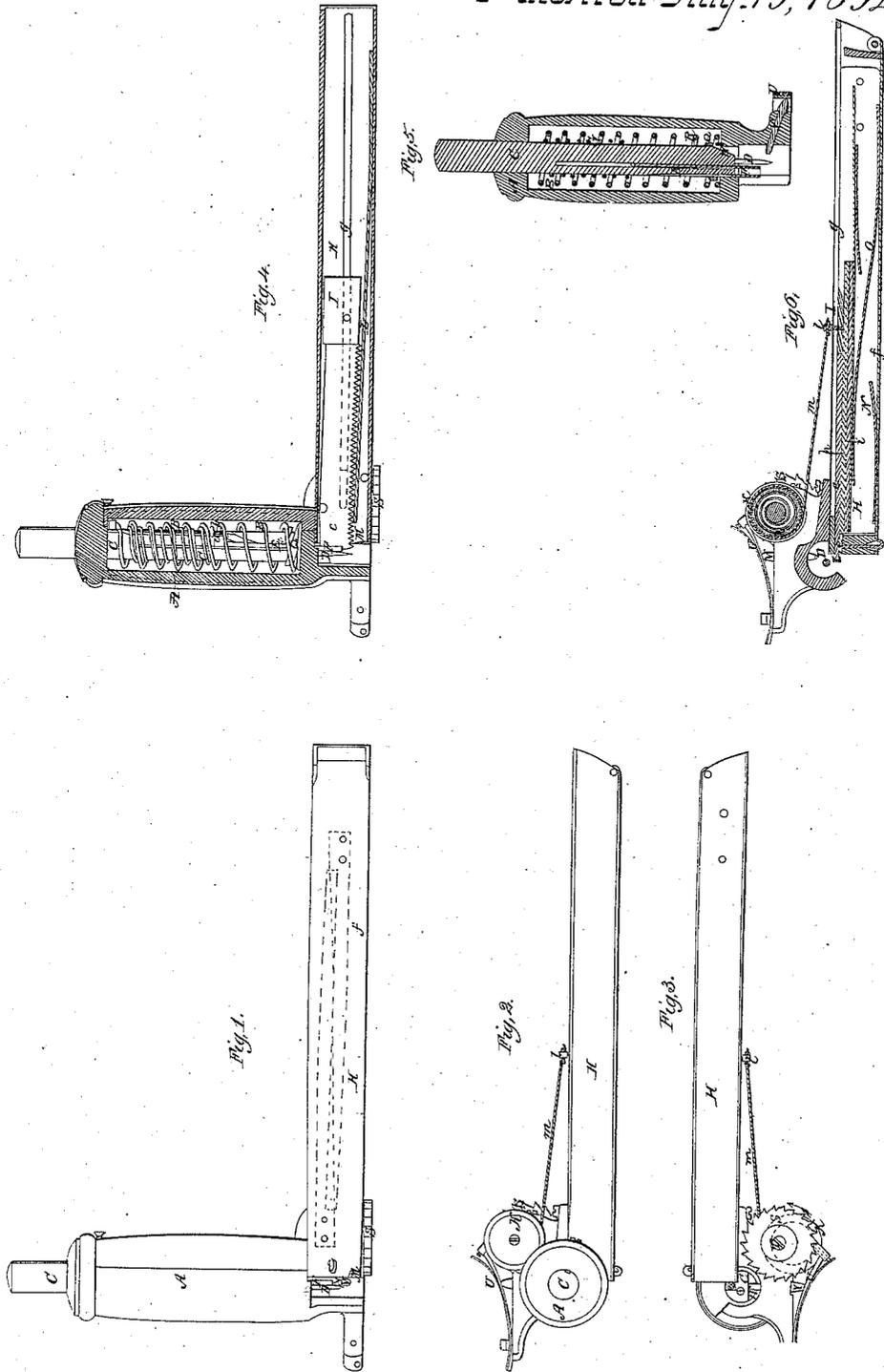


W. Kidder,

Shoe-Pegging Machine,

No. 11,542,

Patented Aug. 15, 1854.



