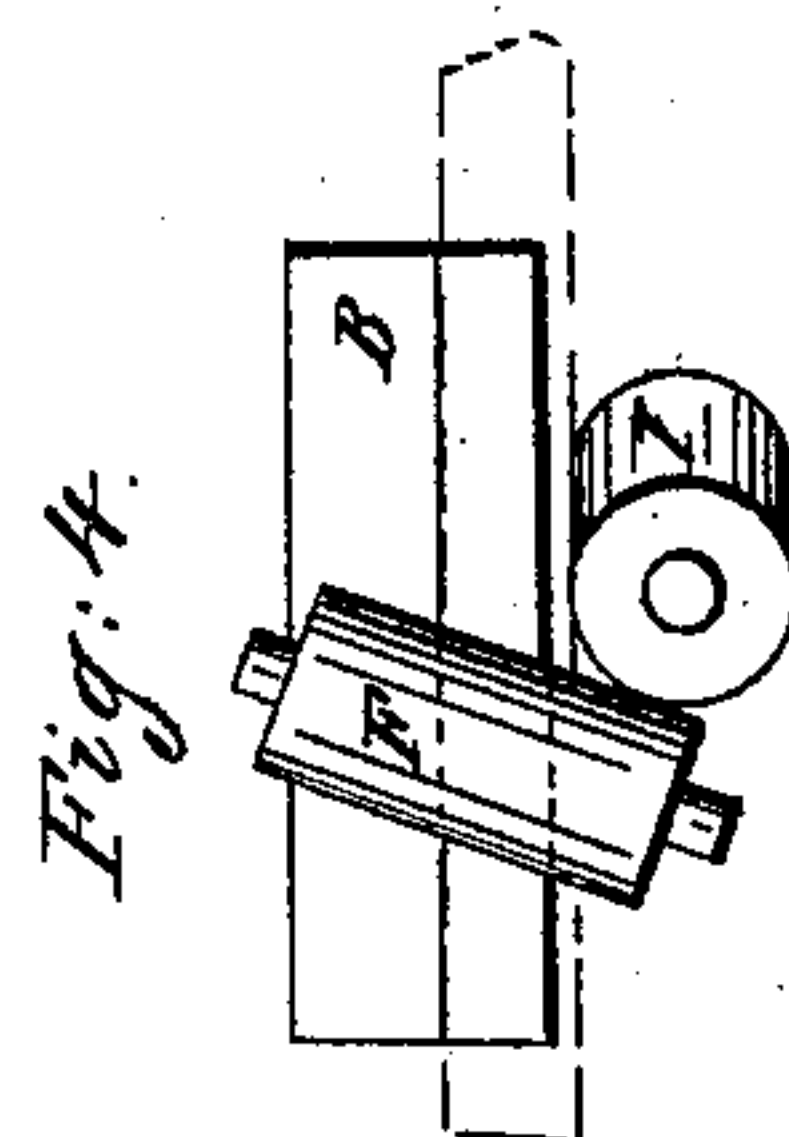
