

(No Model.)

R. E. BREED.
MECHANICAL MOVEMENT.

No. 252,176.

Patented Jan. 10, 1882.

Fig. 1.

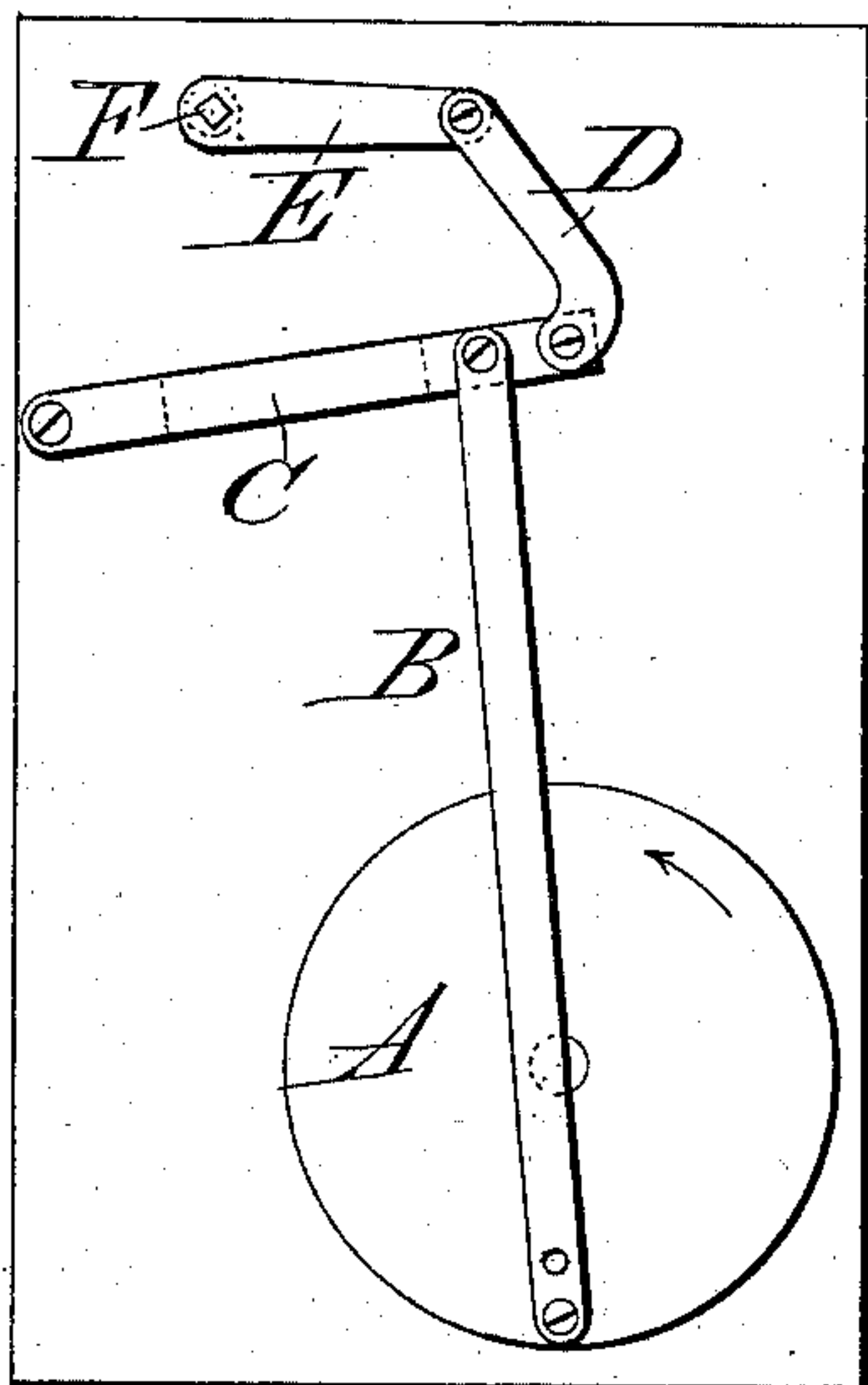


Fig. 2.

