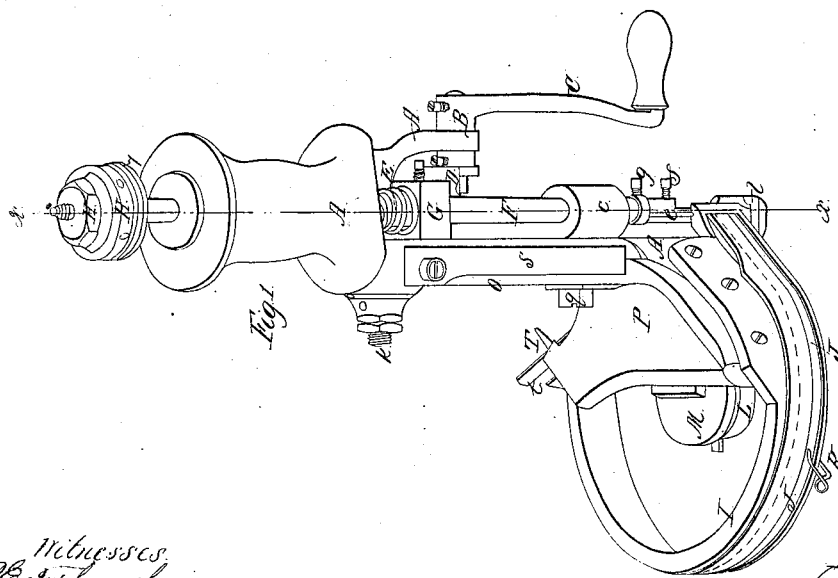
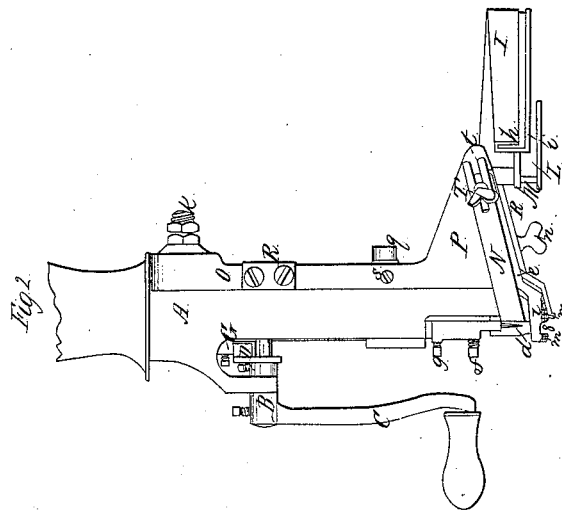


L. Goddu,

Pegging Machine,

No. 51,387,

Patented Dec. 5, 1865.



Witnesses
P. B. Swickman
S. W. Stearns

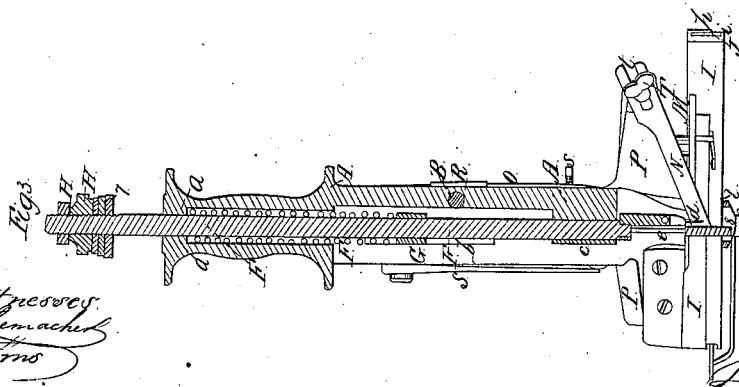
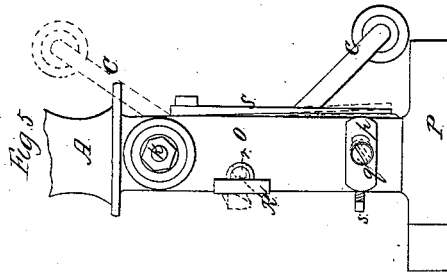
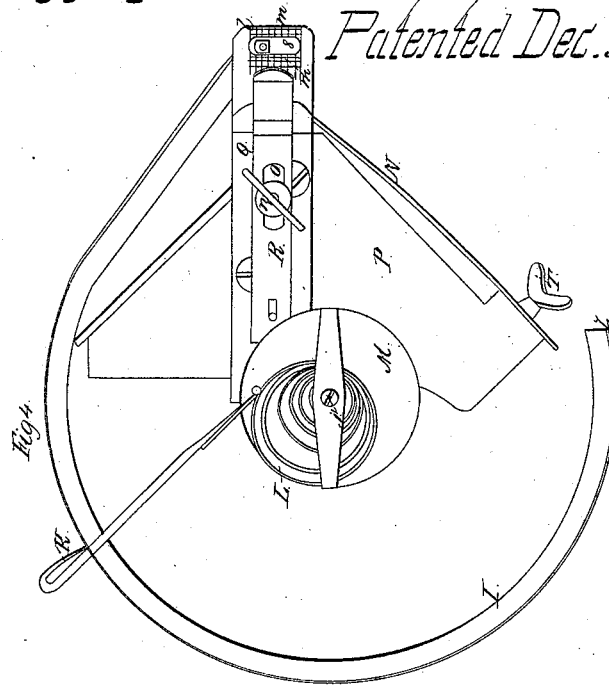
Inventor
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UNITED STATES PATENT OFFICE.

