

J. FERGUSON.
HORSESHOE NAIL-PLATES.

No. 194,768.

Patented Sept. 4, 1877.

Fig. 1.

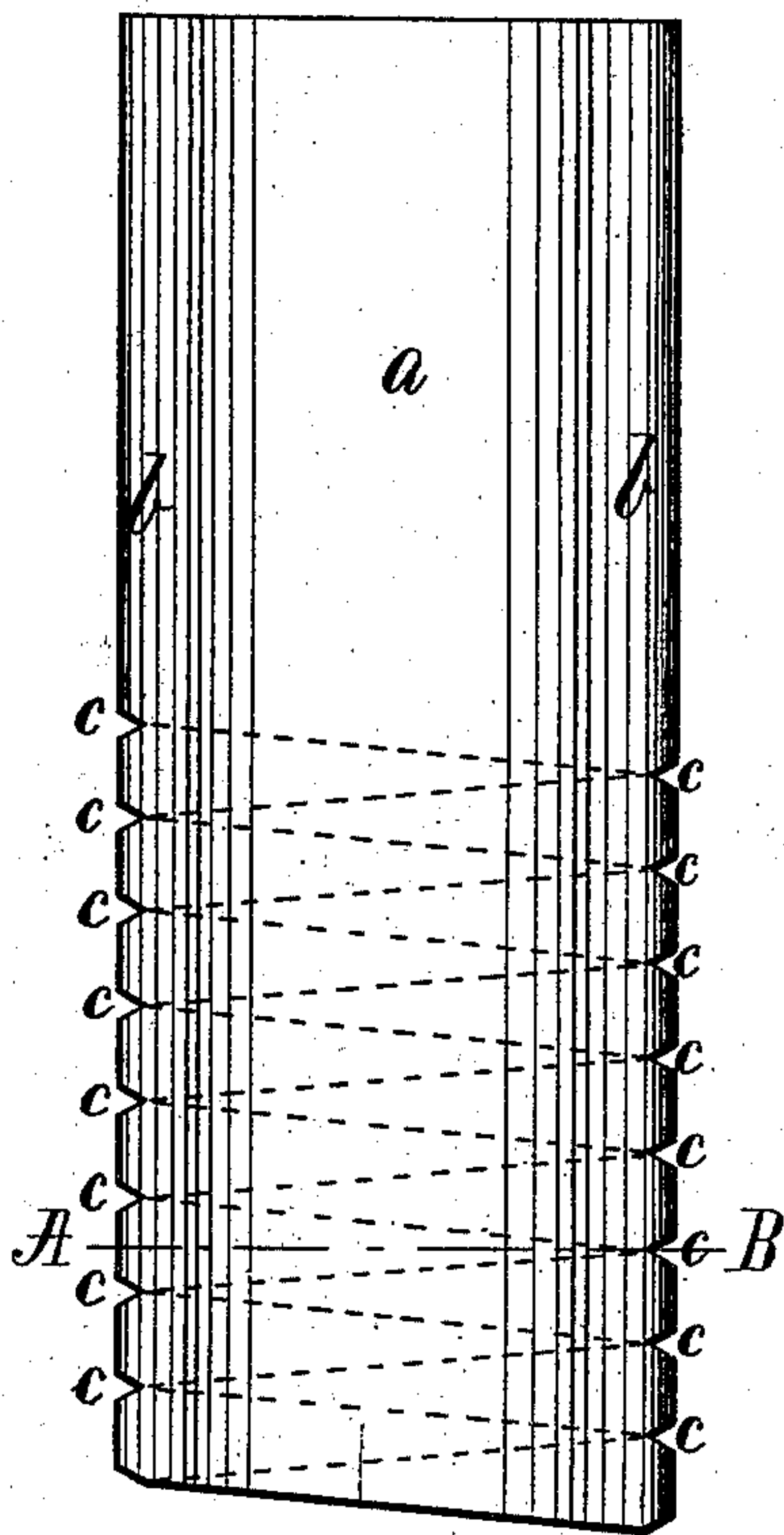
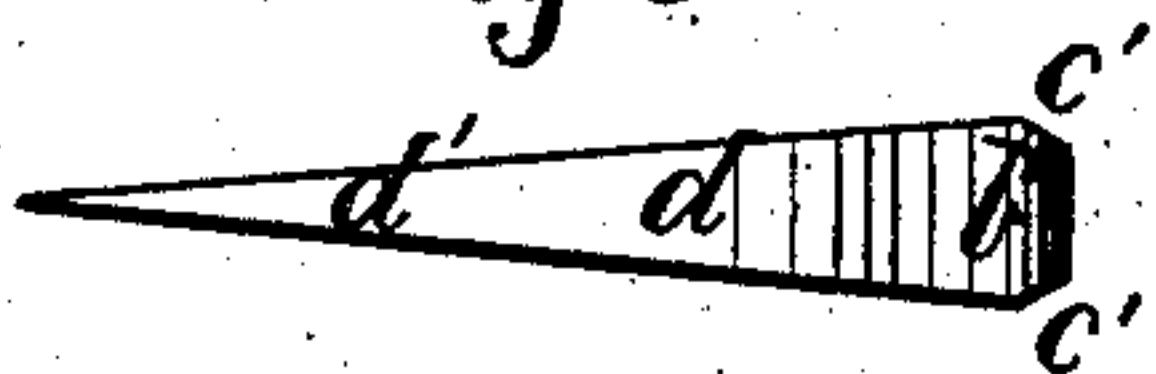


