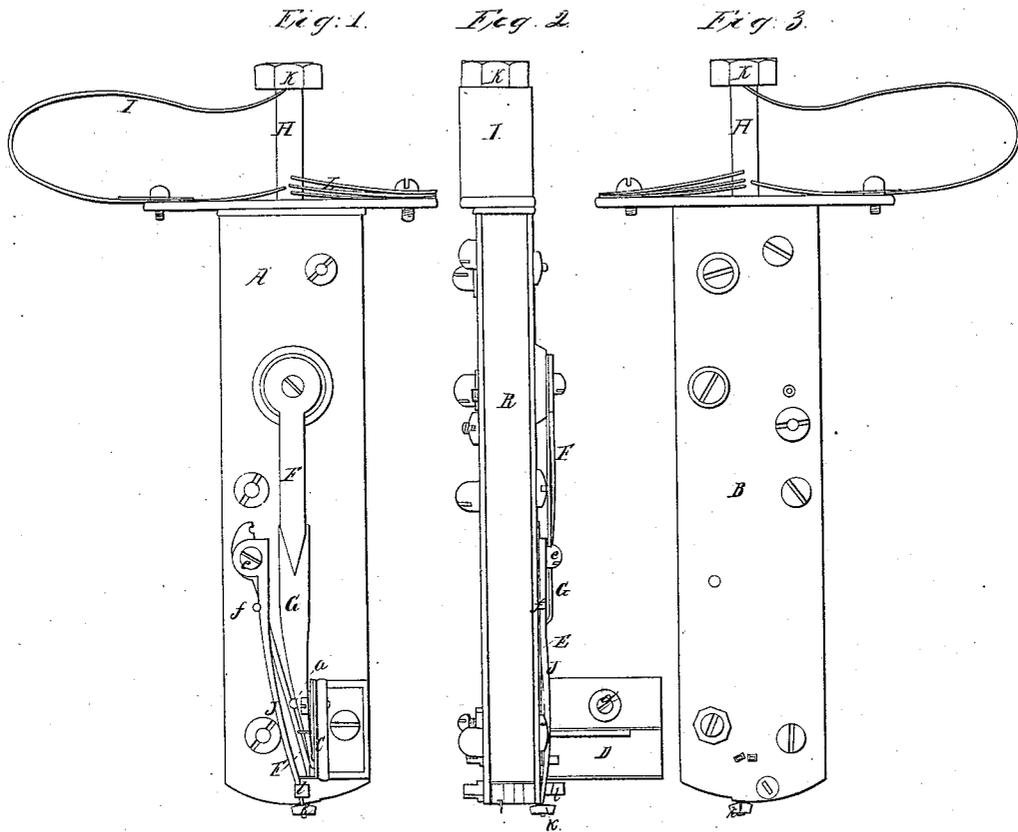


R. H. Thompson,

Pegging Machine,

No 13,144.

Patented June 26 1855.



Witnesses:

Geo S. How

Wm H. Ford

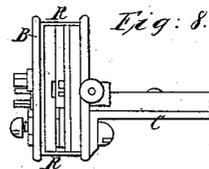
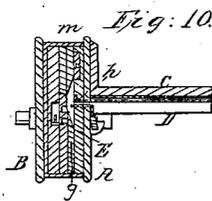
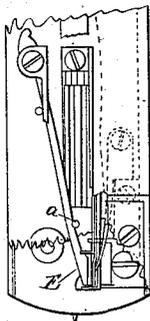
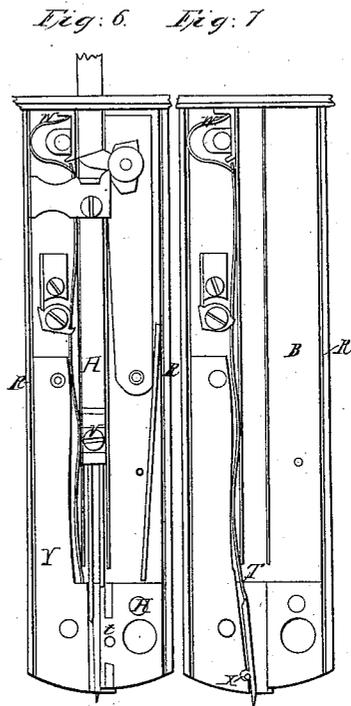
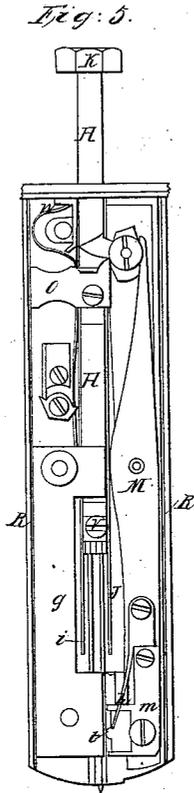
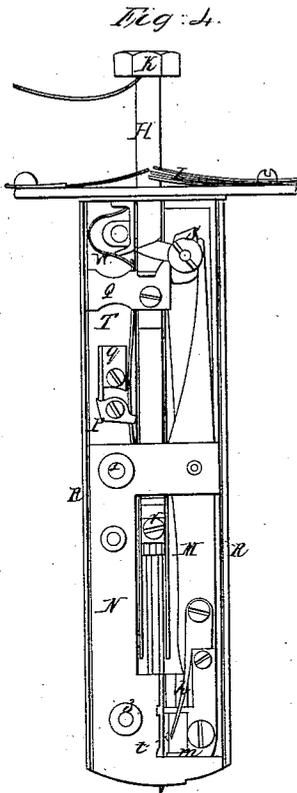
Inventor

Ruben H. Thompson

# R. H. Thompson, Pegging Machine,

No 13,144.

