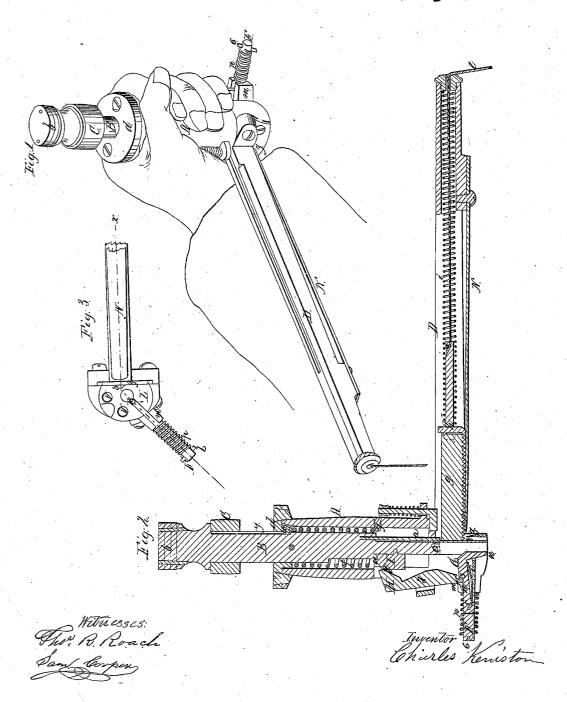
C. Keniston,

Pegging Machine, Nº33,151, Patented Aug. 27, 1861.



N.PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES KENISTON, OF WEST CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN SHOE-PEGGING MACHINES.

Specification forming part of Letters Patent No. 33,151, dated August 27, 1861.

To all whom it may concern:

Be it known that I, CHARLES KENISTON, of West Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in 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 view of my improved pegger as used; Fig. 2, a longitudinal vertical section through the same on the line x x of Fig. 3; Fig. 3, a plan of the under side, a part of the peg-holder being broken away.

In hand pegging-machines—that is, machines in which a plunger driven down by a hand-hammer carries the awl and peg-driverthe machine as formerly constructed had the point or "center," by which the spacing of the pegs from each other was accomplished, placed between the awl and driver. This arrangement has been improved by the invention of Francis J. Vittum, of Chelsea, Massachusetts, in which the point or center has been made movable in the direction in which the pegger is moved, so that the awl and driver may be brought into closer proximity, and each peg may be driven into the hole made by the awl at the preceding blow. This was to avoid the closing or shrinking of the hole before the peg could be driven. In these machines the operator, in order to allow the feed to take place, was obliged to raise the instrument from the sole of the boot by lifting or rocking the instrument to allow the point to clear the surface of the sole before it was thrown forward by its spring to mark the next space between the pegs.

My present invention relates to certain improvements in said machine; and it consists in combining an automatic feed with a hand pegging-machine which is operated by the blow of the hammer, so that it shall be actuated by the motions of the plunger which carries the awl and peg-driver, and without the necessity of raising the instrument from the surface of the sole or of rocking it each

time it is fed along.

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, A is the cylinder or body of the instrument, which is grasped by the hand of the operator, as shown in Fig. 1. In this plays a plunger B, which carries at its lower end the peg-driver a and an awl for punching the holes. The latter is to be attached to the plunger at c in the customary manner. This plunger when operated is driven down by the blow of a hand-hammer (a pad of leather b is applied to its top to receive the blow) and is retracted first by a rubber spring C, which embraces the plunger immediately below its head and is compressed onto the head d of the cylinder by the blow of the hammer, and finally by a coiled spring f, which surrounds the plunger within the cylinder A, and rests on a screw 9. A screw w in a groove y prevents the plunger from turning round within the cylinder.

D is a trough, which contains the peg-wood This peg-wood is fed forward by a follower h and spring i. The follower is retracted when it is required to insert a fresh sheet or blank of peg-wood by means of a cord l. From one side of the lower end of the cylin- $\operatorname{der} A$ projects a hollow stud m, in which slides a rod F, which carries the center or feeding point. This is a hook-shaped piece of steel G, terminating in a point n, and pivoted at 5to the rod F, in which it plays up and down in a suitable slot, being pressed up by a spring o beneath it. A spiral spring p surrounds the rod F. It is confined between the stud m and a pin 6 on the end of the rod, and serves to push the rod out from the stud m. A lever H is pivoted at 7, and vibrates in a slot in the side of the cylinder A. Its upper end is somewhat hooked and is beveled off at Its lower end r rests against a shoulder son the top of the piece G. A stop I is attached to one side of the plunger B. Its upper side is beveled at u, where it strikes the bevel qof the lever H. Two pins v, Fig. 3, project from the lower end or face L of the instrument. These bear against the edge of the sole and serve as guides to keep the row of pegs at the proper distance from the edge of the sole.

The following is the operation of this instrument: The cylinder A is grasped, as shown in Fig. 1. The face L rests on the sole of the boot, the guide-pins v resting against the edge of the sole, the plunger B being raised

by its spring, as shown in Fig. 2. The stop I has vibrated the lever H, so that its lower end r has retracted the rod F against the resistance of the spring p, and at the same time has depressed the piece G, so that its point n projects a little below the face L of the instrument and enters the sole of the boot. (The upper surface 12 of the piece G should be made inclined for this purpose.) the plunger B is driven down by the hammer in the hand of the operator, the lever H being relieved from the stop I allows the spring p to draw out the rod F, the spring o having lifted the point n clear of the surface of the When the point n is in the leather and the end r of the lever H bears against the shoulder s of the piece G, the operation of this lever is to move forward or feed the pegger an amount equal to the longitudinal motion of the rod F. Thus each time the plunger B is driven down and rises again the instrument is fed forward the required amount to give the proper space between the pegs. As the plunger B descends the peg-driver a drives the blank of peg-wood g down against the resistance of the spring N on the under side of the trough D, when a knife Z cuts off a peg, which the driver carries down through the opening 8, and the spring N again lifts up the blank g. It is evident that this feed may also be applied to power pegging-machines, the feeding device being actuated directly by the plunger which carries the awl or by an attachment thereto.

Instead of the spring p to throw the rod F in one direction, this rod may be moved both

ways by the vibrations of the lever H, the stop I or other connection on the plunger B being arranged to vibrate the lever H both ways. This, however, I should consider but a modification of my invention.

I am aware of a machine for pegging boots patented by William W. Batchelder on the 10th June, 1856, which discloses what may be termed an "automatic feed" or "feeding-point;" but being operated in one direction by a spring on a knee joint it is always in contact with the leather, whereby the feed is caused to vary with the density and quality of the leather.

I am also aware of the machine of F. J. Vittum, patented in December, 1860, which discloses a movable center, but which does not feed automatically; but I believe I am the first who has ever made a separate centering-point which by the motions of the plunger would, while it spaced the distances between the peg-holes accurately in all cases, withdraw from and advance and enter again the leather, so as to cause the instrument to move forward in its operations as the pegs are driven.

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

The movable center n, as combined with the plunger, and so arranged as alternately to engage with the leather to effect the feed and disengage itself therefrom, substantially as described.

CHARLES KENISTON.

Witnesses: Thos. R. Roach,

SAM. COOPER.