A. Swingle,

Pegging Jack,

No. 15,462, Patented July 29, 1856.

Fig. 1.

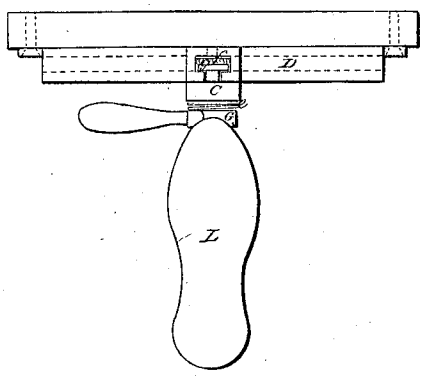


Fig. 2

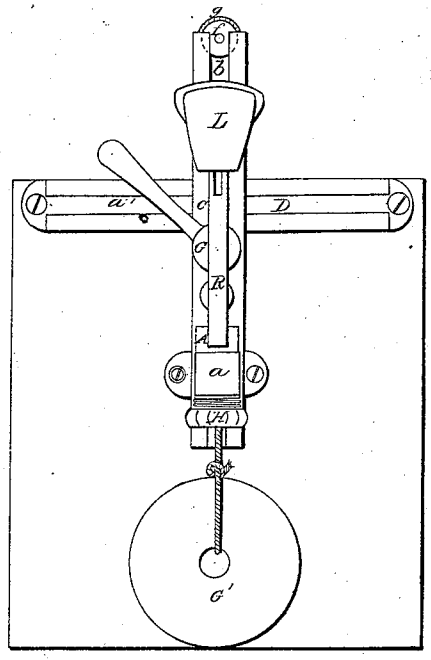


Fig. 3.

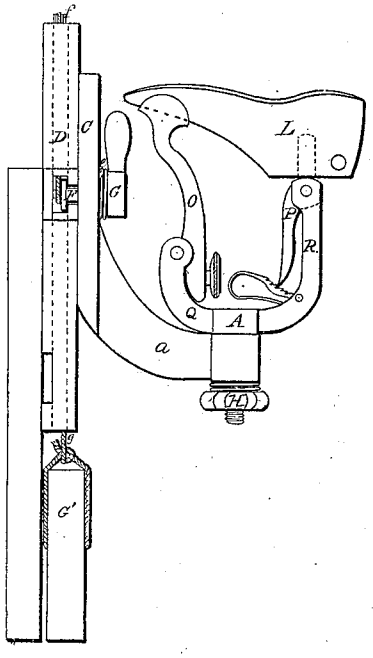
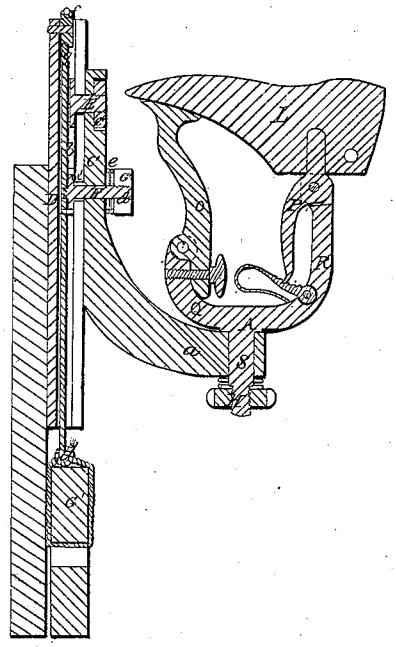


Fig. 4.



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

UNITED STATES PATENT OFFICE.

ALFRED SWINGLE, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO ELMER TOWNSEND, OF BOSTON, MASSACHUSETTS.

PEGGING-JACK.

Specification of Letters Patent No. 15,462, dated July 29, 1856.

To all whom it may concern:

Be it known that I, ALFRED SWINGLE, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Revolving Pegging-Jack; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1, is a top view of a jack containing my invention. Fig. 2, a front elevation of the same. Fig. 3, a side elevation of it. Fig. 4, a vertical central and longitudinal section of it.