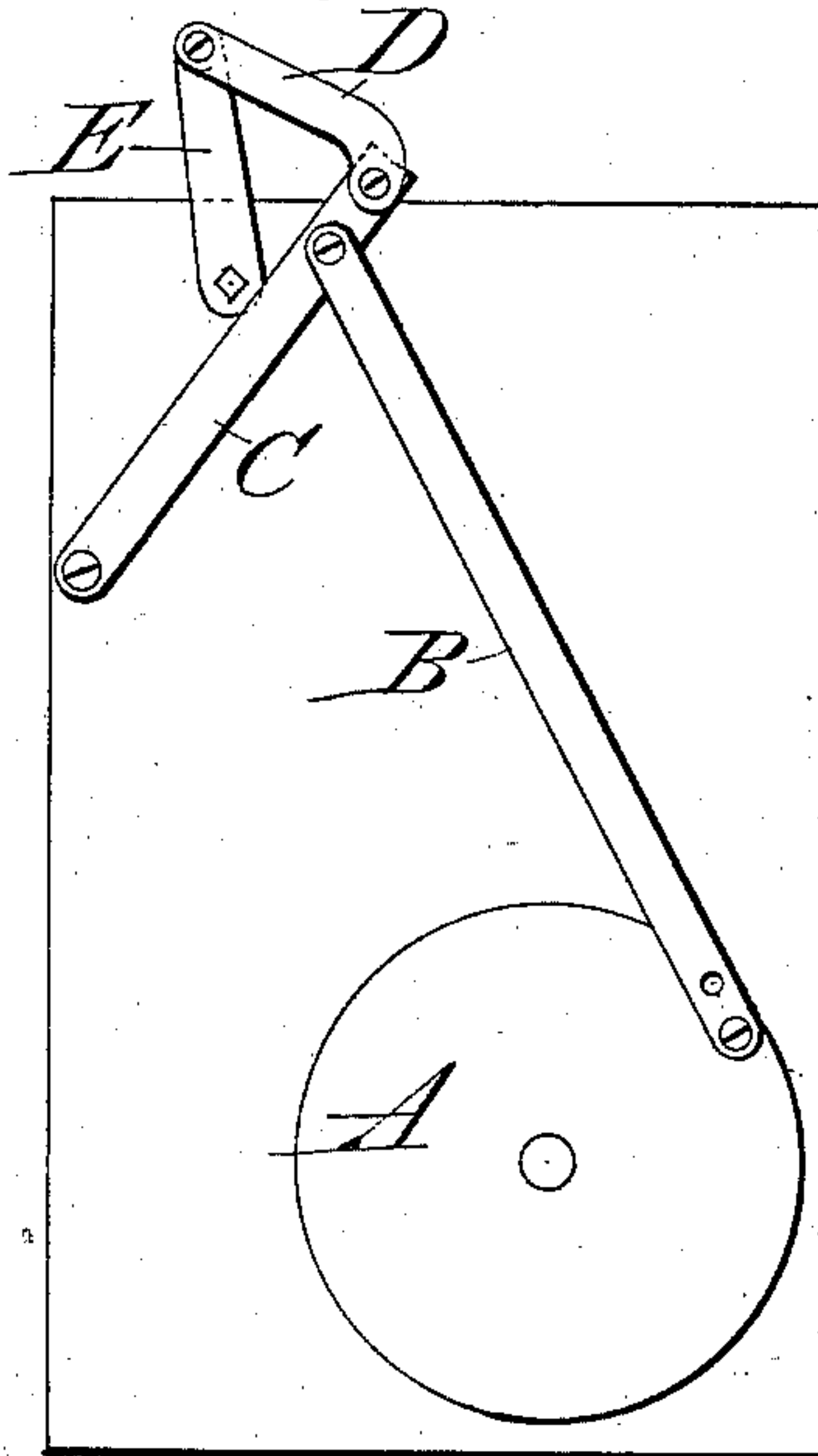


Fig. 4.

