

R. B. Perkins

Mechanical Adjustment.

N^o 88,733

Patented Apr: 6, 1869.

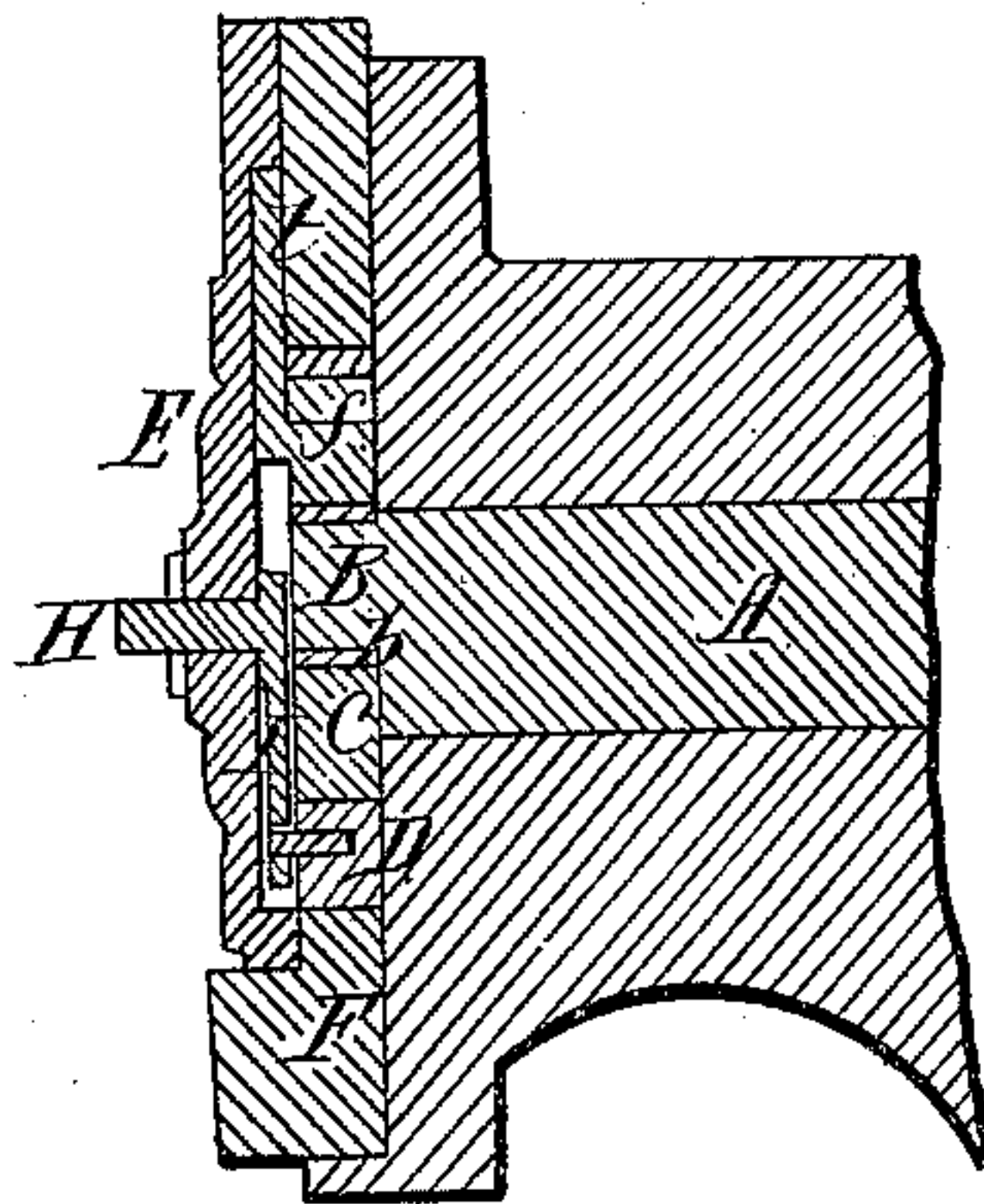
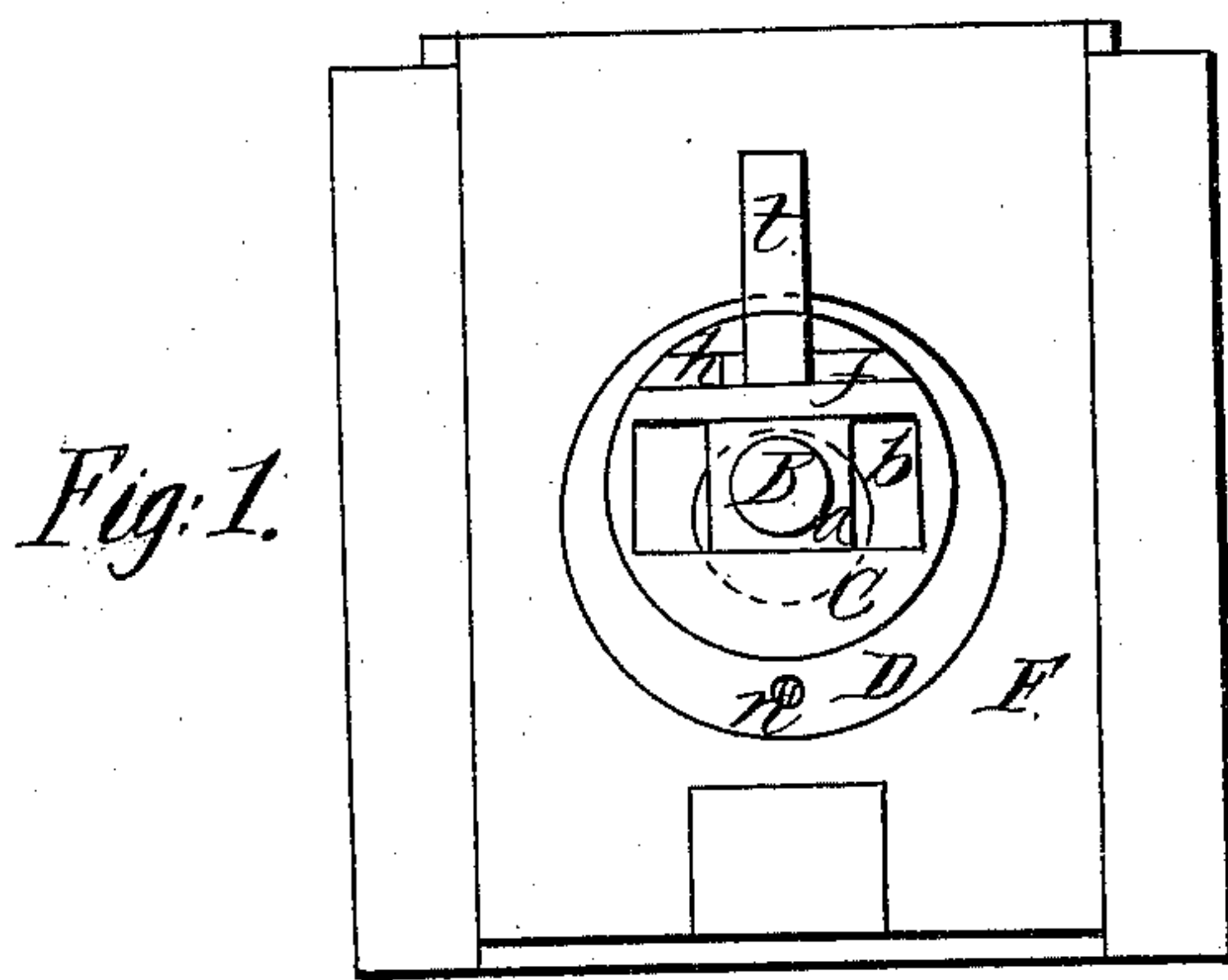


