Shoe Fegging Apparatus.

Dolphas D. Palmer.

72753

PATENTED
DEC 31 1867

Fig 1

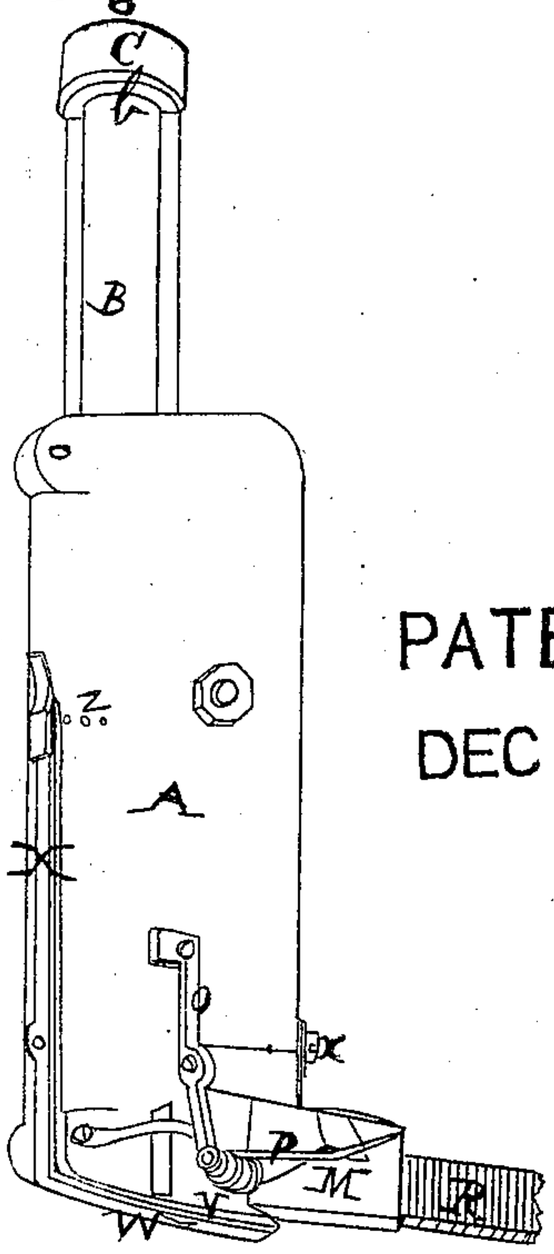


Fig. 2

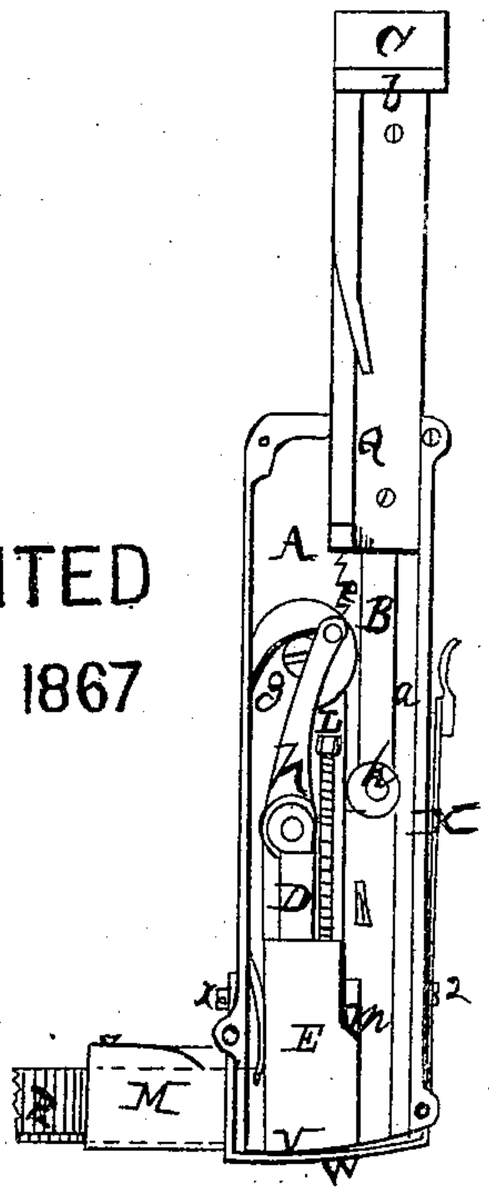


Fig. 3

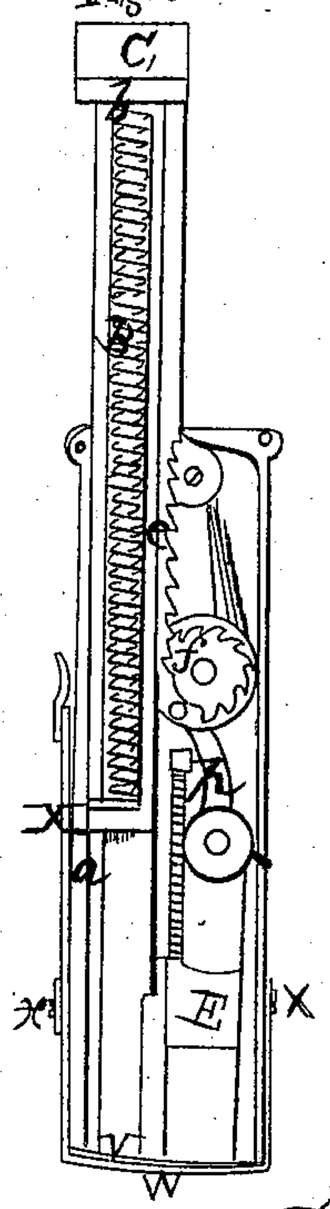


Fig. 4.