UNITED STATES PATENT OFFICE.

WILLIAM KIDDER, OF NEWBURYPORT, MASSACHUSETTS, ASSIGNOR TO WM. KIDDER AND NEHEMIAH HUNT.

MACHINE FOR PEGGING BOOTS AND SHOES.

Specification of Letters Patent No. 11,542, dated August 15, 1854.

To all whom it may concern:

Be it known that I, WILLIAM KIDDER, of Newburyport, in the county of Essex and State of Massachusetts, have invented an Improved Machine for Pegging Boots or Shoes; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, letters, figures, and references thereof.

Of the said drawings, Figure 1, represents a side elevation of my improved machine. Fig. 2, is a top view of it. Fig. 3, is a bottom view of it. Fig. 4, is a vertical and longitudinal section of it taken through the peg receiver, and the peg-wood magazine to be hereinafter described. Fig. 5 is a transverse and vertical section of it taken through the awl driver, its cam and slide. Fig. 6, is a horizontal section taken through the peg-wood magazine.

My said machine is intended to be used in the left hand of a workman, who while grasping it by its handle and holding its feeding wheel in contact with the edge of a sole to be pegged while the bottom of the handle is made to rest on the top surface of the sole strikes with a hammer held in his right hand upon the top of the awl driver or carrier so as to impel it downward. During the act of forcing the awl carrier downward, a peg is separated from a strip of pegwood and is carried downward and driven into a hole previously made by the awl, at the same time the awl is driven into the sole and makes a hole for the next succeeding peg. During the elevation of the awl, the machine is fed or moved along the distance necessary to bring over the said awl hole, the next peg to be driven.

In the said drawings, A, exhibits a handle which is made of metal and has a chamber, B, formed in it. Within the chamber, B, and so as to extend through the top of the handle and to play freely upward and downward I arrange an awl driver, C, armed with an awl, D, fixed on its lower end. The awl driver carries the peg driver, E, which is fixed to the awl driver and partially surrounded by the peg receiver F, which is a small spout playing or sliding on the peg driver and against a spring, G, coiled around the awl driver, the downward movement of the peg receiver, relative to the peg driver being determined by studs or shoulders, a, b,

formed respectively on the peg receiver and the awl driver.

The peg receiver is open on its side where it is to receive a peg from the strip of pegwood, c, which is forced out of the magazine, H, through a rectangular opening, e, made in that end of it which is next to the awl. When the awl driver is forced downward so as to cause its awl to pierce into a sole, the peg receiver is carried downward until its lower end rests on the sole, in which position it remains during the further descent of the awl and the peg driver; the latter moving within the peg receiver crowds the peg into the hole in the sole directly over which the peg receiver rests. The said peg receiver not only serves as a rest or stop to arrest the forward movement of a strip of pegwood, but it also guides downward the peg that is within it and is forced toward the sole. And furthermore by supporting the peg on three of its sides, the peg receiver prevents such peg from being broken or unevenly cut or split under the action of the knife or chisel by which it is severed from the strip. The said magazine, H, is attached to the handle and made to project therefrom at right angles to its axis as seen in the drawings. It consists of a long box, which is provided with a cover, f, and has an elongated slot, g, made through its rear side. The box is constructed of sufficient capacity to receive two or more strips of pegwood c, h, i, &c, placed side by side and against one another. Within the box is a slider, I, that has a stud, l, extending out from it and through the slot, g, of the pegwood carrier; such stud having attached to it a string, chain, or cord, m, which is wound upon the periphery of a turning barrel, K, that is rotated by means of a spiral spring placed within it, the object of such slider, barrel, cord and spring being to force a strip of pegwood forward and into the peg receiver immediately after any peg has been separated from such strip of pegwood.

Within the pegwood magazine I arrange a spring, L, upon which the several strips of pegwood rest as seen in the drawings, said spring allowing of the downward movements of the strip of pegwood during the act of separating a peg from one of them.

