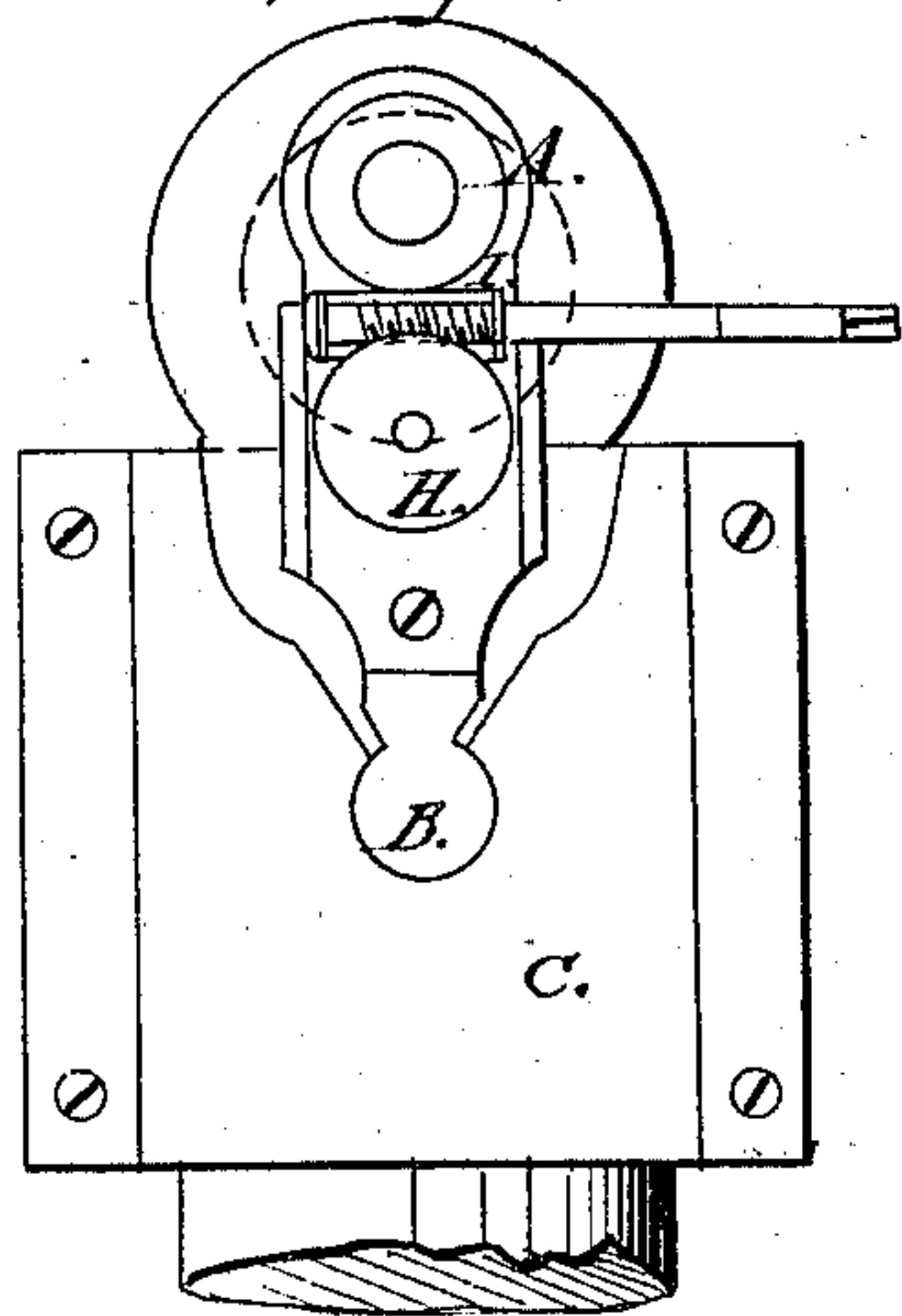


R. B. Perkins, Punching Metals

No. 88,734.

Fig. 1.



Patented Apr. 6. 1869.

Fig. 2.