LOUIS GODDU, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO REUBEN W. DREW, OF SAME PLACE.

IMPROVED HAND PEGGING-MACHINE.

Specification forming part of Letters Patent No. 51,387, dated December 5, 1865.

To all whom it may concern:

Be it known that I, LOUIS GODDU, of Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Machines for Pegging Boots and Shoes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of my improved machine. Fig. 2 is an elevation of the lower portion of one side of the same. Fig. 3 is a vertical section on the line *xx* of Fig. 1. Fig. 4 is a plan of the under side of the machine, (full size.) Fig. 5 is a rear elevation of a portion of the same; Fig. 6, detail to be referred to.

My invention has for its object to furnish a hand pegging-machine of simple construction, which may be conveniently operated, and will perform its work in a thorough and reliable manner; and my invention consists in securing the awl and peg-driver to the plunger, so that they will not have any movement independently of each other, and feeding the machine along the sole by the application of the hand to a crank attached to the driving-shaft the end of which is flattened or eccentric, so as to cause the vibration of one frame upon another; and my invention also consists in cutting off the pegs separately by a knife which remains stationary while the peg-wood is being fed through the peg-trough against it by a follower actuated by a spring, the end of the knife being flexible so as to press each peg, as it is cut off, into the peg-tube and retain it therein in a position ready to be struck by the peg-driver, which is brought down and the awl driven into the sole by a spring surrounding the plunger, instead of driving the awl and peg-driver by a hammer, and employing a spring to withdraw them, as in machines heretofore constructed.

My invention, furthermore, consists in certain other improvements, which will be mentioned hereinafter.

In the said drawings, A is the frame-work, in suitable bearings, in which runs the shaft B, which is actuated by hand-power applied to the crank C.

D is a dog adjusted and secured in place upon the driving-shaft B by means of a set-screw.

The upper end of the frame-work A is bored out for the reception of a spiral spring, E, which surrounds the plunger F, which is raised against the resistance of the spring E, the upper end of the spring E bearing upon a shoulder, *a*, in the frame-work A, while the lower end of the spring E rests upon a block, G, which surrounds the plunger F, and is securely attached thereto by a set-screw. One end of the block G has projecting from it a lip which moves in a narrow vertical groove, *b*, in the side of the frame-work A, which, in connection with the guide *c* below it, prevents any lateral play of the plunger and keeps it always in a proper position for performing its office.

Within a projecting portion of the lower end of the plunger F is formed an aperture for the reception of an awl, *d*, and in a similar recess, bored in a line with the axis of the plunger F, is placed a circular rod or peg-driver, *e*. After the awl *d* and peg-driver *e* are adjusted to their proper heights they are secured in place by their screws *f* *g*, and as they are both attached to the plunger F they can have no movement independently of each other.

The upper end of the plunger F projects through the frame-work A, and terminates in a screw-thread upon which turn the circular nuts H. Below these nuts H and around the plunger are placed leather or other elastic washers, 7, for the purpose of reducing the force of the concussion which takes place when the plunger is suddenly depressed by the spring E, and as the washers, 7, are gradually worn away the nuts may be screwed down.

The height of the circular nut H may be so regulated as to keep the bottom of the awl-stock or plunger F always a little above the sole when the hole is punched, thereby preventing the sole from being injured by it.

To the bottom of the frame-work A is screwed or otherwise secured the peg-trough I, of the form seen in Figs. 1 and 4. The outer end, *h*, of the peg-trough I is open for the admission of the strip of peg-wood J, (shown in red,) which rests on the shoulder *i*, and is pressed forward by the finger K, actuated by a flat spiral spring, L, pivoted at *j* to a circular plate, M, proceeding from the enlarged base of a lever, a description of which will be given hereinafter. The inner end of the peg-trough has a

passage formed in it for the peg-driver to work in, and this passage is open to admit the pegs as they are cut off separately by the knife N.

The motion of the machine along the edge of the sole for the purpose of spacing the distances between the pegs is accomplished by the following means: From the inner side of the frame-work A projects a stud or pin, *k*, upon which is pivoted a lever or beam, O, the base P of which is enlarged and of the form shown in Figs. 1 and 4. The under side of the base P is inclined downward (toward the lower end of the passage which contains the peg) and has firmly fastened to it the inclined bar Q, which is bent to form an elbow or foot-piece *l*, through which is cut a slot, 8, for the passage of the awl and peg-driver, the under side of the elbow or foot-piece *l* resting upon the sole of the boot or shoe to be pegged, and being provided with teeth or notches *m* to prevent it from sliding when resting thereon.

