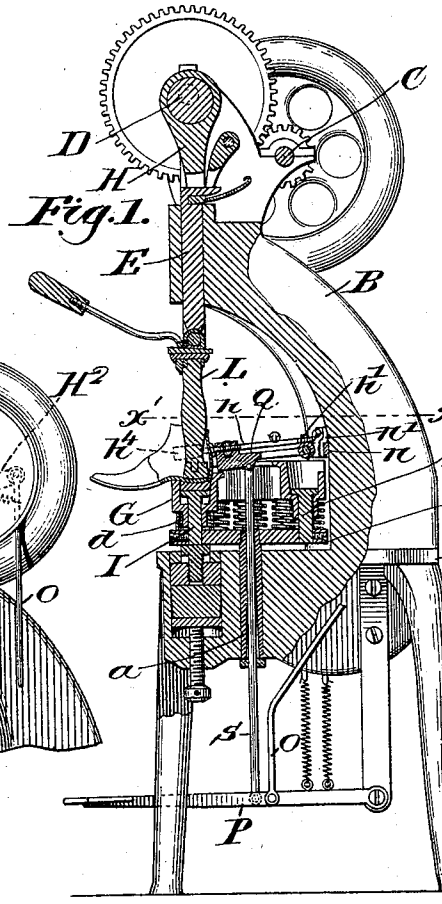


Fig. 2.

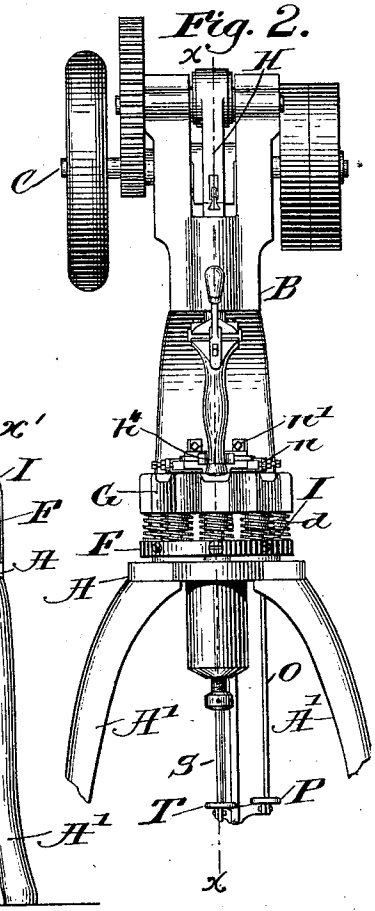


Fig. 3.

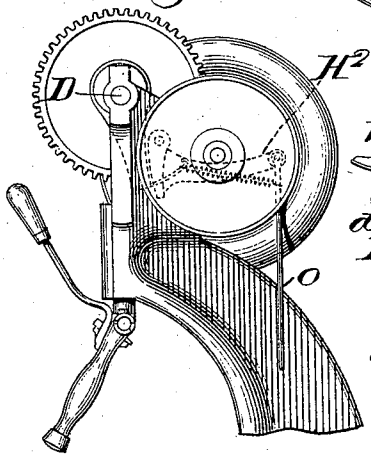
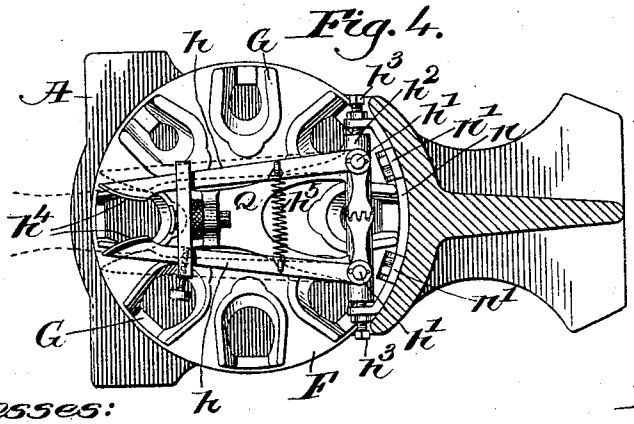


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH H. POPE, OF BROCKTON, MASSACHUSETTS, ASSIGNOR TO JAMES W. BROOKS, PRINCIPAL TRUSTEE, OF PETERSHAM, AND JOHN BROOKS, ASSOCIATE TRUSTEE, OF CAMBRIDGE, MASSACHUSETTS.

HEELING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 588,936, dated August 24, 1897.

Application filed September 18, 1896. Serial No. 606,208. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. POPE, of Brockton, county of Plymouth, State of Massachusetts, have invented an Improvement in Heeling-Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to improve the class of heeling-machines represented in United States Patent No. 108,677, dated October 25, 1870.

