(No Model.)

G. W. BRADLEY.

RIVETING MACHINE.

No. 375,725. Patented Jan. 3, 1888.

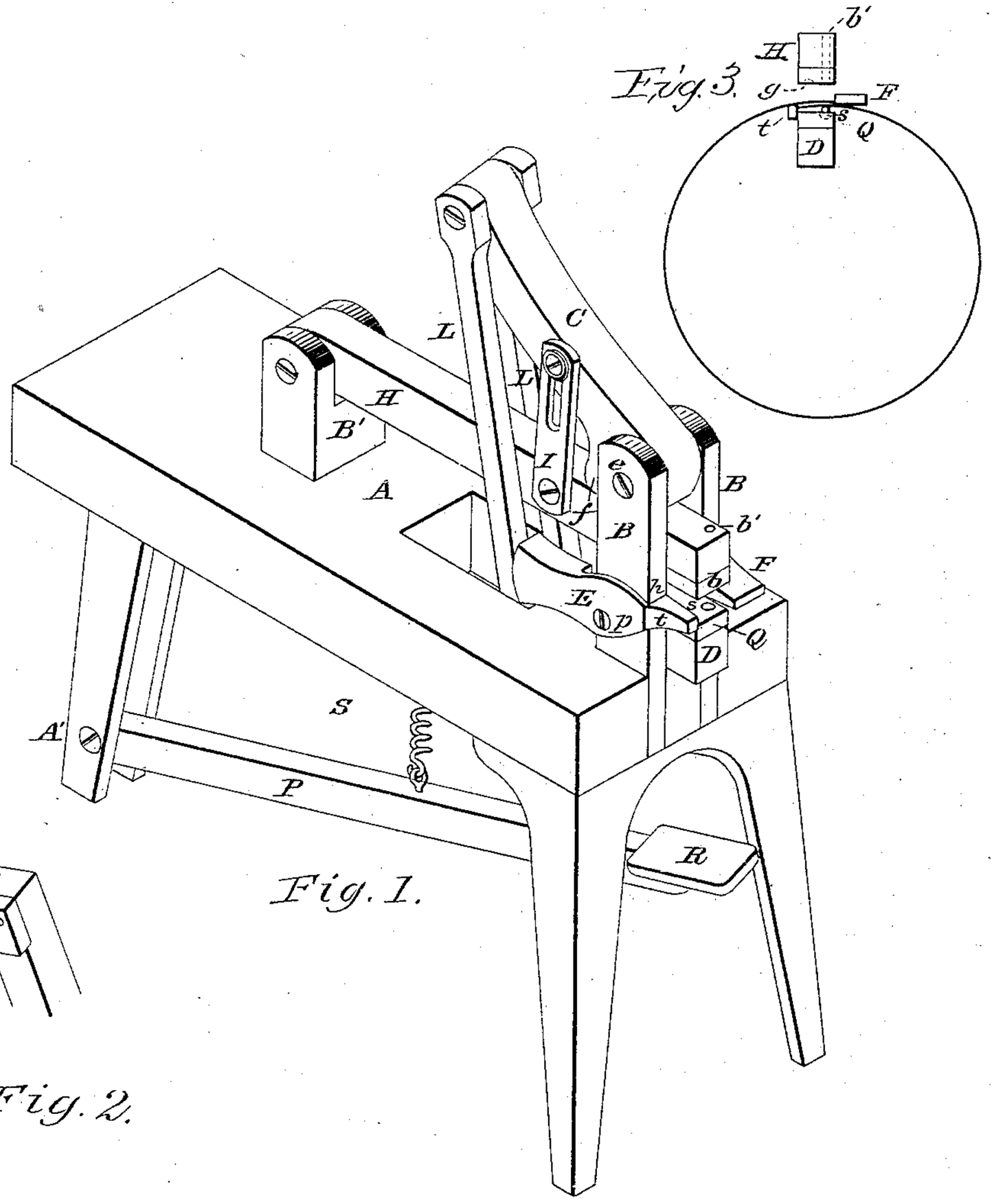

Fig. 1.

