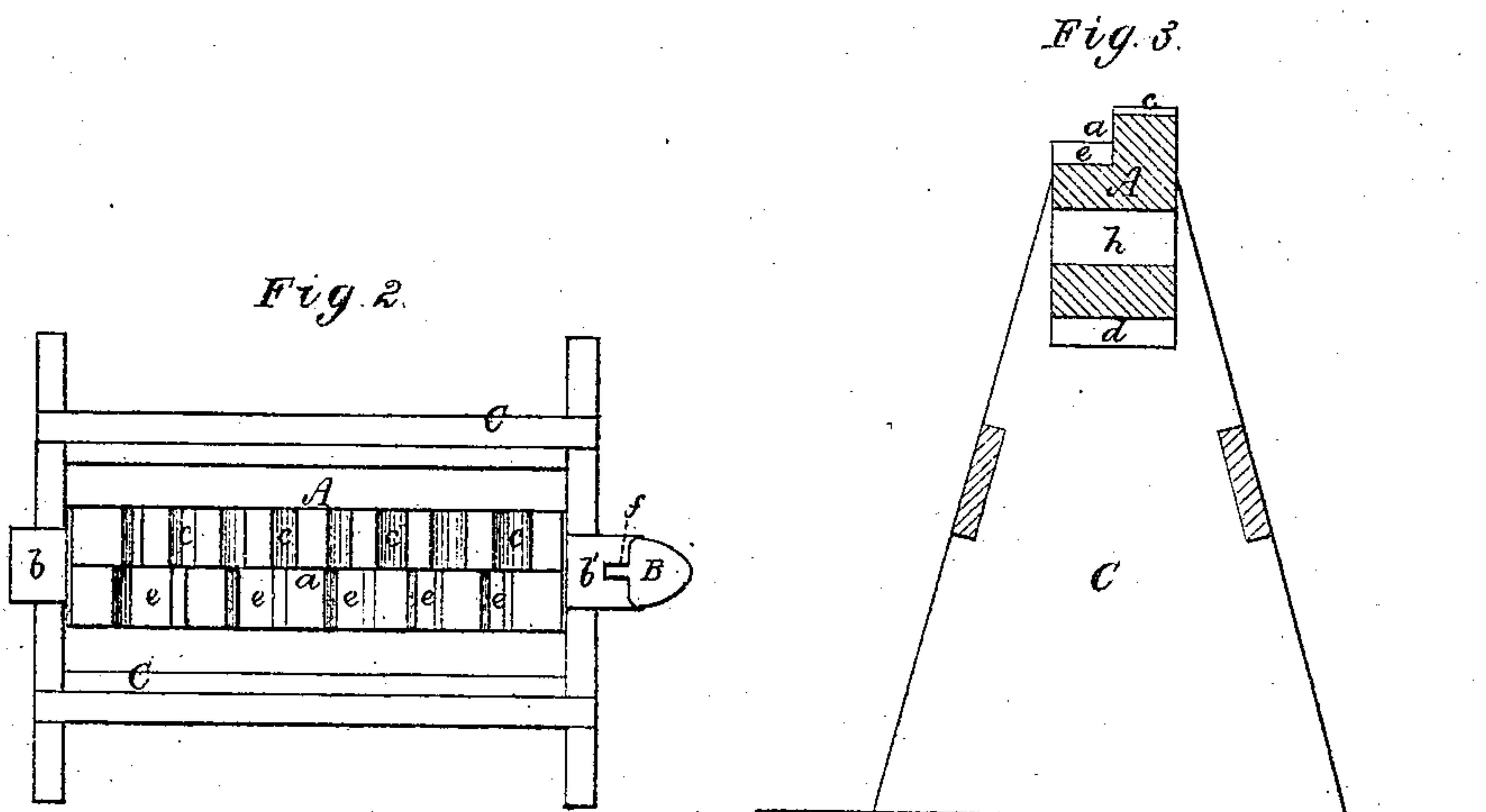
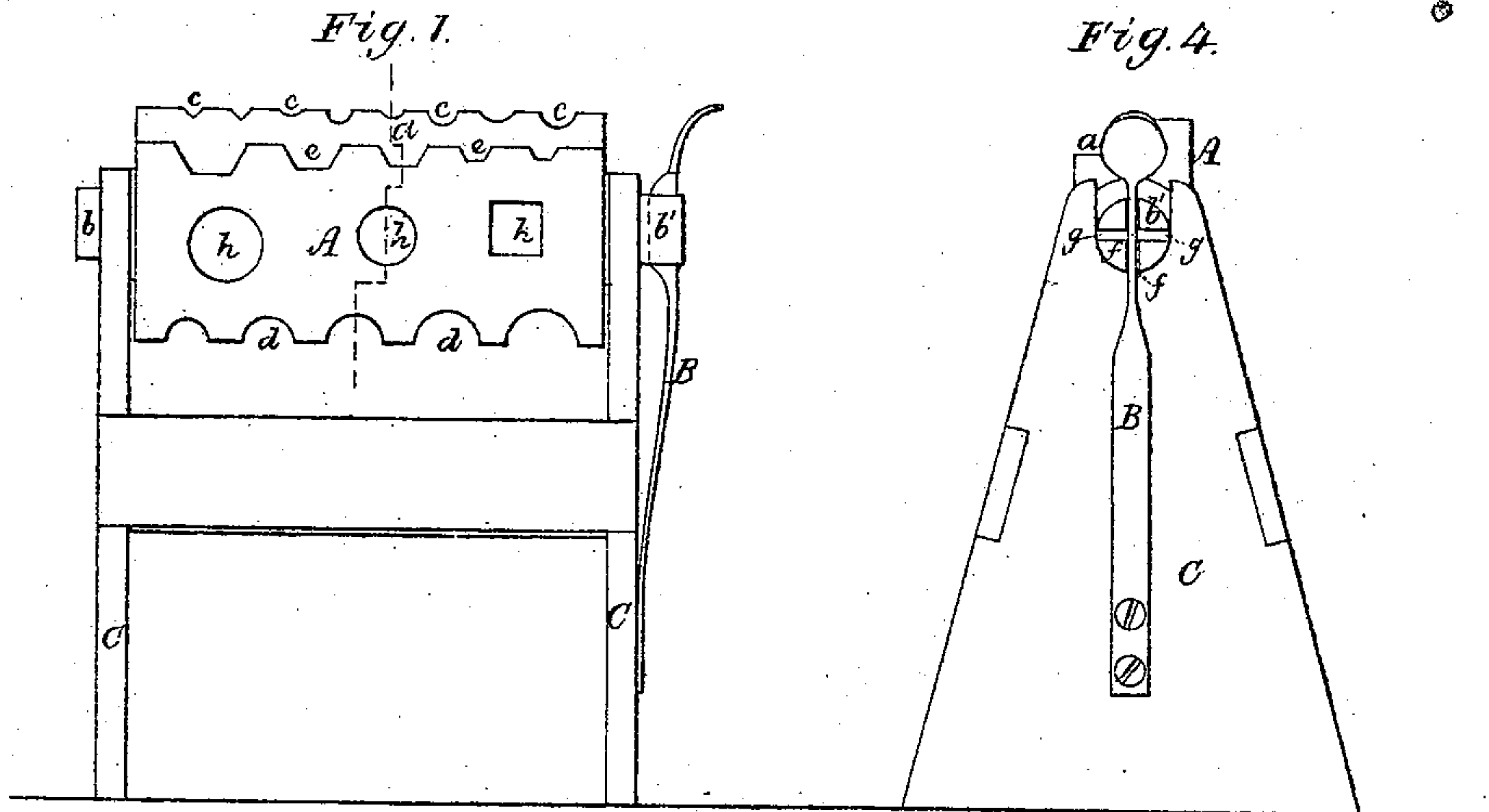