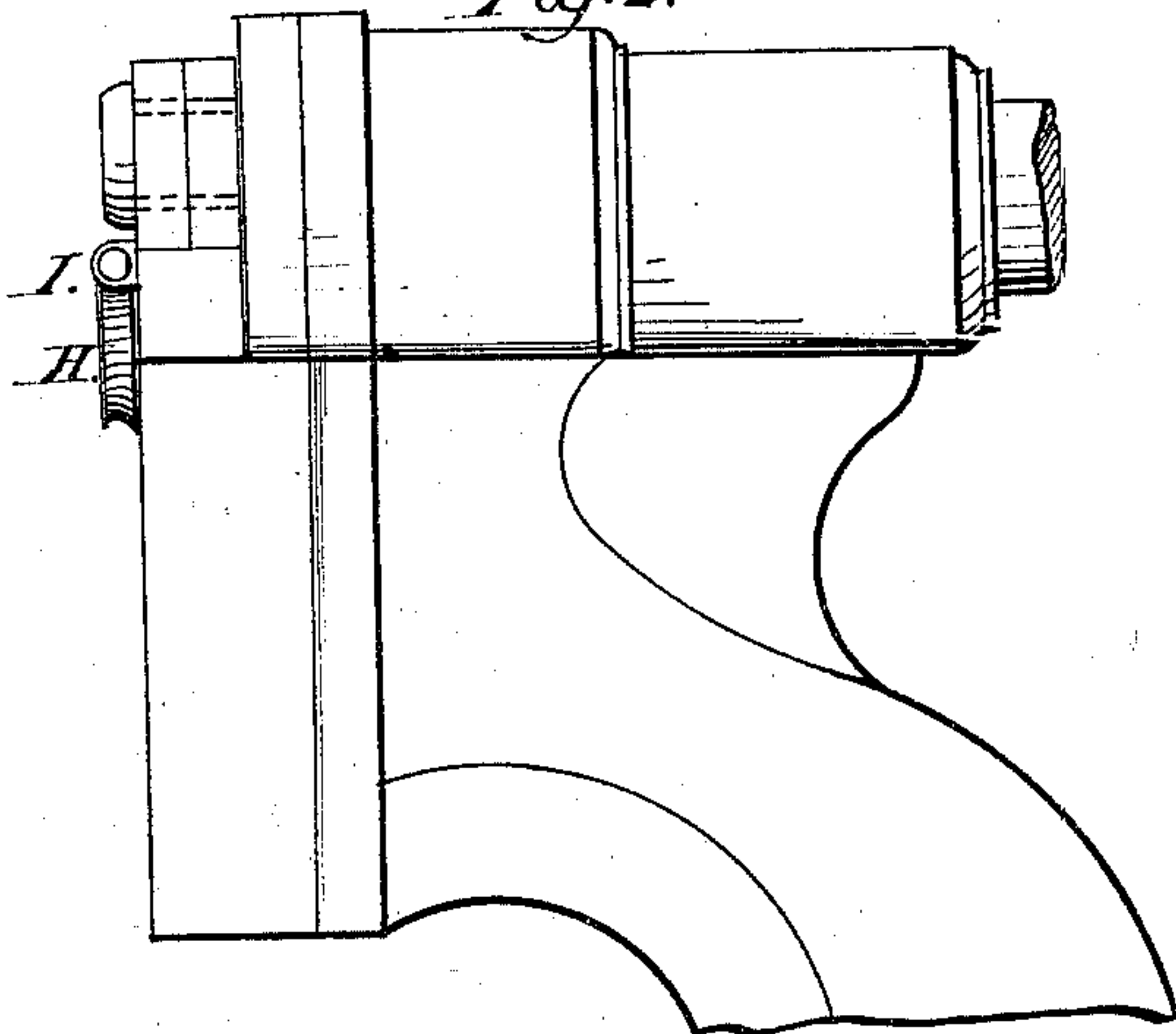


Fig. 3.