Fig: 3.

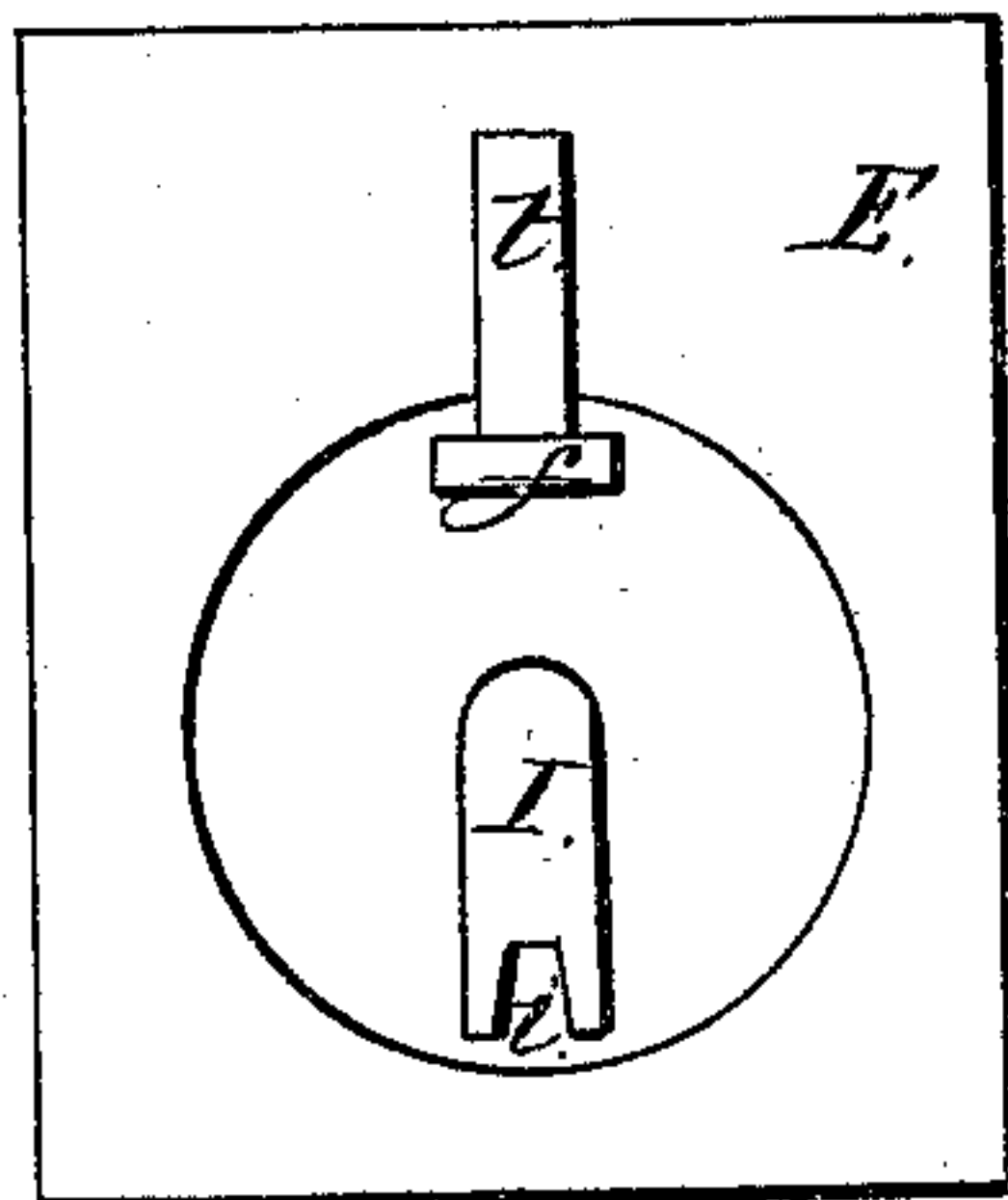
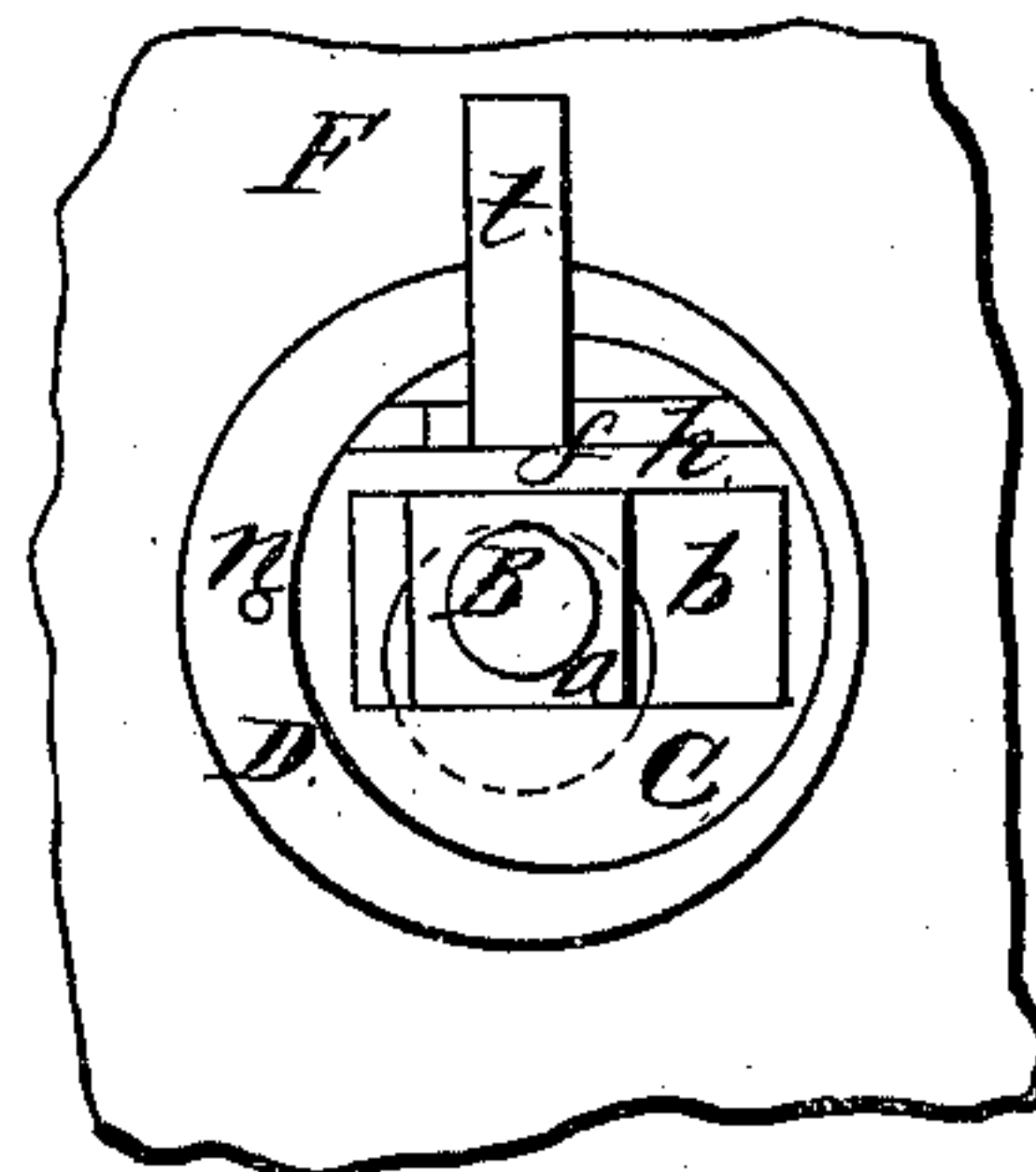


