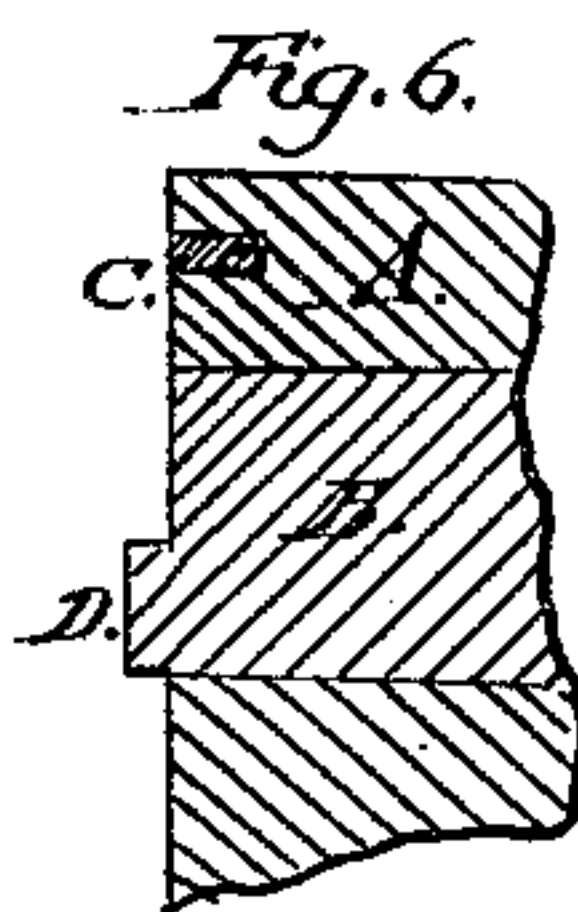
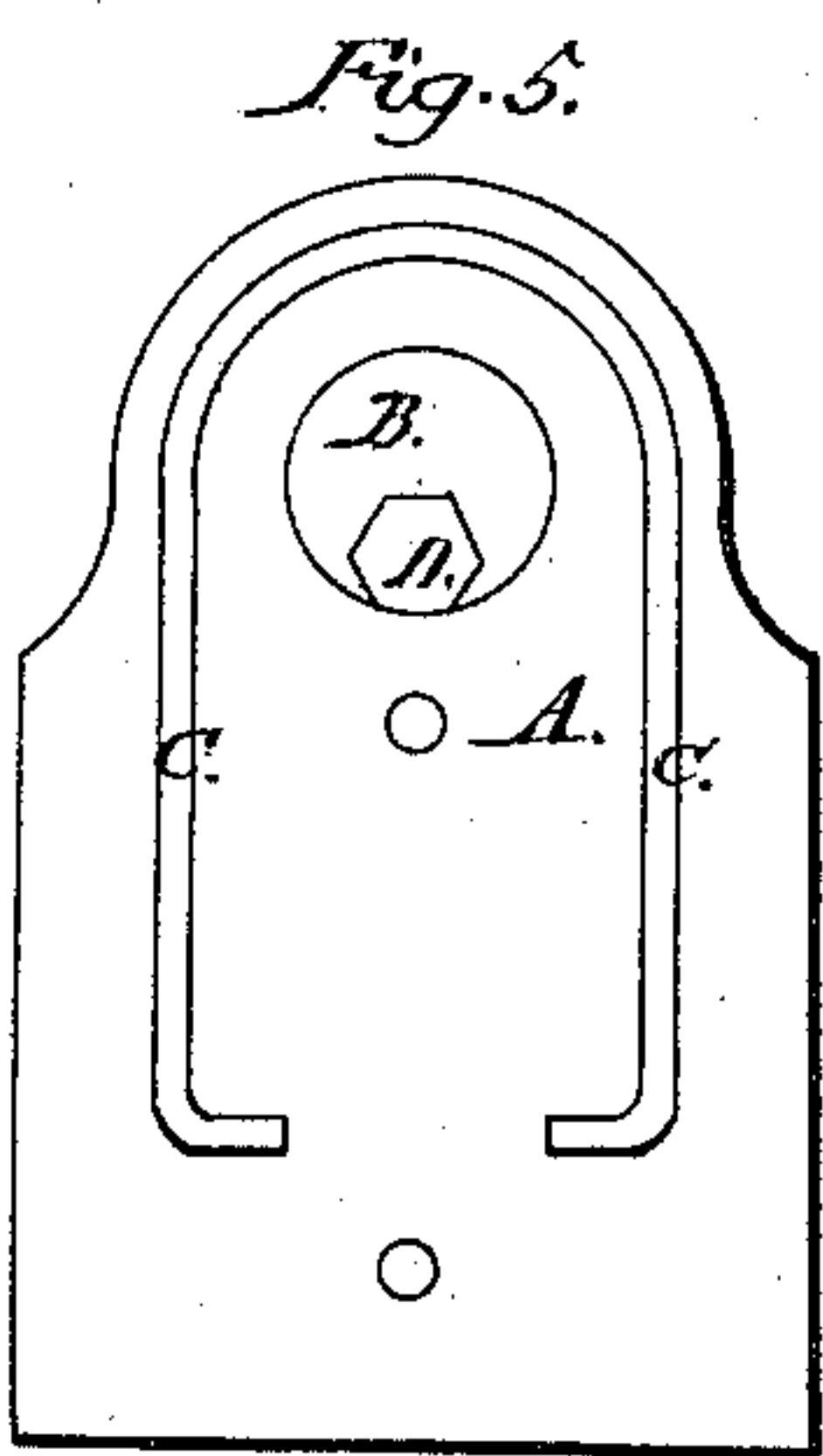
