J. SMITH.

HORSESHOE SWAGE.

No. 188,824. Patented March 27, 1877.

FIG. 1.

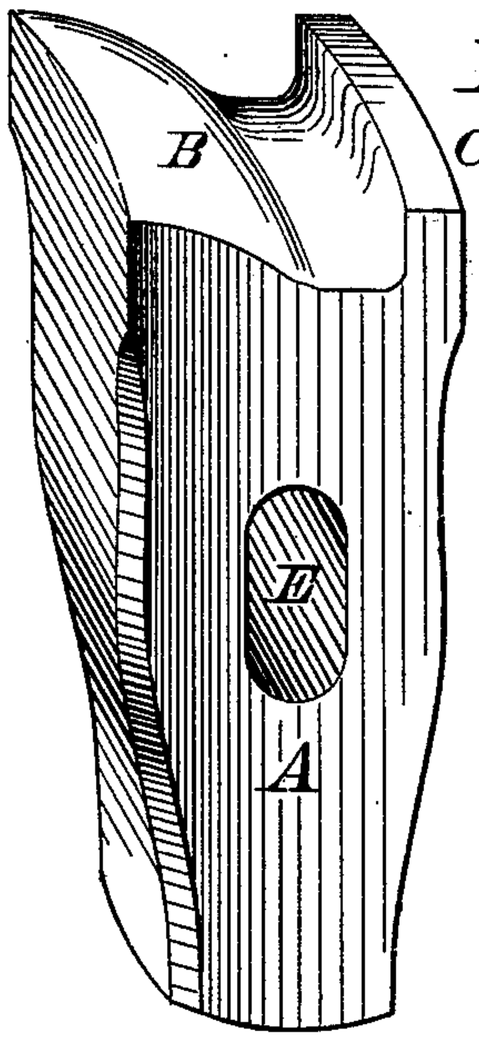
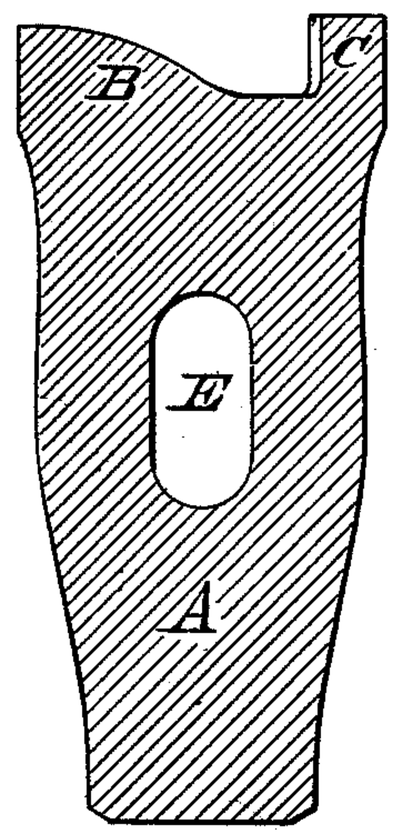


FIG. 2.



WITNESSES:

Frank Hirsch
John Preis.

INVENTOR:

John Smith
by Michael J. Stark
his attorney.

UNITED STATES PATENT OFFICE.

JOHN SMITH, OF BUFFALO, NEW YORK.

IMPROVEMENT IN HORSESHOE-SWAGES.

Specification forming part of Letters Patent No. **188,824**, dated March 27, 1877; application filed March 1, 1877.

To all whom it may concern:

Be it known that I, JOHN SMITH, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements on a Horseshoe-Swage; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to swages for shaping and beveling horseshoes; and it consists in the combination and arrangement, with a suitable body having an aperture for the insertion of a handle and a curvilinear face, of a projecting heel or gage part, wherewith the iron is reduced to proper shape and thickness, substantially as hereinafter fully described.

In the drawings, Figure 1 is a perspective view of my swage. Fig. 2 is a longitudinal transverse section of the same.

Like letters of reference indicate corresponding parts in both figures.

A is the body of a swage, made either entirely of cast-steel or of wrought-iron having a steel facing. This swage is provided with an opening for the insertion of a handle, and it has a face, B, corresponding in outline to the transverse section of the shoe to be produced, and in curvature to that of the circular part of the same. This face B has a heel part, C, curved on its inner nearly perpendicular side to fit the external shape of said shoe, and of a height in accord with its thickness. This heel C serves as a gage, so that when the swage is used the iron cannot be reduced below its proper thickness. This is accomplished by said heel C, which strikes the anvil as soon as the proper thickness is reached, and thereby prevents any further reduction. The heel C serves also as a gage to make the bevel of the shoe parallel with the external outline of said shoe, its nearly perpendicular front side serving as a guide for this purpose.

To properly swage a hand-made iron shoe which is produced from flat iron of proper width and thickness, and is, for many reasons, preferable to those made by machinery, the iron is bent to nearly the proper curve, and then subjected to the action of the swage, which is held with its heel C against the outer edge of the iron, and struck with a sledge-hammer in the usual manner. By this action of the swage the proper shape and bevel or curve are very rapidly imparted to the shoe and a shoe of superior finish and appearance produced. After the shoe is thus properly manipulated it is ready for the various subsequent operations, viz., the swaging of the nail-crease, bending and welding of the calks, &c.

In the present practice of producing the necessary bevel on hand-made horseshoes the shoe is forged by successive blows. This mode is at best a very laborious process, and, besides requiring considerable skill, produces a comparatively rough shoe, while with my swage it is made perfectly smooth, and in considerably less time. It furthermore enables a blacksmith of limited skill to produce perfect shoes, thus enabling a manufacturer of that class of horseshoes to employ unskilled labor in the first stage of their manufacture, which results in a further reduction of their cost of production.

It is evident that different swages will be used for the various sizes and styles of horseshoes, as necessity demands.

Having thus fully described my invention, I desire to secure to me by Letters Patent of the United States—

The hereinbefore-described swage for shaping horseshoes, consisting of the body A, having an opening for the insertion of a handle, and a curvilinear face, B, provided with the heel C, substantially as and for the use and purpose set forth and described.

In testimony that I claim the foregoing as my invention I have hereto set my hand and affixed my seal in the presence of two subscribing witnesses.

JOHN SMITH. [L. S.]

Witnesses:

MICHAEL J. STARK,

FRANK HIRSCH.