

J. ELLISON.

Machinery for Compressing and Securing Heel-Lifts.

No. 153,163.

Patented July 21, 1874.

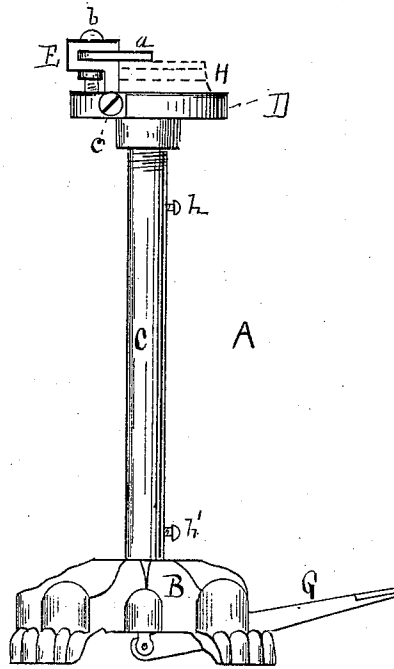


Fig. 1.

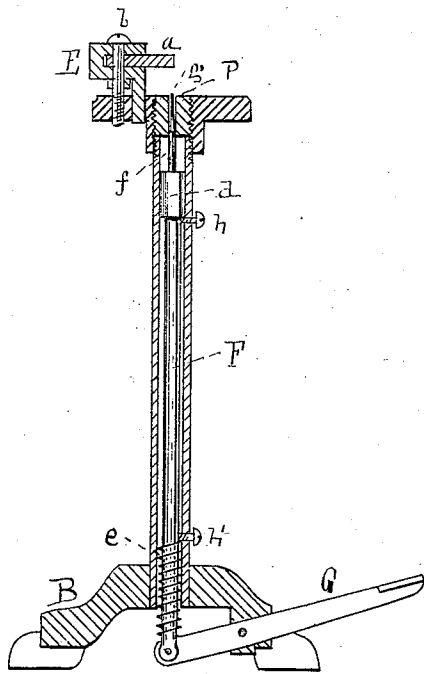


Fig. 2.

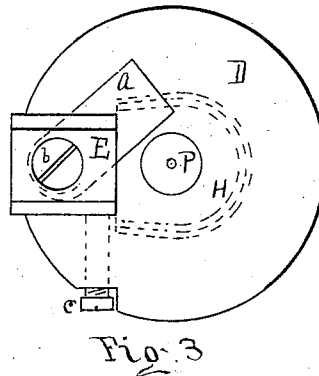


Fig. 3.

Witnesses

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JAMES ELLISON, OF LYNN, MASSACHUSETTS.

IMPROVEMENT IN MACHINERY FOR COMPRESSING AND SECURING HEEL-LIFTS.

Specification forming part of Letters Patent No. **153,163**, dated July 21, 1874; application filed February 4, 1874.

To all whom it may concern:

Be it known that I, JAMES ELLISON, of Lynn, in the county of Essex and State of Massachusetts, have invented a Heel-Packing Machine, of which the following is a specification:

The heel-packing machine A is constructed of the several parts hereinafter described, the same being combined and operating together for the purpose of packing or laying heel-lifts of leather one upon the other to any desired height for the heel, and then fastening them with one nail, and at one single blow, leaving the heel ready to be fastened to the boot or shoe. The machine A stands upon any convenient stand or platform, B, (see Fig. 1 in the drawings,) upon which stand rests an upright hollow shaft, C, bearing upon its upper end a table, D. Said table D is clearly shown in Figs. 1, 2, and 3, and in Fig. 3 is seen one end of the plug P fitted into the table, and the diameter of whose screw is the same as the diameter of the shaft C. Said plug has a hole in its center for a nail, *g*, through which also plays the pin *f*. The clamp E is set through a slot in the table D, its height above the table being adjustable by the screw *b*. The clamp E also has a movable gage, *a*, swinging sidewise on the screw *b* as a pivot, so that the nail can be easily dropped into the hole in the plug P. The heel is built up under the gage *a*, the same being adjusted to the desired height of the heel. *c* is also a screw, pressing against the clamp E for steadying the same. The section of the machine (see Fig. 2) shows the interior of the hollow shaft C. The rod or piston F, working within said shaft C, is pivoted to and operated by the foot-lever G. Its upper end has a steel or hardened hammer. The small pin or driver *f* and nail *g* will be observed in said Fig. 2. Upon the lower end of the rod F is a spiral spring, *e*.

The screws *h* and *h'* serve to keep the rod adjusted to its work. Said Fig. 2 shows clearly the object of each designated part of the machine when put in operation, and the manner in which said machine may be operated.

Suppose the machine to be in the position indicated in Fig. 2. The lifts of leather are placed, one above the other, till the heel is at the height shown in Fig. 1. By depressing the foot-lever G the nail *g* is driven through all of the lifts of leather and fastens them together. The heel is ready then to be fastened to the shoe. The present mode of thus fastening the lifts is to drive, by hand, a nail through the second lift into the first lift, and thus separately fasten each lift to the height of heel intended. By this process the lifts of heel-leather cannot be so evenly laid one upon the other as by the method indicated in this invention, aside from the time taken and the number of nails driven. It will be observed also that in this invention the nail is driven into the leather, and not the leather driven upon the nail.

The dotted lines H, in Figs. 1 and 3, represent a heel packed in the manner above shown.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a machine for packing heel-lifts, the combination of the clamp E, table D, set-screws *c* and *b*, and movable gage *a*, all arranged substantially as shown, and for the purpose described.

2. In a machine for packing heel-lifts, the combination of the table D, driving-pin *f*, hammer *d*, and foot-lever G, substantially as shown, and for the purpose described.

JAMES ELLISON.

Witnesses:

J. L. NEWTON,
D. T. FLYNN.