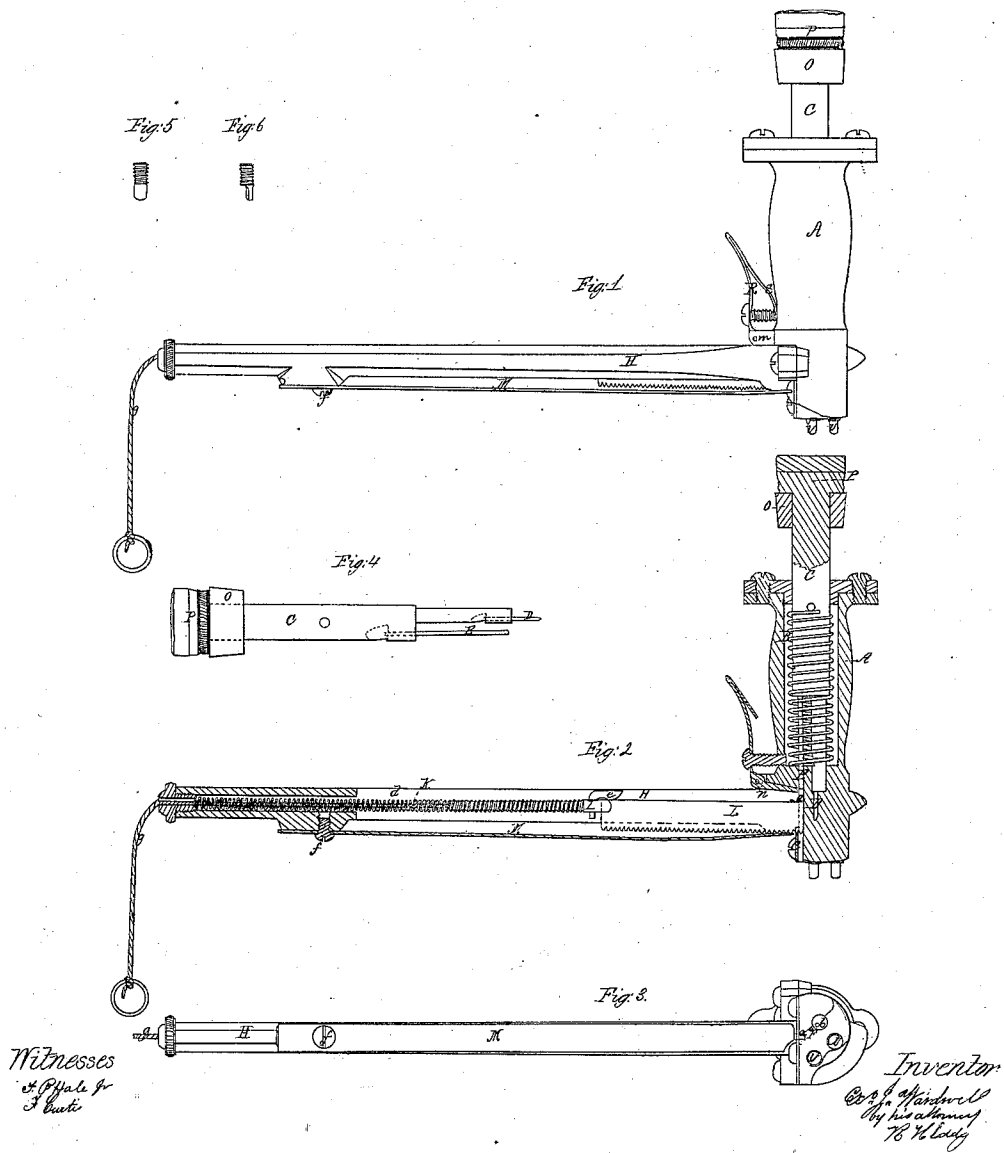


*G. J. Wardwell,
Pegging Machine.*

N^o 11,346.

Patented July 18, 1854.



UNITED STATES PATENT OFFICE.

GEORGE I. WARDWELL, OF ANDOVER, MAINE, ASSIGNOR TO G. I. WARDWELL AND ELMER TOWNSEND.

