(No Model.)

A. EPPLER, Jr.

PEGGING MACHINE.

No. 269,840. Patented Jan. 2, 1883.

Fig. 1.

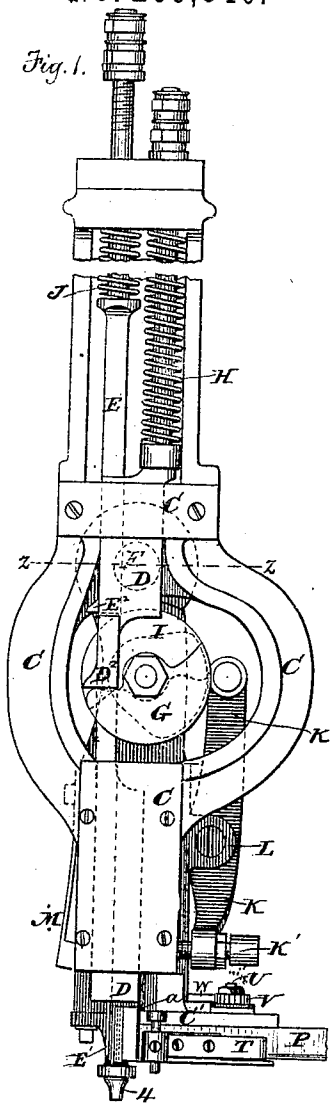


Fig. 2.

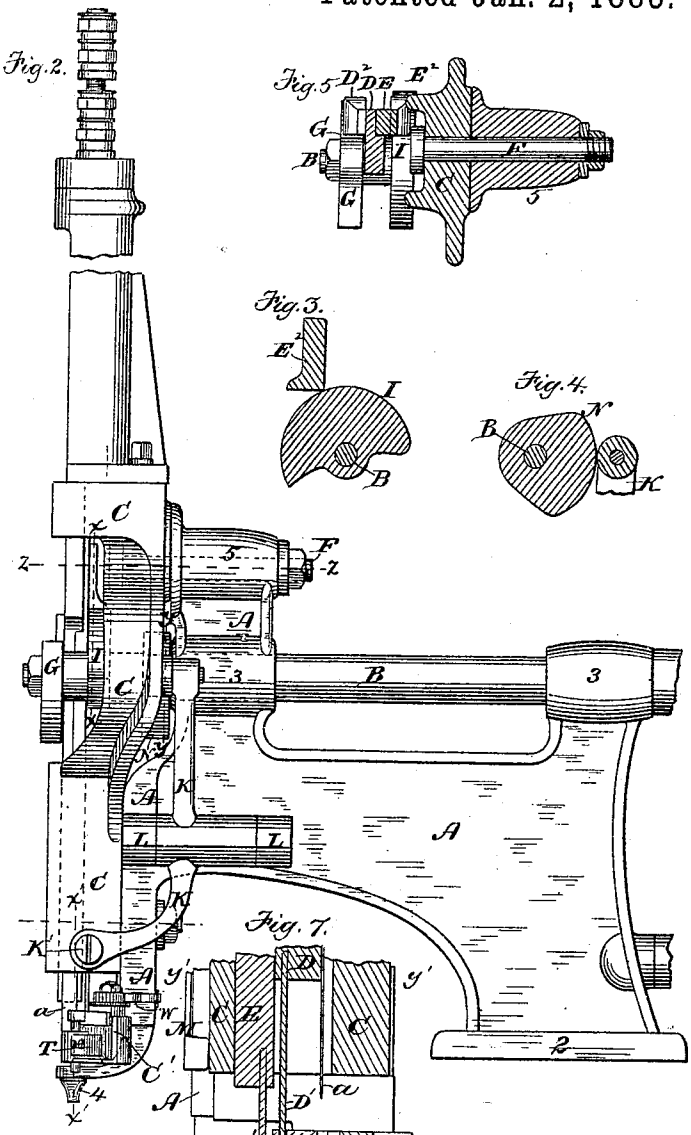


Fig. 5.

Fig. 3.

Fig. 4.

Fig. 7.

Fig. 6.

