O. Gilmore,

Pegging Machine.

No. 37,909 Patented Mar. 17, 1863.

Fig. 1.

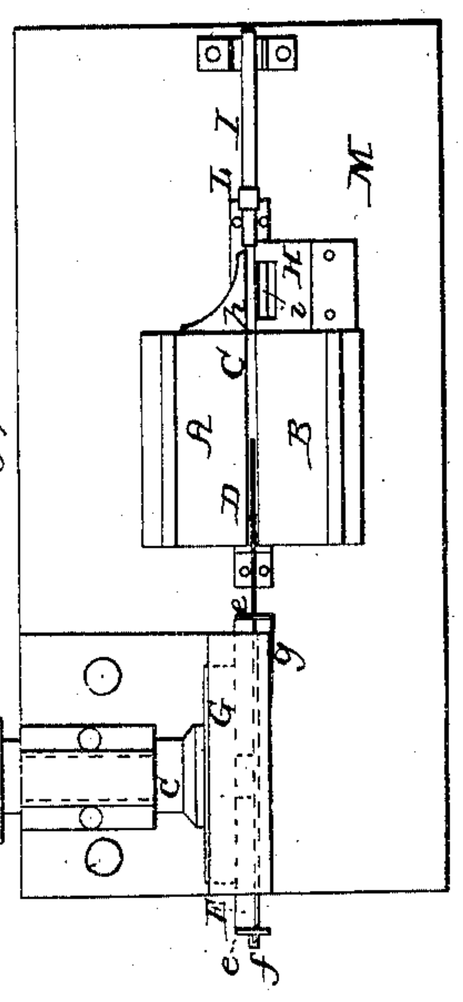


Fig. 2.

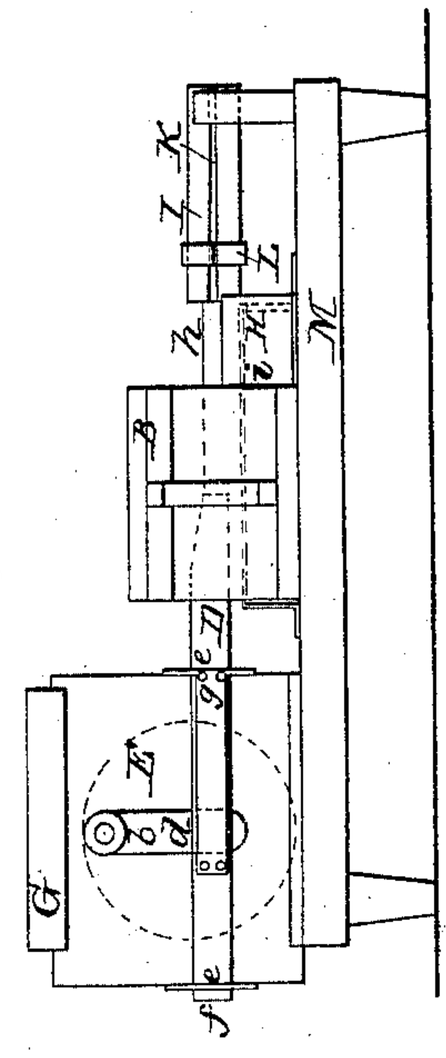


Fig. 3.

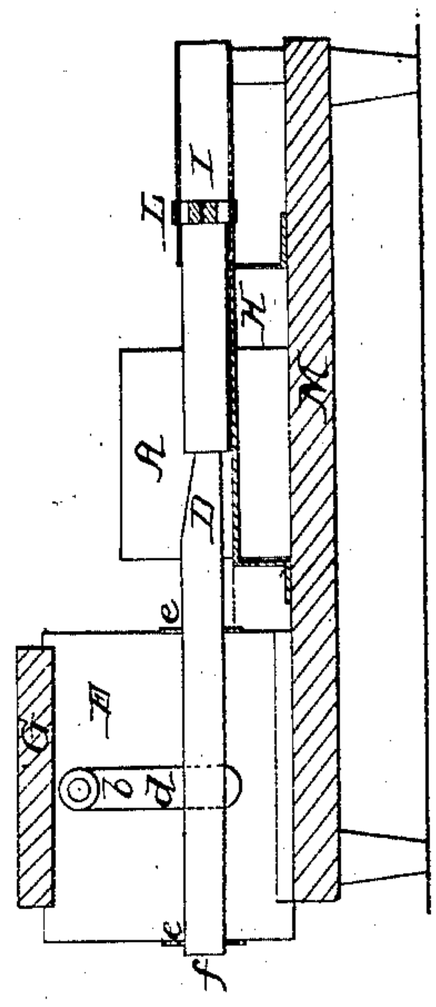


Fig. 4.