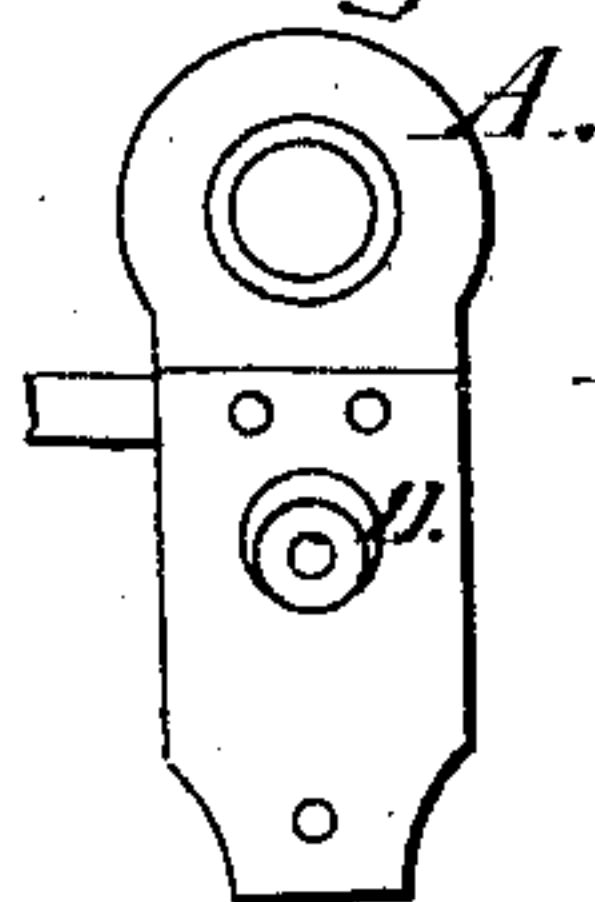


Fig. 4.



Fig. 5.

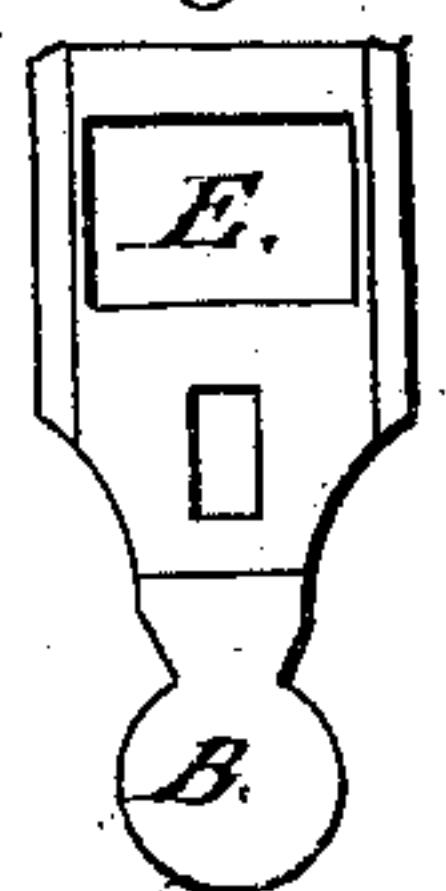


Fig. 6.

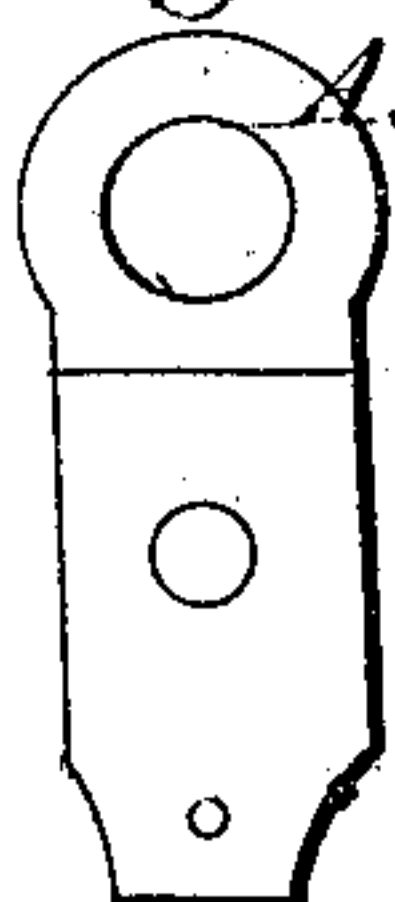


Fig. 7.