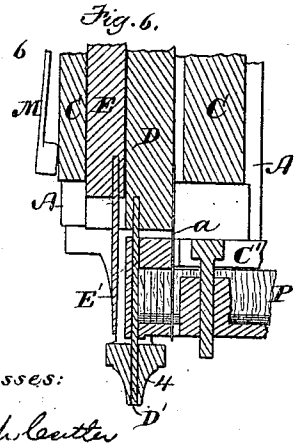
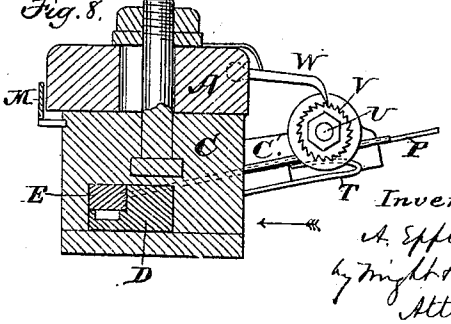


Fig. 8.



Witnesses:

Joseph Leuter

A. L. White

Inventor:

A. Eppler Jr.

by Wright & Brown

Attys.

UNITED STATES PATENT OFFICE.

ANDREW EPPLER, JR., OF QUINCY, MASSACHUSETTS, ASSIGNOR TO THE EPPLER MANUFACTURING COMPANY, OF PORTLAND, MAINE.

PEGGING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 269,840, dated January 2, 1883.

Application filed July 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, ANDREW EPPLER, Jr., of Quincy, in the county Norfolk and State of Massachusetts, have invented certain Improvements in Pegging or Tacking Machines, of which the following is a specification.

This invention has for its object to provide a pegging-machine adapted to drive pegs into the sole of a boot or shoe which is held in the hands of the operator instead of being jacked. The machine is intended for use in temporarily securing the outer sole by pegs preparatory to the permanent attachment of the outer sole by stitching or nailing.

The invention consists, as a whole, in a pegging-machine composed of a fixed frame having a tubular projection through which the pegs are driven into the sole, a frame or head carrying the driver and awl bars pivoted to fixed frame, so that when oscillated on its pivot the driver and awl are caused to coincide alternately with the fixed tubular projection, and mechanism for operating said driver and awl bars and for oscillating the pivoted frame, and peg-wood holding and feeding mechanism, all combined and operating as described hereinafter.

The invention also consists in certain details, all of which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a front end elevation of a pegging-machine embodying my invention. Fig. 2 represents a side elevation of the same. Figs. 3 and 4 represent respectively sections on lines *x x* and *y y*, Fig. 2. Fig. 5 represents a section on line *z z*, Figs. 1 and 2. Fig. 6 represents an enlarged section on line *x' x'*, Fig. 2. Fig. 7 represents a similar section, showing the pivoted frame with the awl and driver in a different position. Fig. 8 represents a horizontal section on line *y' y'*, Fig. 7.

The same letters of reference indicate the same parts in all the figures.

In the drawings, A represents the fixed frame of my improved machine, said frame having a suitable base, 2, bearings 3 3 for the driving-shaft B, and a downwardly-projecting arm having a tubular projection or nose, 4, against the lower end of which the outer sole of a boot or shoe is held by the operator, and into which the awl E' and driver D' are alternately forced, as described hereinafter, the nose being adapted to enter the usual channel formed in the outer sole.

C represents the frame or head which contains the driver-bar D and awl-bar E. The frame C is pivotally connected by a bolt, F, with a socketed boss, 5, on the fixed frame A, and is capable of oscillating in a vertical plane on said bolt or pivot. The driver-bar D has an offset, D^2, which bears on a cam, G, on the driving-shaft, and is raised by said cam. A spring, H, forces the driver-bar downwardly, when the bar is released by said cam. The awl-bar E has a similar offset, E^2, and is operated similarly to the driver-bar by a cam, I, on the driving-shaft and a spring, J, the offset E^2 resting on the cam I, as shown in Fig. 3.