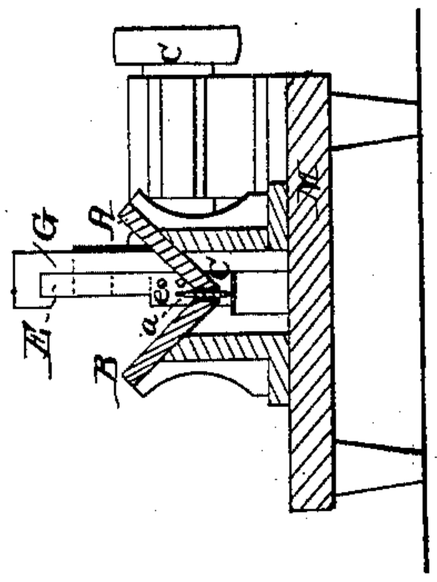


Fig. 5.

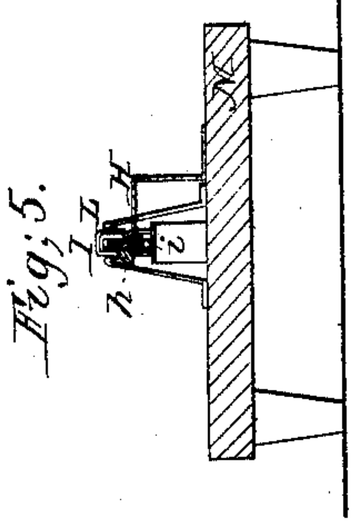
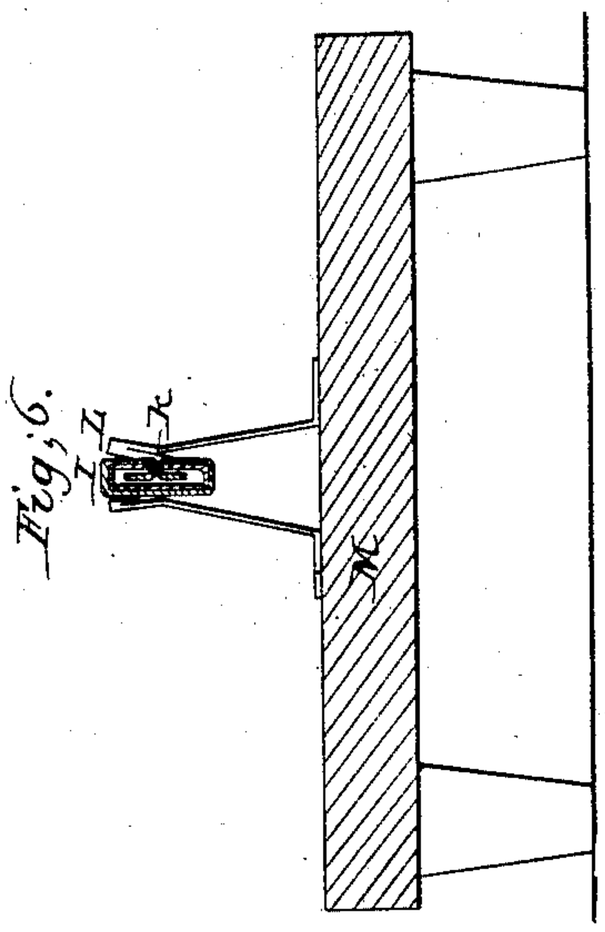


Fig. 6.



UNITED STATES PATENT OFFICE.

OTHNIEL GILMORE, OF RAYNHAM, MASSACHUSETTS.

IMPROVED MACHINE FOR ARRANGING NAILS FOR USE IN MACHINES FOR NAILING SHOES.

Specification forming part of Letters Patent No. **37,909**, dated March 17, 1863.

