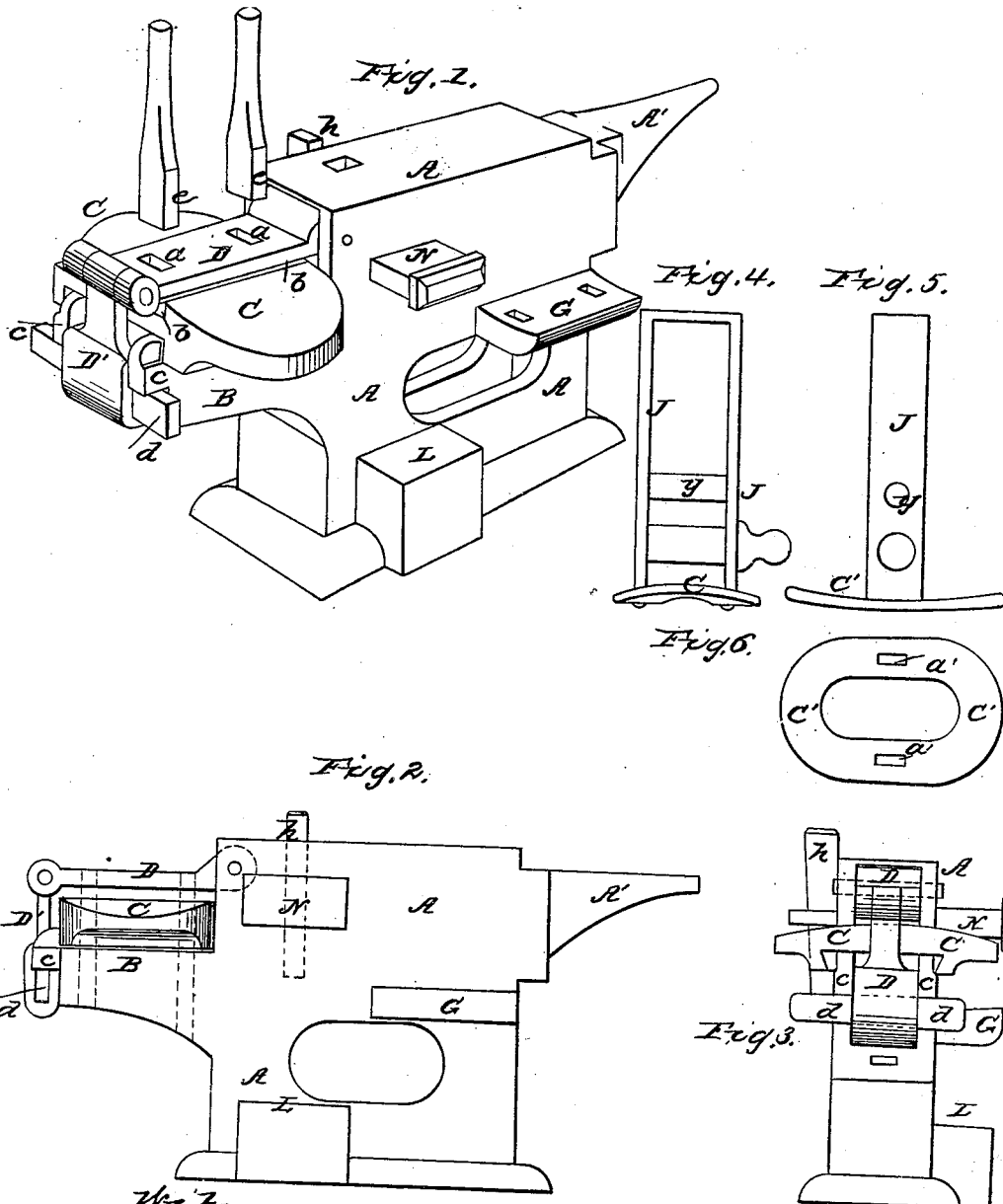


P. L. WEIMER.

Bending and Punching Drawhead Plates.

