(No Model.)

# G. H. MEADE.

## ANVIL FOR RIVET SETTING MACHINES.

No. 325,689. Patented Sept. 8, 1885.

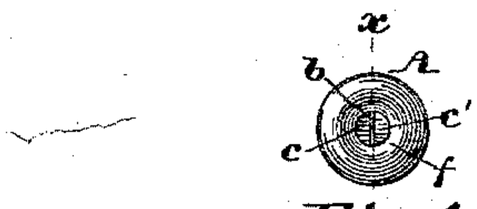


Fig. 1.

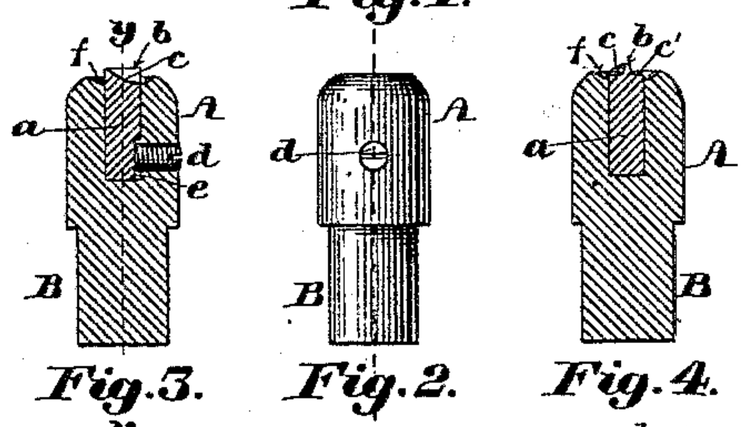


Fig. 3. Fig. 2. Fig. 4.

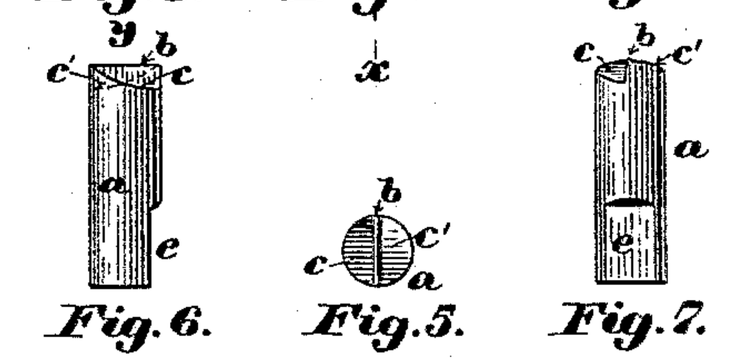


Fig. 6. Fig. 5. Fig. 7.

**Witnesses:**

Walter G. Lombard.

William H. Parry.

**Inventor:**
**George H. Meade,**
**by N. C. Lombard,**
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# UNITED STATES PATENT OFFICE.

GEORGE H. MEADE, OF QUINCY, ASSIGNOR TO MELLEN BRAY, OF NEWTON, MASSACHUSETTS.

## ANVIL FOR RIVET-SETTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 325,689, dated September 8, 1885.

Application filed October 15, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. MEADE, of Quincy, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Anvils for Rivet-Setting Machines, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to anvils for rivet-setting machines; and it consists in certain novel constructions and arrangements of parts whereby rivets made with a wedge-shaped shank (as fully described in another application of even date herewith) may be readily set in any suitable material by splitting or dividing said shank and forcing one portion thereof in one direction, while the other is being forced in the opposite direction, all of which will be readily understood by reference to the description of the drawings, and to the claims to be hereinafter given.

Of the drawings, Figure 1 represents a plan of my improved anvil. Fig. 2 represents an elevation of the same. Fig. 3 represents a section on line *x x* on Figs. 1 and 2. Fig. 4 represents a section on line *y y* on Fig. 3. Fig. 5 represents a plan of the central core thereof enlarged. Fig. 6 represents a side elevation of the same, and Fig. 7 represents a front elevation of the same.

A is the main portion of the anvil, which is provided with the shank B, by which it is firmly secured to the machine for setting the rivets. The main portion A is provided at its upper end with a cylindrical recess or cavity, in which is secured the central core or tool, *a*, of a diameter equal to the diameter of the rivet to be set. This tool *a* has its upper end provided with a straight knife-edge, *b*, extending from side to side through the center thereof, and upon either side of said knife-edge *b* it is provided with an inclined plane, *c c'*, each of which inclines in a direction opposite to the other, as plainly shown in Figs. 5, 6, and 7. The tool *a* is firmly held from moving about its axis in the recess by the set-screw *d* bearing against the flat portion *e*, in an obvious manner. The upper end of the main portion A is also provided with a slight concavity, *f*, which surrounds the tool *a*, and has its lower inner edge contiguous and even with the lower edges of the inclined planes *c c'*. The shank B being firmly secured to the bed of the rivet-setting machine, (not shown,) a rivet, constructed substantially as described in the before-mentioned other application, is fed into position above the anvil, so that the cutting-edge of said wedge-shaped shank will be at right angles with the cutting knife-edge *b*, and the center of the length of said wedge-shaped shank will be directly above the center of the length of said cutting knife-edge *b*, and then the said rivet is firmly forced through the material into which it is destined to be set against said knife-edge *b* until the shank thereof is split or divided, and one portion thereof is forced in one direction by the inclined plane *c*, while the other is forced in the opposite direction by the inclined plane *c'* until these portions of the shank of the rivet come in contact with the upwardly-curved surface formed by the concavity *f* in the upper end of the main portion A, when these ends are forced upward and forced into the material, thus firmly clamping between the head and themselves any material in which they may have been placed.

The inclinations *c* and *c'* are shown in the drawings as being curved; but each or both of them may be straight and flat inclined planes without in any way affecting the principles of my invention.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. An anvil for setting rivets, having its upper end provided with two plane or curved surfaces inclined in directions opposite to each other, substantially as shown and described.

2. An anvil for setting rivets, provided with the inclined plane or curved surfaces *c*, *c'*, and *f*, all arranged substantially as shown and described.

3. An anvil for setting rivets, provided with a suitable cutting-knife extending through the center thereof, and also provided with two plane or curved surfaces, each inclining

in a direction opposite to the other, substantially as shown and described.

4. An anvil for setting rivets, provided with the knife *b* and the inclined planes or curved surfaces *c*, *c'*, and *f*, all arranged substantially as shown and described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 13th day of October, A. D. 1884.

GEORGE H. MEADE.

Witnesses:

N. C. LOMBARD,

WALTER E. LOMBARD.