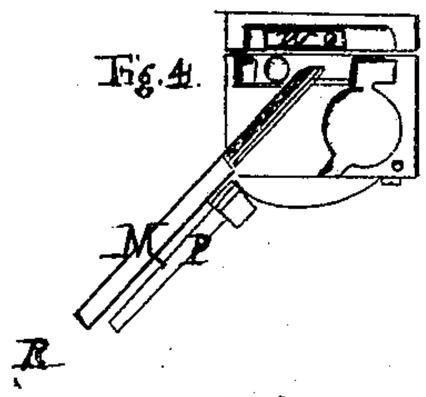


Fig. 5.

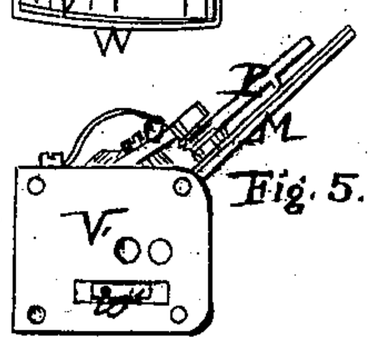


Fig 6.

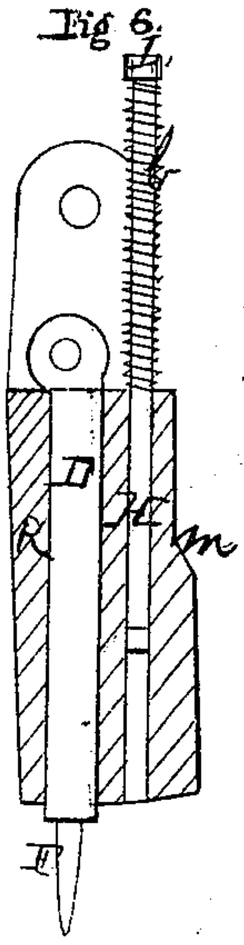


Fig 7

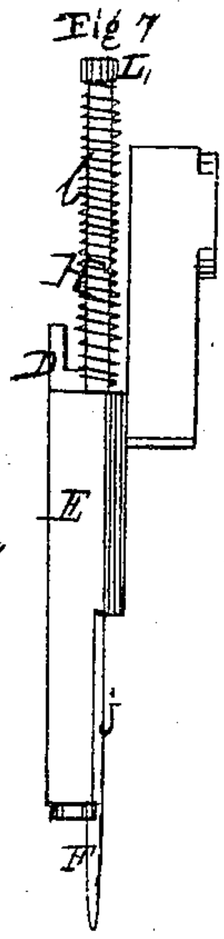


Fig 8

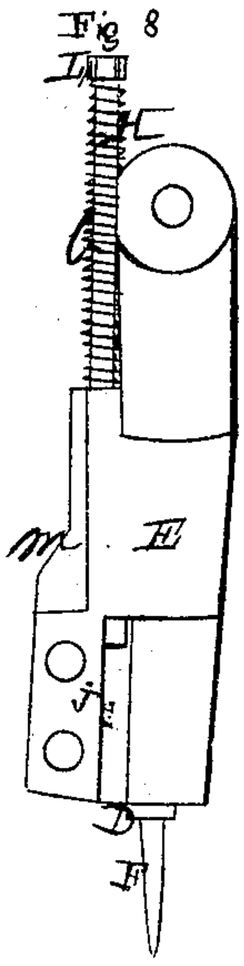


Fig. 9.