MACHINE FOR PEGGING BOOTS AND SHOES.

Specification of Letters Patent No. 11,346, dated July 18, 1854.

To all whom it may concern:

Be it known that I, GEORGE J. WARDWELL, of Andover, in the county of Oxford and State of Maine, have invented a new and useful or 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 vertical, central and longitudinal section of the same. Fig. 3, is an underside or bottom view of it. Fig. 4, is a side view of the peg driver, the awl, and their carrier.

My said machine is intended to be used in the left hand of a workman, who while grasping it by such hand and holding it in contact with the sole to be pegged, strikes with his hammer (held in his right hand) upon the top of the awl carrier so as to drive it downward. In doing this, he not only makes a hole in the sole, but he separates a peg from a strip of peg wood and inserts and drives said peg into the soles.

In the said drawings A, exhibits a handle, which is made of metal and has a chamber, B, formed in it. Within this chamber and through the top of the handle and so as to slide freely up and down through said top, I arrange what I term a carrier or haft, C, its purpose being to carry on its lower end, an awl D, and a peg driver, E, the same being formed as seen in the drawings. The bottom of the handle, A, is constructed with two passages or openings, *a*, *b*, made down through it, they being intended to respectively to receive the awl and the peg driver, the opening, *a*, serving to receive the peg and conduct it down to the sole. Between these two passages, and so as to project from the lower end of the handle, I arrange a small point or projection, F, which I term the guide or setting point, the purpose of which will be hereinafter explained. Against the passage, *a*, through which the peg driver passes I arrange, as seen in Fig. 2, a vertical knife, G, which I fasten to the handle and at the end of the peg wood carrier or case H, which extends from the han-

dle at right angles or thereabouts as seen in the drawings and is fastened to it by screws or other proper means. The said peg wood carrier consists of a long bar which is slotted or chamfered as seen at, *d*, it having within it a piston or slide, I, which is pressed toward the handle by a helical spring, K. The said piston or slide I term the peg wood driver, its office being to press the strip of peg wood, L, forward toward the handle as fast as may be necessary, the pegwood being inserted in the pegwood carrier as seen in the drawings. Said pegwood driver, I, has a lip or projection, *e*, made to project a short distance over and on the top of the pegwood, its object being to prevent the strip of pegwood from being thrown out of the carrier under the blow or downward action of the peg driver during the operation of severing a peg from such wood. Combined with the pegwood carrier is a long spring, M, which is fastened to the carrier at or near the rear end of the spring by a screw, *f*; the other end of the spring being left free so that it may be sprung away from the carrier, when the pegwood is forced downward by the peg-driver. This spring serves as a rest or support to the pegwood, and constitutes a bottom to the carrier. It also serves to elevate the pegwood immediately after each depression of it by the peg driver; it being understood that it elevates the pegwood entirely above the knife so as to allow the spring of the pegwood driver, I, to force the pegwood forward over the knife into the passage, *a*. To the rear end of the pegwood driver a cord, *g*, is fastened and made to extend through the rear end of the carrier, and so as to enable a person to retract the pegwood wherever the same may be necessary, or whenever it may be desirable to insert a fresh strip of pegwood into the carrier.

There is around the awl carrier and within the chamber of the handle a helical spring, N, whose office is to raise the carrier so as to elevate the awl out of the sole after it has been driven into the same. The awl, however, is started out of said sole by the action of a stiff india rubber or other suitable spring, O, that is placed directly under the head, P, of the awl haft or carrier.

