

W. FERGUSON.
Saw-Swages.

No. 137,767.

Patented April 15, 1873.

Fig. 1.

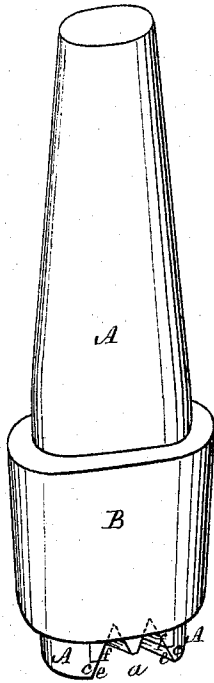


Fig. 2.

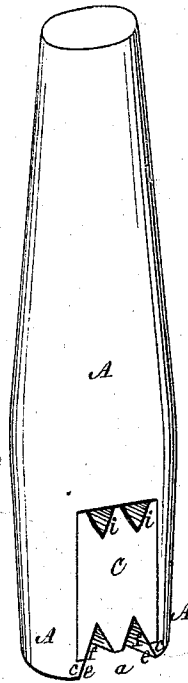
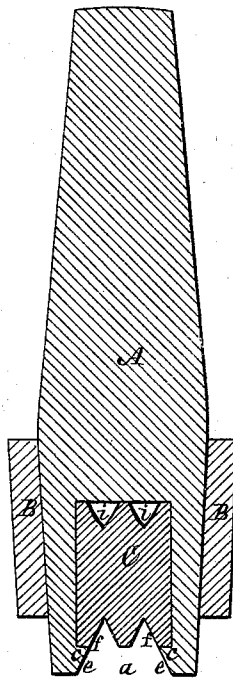


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM FERGUSON, OF CANTON, OHIO, ASSIGNOR TO HIMSELF, THOMAS A. LATHROP, AND THOMAS H. REEVES, OF SAME PLACE.

IMPROVEMENT IN SAW-SWAGES.

Specification forming part of Letters Patent No. 137,767, dated April 15, 1873; application filed March 21, 1873.

To all whom it may concern:

Be it known that I, WILLIAM FERGUSON, of Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Swages; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents a perspective view of the swage. Fig. 2 represents a perspective view of the swage-stock with the die in place and the clamping-ring removed. Fig. 3 represents a section through the swage.

My invention consists in combining a removable and reversible die-block with a swage-stock and clamping-band, whereby several varieties of dies may be used or made interchangeable, as occasion may require.

To enable others skilled in the art to make and use my invention I will proceed to describe the same with reference to the drawing.

A represents the swage-stock, which may be made of wrought or malleable iron or steel, in the lower end of which is made a rectangular opening or mortise, the under side *a* of which is so cut away as to leave shoulders, as at *c*, and so that the bevel *e* of the cut-away part may correspond with the beveled or inclined side *f* of the die in the die-block C. This die-block C is of rectangular form, so as to nearly fit into the rectangular opening or mortise in the stock A, and be held therein by the shoulders *c*, as shown. The die-block

must, of course, be slipped into its seat laterally or sidewise, and when the clamping-band B is put on and tightened the die-block is held very rigidly in the stock.

The dies may differ in size and form, some of them, as *i*, more full or rounding for upsetting the point of a saw-tooth or spreading it, and the straight-sided ones, as at *f*, may be used for straightening and finishing the saw-teeth. As shown in the drawing the die-block C has dies at each end only, and is reversible end for end, so as to bring such dies to the front, as may be required.

There is no reason why the die-block might not be square, and fit into a square mortise, and so have all four of its sides wrought into swaging-dies of such forms as may be required and of different sizes; or instead of a square or rectangular die-block an angular or many-sided die-block may be used, the recess in the die-stock being of a corresponding shape or form, and held in place by the shoulders *c* in the recess, as hereinabove described.

Having thus fully described my invention, what I claim is—

The combination of a swage-stock having a recess in it, and shoulders *c* therein, the clamping-ring or band, and a removable and reversible die-block with dies therein, as and for the purpose described and represented.

WILLIAM FERGUSON.

Witnesses:

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