Fig: 4.



Witnesses:

A. J. Tibbitts
J. H. Shennoy

Inventor:
Russell B. Perkins

By his Attorney
Thos. E. Earle

United States Patent Office.

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

Letters Patent No. 88,733, 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 Improvement in 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, the face-plate removed.

Figure 2, a vertical central section, the face-plate attached; and in

Figures 3 and 4, detached views to illustrate the operation.

This invention relates to a mechanical adjustment, the object of which is to adjust the points of starting and stopping of a reciprocating movement without changing the extent of the said movement. To this end

My invention consists in the arrangement of a slide or block attached to the wrist-pin, within a circular plate, around which an eccentric is arranged, the said eccentric governing the connection, so that by turning the eccentric, the connection is practically lengthened or shortened, as the case may be, and without changing the throw of the crank.

In order to the clear understanding of my invention, I will fully describe the same as illustrated in the accompanying drawings.

For convenience of illustration I show my invention as applied to the slide of a press.

A is a shaft upon which a wrist or crank-pin, B, is attached, its eccentricity being proportionate to the reciprocating movement required.

On to the said wrist-pin, a block, *a*, is placed, so as to permit the wrist-pin to turn freely therein.

The said block is placed in a slot, *b*, of a circular plate, C, the said plate being held to prevent its turning by a tongue, *f*, lying in a slot, *h*, so that as the

crank revolves, the block *a* moves to the right or left, giving to the plate C simply a vertical movement.

Around the plate C is placed an eccentric, D, which may be turned freely around the plate C, the plate C being prevented from turning therewith by a tail-piece, *t*, which lies in a groove in the face-plate E, as seen in figs. 2 and 3, fig. 3 showing the face-plate from the inside.

The eccentric D is arranged in the slide F, or in whatever the connection may be from the crank to the thing to be moved.

In the position seen in fig. 1, the eccentric is set so as to carry the connection or slide F so as to give the extreme length between the crank and thing to be moved. By turning the eccentric one-fourth around, to the position seen in fig. 4, the connection has been shortened one-half the extent of the eccentric, turned further around to the reverse of fig. 1, and the other extreme is reached. That is the shortest connection.

Various devices may be arranged for holding the plate C to prevent its turning, and also for the adjustment of the eccentric.

A convenient adjustment for the eccentric is made by placing centrally through the plate E a shaft, H, to which an arm, I, is fixed, its end slotted, as at *i*, fig. 3, so as to catch upon the stud *n*, upon the eccentric. Therefore, to adjust the connection, turn the shaft H, and the arm I will carry the eccentric to the desired position.

Having described my invention,

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

The plate C, arranged so as to have a reciprocating movement imparted thereto, combined with the eccentric D, arranged so as to adjust the plate C to vary the point of starting and stopping of the said reciprocating movement.

Witnesses:

ORVILLE H. PLATT,
GEO. W. SMITH.

R. B. PERKINS.