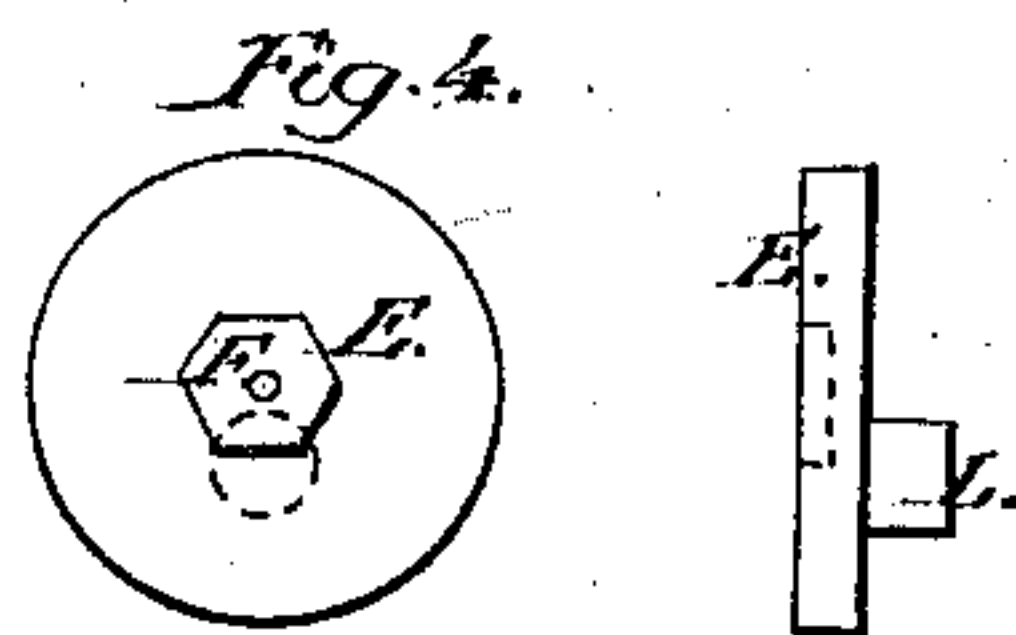