B. A. ELLISON.
Reversible Anvils.

No. 152,351.

Patented June 23, 1874.



Witnesses.
S. W. Piper.
L. B. Höller.

Benj. A. Ellison.
by his attorney
N. H. Edger.

UNITED STATES PATENT OFFICE.

BENJAMIN A. ELLISON, OF EXETER, NEW HAMPSHIRE.

IMPROVEMENT IN REVERSIBLE ANVILS.

Specification forming part of Letters Patent No. 152,351, dated June 23, 1874; application filed April 1, 1874.

To all whom it may concern:

Be it known that I, BENJAMIN A. ELLISON, of Exeter, of the county of Rockingham and State of New Hampshire, have invented an Improved and useful Reversible Swage-Block or Anvil; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, Fig. 2 a top view, Fig. 3 a transverse section, and Fig. 4 an end elevation, of the swage-block and its supporting-frame.

In such drawings, A denotes a block of metal, in the form of a rectangular prism, rabbeted along one edge, as shown at *a*, and having two journals, *b b'*, projecting from its opposite ends. Furthermore, the block has a series of swage notches or recesses, *c* or *d*, made in each of its opposite edges, such varying in width and depth, as occasion may require. It also has another series of swage recesses or notches, *e*, leading from the rabbet, as shown. In other words, the rabbeted edge is provided with two series of such notches, the lowermost of which are closed at their inner ends, such closing of them being convenient for finishing the end of a bar during the process of swaging it. The rabbet also causes the notches of one series to be entirely above those of the other, with a space or distance between the two series, such enabling any one of the upper series to be used for some kinds of work or articles which could not be swaged by it were it on a level with the notches of the other series. One of the journals is nicked or slitted diametrically across its end, with two slots, *f g*, at right angles to each other, such being to receive a spring-latch, B, fixed to the end of the supporting-frame C of the swage-block, and arranged with it and the swage-block in manner as shown. Furthermore, the swage-block also has a series of holes, *h*, made in or through it transversely from one or both sides of it, such holes being what may be termed "punch-holes," as they enable the block to be used in supporting a plate or bar while being punched, the bar or plate resting upon the block and

over one of the holes, so that the part separated by the punch may be driven through the hole.

The block may be revolved in its frame so as to bring either edge or side of the block uppermost, as occasion may require, the block being held in either of its four positions by the spring-latch, and one of the slits for its reception.

A swage-block so made is very useful for blacksmiths, especially in the making of nuts or other forged articles of metal for carriages.

The block may be made without the rabbet, and with but one set of notches in each of its opposite edges; but it will not be so extensively useful as when it is connected with the rabbet, and two ranges of notches in one edge, disposed as represented.

I do not claim a rotary swage made as described in the Patent No. 88,125, as my swage is not a circular block with swage-notches formed in its periphery in the direction of its axis, my swage being a rectangular block, having the notches in its opposite edges, and each in a direction at right angles to the axis of motion, or of the journals of the block. This enables me to bring all of one range of notches in one horizontal line, and avoids the necessity of turning the block preparatory to the use of each notch.

I claim—

1. A rotary swage-block having not only a series of punch-holes, *h*, made in or through it laterally from one or both sides of it, but provided with pivots or journals *b b'* at its opposite ends, and two series of notches, *c d*, arranged in its opposite edges, all being substantially as described.

2. A rotary swage-block, not only rabbeted on one edge, and there provided with two series of swage-notches, *c e*, all substantially as represented, but provided with a series of swage-notches, *d*, in its other edge, and two journals, *b b'*, projecting from its ends, all being essentially as specified.

BENJAMIN A. ELLISON.

Witnesses:

R. H. EDDY,
J. R. SNOW.