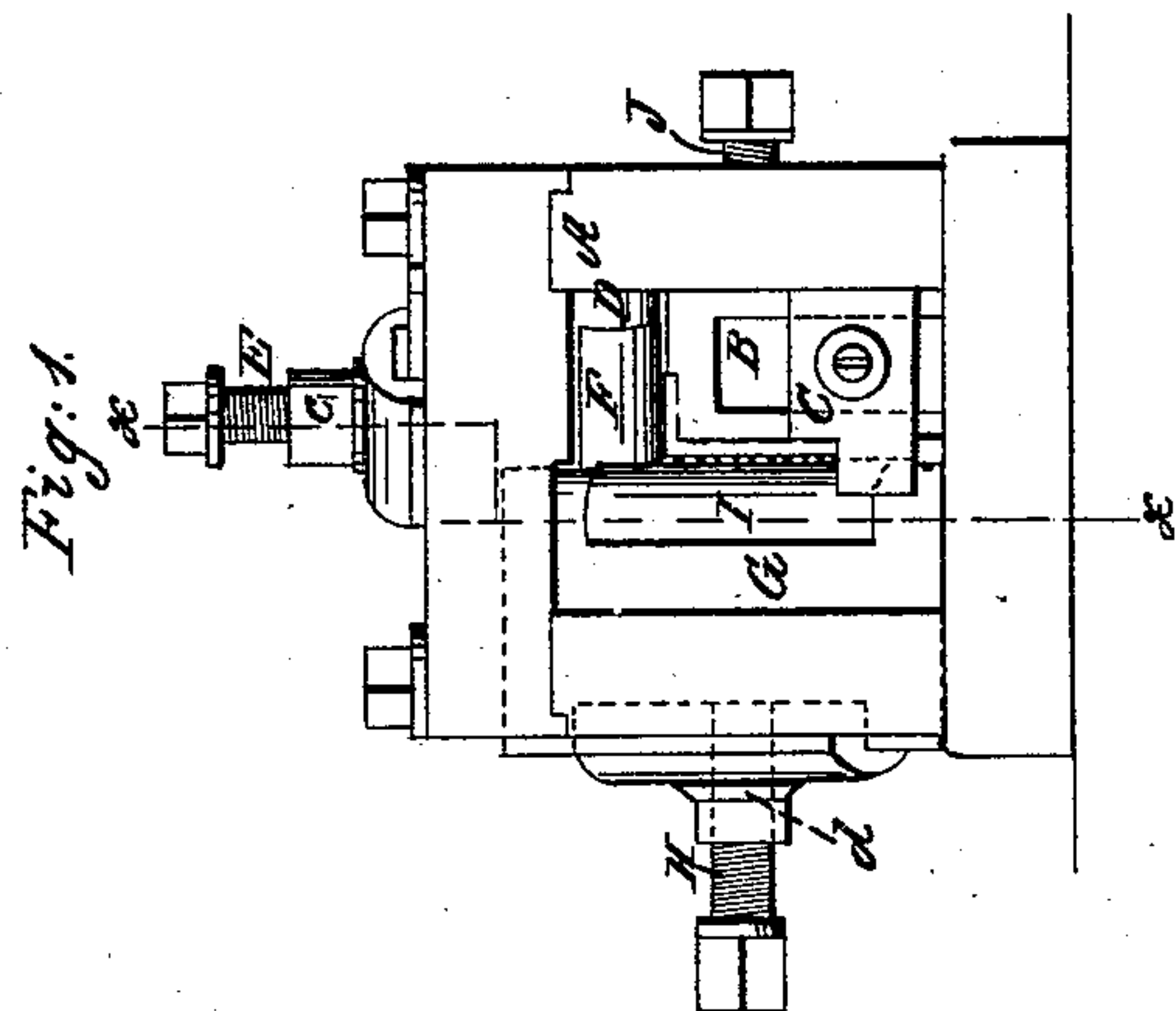
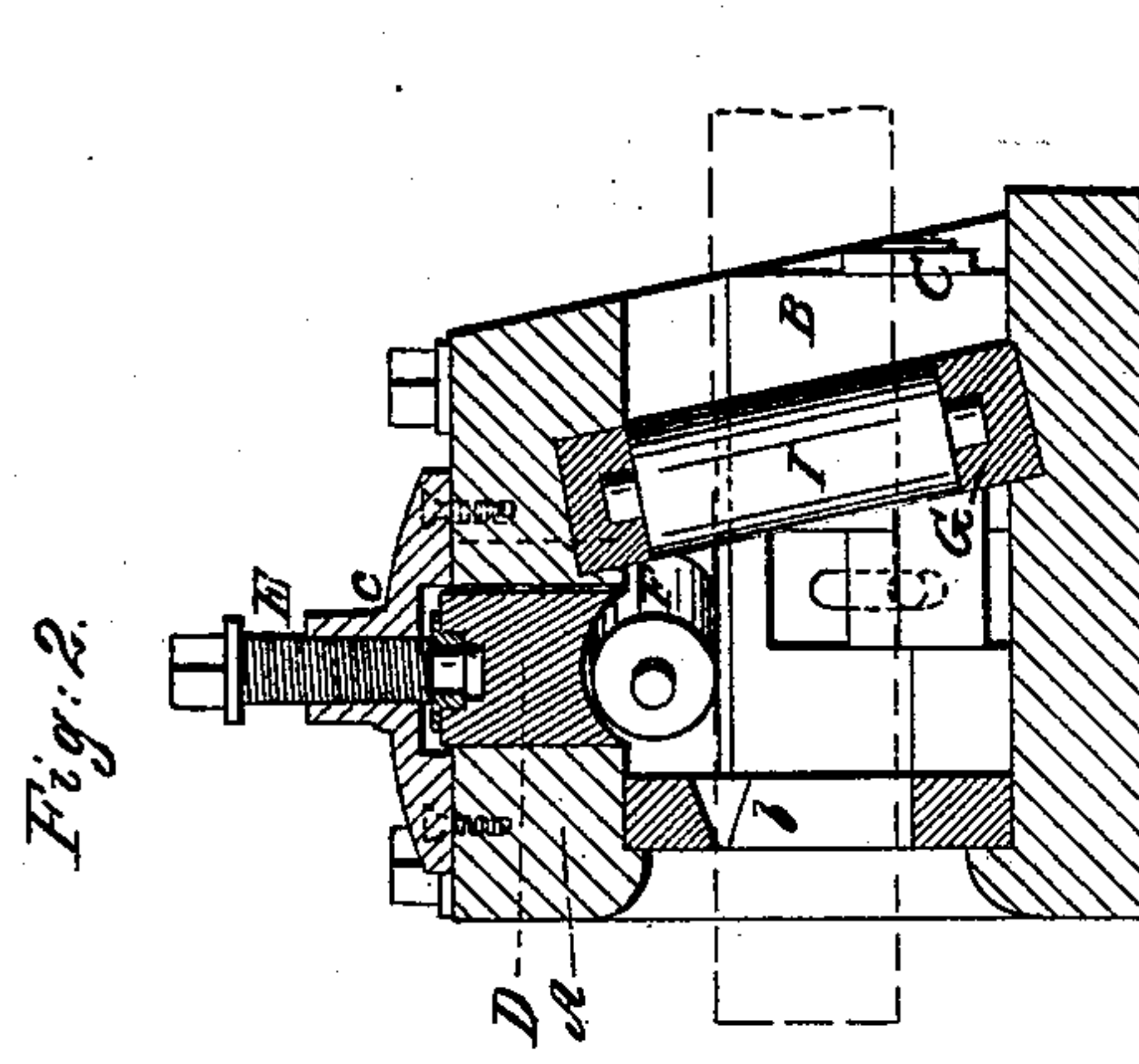