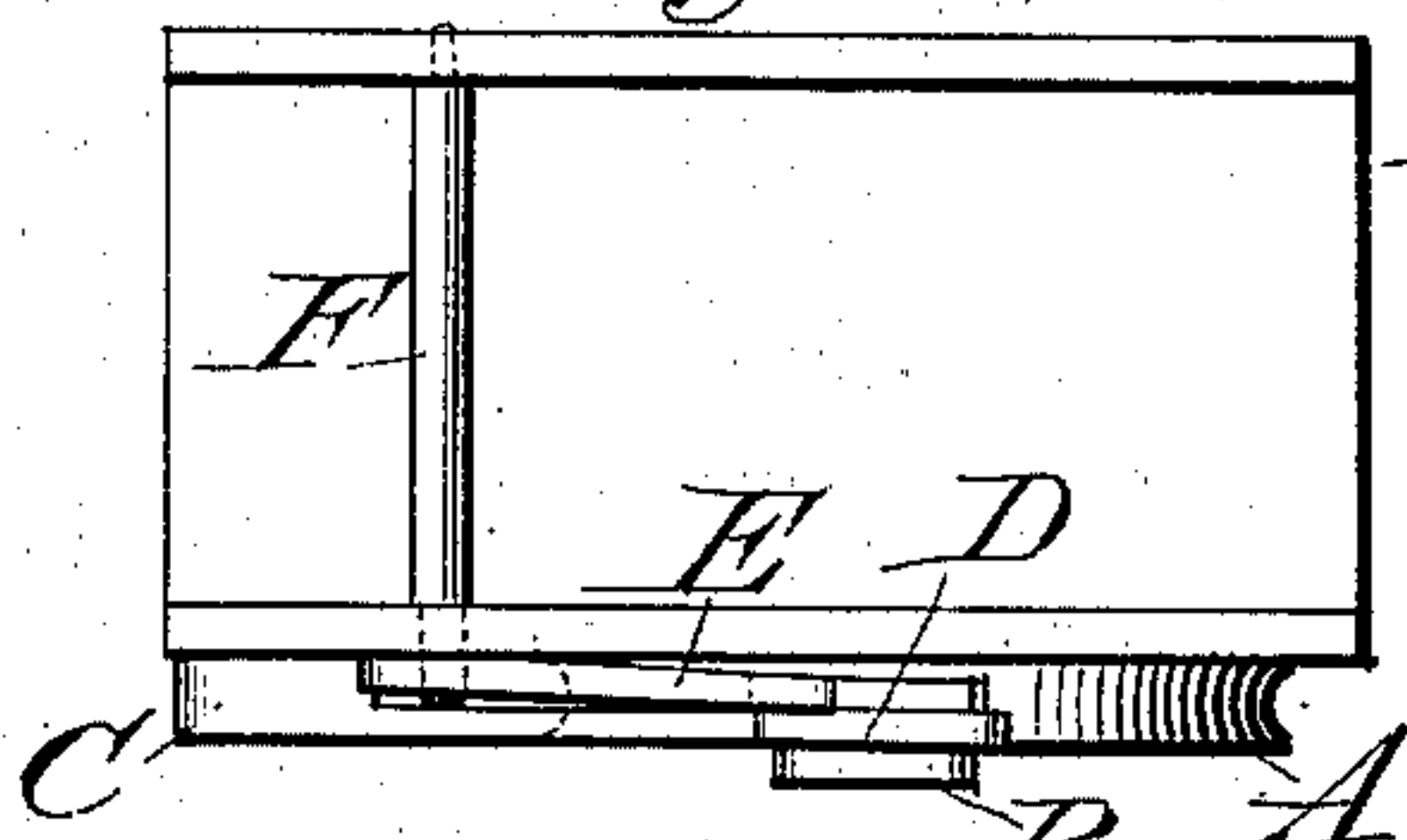


Fig. 3.