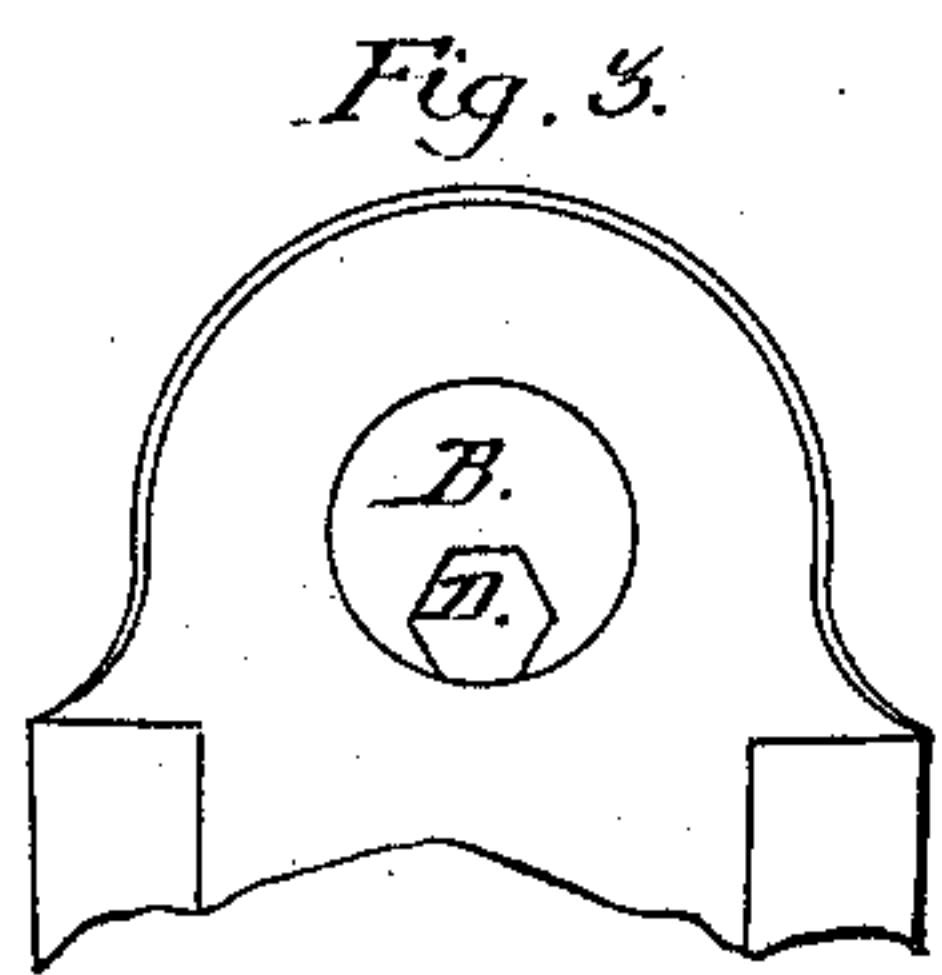
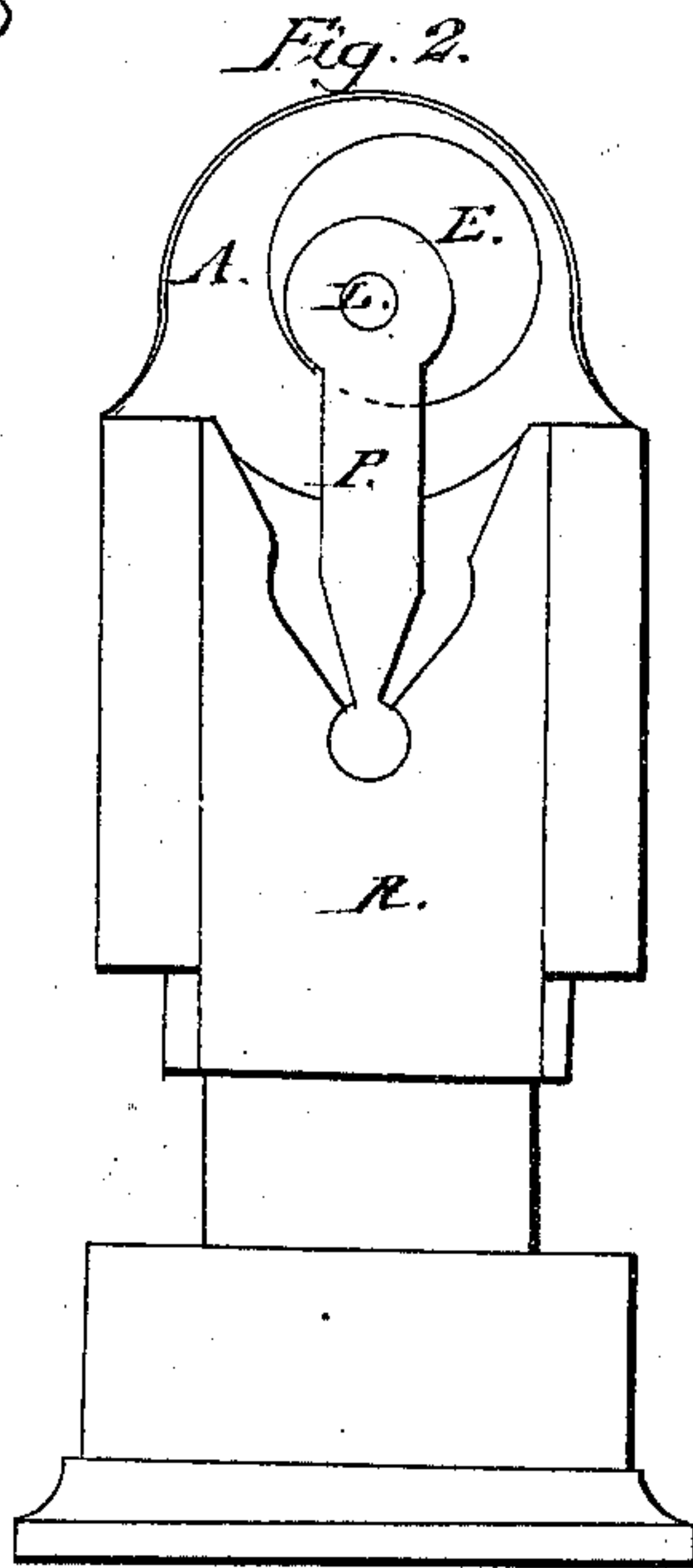
