

C. H. PERKINS.

MACHINES FOR REMOVING THE BURR FROM HORSESHOES.

No. 181,279.

Patented Aug. 22, 1876.

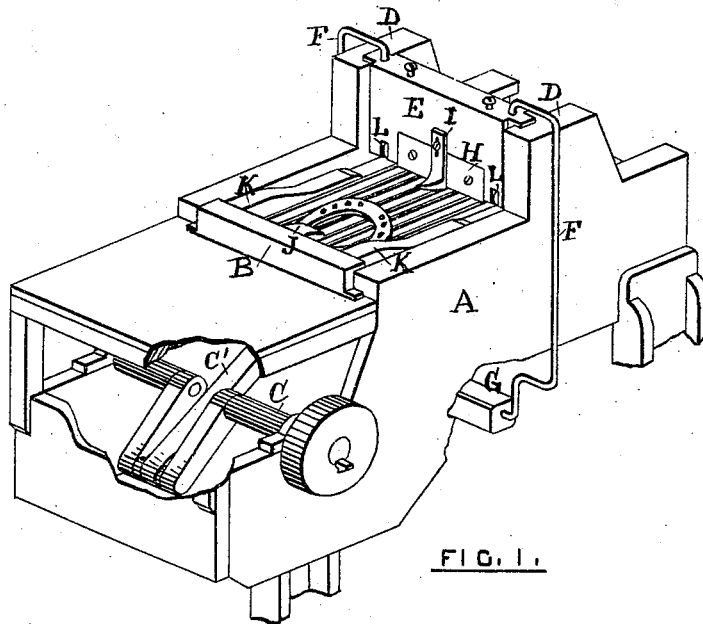


FIG. 1.

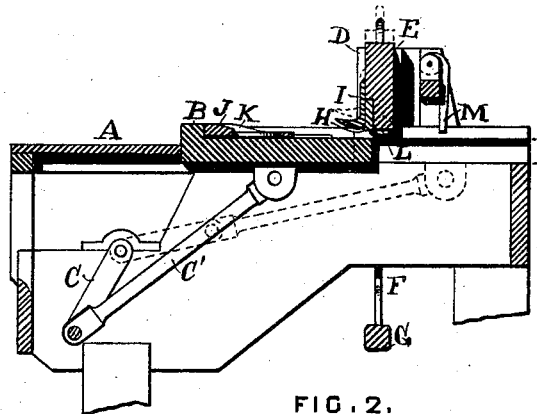


FIG. 2.

WITNESSES.

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## IMPROVEMENT IN MACHINES FOR REMOVING THE BURR FROM HORSESHOES.

Specification forming part of Letters Patent No. **181,279**, dated August 22, 1876; application filed  
July 14, 1876.

*To all whom it may concern:*

Be it known that I, CHARLES H. PERKINS, of Providence, in the State of Rhode Island, have invented a new and useful Machine for Removing the Burr from Horseshoes; and I do hereby declare that the following specification, taken in connection with the drawing making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a view, in perspective, of my invention. Fig. 2 is a longitudinal vertical section.

The object of my invention is to produce a machine which shall remove from the shoe the burr upon one side, resulting from the punching of the nail-holes; and consists in the mechanism hereinafter described.

It is well understood that in punching horseshoes, as well as metal in other forms, a burr will be left on the side opposite to that from which the punch enters, which it has been necessary heretofore to remove by hand.

In my invention, A, Fig. 1, is a frame, supported by legs or otherwise, as may be desired, and provided with suitable horizontal grooves, within which slides a bed, B. A reciprocating movement is communicated to the bed B by the crank-shaft C through the connecting-rod C'. D D are perpendicular guides attached to the frame, within which slides a bar, E, connected by rods F F to a suitable weight, G, beneath the frame. Attached to the bar E is a sharp-edged plate or tool, H, and an adjustable finger, I.

Having now set forth the principal features of my invention, I will now proceed to describe its operation.

Commencing with the parts in the position shown in Fig. 1, the operator places a shoe upon the bed B, with the heels upon either side of the prong J, and against the back of the bed. The bed B, moving forward, carries the shoe to the cutting-tool H, which, being forced downward by the weight G upon the

bar E, removes the burr as the shoe passes under it.

In case the shoe is bent or twisted when placed upon the bed, it will come against and raise the finger I and cutter, and be carried under the cutter, and thus prevented from striking against the bar E and breaking the machine. The bar E is fitted to the guides, so as to readily yield to any difference in thickness, as well as any unevenness arising from the previous bending or twisting of the shoe.

The shoes now manufactured being thick at the heel, it is necessary to raise the bar E as soon as the tool H has passed the last nail-hole. This I accomplish by constructing the bed B with two inclined surfaces, K K, which, as the bed moves forward, raise the bar, which may be provided with rollers L L, at the proper moment. After the shoe has passed under the bar E it is caught by a finger, M, and thrown off at the rear as the bed returns to receive another.

Instead of the weight G, the bar E may be made stationary, and the bed B in two parts, between which are placed suitable springs.

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

1. A reciprocating bed, B, and a yielding or stationary bed, E, provided with the finger I and a suitable tool, H, the whole constructed and operating together in the manner substantially as described, for the purposes specified.

2. A reciprocating bed, B, having inclined surfaces K K, in combination with the yielding bar E, tool H, and finger I, the whole constructed, arranged, and operating together in the manner substantially as described, for the purposes specified.

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Witnesses:

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