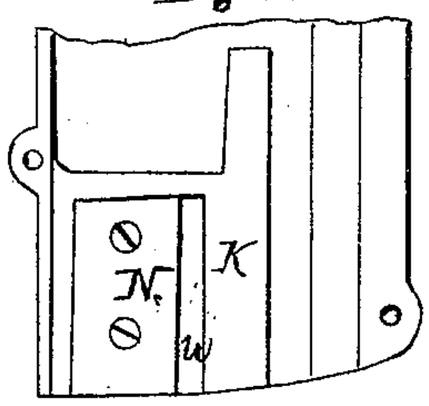
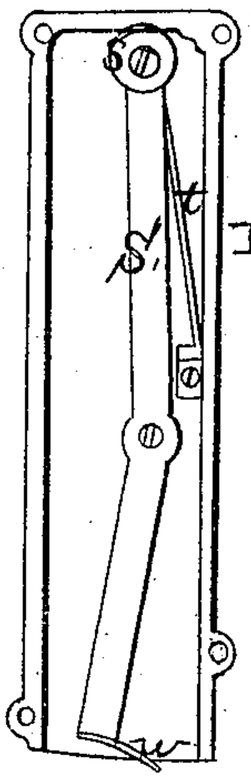


Fig. 10.



Witnesses_
D. B. Ventres
Geo. B. Green

D. D. Palmer
By Atty J. B. Wordenhoff

United States Patent Office.

DOLPHAS D. PALMER, OF WALTHAM, MASSACHUSETTS.

Letters Patent No. 72,753, *dated December* 31, 1867.

IMPROVED MACHINE FOR PEGGING BOOTS AND SHOES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, DOLPHAS D. PALMER, of the town of Waltham, in the county of Middlesex, in the State of Massachusetts, have invented a certain new and useful Instrument, Implement, or Machine for Pegging Boots and Shoes; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents the face outside view of the apparatus or machine.

Figure 2 shows a section through the working mechanism.

Figure 3 is a reverse side of the same working parts.

Figure 4 shows a cross-section, exhibiting the guide for feeding in the peg-wood.

Figure 5 is the lower end or bottom view of the instrument.

Figure 6 shows an enlarged view of the awl and peg-driving mechanism in section.

Figure 7 shows an edge view of the same.

Figure 8 is a reverse side of fig. 6, showing the peg-cutting blade.

Figure 9 is an enlarged broken section of the stock.

Figure 10 shows the cap and feed-lever.

The object of my invention is to facilitate the pegging of hand-made boots and shoes, and to execute the work in the neatest, the most perfect, and substantial manner.

My invention consists in enclosing in a stock the arrangement and combination of mechanism by which the awl is driven into the sole and withdrawn, the peg fed in, cut, and placed in position, and driven in the hole made, and the stock moved for inserting the next peg, all by the single blow of a hammer.

To enable others to make and use my invention, I will proceed to describe it more in detail, referring to the drawings and to the letters of reference marked thereon.

I make the stock or handle A of my improved implement or machine for pegging hand-made boots and shoes of metal, cast hollow, or in such form as to make the ways or guides *a* for the slide B to move down and up on, the slide being a round or square bar of steel, having a flange, *b*, and head of leather, or other suitable substance, *c*, capable of sustaining the concussion of the blows of the hammer in operating, the lower portion of the slide being bored out, so as to admit the spiral spring *d* in its cavity, for the purpose of bringing it back into the proper position to receive each successive blow. On the side of the slide-bar B is a rack-gear, *e*, into which a pinion, *f*, meshes, which is attached to a plate, *g*, in which is the wrist-pin, *i*, to connect, by the pitman *h*, the awl-shaft D, which is fitted to slide in the movable block E, to which is fitted one of the knives, *j*, to cut the peg, and place it in the proper position to be driven into the hole made by the awl F. In the same block, E, is the sliding rod or punch H, which drives the peg into the sole flush with the surface by the last part of the stroke. The punch H, being provided with a head, L, and spiral spring, *b*, to hold it in position to receive and drive the next peg, the movable block E being operated by the friction-roller *k* on the lower end of the slide B coming in contact with the incline *m*. In the lower end of the stock A is a stationary piece, K, with an opening, *n*, through it, where the peg-wood is fed in through the guide M, and comes in contact with the knife N, when the peg is cut the right size and shape by the other knife, *j*, on the movable block or piece E.