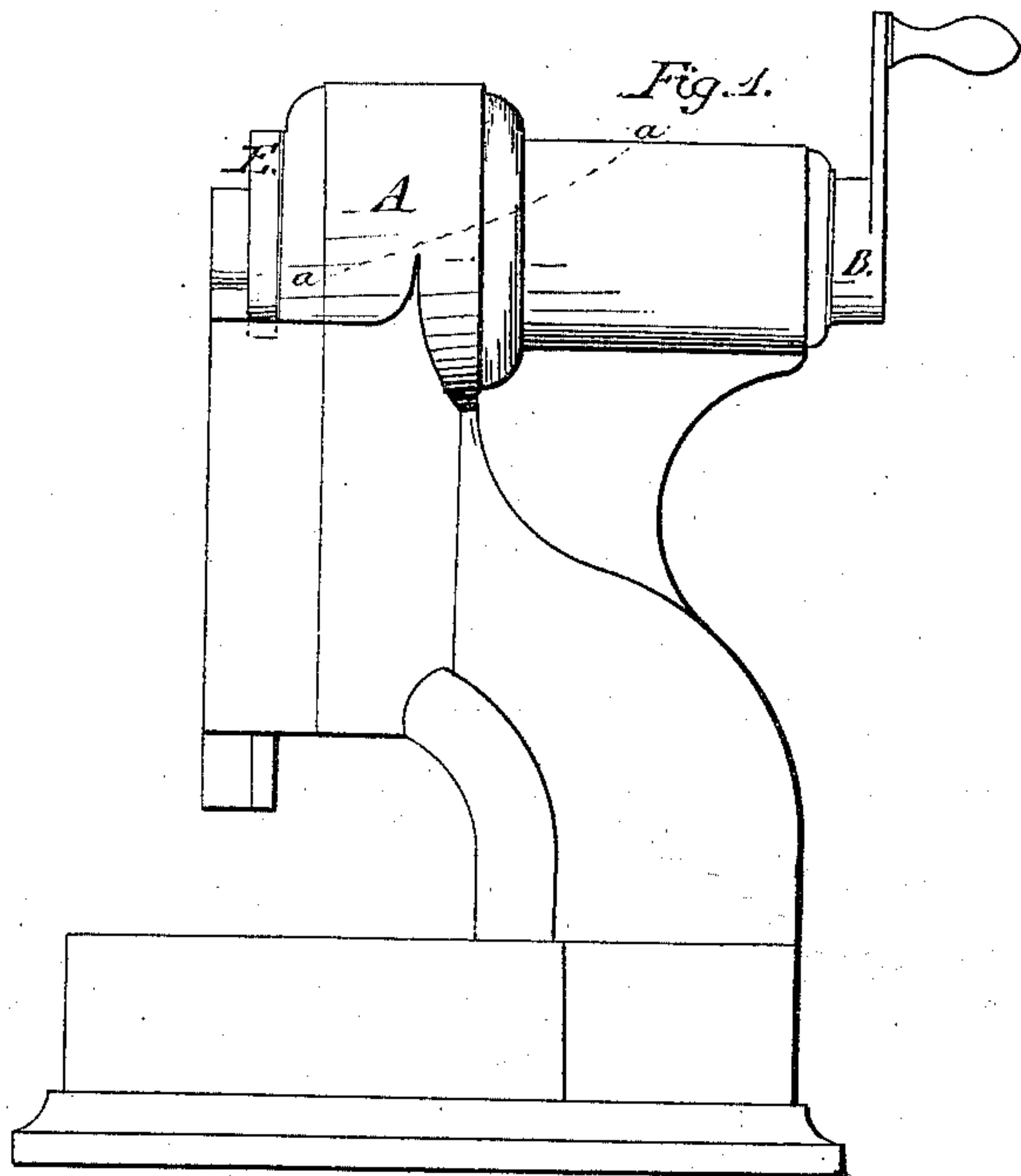