In the machine referred to a molded heel loaded with partially-driven nails is placed in a vertically-movable die shaped to receive the heel, the breast side of said guide being cut out to admit the sole of the shoe near the heel. Said machine also has a lever controlled by a treadle, said lever being depressed after a heel has been attached, to aid in pulling the die from the heel. I have found it very desirable to insure rapid and accurate work to combine with said heel-die a jaw-like back-part guide or holder, which always stands just above and at the rear side of the heel-die, the acting faces of said jaw-like guide being held within a vertical plane rising from the inner wall of the die, where they are held with a yielding pressure, the said back-part guide so located being always in position to be entered by the back part of the shoe as the latter is pushed into place above the heel to be connected with the sole of the shoe, the said jaws controlled by a spring and having teeth in engagement one with the other, separating or yielding uniformly as required, and holding and guiding the shoe correctly, preventing the shoe being put into wrong position over the heel and heel-die.

My invention consists in the combination, with a jack for holding a shoe and a heel-die to receive within it the heel to be attached to the shoe, of an independent back-part gage composed of connected spreading jaws located at the rear side of the heel-die above it, substantially as described.

Figure 1 is a side elevation, partially broken out, on the dotted line x, Fig. 2, of a heeling-machine having my improvements added, it showing a shoe with a heel attached. Fig. 2 is a front elevation without the shoe and with the eccentric shown in the section Fig. 1 in its upper throw; Fig. 3, a detail to show some of the parts broken away in Fig. 1 and the jack thrown out to receive a shoe upon it, and Fig. 4 is an enlarged top or plan view below the dotted line x'.

The bed A, legs A', upright frame B, driving-shaft C, eccentric-shaft D, gearing uniting said shafts, the plunger E, having jointed to it the jack L, the dog H, reciprocated constantly by said eccentric, the revoluble disk F, having an attached hollow spindle a, said disk having an attached series of driving-studs I, surrounded by hollow heel-dies G, normally kept elevated by springs d, the lever H^2, under the control of the foot-treadle P and rod O, to put the dog H in position to strike and depress the plunger E, the treadle T, and the rod S, connected to said treadle and to the lever Q, are and may be all substantially as shown in said patent, wherein the like parts are designated by the same letter. I have added to these well-known parts a back-part guide composed of two like jaws or levers h, pivoted at h' on the inner end h^2 of the lever Q, supported in suitable manner, as by point-screws h^3, the inner ends of said levers being toothed, as shown in Fig. 4, so that their forward or acting convexed faces h^4 when acted upon by the back part of an incoming shoe will separate evenly and uniformly, the force of this pressure on the back part of the shoe being controlled by a suitable spring, as h^5. The screws h^3 enter ears of a yoke or bearing n, fixed to the upright by suitable bolts n'.

The acting faces h^4 of the back-part guide, when the jack is turned out to the left, as shown in Fig. 4, lie within a vertical plane rising from the inner wall of the heel-die having the heel next to be attached to the heel of a shoe to be applied to the jack, the said shoe when applied being swung backwardly or to the right in the drawings, and in such movement the back part of the shoe, the foot of the operator then being off of both the treadles, enters between the said jaws, and the shoe is positioned or centered correctly with relation to the heel in the heel-die, so

that when the operator puts his foot on the treadle P to insure the starting and depression of the spindle, jack, and shoe the said jaws grasping the back part of the shoe may move down by the friction against the shoe into the position shown in Fig. 1.

The heel having been attached, the shaft D in completing its rotation raises the plunger and jack, and the operator, his foot being on the treadle T, holds the lever Q in place, so that it will contact with the top of the heel-die and assist in removing the heel from the die.

In this invention no claim is made broadly to pivoted arms rising and falling with the heel-holding die, said arms bearing against the side of the upper.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a heeling-machine, a jack for holding a shoe to the heel, a heel-holding die to receive within it a loaded heel to be attached to the sole of the shoe, combined with a back-part guide composed of toothed arms in engagement one with the other, a lever having its pivot fixed on a stationary part of the framework on which said arms are pivoted, said lever being movable up and down, and a spring to normally close the acting ends of said guide on the shoe, preparatory to and while attaching the heel, substantially as described.

2. In a heeling-machine, a jack for holding a shoe to the heel, a heel-holding die to receive within it a loaded heel to be attached to the sole of the shoe, combined with a back-part guide composed of toothed arms in engagement one with the other, a lever having its pivot fixed on a stationary part of the framework on which said arms are pivoted, a treadle and connections between it and said lever to depress and raise the same, and a spring to normally close the acting ends of said guide on the shoe, preparatory to and while attaching the heel, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH H. POPE.

Witnesses:
JOHN C. EDWARDS,
ALEX. C. PROUDFIT.