When the carrier is driven downward by the blow of a hammer upon it, the spring, O, is forced against top, P, of the handle and compressed to such an extent by the percussion of the blow as will enable it instantly afterward and by its expansive force to overcome the adhesion of the awl to the leather and permit the spring within the chamber of the handle to perform its office of elevating the awl haft. There is applied to the rear side of the handle, what I term the spring thumb gage lever, or depressor, R. It consists of a bent lever formed as seen in Fig. 2, and made to turn upon a fulcrum or pin, *m*. The lower arm of the said lever projects into the pegwood carrier and over the strip of pegwood as seen in the drawings, while the upper arm extends upward and has a spring, S, attached to it and made to bear against the handle as exhibited in Figs. 1, and 2. An adjusting screw, T, passes through the upper arm of the lever and is screwed into the handle. Into the lower end of the handle, I screw one or more cam pins, U, U, and with respect to the setting or guide point, F, and passages, *a*, *b*, as represented in Fig. 3. These cam pins or gages are formed as seen in side view in Fig. 5, and in edge in Fig. 6. They are intended to rest against the edge of the sole of a shoe and to gage or regulate the distance at which the line of pegging is to be arranged from the same. By turning each one around in its female screw socket a hundred and eighty degrees we so adjust it as to enable the pegging machine to perform a second line of pegging parallel to the first.

By means of the thumb lever or depressor, R, and the set screw, T, we are not only enabled to vary the distance between the lower end or arm of the depressor and the spring, M, so as to gage the space in the pegwood carrier in order to adapt it to a strip of pegwood of any desirable width that can be used within the maximum of the machine, but we also enable a person by applying his thumb to the upper arm of the lever and pressing it toward the handle to shove the pegwood downward back of and below the edge of the knife, so that the said pegwood may not be moved forward by its driver while the awl carrier or haft is being put in motion.

It is often desirable, and particularly in commencing a row of pegging, to make one or two holes in the sole with the awl before the pegs are separated and driven. The depressor, R, enables us to effect this, and by operating it in the manner above described, it will stop the pegs from being separated from the pegwood and driven, until the requisite number of holes in the sole is formed by the awl.

The small guide or setting point, F, during the operation of pegging a boot by the

machine is inserted in the peg holes successively. Immediately after one peg hole has been made by the awl, the setting point or projection, F, is inserted in it. The awl haft is then driven downward and the second hole is formed. Next, the instrument is moved and the point, F, is inserted in this second hole. Next, a third hole is formed and at the same time a peg is suffered to be cut from the strip of pegwood and driven into the first hole during the descent of the awl haft or carrier, such awl haft at the same time forcing downward the peg driver, and thereby causes a peg to be separated from the pegwood and forced into the sole. Next, the instrument is moved and the setting point inserted in the last hole made by the awl. The awl haft is again driven downward, a new hole is formed, and another peg is separated from the pegwood and driven into the sole. This operation is continued until the line of pegging is completed, care being taken to keep the cam pins in close contact with the edge of the sole.

With this hand pegging machine a workman of ordinary skill can generally insert, in a given time, in a sole about four times the number of pegs that can be inserted or driven in the usual way, viz, by means of a common pegging awl and hammer in the hands of a workman, such workman picking up the pegs and inserting them in the holes as fast as they are made by him in the sole. Besides this great advantage which it possesses the said hand pegging machine enables the pegs to be driven at equal distance asunder and so as to present a uniformity or regularity in their appearance when driven, such as can not be conveniently effected in any other way or without great care.

I do not claim the combination of a guide point with a set screw to regulate the distance of the pegs from each other, but

I claim—

1. The combination and arrangement of the guide or setting point, F, with the handle, the awl or hole punch, the peg driving orifice and mechanism substantially as specified.

2. I also claim the combination and arrangement of the spring gage lever or depressor, R, and the screw T, with the handle and pegwood carrier, the object of the same being not only to gage the space in the pegwood carrier so as to adapt it to pegwood of any desirable width below the maximum that can be used therein, but also to enable a person to move the pegwood downward and back of and below the edge of the knife when necessary, so that it may not be moved forward under circumstances as hereinbefore stated.

3. I also claim the so combining the spring,

M, with the pegwood carrier, peg driver
and gage lever, that it shall not only serve
to support the pegwood or constitute a bot-
tom to the carrier, but also to force up the
5 pegwood after it has been depressed either
by the peg driver, or the gage lever as speci-
fied.

In testimony wherof I have hereunto set
my signature this fifteenth day of April,
A. D. 1854.

GEO. J. WARDWELL.

Witnesses:

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