K represents a lever, which is pivoted to ears L L, formed on the fixed frame A, and has at one end a friction-roller bearing against a cam, N, on the driving-shaft, and at the other end an adjustable screw, K', bearing against one side of the pivoted head or frame C. A spring, M, attached to the fixed frame A and bearing at its free end against the opposite side of the frame C, holds said frame with a yielding pressure against one end of the lever K, thereby pressing the opposite end of the lever K against the cam N. It will be seen therefore that when the driving-shaft B is rotated the awl and the driver bars will be reciprocated longitudinally by the cams G I and springs H J, and the frame C will be oscillated on its pivot by the cam N, lever K, and spring M. The oscillating movements of the frame C are of such length that they cause the awl E' and driver D' to coincide alternately with the orifice in the nose 4 of the fixed frame.

The peg-strip P, which furnishes the pegs driven by the machine, is held in a holder, C', which is rigidly attached to the lower end of the frame C, and is provided with a vertical orifice, R, (seen in Fig. 7,) in which the driver reciprocates, and with a guide-channel for guiding the inner end of the peg-strip into said orifice. The holder C' is provided with a suitable feed-roll, against which the peg-strip is

pressed by a spring, T. The arbor U of said feed-roll is provided with a ratchet, V.

W represents a pawl, pivoted to the fixed frame A and engaging with the ratchet. When the pivoted frame C is moved in the direction indicated by the arrow in Fig 8 the ratchet is moved therewith against the pawl W and rotated one step, thus causing the feed-roll to move the peg-strip P forward in the holder.

The peg cutting or scoring knife *a* is attached to the driver-bar and descends through a suitable recess formed to receive it in the holder C′.

The operation is as follows: A lasted boot or shoe, with the outer sole laid upon it, is held by the operator with the sole in contact with the nose 4. The pivoted frame or head C, being at the extreme of its movement, (shown in Fig. 7,) the awl E′ is forced down through the nose 4 and makes a perforation in the outer sole and the parts of the boot or shoe on which said sole is laid. The downward movement of the awl, under the impulse of the spring J, is so quick that the operator is enabled easily to prevent the boot or shoe from yielding to the pressure of the awl. This could not be so readily done if the awl were driven downwardly by a cam. The awl is then raised and the frame C is moved by the mechanism that oscillates it in the direction indicated by the arrow in Fig. 8, causing the driver to coincide with the orifice in the nose 4, this movement feeding the peg-strip, as above described, and moving the partially-severed peg at the end of the strip into the orifice R. The driver is now forced downwardly by its spring, as shown in Fig. 6, forcing a peg into the hole formed by the awl. The driver then rises, the frame C is moved to the position shown in Fig. 7, and the operation is repeated. The operator is thus enabled to cause any part of the sole to receive a peg, and the operation of temporarily securing the sole is very quickly performed without removing the boot or shoe from the last on which it was made. The awl E′ is preferably tapered inwardly on all sides toward its lower end and there left slightly blunt, as shown in Figs. 6 and 7, instead of being brought to a point, as usual. This form is best calculated to adapt the awl to penetrate the leather, and at the same time relieve it from liability of injury by contact with the bottom of the last within the boot or shoe.

It will be observed by reference to Fig. 1 that the point where the frame C is pivoted to the fixed frame is at the opposite side of the driving-shaft B from the point where the lever K is pivoted. By this arrangement of said pivoted points the jar of the machine is reduced to the minimum.

I claim—

1. In a pegging-machine for temporily attaching outer soles, the combination of a fixed frame having a tubular nose or peg tube adapted to enter the channel of an unattached outer sole, an oscillating frame or head pivoted to the fixed frame, awl and driver bars reciprocated in the ocillating frame and alternately entering the nose of the fixed frame, and peg-wood holding, feeding, and cutting mechanism secured to and actuated by the oscillations of the frame to supply pegs to the fixed nose, substantially as described.

2. The combination, with the fixed frame having the pawl W, the oscillating frame having the awl and driver bars, the peg-strip holder attached to the oscillating frame, and the feeding-arbor U, journaled in the holder, and provided with the ratchet V, engaged with the pawl W, and rotated by said pawl during the movement in one direction of the oscillating frame, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 10th day of July, 1882.

ANDREW EPPLER, JR.

Witnesses:
C. F. BROWN,
A. L. WHITE.