

W. HAMILTON.

Machines for Making Ox Shoes.

No. 136,915.

Patented March 18, 1873.

Fig. 2.

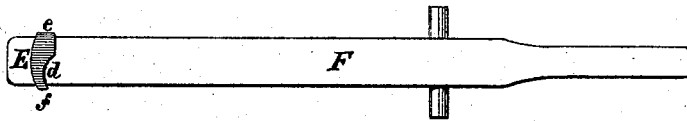


Fig. 1.

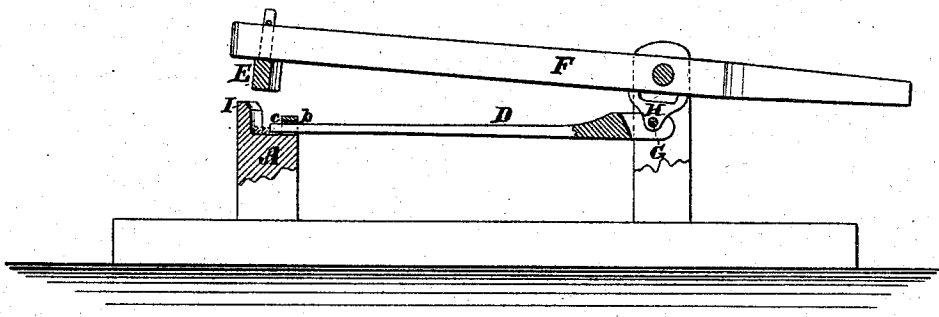
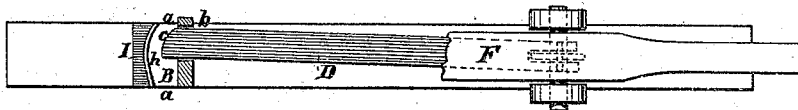


Fig. 4.

Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM HAMILTON, OF NEVERSINK, NEW YORK, ASSIGNOR TO HIMSELF
AND JAMES L. LA MOREE, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR MAKING OX-SHOES.

Specification forming part of Letters Patent No. 136,915, dated March 18, 1873.

To all whom it may concern:

Be it known that I, WILLIAM HAMILTON, of Neversink, in the county of Sullivan and State of New York, have invented a new and Improved Machine for Making Ox-Shoes, of which the following is a specification:

My invention consists of a trip-hammer and anvil, with faces adapted in size and form to hammer the upper and lower sides of the half-shoe for oxen, with which a horizontal reciprocating die is combined in such manner as to be actuated by the hammer-stock, and caused to hammer up the inner edge of the shoe, and form the concavity in it between the heel and toe; also, to shape the outer edge, the said horizontal hammer-die operating alternately with the trip-hammer.

Figure 1 is partly a side elevation and partly a sectional elevation of my improved machine. Fig. 2 is a plan of the under side of the trip-hammer stock and face of the hammer, showing the form of the latter. Fig. 3 is a horizontal section of the machine, showing the forms of the anvil-face and the horizontal hammer-die; and Fig. 4 is a plan of one of the shoes.

Similar letters of reference indicate corresponding parts.

A is the anvil of a trip-hammer, in the face of which is a socket, B, having the form of one-half of the bottom of the foot of an ox, with openings *a* through the side walls of the socket at the ends, of the shape corresponding to the heel and toe of the shoe; also, with an opening at *b*, which corresponds to the inside of the shoe between the heel and toe and near the latter. E is the face of the hammer, which corresponds in form exactly to the shape of the complete shoe. *c* is the side die for hammering up the edge to form the concavity in the inside of the shoe corresponding to the concavity *d* in the shoe between the heel and the toe *f*; also, to shape the outside edge. This

die is formed on the end of the horizontal bar D, and arranged in the opening *b* of the side wall of the socket B, while the other end, which is extended under the trip-hammer stock F to a point below the pivot, is jointed at G to an arm, H, extending downward from the hammer-stock, so that when the hammer E rises off the anvil the die *c* will be thrust forward against the edge of the bar of which the shoe is to be formed to produce the concavity *d*, the bar being at the same time bent into the concavity *h* in the wall I of the socket B to shape the outer edge of the shoe at the same time that the shape *d* is formed.

The bar of which the shoes are to be formed is fed into the socket B through one of the openings *a*, and held thereon till the shoe is forged. It is then taken out, the shoe is cut off, and it is again fed along as before for another shoe.

The upper and lower sides of the shoe being exactly alike, the machine will make both halves of the shoe, the two being reversed, as to each other, in respect of the sides for the right and left parts; but, if preferred, two machines may be used, with dies reversed in respect of the right and left forms, the one making the parts for one side, and the other the parts for the other side.

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

The combination, with a trip-hammer having a socket-die or anvil, B, and a hammer-die, E, constructed as described, of a die, *c*, arranged and operating substantially as specified.

WILLIAM HAMILTON.

Witnesses:

T. B. MOSHER,
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