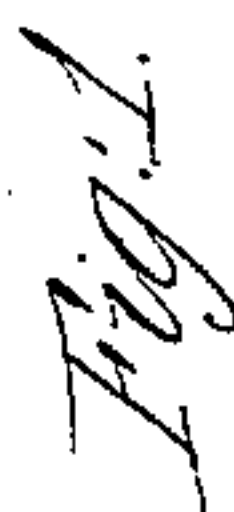


N<sup>o</sup> 27.085,



P. E. Föschmacher.

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# UNITED STATES PATENT OFFICE.

ELMER TOWNSEND, OF BOSTON, MASSACHUSETTS.

## PEGGING-MACHINE.

Specification of Letters Patent No. 27,085, dated February 7, 1860.

*To all whom it may concern:*

Be it known that I, ELMER TOWNSEND, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Boot and Shoe Pegging Machines, 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 the peg feed to be attached to a pegging machine, with my improvements connected therewith; Fig. 2, a view of the same from the opposite side; Figs. 3, 4, 5 and 6, details to be referred to hereafter.

In boot and shoe pegging machines where a blank or strip of pegwood has been fed into the machine, from which blank the pegs were cut as required by the machine itself, it has been heretofore customary to bevel or chamfer one edge of the blank as at *a*, Fig. 5, before it was placed in the machine; this adds materially to the cost of production of the blank, and where the blank is made, as has been, on a long coil by cutting a strip or ribbon around the log, this chamfering is liable to break the coil into many pieces, making it less convenient to feed into the pegging machine. This I have obviated by beveling or chamfering the blank while it is being fed into the pegging machine, by means of suitable cutters placed in proximity to the feed apparatus. For some kinds of work it is desirable to have the point of the peg beveled in both directions thus bringing it more nearly to a point. This I accomplish by arranging in the pegging machine cutting tools which operate on each side of the edge of the blank, to form notches in it. These two devices may be employed in conjunction with each other, and with a feed apparatus, to bring the peg to a point; or either may be used in conjunction with the feed, and without the other. This preparation of the blank in the pegging machine to give the required point to the peg before splitting it from the blank, constitutes the first part of my invention.

The second part of my invention consists in an improved method of cutting the pegs from the blank, as they are used in the machine.

That others skilled in the art may understand and use my invention, I will proceed

to describe the manner in which I have carried out the same.

In the said drawings the feed and parts which relate to my present improvements are detached from the pegging machine, and are driven by hand by means of a crank *A*, to show their operation. The crank *A*, is attached to and operates a shaft *B*, supported in suitable bearings in standards *C*, *D*, rising from the bed *E*.

*b b'*, are two feed rolls geared together by cog wheels *c*. To one of them is attached a ratchet wheel *d*, which is fed, one notch at each revolution of the shaft *B*, by a dog *e*, on the end of a lever *F*, pivoted at 3 to an arm *f*, attached to the standard *C*,—the upper end of this lever is formed in a cam 4 against which a pin *i*, on the shaft *B* strikes and vibrates the lever,—a spring *g*, holds the dog *e*, in contact with the wheel *d*, and a spring *n*, retracts the lever *F*. A retaining pawl *h*, also engages with this ratchet wheel *d*. Thus at each revolution of the shaft *B*, the blank of peg wood *G*, is fed forward by the rolls *b, b'* an amount equal to the thickness of a peg. The roll *b*, has its bearings in two plates *k*, and the roll *b'* in a strap *l*, which is pressed toward the roll *b*, by a spring *m*. This allows the rolls to spring apart a little to accommodate themselves to different thicknesses of "blank."

Immediately behind the feed rolls are placed two cutters *o* (detached in Fig. 4) which pass through the top plate *k* and are secured in an inclined position by screws 5. The points of these cutters are placed near each other as shown on Fig. 4, so that their cutting edges 6 will operate on the lower edge of the "blank" *G*, as it is pressed against them by the feed rolls *b, b'* and bevel or chamfer it as at *a* Fig. 5.

A box or block *H*, attached to the front of the standard *D* has cut in it inclined ways or grooves in which slide the tools *r* (detached in Fig. 3); these tools have their lower ends ground to a V shaped edge as at 8, Fig. 3, and are brought down on each side of the blank *G* so that they strike it at or near the top of the bevel *a* (Fig. 5) and as they complete their descent cut out from each side a notch as shown at 7, Fig. 5, this notch in conjunction with the bevel *a*, completing the point of the peg when it is split off from the blank as at *s*, Fig. 1. These tools *r* are operated in the following



manner: A pin 9 in the top of each tool enters an inclined slot in the end of a horizontal bar I attached to a vertical bar *p*, which slides up and down in a recess in the block H, and between two pins 10 in the face of the standard D. An eccentric *u* on the shaft B, turns in the head of a pitman *q*, the other end of which is pivoted at 11, to the bar *p*, so that at each revolution of the shaft B the tools *r* are depressed and their points are brought together to form the notches 7. This is done whilst the blank G is stationary. These notching tools *r*, may be used in conjunction with the beveling cutters *o*, when it is desired to bring the peg to a point when it is split from the blank as shown enlarged at *w*, Fig. 6, or the beveling cutters *o*, may be used alone when the point of the peg will be sharpened on two of its sides only as at *x*, Fig. 6, or the tools *r* may be used without the cutters *o*, when the point of the peg will be formed as at *y*, Fig. 6, beveled on all four sides. In some kinds of work and with some kinds of peg wood it will not be necessary to bring the peg to so perfect a point as shown at *w*, as it will drive very well when beveled on two sides only.

I will now proceed to describe the second part of my invention which relates to separating the pegs from the "blank" G. It has been customary to split the peg from the blank in the machine immediately before driving the peg, by means of a simple knife attached to some reciprocating part of the machinery, which knife entered and cut through from one side of the blank to the other. This operation rather split off than cut the peg from the blank, often leaving the edge of the peg on one side rough with small splinters of the wood attached, whilst it is desirable that the edges of the peg should be smooth, that they may be driven without tearing the sides of the hole made in the leather by the awl.

Again referring to the drawings, a crank J, on the end of the shaft B, is connected by a rod *t* to a gate K which slides up and

down in dovetail ways L, attached by screws 12 to the back of the standard D. The gate K, has a recess cut in its lower end to allow the "blank" G to pass through and has attached to its face by screws 13, two thin steel plates N, the cutting edges 14 of which are inclined as shown in Fig. 1, so that as the gate K descends over the end of the blank G which is protruded through by the feed rolls, the inclined edges of the plates or knives N, enter from both sides of the blank and gradually cut through it, separating the peg *s*, Fig. 1 from the blank and leaving its edges on all sides smooth and in a fit condition for driving. Another advantage in this manner of separating the pegs is, that I can employ a thinner cutting edge as it is not required to penetrate the wood to so great a depth and does not bruise and distort one side of the peg more than the other, as would be the case with a knife which passed through from one side to the other of the blank.

The positions as well as the manner of operating the above described tools for pointing the peg and splitting it from the blanks in the pegging machine, will be varied to suit the machine to which they are applied; I do not therefore limit myself to their arrangement or combination one with the other, nor do I limit myself to the particular method above described for feeding the "blank" as there are other well known ways of doing this, which need not be here described.

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

1. Pointing the peg on the pegging machine substantially as described.

2. I claim the inclined knives N operating substantially as set forth to cut the peg from the blank.

ELMER TOWNSEND.

Witnesses:

THOS. R. ROACH,  
P. E. TESCHEMACHER.