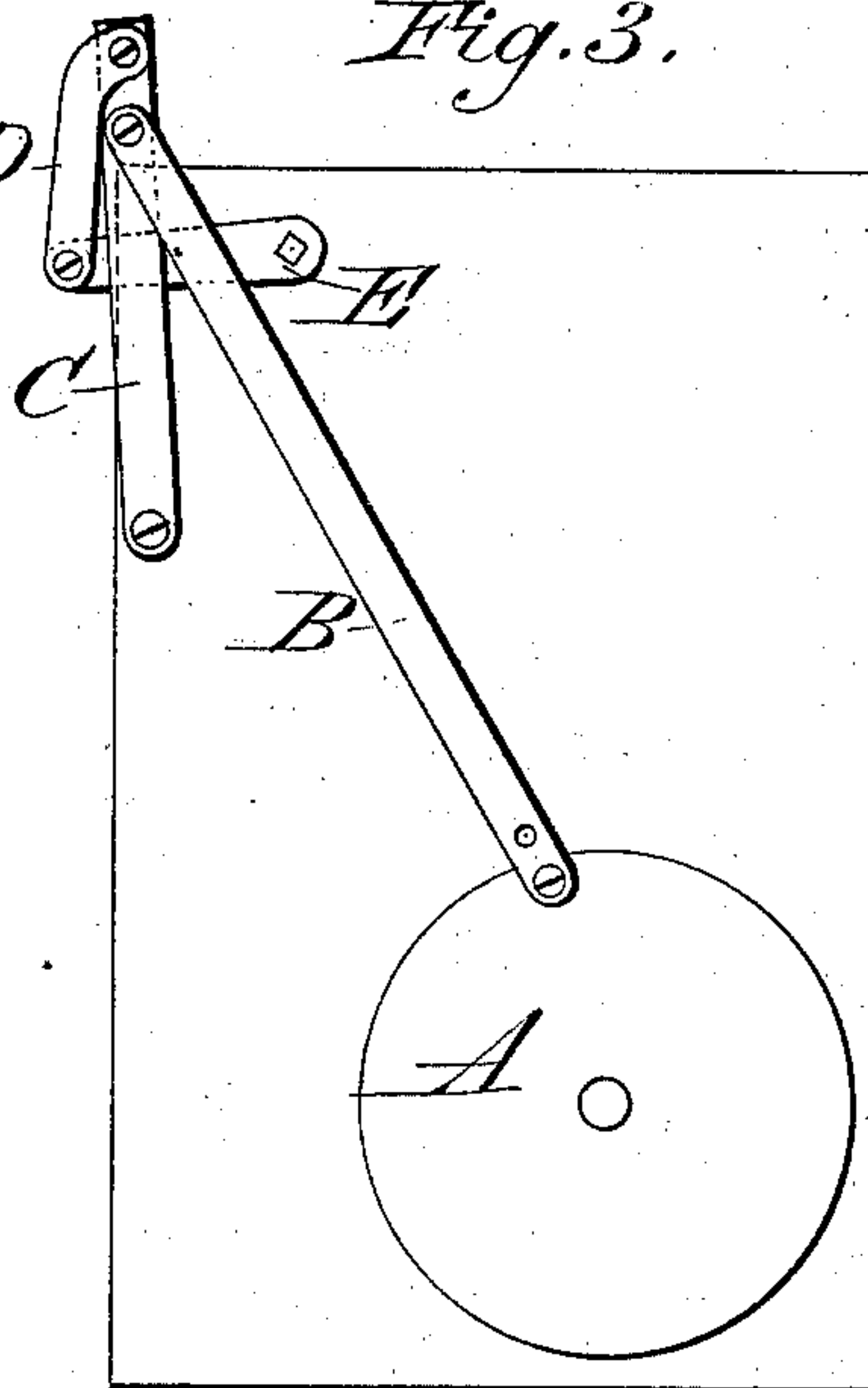
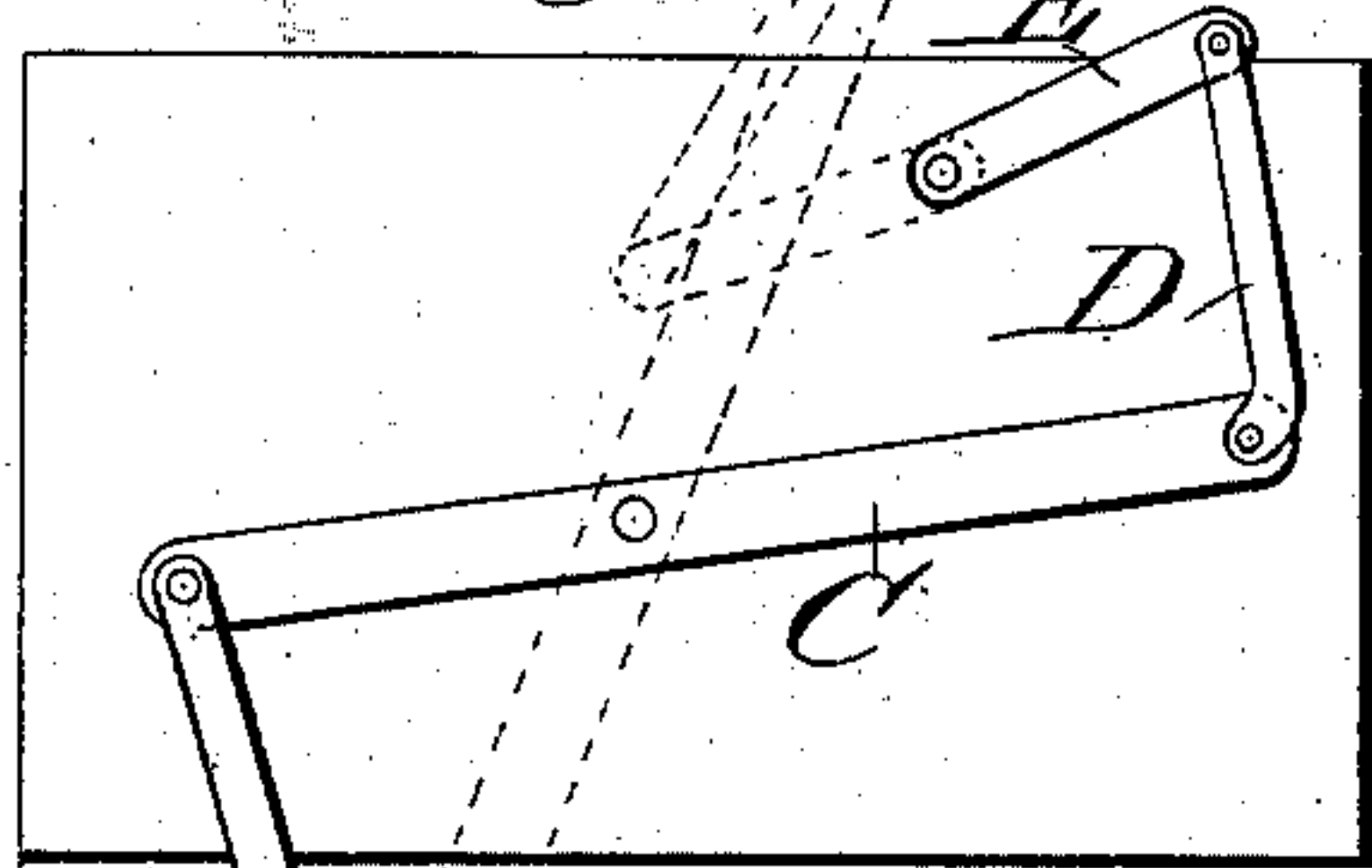


