(No Model.) 3 Sheets—Sheet 1.

D. WILCOX.

DIE FOR MOLDING HORSESHOE BLANKS.

No. 265,909. Patented Oct. 10, 1882.

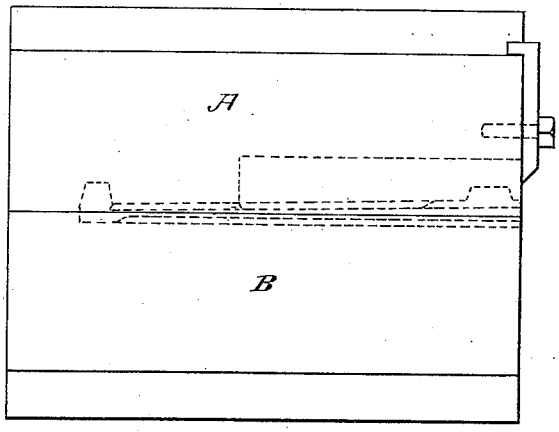

Fig 1.

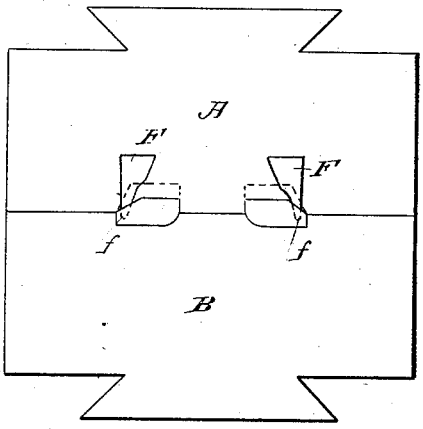

Fig 2.

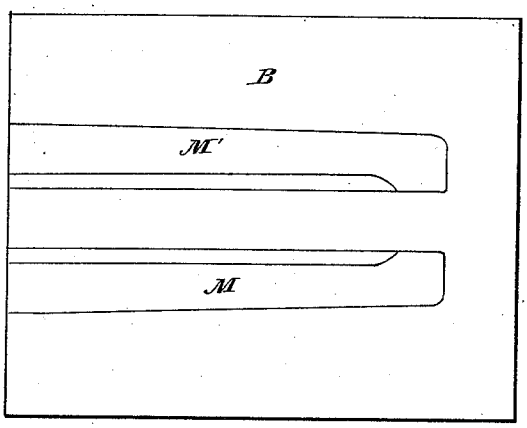

Fig 3.

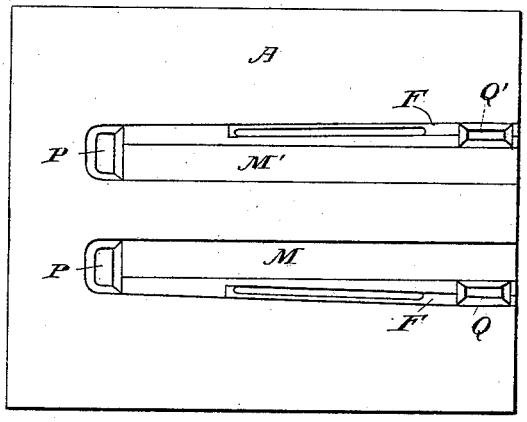

Fig 4.

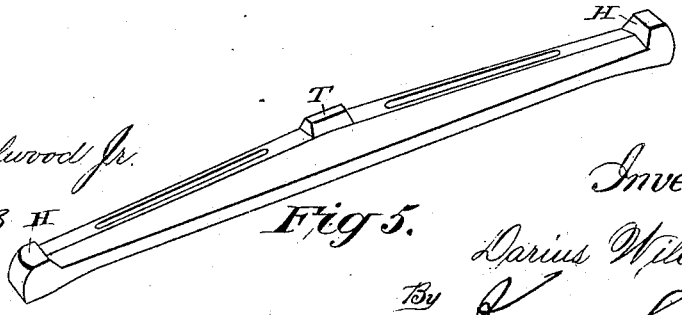

Fig 5.

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Fig 6.

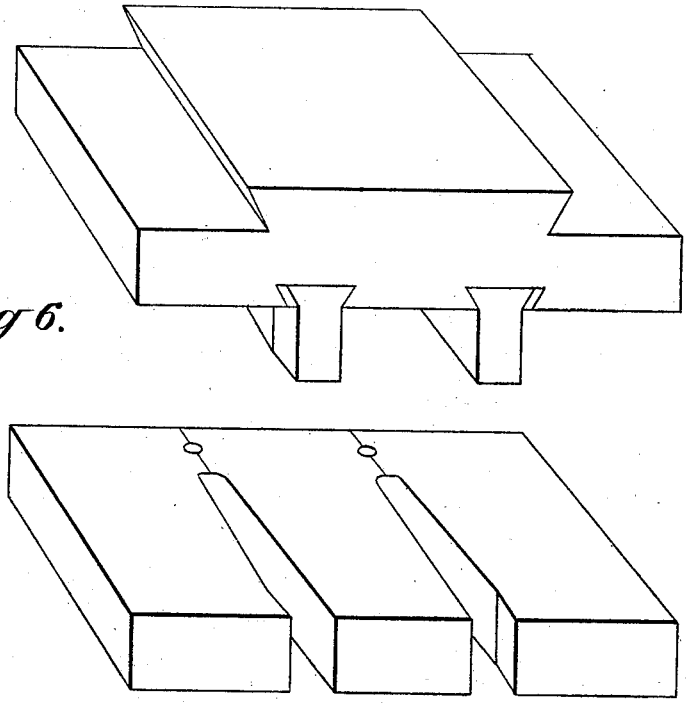

Fig 7.

