C. H. BABCOCK.

Dies for Making Flap-Axles.

No. 221,208. Patented Nov. 4, 1879.

Fig. 1.

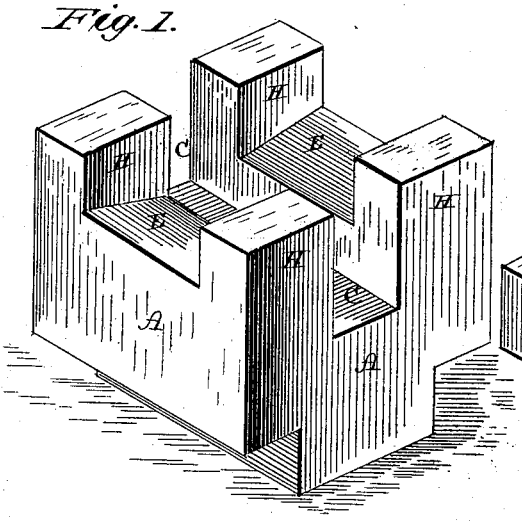


Fig. 2.

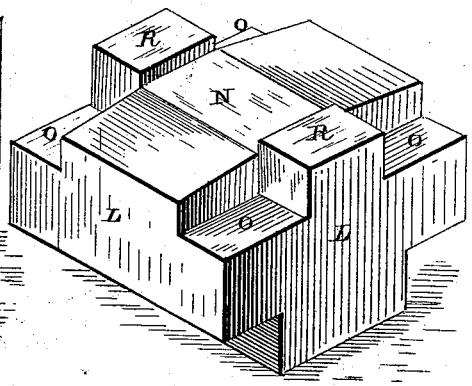


Fig. 3.

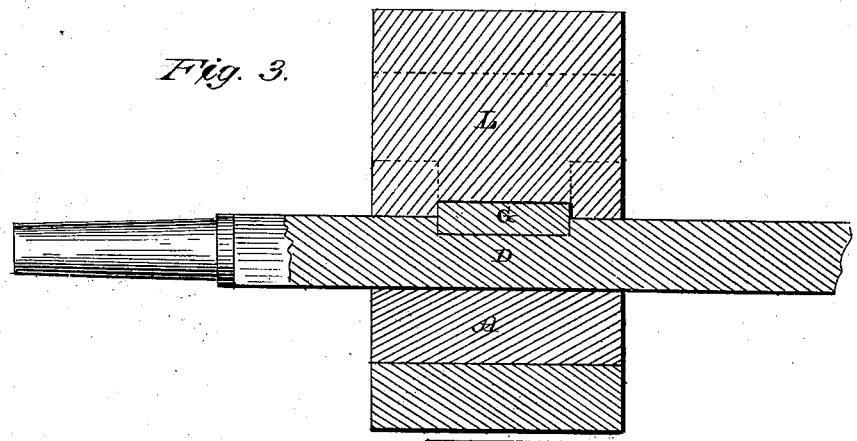
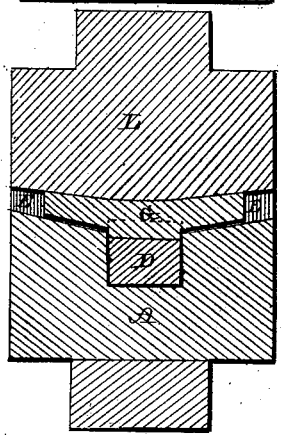


Fig. 4.



Witnesses
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per
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Atty

UNITED STATES PATENT OFFICE.

CHARLES H. BABCOCK, OF WEST CHESHIRE, CONNECTICUT.

IMPROVEMENT IN DIES FOR MAKING FLAP-AXLES.

Specification forming part of Letters Patent No. **221,208**, dated November 4, 1879; application filed June 26, 1879.

To all whom it may concern:

Be it known that I, CHARLES H. BABCOCK, of West Cheshire, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Dies for Making Flap-Axles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in dies for making flap-axles; and it consists in the combination of a die having a recess in which the axle rests, and a recess, running at right angles to the one in which the axle rests, to receive the flap, and a die which has a projection to enter the recess in which the flap rests, and smaller projections to enter the top of the recess in which the axle rests, whereby the flap may be secured to the axle by a single stroke, as will be more fully described hereinafter.

Figure 1 is a perspective of the top of the lower die. Fig. 2 is a perspective of the lower side of the upper die. Figs. 3 and 4 are vertical cross-sections of the two dies, with the axle and flap shown in position

A represents the lower die, which has the groove C running entirely across its face to receive the axle D. Cut in the top of this die, and extending at right angles to the groove C, is a groove, E, which groove is much wider than the one C, but not so deep, and in which groove E is placed the flap G, which is to be welded to the top of the axle. The bottom of the groove E will be shaped according to the shape which it is desired to give to the flap. At each corner of this die, extending any suitable distance above both the flap and the axle, is a projection, H, as shown.

The upper die, L, has a recess, O, made at each one of its corners, so as to receive the projection at the corner of the lower die, and has running entirely across its bottom the flange or projection N, which corresponds in width, thickness, and length to the groove E made across the face of the lower die. On each side of the center of this flange N is a projection, R, which projects down below the bottom of the flange N sufficiently far to rest upon the top of the axle, while the flange N rests upon the top of the flap.

The axle and flap, having been heated to a welding-heat, are placed in the lower die, as shown, when the upper die descends upon them one or more times and welds the flap solidly to the axle. Owing to the peculiar shape of the two dies, as here shown, the flap is not only welded in place, but it is straightened and finished or formed at the same time. These dies are also intended to form the flap when it is made solid with the axle by giving it a suitable shape and finish while hot.

Having thus described my invention, I claim—

The combination of a lower die, A, having a groove, C, across its face to receive the axle, and a groove, E, at right angles thereto, to receive the flap, with the upper die, L, having a flange or projection, N, to fit in the groove E, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of June, 1879.

CHARLES H. BABCOCK.

Witnesses:

J. B. WEBB,

EDMUND BABCOCK.