Fig. 5.



Attest:

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UNITED STATES PATENT OFFICE.

RICHARD E. BREED, OF PITTSBURG, PENNSYLVANIA.

MECHANICAL MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 252,176, dated January 10, 1882.

Application filed September 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, RICHARD E. BREED, of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Mechanical Movements; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to mechanical movements, the object being to provide a simple and effective means of imparting a semi-rotary motion to a rock-shaft, for the various purposes to which said motion may be applied; and the invention consists in the combination, with a rock-shaft having at one end a suitable arm, of a link connecting said arm with an oscillating lever, which is in turn connected by a pitman with a power or crank wheel, the rotary motion of which is thereby transmitted to said rock-shaft in such a manner as to cause the same to rotate in a half-circle, as hereinafter more fully set forth.

In the annexed drawings, which fully illustrate my invention, Figure 1 is a vertical side elevation of my improved mechanical movement, showing the position of the parts at the beginning of a movement. Fig. 2 is a similar view, showing the position of the same when the movement is about half completed. Fig. 3 is a view of the parts at the end of the movement. Fig. 4 is a plan view, and Fig. 5 a modification.

Like letters indicate like parts in the several views.

A represents a wheel, which is driven by power applied in any convenient manner. This wheel is connected by a pitman, B, with an oscillating lever, C, which may be pivoted at its opposite end, as shown in Figs. 1, 2, and 3, or at or near its center, as shown in Fig. 5.

The pitman B may be made adjustable, if

desired, so as to be readily attached in any suitable manner to wheels of varying diameters, and may be secured at or near either end of the oscillating lever C, as found most convenient. This oscillating lever is connected by a link, D, with the arm E of a rock-shaft, F, which is journaled in suitable bearings, the lever being recessed or cut away on one side to allow the arm E sufficient room to pass.

It will be seen that as the pitman is operated by power applied to the wheel A an oscillating movement will be thereby imparted to the lever C, thus causing the link D, which is connected therewith, to move the arm E of the rock-shaft in a half-circle back and forth. The rock-shaft F thus receives a semi-rotary motion corresponding to the movements of its arm E, and will transmit the same in an appropriate manner to any connected mechanism that may require to be so operated.

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

1. In a mechanical movement, the combination of the following elements: a rock-shaft having a suitable arm, a connecting-link, an oscillating lever, a pitman, and a driving-wheel, the link being arranged to connect the arm of the rock-shaft with the oscillating lever, which is in turn connected with the driving-wheel by means of the pitman, whereby the rotary movement of said wheel imparts a semi-rotation to the rock-shaft, substantially as specified.

2. The combination, with the rock-shaft F, having arm E, and the wheel A, having pitman B, of the oscillating lever C and link D, substantially as and for the purpose shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

RICHARD E. BREED.

Witnesses:

HERBERT F. MOORE,
JEFF. D. LOKER.