Patented June 26 1855.



Witnesses:

*Thos P. Keen*  
*W. J. H. H.*

Inventor:  
 Reuben H. Thompson.

# UNITED STATES PATENT OFFICE.

REUBEN H. THOMPSON, OF BUFFALO, NEW YORK.

## HAND-MACHINE FOR PEGGING BOOTS AND SHOES.

Specification of Letters Patent No. 13,144, dated June 26, 1855.

*To all whom it may concern:*

Be it known that I, REUBEN H. THOMPSON, of Buffalo, in the county of Erie and State of New York, have invented certain  
5 Improvements in Machines for Pegging Boots and Shoes, which I have described in the following specification and accompanying drawings with sufficient clearness to enable others of competent skill to make and  
10 use my invention.

My invention consists in, first, a device for gaging the distance between the pegs and causing the machine to move accurately the proper distance after the peg has been  
15 driven for the insertion of the next pegs; second, in a device for feeding the peg wood to the knives which cut off the pegs.

The drawings are made full size.

Figure 1 is a front side elevation of the  
20 machine. Fig. 2 is an edge elevation—the edge shown at the left hand in Fig. 1 being shown in Fig. 2. Fig. 3 is a back elevation. Fig. 4 is a front elevation of the parts back of the front plate of the case of the machine.  
25 Fig. 5 is a like view of the same with the plate N removed so as to expose to view the stationary cutter. Fig. 6 is a similar elevation showing the peg tube and peg driver. Fig. 7 is a like internal view showing  
30 the spacer T and the spacer plate—the parts in front being removed. Fig. 8 is a plate of the machine turned over—the bottom being shown upward. Fig. 9 is a front elevation of certain portions of the lower  
35 part of the machine, the design of this figure being to show more clearly the construction and operation of the spring clamp above mentioned a part of the front plate and some other parts being removed for the purpose  
40 of giving a better view. Fig. 10 is a horizontal projection of the parts below the line drawn across the elevations. Fig. 11 is an edge view in detail of the movable cutter and of part of the lever to which it is at-  
45 tached and by which it is operated.

A is the front plate of the case.

R is a side piece between the front and back plates to which both are bolted.

H is a slide by which most of the oper-  
50 ating parts are moved, motion being given to it by striking upon the head K with a mallet. This slide carries the awl *i* and the peg driver *j* they being held between the end of the slide and a piece of iron which fits  
55 upon it by the screw V. The peg driver is intended to drive one peg at the same time

that the awl makes the hole for the next peg, the machine being moved the distance from one to the next by a slight pressure of the hand in that direction this distance being  
60 measured and this motion of the machine restricted to correspond by the spring spacer T as follows: The lower end of this spacer T terminates in a point and being held down  
65 by the spring W pierces the leather sufficiently to keep the machine from being easily moved out of place if a slight downward pressure is exerted upon the machine so as to keep the instrument snugly to the  
70 work. The spacer T has a notch in the side of it to receive the tumbler P which is operated by the arm O on the slide H just as the slide completes its descent thus with-  
75 drawing the spacer from the leather at the identical time that the awl is sunk deepest into it. The spacer T has also a slight vibratory motion in a groove in the spacer plate Y limited in one direction by the side  
80 of the groove and in the opposite direction by the eccentric adjusting pin X, by the turning of which the travel of the spacer may be accurately graduated so as to bring  
85 the peg driver exactly over the hole made by the previous descent of the awl. The natural position of the spacer is bearing against this pin. The pressure of the hand  
90 in the direction the machine is to move should be sufficient however to overcome this tending and move it to the opposite side of the groove. Then as it is raised by each de-  
95 scent of the awl and peg driver it will spring forward against the pin X and as the awl begins to rise will descend in the same position upon the leather and when the awl rises so as to clear the leather the pressure  
of the hand in that direction overcomes the spring of the spacer and moves the machine forward for the next peg.

The peg wood is fed to the knives which cut off the pegs by a spring feeder F, G,  
100 which has a point made so as to push the peg wood forward into the machine but may be drawn back without moving the peg wood which is fed into the machine in thin strips or  
105 slabs and placed between this feeder and the spring D. This feeder is operated by the head of the screw V which holds the awl and peg driver to the lower end of the slide and bend or incline in the feeder and pushing  
110 peg wood at the time the wood is held firmly by the cutters and a clamp hereinafter described. The tension of the spring is suffi-

cient to throw the peg wood forward at the proper time.