R is a gage, by means of which the distance of the pegs from the edge of the sole is regulated, the gage being allowed to slide out and in on the bottom of the bar Q, and held in position by the screw-clamp *n* passing through the slot *o* into the bar Q.

The beam O is provided with a slot, *p*, through which passes a screw-pin, *q*, which holds the lower portion of the beam O up to the frame-work A, and allows it to vibrate freely on the pin *k*.

The extremity of the driving-shaft B is flattened, as seen at *r*, Fig. 5, and passes through the beam O, where it revolves in an aperture, 9, closed on one side by the plate R' screwed to the beam O. The throw of the eccentric or flattened portion *r* of the shaft within the aperture 9 thus determines the amount of vibration of the beam O upon the frame A, and consequently the amount of feed or distance between two successive pegs.

A screw, *s*, and flat-spring, S, are placed on opposite sides of the frame A and beam O, for the purpose of preventing any possibility of the awl and inner end of the peg-trough from coming in contact with the sides of the slot 8 in the foot-piece *l*, the pressure of the spring S throwing forward the frame A with the peg-driver and awl, when the flattened side *r* of the driving-shaft coincides with the straight surface of the plate R'.

The outer end of the knife N is provided with an open slot, *t*, so as to allow of its being moved along the base P, to which it is secured by a clamp, T, when properly adjusted. The blade of this knife is made flexible, and is of a width equal to the height of the passage which forms the peg-tube, against the side or shoulder *t'*, Fig. 6, of which it bears and holds the peg in place after being cut.

Operation: The awl *d* and peg-driver *e* being down, and the peg-trough I supplied with the peg-wood, the distance to which the pegs should be placed from the edge of the sole is regulated by the gage R, when the operator

grasps the cylindrical or upper portion of the frame A with one hand, and the awl is pressed into the sole by the weight of the machine, in which position the flattened side *r* of the driving-shaft bears against the side of the plate R'. The crank C is now turned by the other hand, and the flattened side *r* of the driving-shaft is brought round underneath, as seen in red, Fig. 5, the beam O being thrown forward on its pivot *k*, and carrying with it the slotted foot-piece *l*. The crank C continuing to revolve the dog D comes under and lifts the block G against the resistance of the spring E, and the awl is withdrawn from its hole in the sole, while the teeth *m* of the foot-piece *l* are brought down thereon. The awl and peg-driver continue to rise with the plunger until the flattened portion *r* of the driving-shaft arrives in a position to be thrown forward by the pressure of the spring S against the flat surface of the plate R', when the whole frame moves forward, carrying with it the plunger F, with the awl *d* and peg-driver *e* secured thereto. Simultaneous with the forward movement of the awl and peg-driver the peg-trough I is advanced so as to allow the follower K to press the peg-wood J in contact with the knife N, which splits off a single peg, which is retained by it in the peg-tube (see Fig. 6) in a position to be struck squarely by the driver when it descends, the flexible blade extending the whole width of the peg-wood, and constantly pressing against the shoulder *t'* of the peg-tube, by which arrangement the pegs are cut separately in the peg-tube of a uniform thickness just previous to their being driven. As the crank continues to be turned the dog D passes from under the block G and the spring E is released, which drives the awl into the sole to punch a new hole, while the peg-driver simultaneously descends and drives a peg into the hole last made by the awl, and the operation of feeding forward the machine continues, as before described.

When it is required to make the holes simply, to be afterward filled with metallic nails, the cutting and feeding of the pegs may be interrupted by arresting the motion of the follower K.

What I claim as my invention, and desire to secure by Letters Patent, as an improvement in hand-machines for pegging boots and shoes, is—

1. The application to the driving-shaft of a crank operating substantially as and for the purpose set forth.

2. The flexible knife N, for cutting off the pegs separately, and for holding them in the proper position for being driven, substantially as described.

3. Depressing the awl *d* and peg-driver *e* by releasing the spring E, substantially as described.

4. Securing the awl and peg-driver to the plunger F, to prevent them from moving independently of each other.

5. Feeding the peg-wood J through the peg-trough I by means of a follower, K, actuated by a spring, L, substantially as set forth.

6. As an improvement in hand-pegging machines, producing the feed by means of the foot-piece *l*, actuated by the flattened or eccentric portion *r* of the driving-shaft B, in combination with the awl *d*, operating substantially as described.

7. As an improvement in hand-pegging machines, the block G, or its equivalent, in combination with the dog D, or its equivalent, for

raising the plunger, constructed and operating substantially as described.

8. As an improvement in hand pegging-machines, pivoting the beam O to the frame A to allow of its vibration, substantially as described.

9. The spring S, operating substantially in the manner and for the purpose set forth.

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Witnesses:

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N. W. STEARNS.