Fig. 2.



Fig. 3.



Witnesses:

Henry Chadbourne.
A. Torrey

Inventor:

James Ferguson
by Wm. Andrew
his atty.

UNITED STATES PATENT OFFICE.

JAMES FERGUSON, OF BRIDGEWATER, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO JOHN TURNER AND JAMES H. FERGUSON, OF SAME PLACE.

IMPROVEMENT IN HORSESHOE-NAIL PLATES.

Specification forming part of Letters Patent No. **194,768**, dated September 4, 1877; application filed June 5, 1877.

To all whom it may concern:

Be it known that I, JAMES FERGUSON, of Bridgewater, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Horseshoe-Nail Plates; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in nail-plates for horseshoe-nails; and consists in providing the ordinary ribbed plate with notches or incisions on the outer edges of the ribs, for the purpose of facilitating the insertion of the heads of the nail-blanks that are cut from such a plate within the dies of the rolls in which the head and shank of the nail are properly shaped of the desired form. Such nail-blanks, having tapering heads, allow of their being positively and easily run in between the recesses or engravings on the rolls, which has heretofore been difficult to accomplish with nail-blanks having square heads, on which projecting burrs are generally produced at the sharp corners thereof by the dullness of the shears or cutting-tools by which the said square-headed blanks are cut out. This difficulty is avoided by cutting the nail-blanks off from this my improved nail-plate, having notches or incisions on its outer edges.

The distance between center to center of each such notch or incision is equal to the width of the head of the nail-blank, and I prefer to locate each incision on one side of the nail-plate midway between two incisions on the opposite side of said nail-plate.

The nail-blanks cut from this my improved nail-plate have a tapering shank as well as a tapering head, tapering in opposite directions to each other.

The nail-blanks are cut from the apex of one incision on one side of the plate to the apex of the next incision on the opposite side of the plate.

The nail-plate is of that kind having parallel ridges on two opposite sides, and said ridges may extend on the upper part of the plate only, or on both upper and under parts,

and such a plate in itself forms no part of my invention.

The incisions in the edges of the plate may be made in any of the well-known manners—for instance, by punching, milling, rolling, shaping, &c.—without departing from the spirit of my invention.

On the accompanying drawings, Figure 1 represents a plan view of my improved nail-plate. Fig. 2 represents a cross-section on the line A B shown in Fig. 1, and Fig. 3 represents the shape of a nail-blank cut from my improved plate.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

a represents the ordinary nail-plate, provided with parallel ridges *b b*, in the usual way.

c c c represent the notches or incisions made in the ridges *b b* for the purpose aforesaid.

The dotted lines in Fig. 1 represent the manner in which the nail-blanks are cut off from the nail-plate—that is to say, from the apex of the incision on one side of the plate to the next apex of the incision on the opposite side of the plate.

d, in Fig. 3, represents a nail-blank cut off from my improved nail-plate, as above set forth; and it will be seen that such nail-blank has a tapering shank, *d'*, and a head, *b'*, having tapers *c' c'* on each side, each of the latter tapers representing one-half of the notches *c c* on the nail-plate.

In this manner I produce a nail-blank having a tapering head, by which such a nail-blank is better prepared for inserting its head within the dies of the roll, where the desired shape is given to the head and shank.

Having thus fully described the nature and construction of my invention, I wish to secure by Letters Patent, and claim—

The herein-described improved nail-plate, provided with notches or incisions *c c c* on its ridges *b b*, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own invention I have affixed my signature in presence of two witnesses.

JAMES FERGUSON.

Witnesses:

ALBAN ANDRÉN,

HENRY CHADBOURN.