To all whom it may concern:

Be it known that I, OTHNIEL GILMORE, a citizen of the United States of America, and a resident of Raynham, in the county of Bristol and State of Massachusetts, have invented a new and useful Machine for Arranging Nails for Use in Machinery for Nailing Shoes; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a front elevation, and Fig. 3 a longitudinal section, of such machine. Fig. 4 is a transverse and vertical section taken through the inclined planes. Fig. 5 is a vertical and transverse section taken through the conduit extending from the inclined planes to the receiver. Fig. 6 is a vertical section taken through the receiver and its friction-slide.

The nature of my invention consists as follows: First, of a combination or machine composed of a plunger, two inclined planes, a space between said planes, and a receiver, the whole being constructed and arranged substantially in manner and so as to operate as hereinafter specified; second, in the combination therewith of a conduit so constructed and arranged as to enable the reversed nails to be discharged laterally from the collection which may be in the act of passing through the said conduit.

In the drawings, A B represent two inclined planes, arranged so as to incline in opposite directions from the horizon, and so as to stand at or about at a right angle to one another. They are also to be arranged so that there may be a narrow space or passage, C, between them at their lower ends. This space is intended to be of a width less than that of the greatest width of a nail to be arrested by it, or, in other words, it is to be of a width which will cause the nail to be supported between the two inclined planes in the manner as exhibited at *a* in Fig. 4, and when thrown between the planes to fall downward into a vertical position with its point downward. An impeller or plunger, D, extends into the space or passage C, and projects from a slide-plate, E, which is supported within a standard, G, and is provided with mechanism for imparting to it reciprocating rectilinear movements, such as will cause the plunger to move lengthwise within the passage C. The said machinery, for so giving motion to the slide-plate E, consists of a crank-pin or roller, *b*, extended from a horizontal shaft, *c*, and into a vertical slot, *d*, made in the said slide-plate. Furthermore, the impeller extends loosely through two ears, *e e*, projecting from the slider, and has a shoulder, *f*, to bear against one of the said ears. A spring, *g*, attached to the other ear and to the impeller, serves not only to draw the shoulder *f* up to its adjacent ear, but to enable the impeller to retreat should the nails become clogged or too tightly wedged between the arranging planes. Directly in advance of the said arranging planes A B there is a space or conduit, H, one side, *h*, of which is elevated above the opposite side, *i*. This conduit leads the connection of arranged nails out of the space or passage C, and into a movable receiver, I, which consists of a flat tube having a slot, *k*, in one side of it, and being arranged horizontally in line with the passage C. A friction slider or band, L, goes tightly around the receiver and projects at its two ends through the slot *k* and into the interior of the receiver, in manner as shown in Fig. 6.

The apparatus or mechanism thus described is to be supported on a suitable platform or bed-plate, M, and in operating with it the nails, to be arranged side by side with their points downward, are to be thrown indiscriminately upon and between the upper surfaces of the inclined planes A B. The space between the two planes should be wider than each of the nails is at its smaller end; and, furthermore, such space should be of a less width than such nail is at its wider end, and also should have a width greater than the nail is at its center of gravity. In consequence of this, a nail after being thrown on either of the inclined planes will, by the action of gravity or by the same and that of the impeller, fall into the space C between the two planes, and will stand vertically therein with its point downward. As fast as the nails may accumulate within the space C the impeller will force them forward into and through the conduit, and from thence into the receiver, but should any one of them be inverted or stand point upward between any two of them, it, while passing through the conduit, may be discharged from the pack by means of a blow of some implement which will cause it to fall

over the lowermost side of the conduit, which side should have its upper edge even with or a little lower than the top of the space C. The friction-slider L serves not only as an abutment or stop for the nails, and will give way as the collection is advanced into the receiver, but also answers as a means of expelling the nails from the receiver and into the receiving-channel of a shoe-nailing machine.

I claim—

1. The combination of the impeller or plunger D, the two inclined planes A B, the space C, and the receiver I, the whole being arranged and to operate substantially as specified.

2. In combination therewith the conduit H, so constructed and arranged with respect to the space C as to enable the reversed nails to be discharged laterally out of the collection, in manner as specified.

OTHNIEL GILMORE.

Witnesses:
R. H. EDDY,
F. P. HALE, Jr.