A. SCHNEIDERLOCHNER.

Machine for Making Bridge-Eyes.

No. 204,381. Patented May 28, 1878.

Fig. 1.

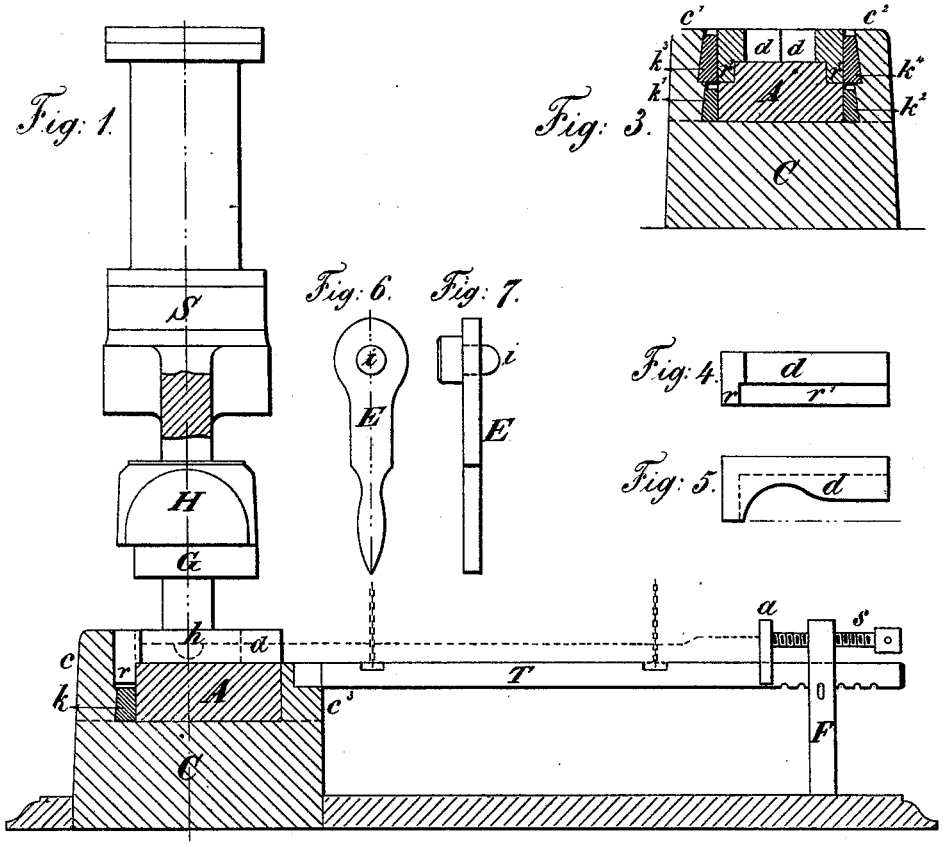


Fig. 3.

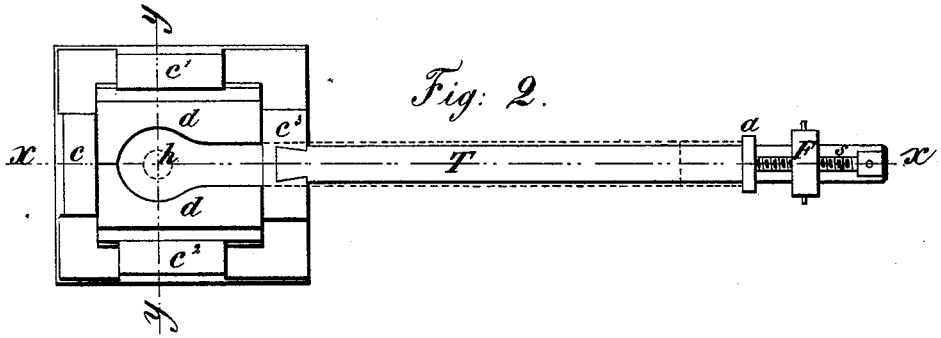
Fig. 6.

Fig. 7.

Fig. 4.

Fig. 5.

Fig. 2.



Witnesses:

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ANTONY SCHNEIDERLOCHNER, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR MAKING BRIDGE-EYES.

Specification forming part of Letters Patent No. **204,381**, dated May 28, 1878; application filed February 13, 1878.

To all whom it may concern:

Be it known that I, ANTONY SCHNEIDERLOCHNER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Machines for Making Bridge-Eyes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 represents a vertical section taken at line *x x* of Fig. 2. Fig. 2 is a top view. Fig. 3 represents a vertical section taken at line *y y* of Fig. 2; and Figs. 4, 5, 6, and 7 represent details.

This invention relates to the class of machines which are used for making eyes on bridge-links or other similar pieces; and consists in the combination and construction of the parts hereinafter specifically described, and pointed out in the claims.

In the accompanying drawings, S represents the frame of a steam-hammer, with its vertically-reciprocating ram H, to which latter the follower G is fixed. C is a square anvil-block, having the side wings c c^1 c^2 c^3 to receive the anvil A and the half-dies *d d*. The anvil A is first secured to the block C by means of the keys k k^1 k^2, after which the half-dies *d d*, with their vertical ribs *r r'*, are lodged into corresponding grooves formed between the anvil A and the wings c c^1 c^2. By means of similar keys k^3 k^4 the die-pieces *d d* are tightly pressed against the anvil A, and thus their position secured. A table, T, to support the iron bar is fixed to the front wing c^3 of the anvil A. The rear part of this table is provided with a movable foot, F, having the screw *s* and the guide-plate *a*. The rear of the bar or link bears against the guide-plate *a*, as shown in dotted lines by Figs. 1 and 2.

The object of the movable foot F and the screw *s* is to obtain the exact length of the link or piece, and to prevent the latter from being made too long, through the action of the hammer during the work of piling and finishing.

As to the working of the machine, it is as follows: Supposing the dimensions of the link or piece to be made are known, the required die-pieces set in, and the foot F, with its screw *s* and guide *a*, moved into its proper place to maintain the given length, the necessary iron to form the eye or head is then piled on the end of the bar. This can be done in different ways. According to the thickness of the bar, the additional pieces are welded either on both sides or only on the top side. The bar being kept tightly in its place by the neck of the dies *d d* and the guide *a*, the pile of the iron to form the eye is driven sideward, and will fill up the form of the die; but in order to obtain this as perfectly as possible, and to make the best use of all the metal, I use a templet, E, Figs. 6 and 7, having a half-spheric punch, *i*, to force the iron sideward, a half-spheric hole, *h*, being found exactly at the center of the head, and at the place where the eye-hole has to be drilled. By this process the loss of a portion of the metal is avoided and the hardness and strength of the piece increased, the fibers of the iron having been forced sideward, and are not cut through by drilling the eye-hole.

The usefulness of the machine is fully justified by its simple and practical construction, no bolts or screws being required for the fastening of the dies or anvil, as is the case in other machines for the performance of the same kind of work.

A further great advantage obtained by this arrangement is, that the piece is made direct to its exact length, and no upsetting of the iron is done.

What I claim as new is—

1. The combination of the anvil-block C, having the wings c c^1 c^2 c^3, as described, the anvil A, the half-dies *d d*, with ribs *r r'*, overhanging the anvil, and the keys, substantially as described and set forth.

2. The table T, provided with the movable foot F and the screw *s* and guide *a*, in combination with the anvil-block C, as described, and for the purpose set forth.

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Witnesses:

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