W. F. Parker,

Power Press.

No. 88,732.

Patented Apr. 6. 1869.



Witnesses:  
J. H. Chumney  
A. J. Libbits

Inventor:  
Wilbur F. Parker  
by  
Thos. E. Earle  
Attorney.



# United States Patent Office.

WILBUR F. PARKER, OF MERIDEN, CONNECTICUT.

Letters Patent No. 88,732, dated April 6, 1869.

## IMPROVED POWER-PRESS.

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, WILBUR F. PARKER, of Meriden, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Power-Press; 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 side view;

Figure 2, a front view; and in

Figures 3, 4, 5, 6, 7, detached views.

This invention relates to an improvement in presses, such as are used for punching and drawing, and for like purposes, the object being to change the extent of the reciprocating movement imparted to the slide. To this end,

The invention consists in forming upon the end of the shaft, and eccentric thereto, a pin, formed with several sides or angles, and fitting thereto a disk, which has upon it a wrist-pin, eccentric to the said disk, so that by changing the position of the disk upon the shaft-pin to any one of the several positions which are allowed by the many sides or angles of the shaft-pin, the length of the stroke may be increased or diminished.

To enable others to construct and use my improvement, I will fully describe the same, as illustrated in the accompanying drawings.

A is the head of the press, shown detached in fig. 5.

B, the shaft, which passes through the head of the press in the usual manner.

The entire strain of punching, or use of the press, necessarily comes upon the shaft, therefore it often happens that when the press is greatly strained the head breaks away nearly, as denoted upon the line *a a*.

To prevent this, I prepare a bar, C, (see fig. 5,) of wrought-metal, extending around the head, and down into the body, and bent, or formed so as to take a firm hold in the body below the shaft, and this bar I place in a mould prepared for casting the head, then pour the metal into the flask, so as to enclose the bar, as seen in figs. 5 and 6, which greatly adds to the strength of the press, so much as to render it impossible to apply power enough to the press to break the head.

On the shaft B, I form a wrist-pin, D, of many sides, here represented as six, and I form a disk, E, upon the back side of which I form a recess, F, (see fig. 4,) corresponding to the pin D on the shaft, so that the disk

may be placed upon the wrist-pin in any of the positions allowed by the several sides of the pin D.

Upon the outside of the disk I form a wrist-pin, L, on to which the pitman P is placed, to connect the slide R, or connect the slide to the wrist-pin L by other device, if preferred.

The pin L on the disk is eccentric to the recess which fits the pin D on the shaft. It will therefore be readily seen that the length of the throw or reciprocating movement imparted by the driving-shaft is varied accordingly, as the pin L on the disk is arranged by the turning of the disk to a greater or less eccentricity of the shaft, as, for instance, if the pin L be arranged on the disk with the same eccentricity to the recess F that the pin D has to the shaft, then, if the disk be placed in one position, the wrist-pin L would be concentric to the shaft, and thus impart no movement to the slide, or, if the disk be turned from that position one-half round, then the reciprocating movement imparted would be equal to the sum of the eccentricities of the two, that is, double the eccentricity of the wrist-pin on the shaft; and the several sides of the pin on the shaft, and recess in the disk, will permit the adjustment of the pin L to any desirable point between the two extremes. By this construction the wrist-pin on the shaft will hold the disk without other security than its own peculiar form.

The same result is accomplished by making a recess into the head of the shaft of many-sided or angular form, and fitting the disk into such recess, it being merely reversing the construction I have first described, consequently an equivalent for the same.

I am aware that it is not new to vary the extent of movement of the pitman of a punching or pressing-apparatus by means of two eccentrics, so adjusted that one shall neutralize, more or less, the extent of throw due to the revolution of other, and accordingly I wish to be understood as claiming only the construction and arrangement of mechanism for effecting said result herein described and shown.

I claim the combination of the many-sided pin D, placed eccentrically on the end of the shaft B, the disk E, with recess F and wrist-pin L, and pitman P, as and for the purpose set forth.

W. F. PARKER.

Witnesses:

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