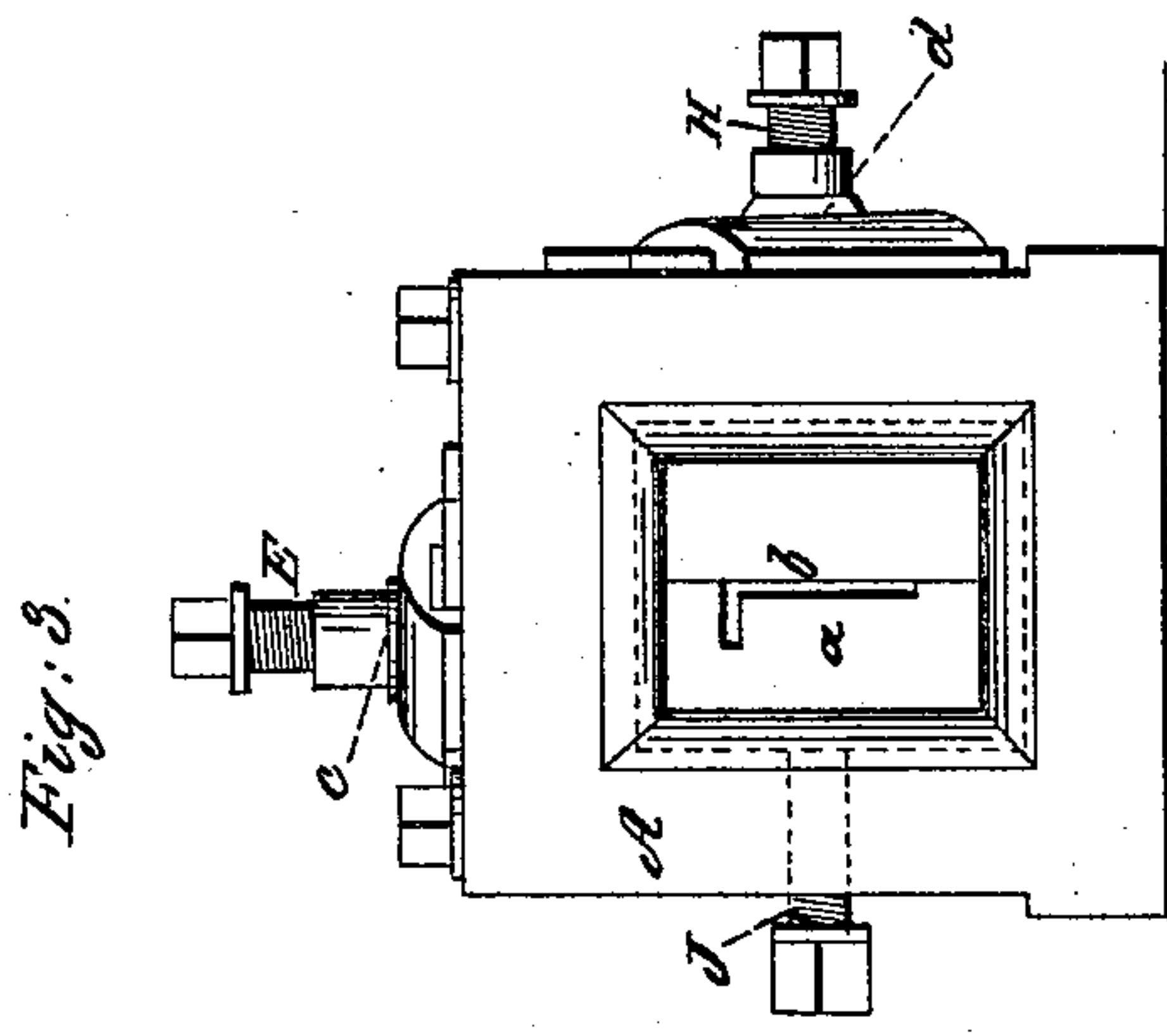


