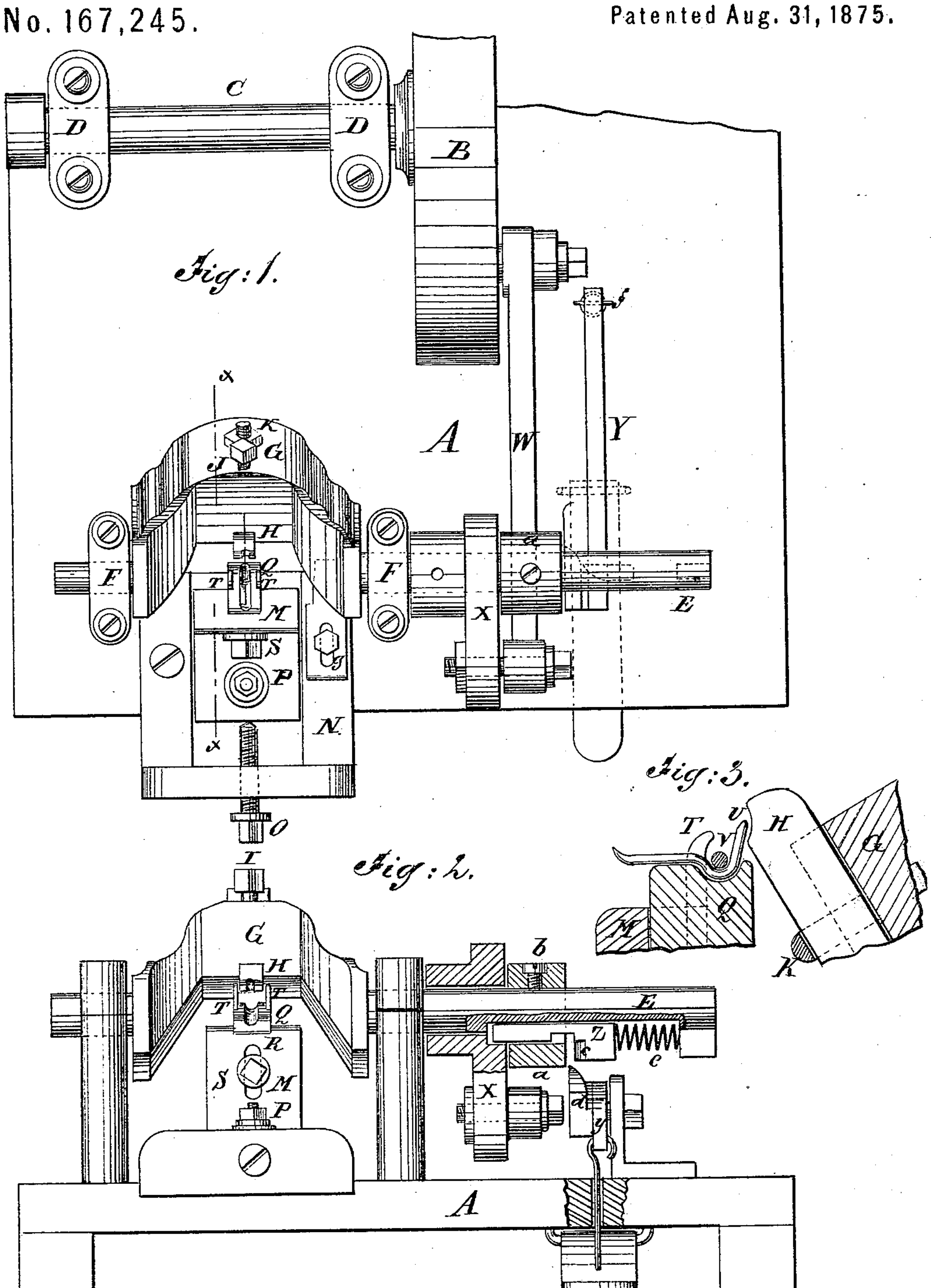
H. C. HICKOX.

Buckle-Making Machine.

No. 167,245. Patented Aug. 31, 1875.



WITNESSES:

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HENRY C. HICKOX, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BUCKLE-MAKING MACHINES.

Specification forming part of Letters Patent No. **167,245**, dated August 31, 1875; application filed May 15, 1875.

To all whom it may concern:

Be it known that I, HENRY C. HICKOX, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Buckle-Closing Machine, of which the following is a specification:

The invention will first be fully described in connection with the drawing and then pointed out in the claims.

In the accompanying drawing, Figure 1 is a top or plan view of the machine. Fig. 2 is a front view. Fig. 3 is a section of Fig. 1, taken on the line *x x*.

Similar letters of reference indicate corresponding parts.

A is a bed-plate. B is a crank-wheel and pulley on the horizontal shaft C. This shaft is supported on stands to elevate the wheel above the bed, and is confined by the box-caps D D on top of the stands. E is a rock-shaft. F F are box-caps on the tops of stands, which confine the shaft. G is a yoke, which forms the portion of the shaft between the boxes F F, the interior of which forms three sides of a hexagon repeated, in the center of which is an adjustable bit, H, confined in a groove in the yoke by a clip, and adjusted (or moved longitudinally) by a screw in the back. (Seen at I, Fig. 2.) It is also moved in and out of the groove in the yoke by means of the screw J. K is the clip-screw. M is a head, which slides back and forth in the frame N, which frame is fastened to the bed. The head is adjusted by the screw O, and fastened in position by the screw or bolt P. This carries a slide, Q, which is placed in a groove in the head, in which groove it is adjusted vertically by means of slot R and screw S. The top of this slide is chambered out to suit the bar and tongue of the buckle. T T are two horns, which project from the top of the slide to hold the bar of the buckle. The slide Q is placed so that the bit H is secured by the horns T T.

The buckle, with the tongue bent and projecting upward, is seen in Fig. 3. As the shaft rocks the yoke makes about half of a revolution, and at the commencement of the stroke brings the bit H in contact with the end U of the tongue, and as the motion continues the end is bent over the bar V of the buckle, and forced down closely onto the tongue, thus completing the buckle.

The shaft and yoke are rocked or oscillated by means of the rod W and crank X. At each operation the crank and shaft are stopped to allow the operator to take out and put in a buckle. This stoppage is accomplished by means of a treadle attached to the spring-lever Y.

Z is a spring-slide on the yoke-shaft. *a* is a collar fastened on the shaft by the set-screw *b*. The spring-slide passes through this collar and enters the eye of the crank X, in which crank the shaft freely revolves. The shaft and crank are thus connected together, so that the shaft rocks or is stopped, according to the position of the slide. On the slide is an inclined or level surface, *c*. *d* is a wedge-shaped piece attached to the spring-lever Y. The slide Z is forced toward the crank by the constant pressure of the spring *e*, and is forced back by removing pressure from the spring-lever. When this pressure is removed the spring *f* of the lever forces the wedge-pieces *d* between the collar and the inclined surface C, which throws back the slide and stops the shaft and yoke. On the frame N (see Fig. 1) *g* is an adjustable stop for the yoke G, to prevent the yoke from descending too far.

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

1. The combination of chambered bit H, set in a rocking yoke, G, with a grooved holder, Q, having horns T T, as and for the purpose described.

2. The combination of spring-slide Z, having bevel *c*, the shaft-collar *a*, the crank X, and the lever Y, having wedge *d*, as and for the purpose set forth.

3. The combination, with rocking yoke G, of sliding stop *g*, as and for the purpose specified.

HENRY CHARLES HICKOX.

Witnesses:

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