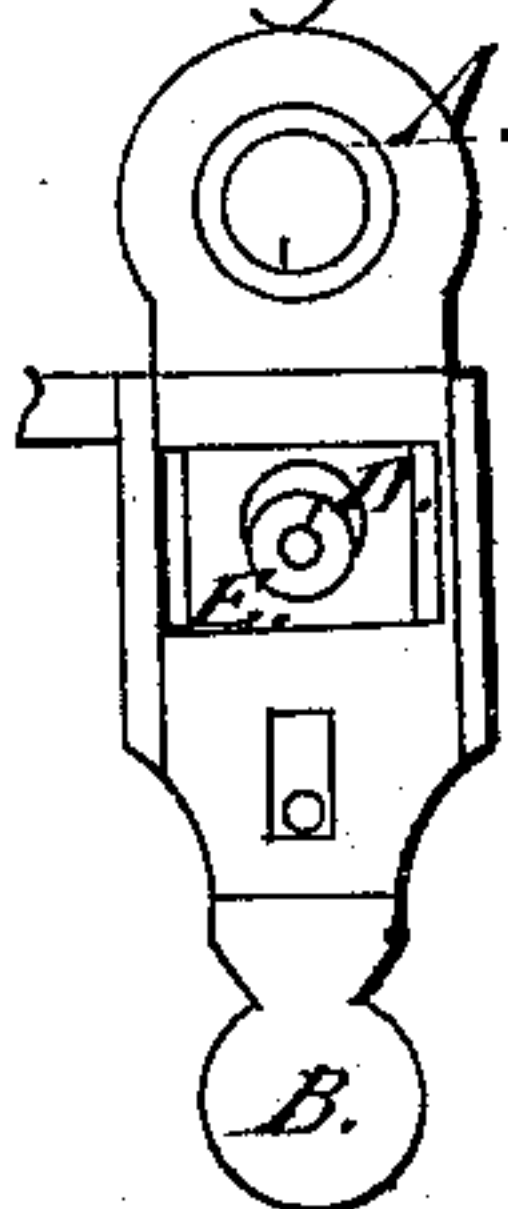


Fig. 8.

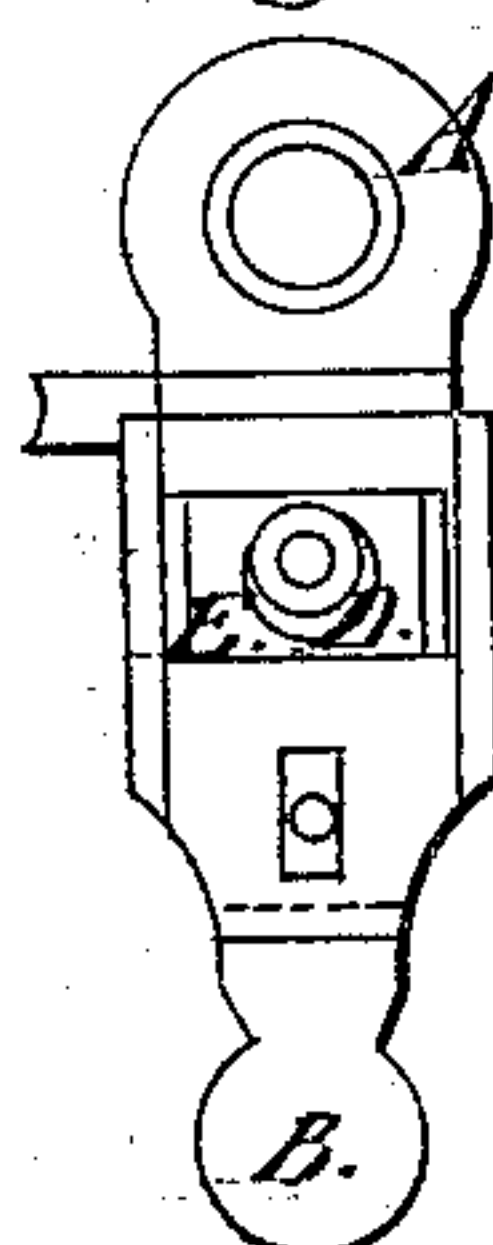
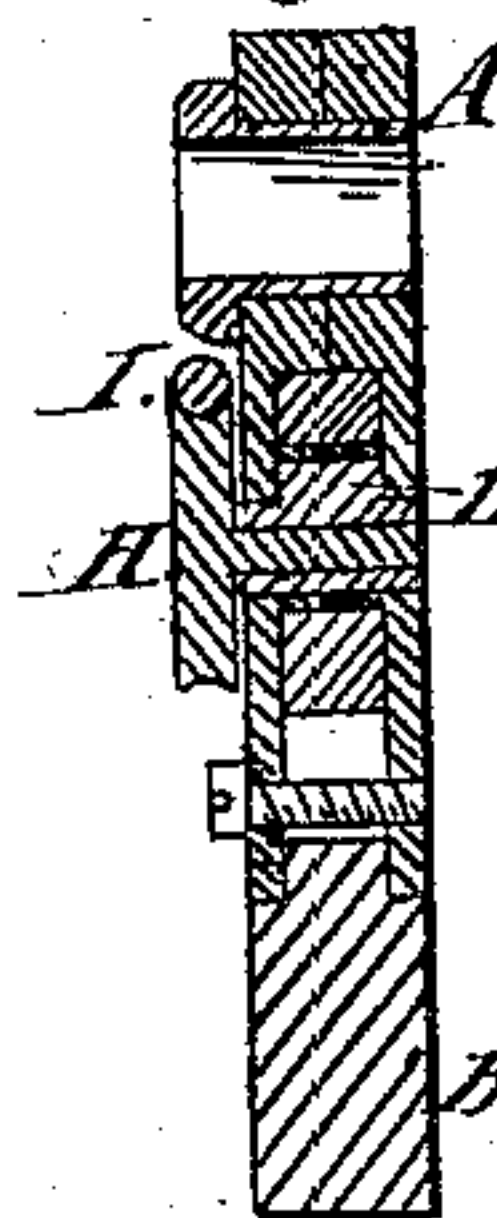