Fig. 2.

Witnesses:
Frank D. Loomis
Ed. K. Worthington.

Inventor:
Gilbert W. Bradley,
By Franklin Scott, Atty.

UNITED STATES PATENT OFFICE.

GILBERT W. BRADLEY, OF SUNDERLAND, VERMONT.

RIVETING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 375,725, dated January 3, 1888.

Application filed May 10, 1887. Serial No. 237,702. (No model.)

To all whom it may concern:

Be it known that I, GILBERT W. BRADLEY, of Sunderland, in the county of Bennington and State of Vermont, have invented an Improved Riveting-Press, of which the subjoined description, in connection with the accompanying drawings, constitutes a specification.

The machine is intended to be used in riveting together the ends of metallic bands or hoops. It is fully shown in perspective in Figure 1 of the drawings. Fig. 2 shows the under side of the punching and heading die; and Fig. 3 exhibits the method of using the machine, and shows the relative positions of the two guide-cheeks E and F.

The mechanism is mounted on frame A, and consists of the two principal punching and heading dies *b* and Q. The die Q may more properly be called an "anvil," and is imposed on the block D. Its upper surface consists of a plane face, with the possible exception of a depressed circular seat, *s*, whereon the rivet-head is laid point upward. Pivoted to block B' is the lever H, the fore end of which carries the punching and heading die or plate *b*. Said plate is better shown in Fig. 2, the end of the lever being inverted for that purpose. It is perforated with a punching-hole, *b'*, which works over the point of the rivet in precisely the same way as the sheet-iron worker's punch operates. More properly it is a die-plate, the rivet itself forming the punch. Close beside this is the countersunk header *g*, which is merely a concave depression designed to head down the protruding point of the rivet and leave a smooth convex finish. The two parts D and H lie between the two cheeks B B, between which the cam-lever C is also pivoted at *e*. The rear end of lever C is connected with foot-lever P beneath the machine by means of rods L L. Foot-lever P is pivoted to rear leg of frame at A', and is connected with platform of frame by retractile spring S. The slotted link I connects the cam-lever C with the lever H, and performs the office of lifting lever H whenever the cam-lever C is pushed up by the retraction of spring S. The depression of foot-pad R effects the closing of the header *b* against the anvil Q.

The office performed by the guide-cheeks E and F is shown in Fig. 3, and will appear by describing the use of the machine. Guide-cheeks E and F are weighted at their rear ends, so that they normally bring a shoulder up against cheeks B B. In use the hoop or band J is first cut to a definite length. A rivet is then laid on spot *s*, head down. One end of the band is then set in between the jaws of the header and brought into contact with the left guide-cheek, *t*. The other is laid in over guide-cheek *t* and abuts against guide-cheek F. Header *b* is then brought down over the rivet, which is forced through the metal, the chips passing up through aperture *b'*. Thus the hole is made and the rivet inserted therein. Then the hoop is moved a little to the left and the lever again brought down, whereby the rivet is headed under header *g*.

The die *b* and anvil Q are old; but the swinging or pivoted guide-cheeks E and F are thought to be new, and the function they perform in connection with the riveting-jaws is as follows: When at rest, the guide-cheek *t* is at an elevation, where the end of the hoop carried under cheek F will readily find abutment against it. The other end of the hoop or band will of course rest on top of cheek *t* at the right elevation to allow it to clear the top of the rivet, and its end will find abutment against inner edge of guide-cheek F. When the header is brought down, the guide *t* yields or descends, as it also does when the rivet is headed by the second movement.

I therefore claim as my invention—

The combination of the vertically-movable header *b*, having die-perforation and heading former or countersink, and the anvil-plate beneath, having a spot or seat for the rivet-head, with the lateral swinging guide cheeks or stops E and F, and means for imparting to the header a reciprocal vertical movement, as and for the purposes specified.

In testimony whereof I have hereto set my hand, at Sunderland, Vermont, this 23d day of August, A. D. 1886.

GILBERT W. BRADLEY.

In presence of—
FRANKLIN SCOTT,
EMILY SCOTT.