No. 50,756.

Patented Oct. 31, 1865.



Witnesses:
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UNITED STATES PATENT OFFICE.

PETER L. WEIMER, OF LEBANON, PENNSYLVANIA.

BENDING AND PUNCHING DRAW-HEAD PLATES.

Specification forming part of Letters Patent No. 50,756, dated October 31, 1865.

To all whom it may concern:

Be it known that I, PETER L. WEIMER, of Lebanon, in the county of Lebanon and State of Pennsylvania, have invented a Machine for Bending and Punching the Oval Plates of Draw-Heads and Securing these Plates to their Frames; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine. Fig. 2 is an elevation of one side of the machine. Fig. 3 is an elevation of one end of the machine. Figs. 4, 5, and 6, are views of the draw-heads and the oval plates.

Similar letters of reference indicate corresponding parts in the several figures.

In the specification of my application for a patent for a mode of constructing the rectangular frames of the draw-heads of railroad-cars I refer to a machine which is intended for finishing these draw-heads by applying the oval plates to the frames. I will now proceed to describe this machine in order to enable others skilled in the art to fully understand its construction and operation.

In the accompanying drawings, A represents the body of an anvil, which is provided with a horn, A', and constructed with vertical sides, as shown in Figs. 1, 2, and 3. This anvil has a projection, B, on the opposite end to the horn, A', which projection is adapted for receiving upon its horizontal face an elliptical former, C, having a curved face which conforms to the curvature of the oval plate C', Figs. 4, 5, and 6. This elliptical former C is attached to the projection B by means of a dovetail connection, as shown in Figs. 1 and 3, so that it can be removed at pleasure, and yet when it is applied to the projection it will be secure.

Directly over the plate C is a hinged bar, D, having two perforations, *aa*, through it, which correspond to the holes *a' a'* through the oval plate C', and also with the holes which are made through a die-plate, *b*, on the former C. The free end of the hinged bar D is hinged to a loop, D', which drops down between the projections *cc*, and receives through it and under these projections a wedge-key, *d*, as shown in Figs. 1, 2, and 3. By means of this arrangement the plates C' are secured firmly upon the

former C previously to bending and punching them. The plates C' are punched by means of rectangular punches *ee*, Fig. 1, which are driven through the holes *a a* of the hinged guide-bar D, and through vertical holes beneath the die-plate *b*, as indicated in Fig. 2. After punching the plates C' they are beaten down upon the former C, and thus made to conform to its curved surface, as shown in Figs. 3 and 5.

On the front vertical side of the anvil A there is cast a concave shelf, G, having two mortises through it, as shown in Fig. 1. After the safety-pins Y are secured in the frames of the draw-heads these frames are ready to receive the oval heads C', which are riveted to the open tenon ends of the frames, as follows: The two tenon ends of the frame J are heated and the tenons inserted into the mortises in the shelf G and driven down hard, so as to give the shoulders of the frame which abut against the curved plate C' the same curvature as this plate, thus allowing the said shoulders to fit snugly against the inside surface of plate C', as shown in Fig. 5. The ends of the frame J are again heated, and the closed end thereof placed upon the bed-piece L. The bolt N, which passes transversely through the anvil A directly above this bed-piece L, is now used to secure the frame J in position, while the oval plate C' is riveted to said frame. The bolt N is drawn tightly into its place by means of a wedge-key, *h*, (shown in Figs. 2 and 3.) This last operation completes the draw-heads, and they thus present the appearance shown in Figs. 4, 5, and 6.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The construction of the anvil-block A with a projection, B, in combination with the former C, and holding-down bar D, substantially as described.

2. The curved-face mortised shelf G, applied to the anvil-block substantially as described.

3. The bed-piece L and movable bolt N, applied to the anvil-block A substantially as described.

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Witnesses:

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