On the 19th of June 1852 Letters Patent of the United States of America, were granted to Henry C. Dewitt on a pegging jack, the same containing a revolving stock consisting of a curved arm, a horizontal shaft and a counterbalance or weighted arm, the two arms being made to project in opposite directions from the shaft; the contrivance or holder for sustaining the shoe last being supported by the curved arm. As in the machine of the said Dewitt, the shaft when used, is arranged horizontally on a bench, the machine becomes not only cumbersome but inconvenient and liable to accident in many respects. In the first place the curved arm owing to its peculiar and necessary shape, not only takes up a great deal of room during its revolutions but is very liable either to be broken, or to spring during the operation of pegging the shoe. It has not the necessary firmness or stability. Furthermore the counterbalance extending from the horizontal shaft requires a great amount of room for its movements, and is often much in the way when it is desirable to economize space, besides being dangerous to those who may be in its vicinity. All these difficulties I have attempted to obviate by my invention, which I shall now proceed to describe.

The sustaining mechanism of the last holder of my improved machine is to be supported against the vertical side of a bench or table.

In the drawings A, exhibits the "last holder" or clamp sustained by a short curved arm *a*, extending as seen in the drawings from a straight slider C, which operates in connection with a grooved trammel or cross D, arranged so as to stand in a vertical plane. This trammel has two dovetailed grooves or their equivalents (*a'*, *b*) extending through it and crossing one another at right angles. In each of these grooves the head of a bolt or pin E or F, is placed the said pins extending through the slider C. One of them viz. E, is confined to the slider by a screw and nut as seen at *c*, while the other projects through the slider and has a screw *d*, and receives upon said screw a clamping nut G, provided with a handle. Between the nut G, and the front face of the slider and encircling the pin F. is a helical spring *e*, the object of such being to press the slider closely against the trammel when the clamp nut is loosened or not screwed up. In the upper part of the vertical groove of the trammel I arrange a pulley or small sheave *f*, around which is carried, a cord or chain *g*, such cord near one end of it being looped or formed with an eye to receive the pin F, and allow said pin to rotate within it, the lower end of the cord is fastened to a weight G', arranged directly beneath the trammel as seen in the drawings, such weight being sufficient to counterbalance the mechanism suspended upon the other end of the chord.

The clamping screw of the last holder is shown at H. When the screw or clamp pin F, is in the lower arm of the vertical groove of the trammel and the pin E, is in the horizontal groove of said trammel, if we lay hold of and move the slider C, we shall cause its lower part to move in the arc of an elliptical orbit. The middle of the last in the meantime being moved nearly in a straight line. By means of the trammel and the slider the last can be entirely rotated in a plane parallel to the face of the trammel. During such rotation its center is maintained nearly at a level and in consequence of the peculiar motion to which it is subjected it is rotated within a very small space in comparison to what would be required were it made to turn on only one center pin arranged on the position of the pin F. The last holder being sustained by the slider, and the short arm projecting therefrom is held very firmly in position, and is not liable to that springing or jarring to which the sustaining arm of Dewitt's last holder is subject.

Another very important advantage results from the use of the trammel and slide such consisting in their admitting the po-

sition of the last holder to be changed so as to vary the vertical elevation of the last to suit the convenience of the workman while he is in the act of pegging or punching a shoe placed on said last. In order to accomplish this the workman has only to bring the two pins E and F, into the vertical groove of the trammel, when he will be able to raise or lower the slider in a vertical line so as to bring the sole of the last to such an elevation as he may desire. This property of my invention is not incident to that of Dewitt.

In the drawings, L, exhibits the last supporter on two standards O, P, jointed respectively to two springs Q, R, extended in opposite directions from a turning screw or journal S, which is sustained by and turns on the arm *a*, of the slide, and has the clamping screw H, applied to its lower end. By means of the above the last holder may be rotated relatively to the said arm.

I believe there is nothing new in sustaining a last by mechanism which will permit it to be revolved in two planes and that this principle or feature though common both to my machine and that of Dewitt herein before named was not the invention of the said Dewitt, nor is it claimed by him,—nor by me.

What I claim as my improvement is—

The above described arrangement and application of the trammel or grooved cross, its slide bar and guide pin the last holder and its sustaining arm the same enabling advantages or new and useful effects to be attained as specified.

In testimony whereof I have hereunto set my signature this twenty-eighth day of November A. D. 1855.

ALFRED SWINGLE.

Witnesses:

R. H. EDDY,

GEO. S. G. SPENCE.