D is a part of a spring clamp which holds the wood firmly while being cut and also presses it against the stationary cutter so as to insure the effectual operations of both cutters at the time that the peg is cut off, said piece D which is one jaw of the clamp being pressed forward for that purpose by the spring *h* on the lever M, which carries the movable cutter *m* as it is moved forward to assist in cutting off the peg which is the first operation performed by the descent of the slide H. When the spring jaw D is pressed forward it presses the peg wood against another spring jaw E, and the two jaws hold the wood firmly while the peg is being cut off and the feeder F, G, pushed back to take a new hold of the wood and when the parts return to their position of rest the jaw E pushes the peg wood back far enough to clear the stationary cutter *m* when it is arrested by a small pin *a* which keeps it from pressing upon the peg wood while it is being fed into the machine. This clamp extends inward as near to the cutters as it may without interfering with the operation of the cutters. The spring D is fastened to the arm C by the screw *d*. The spring E is fastened by its upper end by a screw *e* and kept from turning on the screw by a pin *f* below.

*g* is the stationary cutter. It is placed upon the front side of the plate in which the tubes for the awl and peg driver are formed, and forms for a short distance the front side of the tube for the awl and over half of the tube for the peg driver and the upper end of this cutter also forms the front side of the tube in which the slide H moves. This cutter *g* is held back to its place by the cap plate N placed upon it and made fast by two sunk nuts on the screw bolts 2 and 3 which hold the machine together. Below the end of cutter the back side of the cap plate projects back to the tube plate and forms the front side of the lower end of the tubes and guides the awl and peg driver while being driven into the work.

The working cutter is so adjusted upon the front side of the lever as to project half the thickness of a peg farther toward the cutter *g* than the edge of the lever does. The objects of this adjustment are that the lever M the edge of which presents a flat face to the peg shall assist in compelling the stationary cutter to perform its part of the work and also operate as one side of the peg tube to hold the peg within reach of the peg driver. The cutter has projecting guides at each end of the cutting edge to prevent the edges of the two cutters from ever coming in contact.

The cutter is operated by a notch in the slide H turning the cam or tumbler S a part

of a revolution which forces the cutter against the peg wood—the lever being hung in the middle upon a fulcrum. When the slide H is forced down the tumbler S is turned so as to throw the end of it out of the notch in the slide and allow the slide to pass in which position of the tumbler or cam S the pressure of the lever against it is entirely exhausted upon the axis or fulcrum of the tumbler, by which arrangements the slide H is relieved from the friction that the pressure of the lever against it would cause if the slide acted directly upon the lever. The point of the tumbler S is returned into the notch in the slide H by a point upon the arm O which extends far enough beyond the slide H to catch the tumbler S. The lever M is thrown back after the peg is cut off by the spring *y* back of the lever and working against the end of a screw in the lower end of the lever.

The lower end of the lever bears upon a set screw *u* which is for the purpose of adjusting the edge of the cutter *m* to coincide with that of the cutter *g*. The inner end of the strip of peg wood rests on the end of the set screw *t* by which the size of the pegs may be adjusted.

The face of the machine which rests upon the leather does not rest upon it at the right hand of the peg driver, a little clearance being left between them at that place to allow the machine to pass any pegs that may have failed to be driven quite home.

J is a guide spring with a roller *k* on the lower end of it below the face of the machine. This roller runs against the edge of the work to be pegged to guide the machine and gage the row of pegs to a proper distance from the edge of the sole. *l* is a small stud to hold the lower end of the guide spring. It has two bearings or shoulders for two rows of pegs at different distances from the edge of the work. The awl is withdrawn from the leather by the spring L, assisted by the spring I, and the slide is then carried up by the spring as high as it is allowed to go. The boot or shoe to be pegged is made fast to an isolated block or stand so that the operator can walk around it when using the machine.

To use the machine put a strip or slab of peg wood into the hopper or feeding apparatus; take the machine in the left hand and a mallet in the right. Strike one blow on the head of the driver slide and hold it down with the mallet until the thumb of the left hand is pressed upon the head of the driver slide. Still keep the driver slide down with the left thumb until you set the point of the awl where you desire to place the first peg. Then move the thumb forward upon the head of the driver slide to give room for a few gentle taps with the edge of the face of the mallet until

the awl sticks in the leather; then remove the thumb from the head of the driver slide and give a full blow with the mallet; then give the machine a gentle pressure forward and repeat the blows as often as you please until the strip of peg wood is raised up. Then the small piece of peg wood remaining in the hopper should be removed a new strip put in and then repeat the operation just described.

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

1. The spring spacer or stepping instrument T constructed, arranged, and operating substantially as herein described. 15

2. I claim the spring feeder F G, constructed, arranged and operated by the driver slide H, substantially as herein described.

REUBEN H. THOMPSON.

Witnesses:

GRACE W. FORBES,  
THOS. P. HOW.