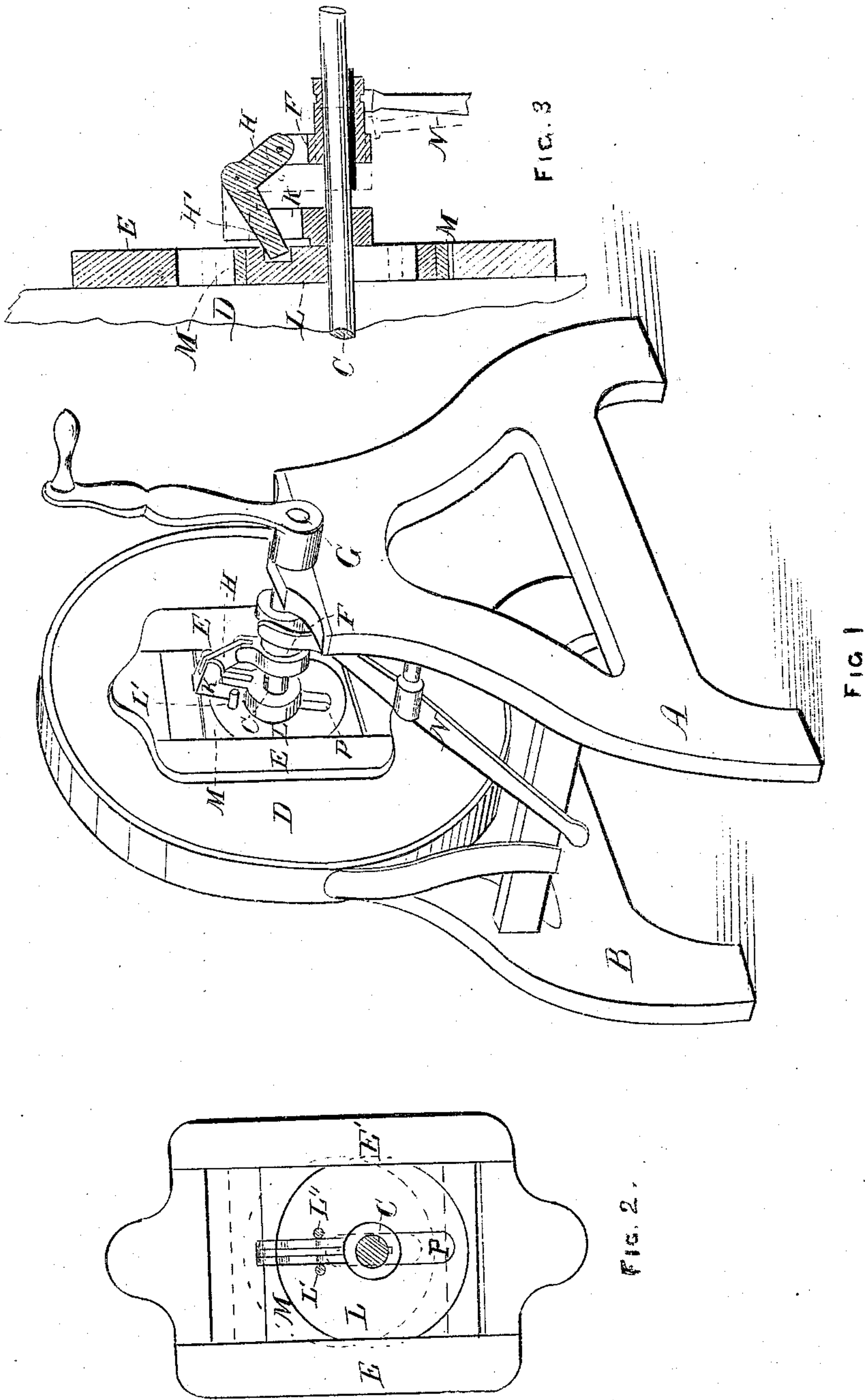


H. F. Shaw, Clutch.

No. 93,486.

Patented Aug. 10. 1869



WITNESSES.

Allen Barry
Frank L. Parker

Henry F. Shaw INVENTOR.

UNITED STATES PATENT OFFICE.

HENRY F. SHAW, OF WEST ROXBURY, MASSACHUSETTS.

IMPROVED CLUTCH.

Specification forming part of Letters Patent No. **93,486**, dated August 10, 1869; antedated August 5, 1869.

To all whom it may concern:

Be it known that I, HENRY F. SHAW, of West Roxbury, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Clutches; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

To enable others skilled in the art to make and use my invention, I will proceed to describe its nature, construction, and use.

The nature of my invention consists in combining with the driving-shaft an eccentric so arranged and combined with the shaft and pulley that it must always revolve with the shaft, but may or may not be concentric with it. When it is concentric with the shaft it will revolve in a circular socket made in the pulley, and will not cause the pulley to revolve; but when the eccentric is not concentric with the shaft the pulley must revolve with the shaft.

In the drawings, Figure 1 is a perspective view, showing my invention. Fig. 3 is a vertical section through a part of the same.

C is the shaft to which I apply my invention. D is a pulley running loose on the shaft C. E E' is a frame attached to said pulley, containing a rectangular slide, M, said slide being free to move in one direction in the frame E E', as represented by dotted lines in Fig. 2. L is an eccentric revolving in the slide M, and being provided with a slot, P,

Figs. 1 and 2, and is free to slide back and forth with M. H H', Fig. 3, is a bent lever pivoted upon the arm K, and operated by the lever N, which acts through the sleeve F. The end H' of the bent lever H H' enters a recess in the eccentric L, so that any action of the bent lever H H' causes a corresponding movement of the eccentric L and its inclosing-slide M. The eccentric L is provided with two pins, L' L'', Fig. 2, so that the arm K, which is made fast to the shaft C, cannot revolve without communicating motion to the eccentric L.

From the above description and drawings it will be seen that the disk, or, as I have called it, "eccentric," L, does not perform the function of an eccentric, but acts as a clutch. As L cannot revolve independent of the shaft it may be considered a part of the shaft. In short, I may say that I may change the form of my shaft. Thus, when L is concentric with C, then it may, with the shaft, revolve without communicating motion to the pulley; but if I throw L out of center, then the shaft as a whole is changed, and cannot revolve without causing the pulley to revolve also.

What I claim as my invention, and desire to secure by Letters Patent, is—

The eccentric L, operating substantially as described, and for the purpose set forth.

HENRY F. SHAW.

Witnesses:

FRANK G. PARKER,
A. HUN BERRY.