Fig. 9.



Witnesses:

A. J. Tibbitts
D. M. Shumway

Inventor

Russell B. Perkins
by John E. Earle
Attorney.

United States Patent Office.

RUSSELL B. PERKINS, OF MERIDEN, CONNECTICUT, ASSIGNOR TO
CHARLES PARKER, OF SAME PLACE.

Letters Patent No. 88,734, dated April 6, 1869.

MECHANICAL ADJUSTMENT.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, RUSSELL B. PERKINS, of Meriden, in the county of New Haven, and State of Connecticut, have invented a new Mechanical Adjustment; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figure 1, a front view,

Figure 2, a side view, and in

Figures 3 to 9, inclusive, detached views, to illustrate the construction and operation.

This invention relates to an adjustment for a connecting-rod, the object being to lengthen or shorten the connecting-rod without changing the extent of the reciprocating movement imparted through the said rod.

To enable others to fully understand my invention, I will proceed to describe the same as illustrated in the accompanying drawings.

For convenience of illustration, I show my improvement as applied to the slide of a power-press.

A is the head of the rod, by which it is attached to a crank, or other means for imparting a reciprocating movement thereto.

B is the other end of the rod, by which the connection is made to the slide C, or to whatever it is desired to impart a reciprocating movement.

The reciprocating movement being positive, and there being no desire to make it adjustable, it is often desirable to adjust the said movement as to the point of starting and stopping, without changing the extent of the said reciprocating movement.

The two ends are made separate the one from the other, and in one (here represented as A) I fix an eccentric D, so as to turn freely in its bearing, the eccentric resting in a block, E, and the said block in a slot,

F, of the end A, as seen in figs. 5 and 7. Therefore, as the eccentric is turned, as from the position in fig. 7 to that in fig. 8, (which reverses the eccentric from one extreme to the other,) the rod is lengthened the extent of the eccentric at any point between these two extremes. The length of the connection may be adjusted by turning the eccentric.

Thus, by this simple adjustment, the length of the rod may be adjusted to vary the point of starting or stopping of the reciprocating movement imparted through the rod without in any way affecting the extent of the said reciprocating movement, and this adjustment may be placed at any convenient point between the two extremes.

I prefer to adjust the eccentric by fixing to its axis a toothed wheel, H, and a worm, I, arranged to operate therein, so that by turning the said worm the eccentric may be nicely adjusted while the rod is moving.

Other means for adjusting the eccentric, it will be readily seen, may be devised by persons skilled in the construction or use of such machinery.

By preference, I make the head A of the rod in two parts, as seen in figs. 3 and 6, and also seen in fig. 9, so as to receive the end, A, and the eccentric between the said two parts.

Having described my invention,

What I claim as new and useful, and desire to secure by Letters Patent, is—

The two parts, A and B, of a connecting-rod, combined with the eccentric D, so that by the turning of the said eccentric the said two parts may be adjusted to lengthen or shorten their extremes, substantially as and for the purpose herein set forth.

R. B. PERKINS.

Witnesses:

AARON PRATT,
GEO. W. SMITH.