The peg-wood, being prepared in long strips, is placed in the guide M, and, by the action of the lever O and ratchet or pawl P, is fed in at the time the awl is being driven, so that it is in place to be cut and put in a position to be driven by the last part of the blow by the punch H, which receives its blow, and is operated by the plate or piece Q, secured to the slide B, forming the hammer or intermediate punch for driving each peg as it is cut off the strip R and placed over the hole in the sole made by the awl F. On the piece Q is formed a ledge, *q*, or a rib, having an inclined plane, *r*, which comes in contact with a friction-roller, *s*, on the top of the lever S, which is retained, when at rest, by the spring *t*. On the lower end of the lever S is a spring, *u*, which operates as a pawl to move the apparatus on the sole the right distance to drive the next peg, and so on, as each consecutive blow is made on the head *c* by a hammer, until the pegging on of the sole is completed.

On the bottom of the machine is secured a steel plate, V, with the openings *v* and *w* for the operating parts to work through. The gauge W for regulating the distance from the edge of the sole for driving the rows of pegs is made in the form of a loop or bow, passing under the bottom plate V, the arm extending up on the

outside of the stock A on both of its edges, where they are secured to the stock by screws *x x*, so as to let the bow W move on the plate V a sufficient distance to place one, two, or more rows of pegs around the sole. One of the arms of the gauge W forms a spring-lever, X, with a point, *y*, to fit into a series of indentations, *z*, in the stock A, to hold the gauge in any fixed position for placing the rows of pegs.

The implement, as above described, consists only of a single set of mechanism for driving one row of pegs at a time; but by duplicating a portion of the parts, two rows of pegs can be put in equally well in the same time by the same operation.

The advantages of my invention over other hand-pegging implements or machines, are that the holes made by the awl are filled with the peg at the same time by the same blow, leaving no hole in the sole without a peg when there is peg-wood in the guide.

The operation of pegging boots and shoes by my implement is quite easy, and can be done with the greatest facility, and in the most perfect manner, even without much practice, only requiring to be placed and held up to the guide, and a blow of the hammer of sufficient force to bring the slide down the required distance, the spacing of the distance between the pegs being entirely automatic, as much so as the feeding of the cloth or material in a sewing-machine, so that no care in that direction is required.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

1. The stock A, as constructed, and the sliding punch B, having a toothed rack, *e*, connecting with the pinion *f*, disk *g*, and pitman *h*, for operating the slide D, as herein described.

2. I claim the movable piece or stock, E, pivoted to the handle or stock A, for holding the awl-slide or holder D, as also the peg-driving punch H, and cutting-blade *j*, as herein set forth.

3. I claim the lever O, pawl P, and guide M, as arranged, in combination with the slide B, for feeding in the strips of peg-wood to be cut by the combined action of the knives *j* and N, and driven by the punch H, substantially as herein specified.

4. I claim the combination of the stationary block K, guide M, cutter N, with the movable block E and knife *j*, substantially as and for the purposes herein set forth.

5. I claim the arrangement of the lever S, pawl *u*, spring *t*, and friction-roller *s*, as constructed and combined with the plate Q, and inclined ledge *v* on the sliding punch B, so as to operate for spacing the distance between the pegs as they are driven, substantially as described.

6. I claim the gauge W, spring-lever X, point *y*, and index *z*, in combination with the stock A, for a hand shoe-pegging apparatus, substantially as and for the purposes herein set forth.

In testimony whereof, I hereunto subscribe my name in the presence of—

D. D. PALMER.

Witnesses:

ZENAS FOLGER,

AUGUSTUS TOWNSEND.