J. PERRY.
Flanging Machine.

No. 18,019.

Patented Aug. 18, 1857.



UNITED STATES PATENT OFFICE.

JULIUS PERRY, OF PLYMOUTH HOLLOW, CONNECTICUT.

MACHINE FOR BENDING METAL PLATES.

Specification of Letters Patent No. 18,019, dated August 18, 1857.

To all whom it may concern:

Be it known that I, JULIUS PERRY, of Plymouth Hollow, in the county of Litchfield and State of Connecticut, have invented a new and Improved Machine for Rolling in Sharp Angular Form the Edges of Bent Metal Plates; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a front view of my improvement. Fig. 2, is a section of ditto, taken in the line (x) (x) Fig. 1. Fig. 3, is a back view of ditto. Fig. 4, is a detached plan or top view of the rollers and bed.

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

The object of this invention is to roll into sharp angular form at one operation the edges of bent metal plates, so that the plates will not require to be manually operated upon, or at least, not materially after being drawn through the machine.

The invention is designed to form bent metal plates properly, so that castings which are now used may be dispensed with, and the bent metal plates, which, by my improvement may be constructed at a small cost, used in their stead.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A represents a rectangular box within which a rectangular bed B is placed. Said bed having an adjustable guide or rest C at its front end, as shown in Figs. 1 and 2.

The upper surface of the bed B has a recess made in it to receive one edge of the bent plate which is shown in red. The front end of the box A is open, but the back end is closed by a die or draw plate (a) the opening (b) of which is of right angular form corresponding of course to that of the bent plate. The plate (a) should be of steel and formed of two parts and one of them made adjustable as usual by means of a set screw J or its equivalent.

In the top plate of the box A a block D is placed, said block having the lower end of a screw E fitted on it, said screw passing through a nut (c) on the top of the box A. In the lower edge of the block D a roller F is placed, said roller having an oblique or diagonal position relatively with the upper surface of the bed B, as shown clearly in Figs. 2 and 4.

A block G is placed in one side of the box A. This block has the inner end of a screw H fitted in it, said screw passing through a nut (d) on the side of the box. In the inner end of the block G, a roller I is placed. This roller has an oblique or diagonal position relatively with the side of the bed B, as shown in Figs. 2 and 4.

The plate, shown in red, is bent or swaged in angular form, as shown in Fig. 1, by a die, or any proper device. The plate thus bent has of course a rounded corner, that is, the angle formed by the bend is not sharp.

The plate thus bent is placed on or adjusted to the bed B, and drawn through the slot (b) and between the rollers I, F, and bed B. As the plate is drawn along the two rollers, owing to their angular position, force or press the metal toward the edge or angle formed by the bend, and in consequence of this tendency of the rollers the angle will be brought to a sharp edge or completely filled out, the draw plate scraping or cutting off the "bur" and completing the work.

By this improvement metal plates may be expeditiously and perfectly bent, and can be made cheaper than castings which are more generally employed. The plates are used for fine lock cases and similar work, and brass is generally used. German silver may be employed as well as other compositions of metal. Castings require a great deal of labor, considerable filing, polishing, &c., and are necessarily much heavier than wrought metal. By my improvement rolled brass or other metal after being bent may be rolled at once into proper angular form and being quite smooth but little or no after work is required.

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

1. The two rollers I, F, and bed B, placed in positions relatively with each other, as shown and described for the purpose specified.

2. I further claim the rollers I, F, and bed B in combination with the die or draw plate (a) arranged as and for the purpose set forth.

JULIUS PERRY.

Witnesses:

SETH THOMAS, Jr.,
FRED W. PIERCE.