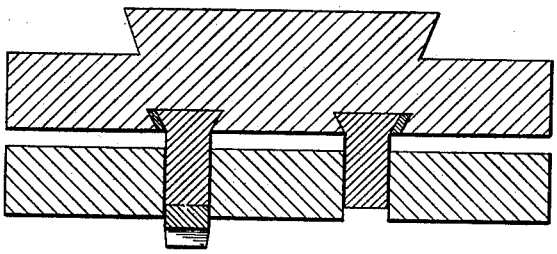

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Fig 8.

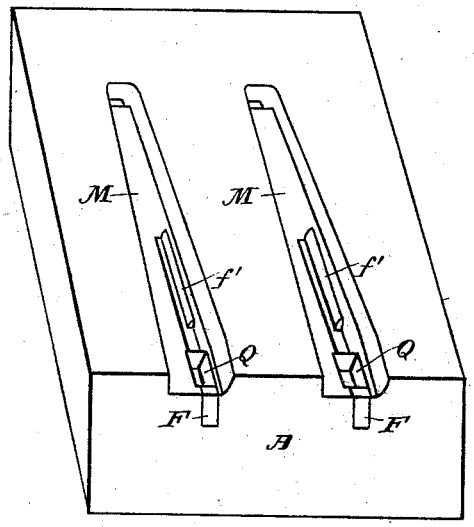
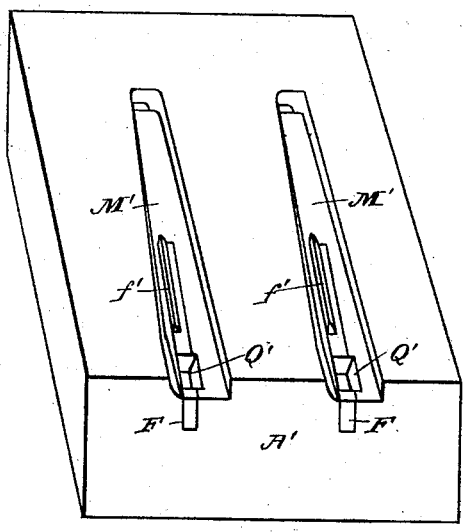


Fig 9.



Attest:
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UNITED STATES PATENT OFFICE.

DARIUS WILCOX, OF DERBY, ASSIGNOR OF ONE-HALF TO ISAAC P. HOWE, OF BIRMINGHAM, CONNECTICUT.

DIE FOR MOLDING HORSESHOE-BLANKS.

SPECIFICATION forming part of Letters Patent No. 265,909, dated October 10, 1882.

Application filed February 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, DARIUS WILCOX, a citizen of the United States, residing at Derby, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Dies for Making Horseshoe-Blanks, of which the following is a specification.

My invention consists in dies by which horseshoe-blanks can be completely formed and finished in readiness for bending, so as to produce a complete and salable horseshoe by bending in a suitable machine, without the necessity of subsequent stamping in finishing dies. To this end I employ a pair of dies having matrices to form the two ends of the blank in succession. Each matrix has at its rear end a suitable pocket to form the heel-calk, and near its front end a pocket to form a toe-calk, so that, somewhat more than one-half the blank having been formed at the first operation, the blank is removed to the second matrix and the toe-calk already formed is placed in the corresponding pocket of the second matrix, which thus serves to accurately gage the length of the finished blank. I prefer to stamp each end of the blank at two successive operations in two die-cavities, by which means I am enabled to produce rudimentary nail-creases in the first and complete them to their full depth at the second stroke.

In the accompanying drawings, Figure 1 is a side view of a pair of dies adapted for carrying out my invention, the shape of the die-cavities being indicated in dotted lines. Fig. 2 is a front end view of the same. Fig. 3 is a face view of the bed-die. Fig. 4 is a face view of the top die or punch. Fig. 5 is a perspective view of a blank. Fig. 6 is a perspective view of trimming-dies employed for removing the fins. Fig. 7 is a transverse section of the same. Figs. 8 and 9 are face views of dies employed for forming the bottom and creased horseshoe-blank by two operations on each end thereof.

The blank is preferably formed in inverted position, as shown; but the dies may be used either side up, as preferred.

In the illustrations shown, A represents the top die, and B the bed-die. The matrices M M′ of the top die are provided with pockets P P to form the heel-calks H H, and with additional pockets Q Q′ near the front end to receive and form the toe-calk. The nail-creases are produced by tongues *f f* projecting from blocks F F, which are made removable for repair or renewal. I prefer to employ for each end of the shoe two matrices for successive use with creasers *f′ f′* of unequal depth, so that rudimentary creases may be formed at the first operation and the crease completed at the second. One end of the blank is first formed, either at one operation in the matrix M by the dies shown in Figs. 2, 3, and 4, or at two operations in the successive matrices M M of the die shown in Fig. 8 and a corresponding bed-die, which is not shown, but is precisely similar to the die B, Fig. 3, excepting that the two cavities are of corresponding shape and position, instead of being reversed. The partly-formed blank is then placed with its unfinished end in the matrix M′ and the already-formed calk in the pocket Q′, to serve as a gage. The second end is then stamped, either at one operation in said matrix M′ of the die shown in Figs. 2, 3, and 4 or at two operations in the die shown in Fig. 9. It is then passed through the trimming-dies shown in Figs. 6 and 7, to remove the fins.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

The combination of a die having parallel matrices, containing front and rear pockets, and removable crease formers or ribs, arranged substantially as shown, with a second die provided with matrices having continuous or unbroken bottom faces, as and for the purpose set forth.

DARIUS WILCOX.

Witnesses:
OCTAVIUS KNIGHT,
WALTER ALLEN.