Said spring also serves to elevate the said strips entirely above the cutting knife, M, 110

by which the peg is severed from the strip of wood when the awl is driven downward, said knife being arranged as seen in the drawings.

5 The cover of the pegwood carrier is provided with two or any other suitable number of springs, N, O, which are arranged so as to press upon the outermost strip of the pack of pegwood strips and press such pack
10 toward the opposite side of the magazine. From the above it will be seen that whenever one of the strips of pegwood has been cut up into pegs, we have only to draw backward the slider, I, that is within the magazine
15 until such slider passes beyond the outer end of the next adjacent strip of pegwood. When such has taken place, such strip of pegwood will at once be forced into a position ready to be driven forward by the
20 action of the slider as a previous strip was moved. I would here take occasion to remark that for convenience of supplying the magazine with strips of pegwood as occasion may require its cover may be hinged
25 to it or otherwise affixed to it so as to be easily removable.

The awl driver is encircled by two or more spiral springs Q, R, which are placed within the chamber, B, and applied to the driver
30 so as to elevate it immediately after it has been driven downward in order to force the awl into a sole.

The next portion of the apparatus to be described is that by which the machine is
35 grasped by the hand of the operator, and is fed along on the sole or has its feeding regulated thereon under the movement of the awl stock or driver; I have combined with the handle of the machine and the
40 machinery thereof for driving the pegs, a feeding mechanism for accomplishing such purpose, which mechanism I shall now proceed to describe.

The lower end of the handle is provided
45 with a serrated or toothed wheel, S, which is arranged horizontally and made to freely revolve on a stationary pin, T. In connection with this wheel there is a spring catch, U, one end of which is fastened to the
50 handle, A, while the other plays into the range of teeth of the wheel, S. The handle is provided with a piston slide, V, one end of which rests against the inner surface of the spring catch, U, while the other end
55 of such slide projects toward the awl in such manner that during the descent of the awl driver, a cam, W, formed upon the said driver shall be carried into contact with the piston slide so as to force it outward
60 against the spring catch to the extent suffi-

cient to move such catch entirely out of engagement with the teeth of the wheel, S, and allow said wheel to be revolved. The cam should however be so formed that not only shall it allow the revolving movements
65 of the wheel to take place instantly after the awl has risen out of the leather or sole, but to permit the reaction or back movement of the spring catch to take place in sufficient time to prevent the wheel from
70 being rotated more than the length of one of the teeth. Under these circumstances, if the machine when held in the hand has the serrated periphery of the wheel, S, pressed against the edge of the sole, while the bottom of the handle rests on the top surface
75 of the sole and pressure is also exerted in a direction to force the wheel to turn against the sole, the direction being denoted by the arrow in Fig. 3, and we strike with a hammer or mallet upon the peg driver a succession of blows so as to cause the said
80 peg driver to be repeatedly driven downward, we shall find that between every two of such blows consecutively made the whole machine will be moved a distance sufficient
85 to carry the peg receiver directly over the next hole into which a peg is to be driven, it being understood that the teeth of the serrated wheel, S, is regulated at a distance
90 as under or from edge to edge, such as will enable the machine to be moved and stopped as may be necessary for driving the pegs.

I claim—

1. The combining with the handle of the
95 machine and the machinery for driving the pegs, a feeding mechanism by which under the movement of the awl stock, the feeding or regulating of the feeding of the machine along on the sole is effected. 100

2. I also claim the combination of mechanism by which the feeding of the machine is regulated while the machine is held in the hand and pressed against and along on the
105 edge of the sole as stated, the said combination being the serrated wheel, S, the spring catch U, the slide, V, and the cam, W, on the awl driver or stock.

3. I also claim the combination of the
110 movable or sliding peg receiver with the pegwood carrier, and the awl driver or stock, the same being applied and made to operate as stated.

In testimony whereof I have hereunto set
115 my signature this ninth day of June A. D. 1854.

WILLIAM KIDDER.

Witnesses:

R. H. EDDY,
F. P. HALE, Jr.