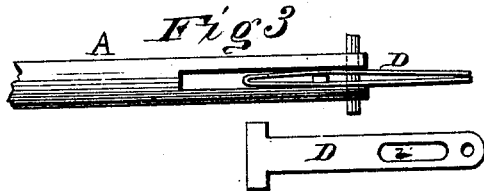
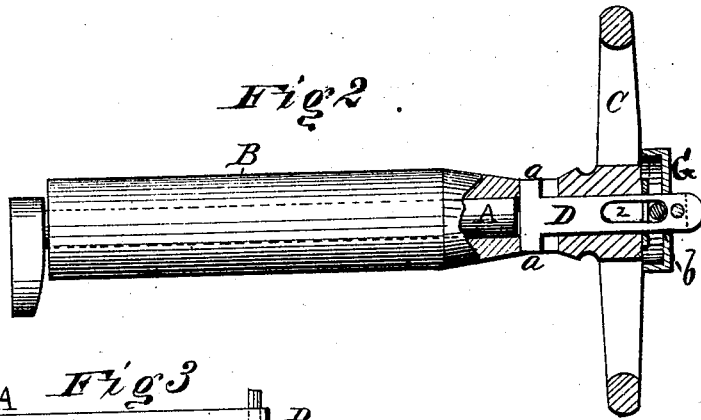
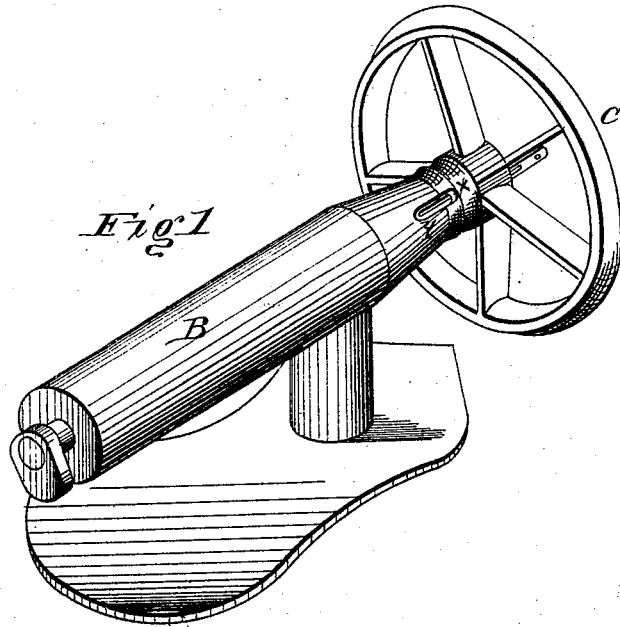


R. A. YORK.

CLUTCH FOR ENGAGING AND DISENGAGING PULLEYS OR FLY-  
WHEELS.

No. 181,514.

Patented Aug. 22, 1876.



WITNESSES  
*Francis L. Ourand*  
*Henry N. Miller*

INVENTOR  
*Richard A. York*  
*Alexander Mason*  
By *Alexander Mason* Attorneys

# UNITED STATES PATENT OFFICE.

RICHARD A. YORK, OF READING, MICHIGAN, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO ANDREW M. R. FITZSIMMONS, OF SAME PLACE.

## IMPROVEMENT IN CLUTCHES FOR ENGAGING AND DISENGAGING PULLEYS OR FLY-WHEELS.

Specification forming part of Letters Patent No. **181,514**, dated August 22, 1876; application filed  
May 10, 1876.

*To all whom it may concern:*

Be it known that I, R. A. YORK, of Reading, in the county of Hillsdale, and in the State of Michigan, have invented certain new and useful Improvements in Clutch for Engaging and Disengaging Pulleys or Fly - Wheels; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a device for engaging a pulley or fly-wheel with a shaft, and for disengaging them therefrom, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a section of the same. Fig. 3 is a detached view of parts thereof.

A represents a shaft, having its bearing in the arm B, and provided with the loose fly-wheel C on its outer end. The outer end of the shaft A is slotted longitudinally, and in said slot is inserted a double spring-key, D, the inner end of which has projections *a a* extending beyond the shaft A on opposite sides. The fly-wheel C is placed over the slotted portion of the shaft, so as to surround the key; and in the inner end of the fly-wheel hub are slots or notches *x x*, for the projections *a* of the key to enter into. In the end of the bearing B are similar notches or slots, *y*.

When the key D is drawn outward far enough for the projections *a* to enter the slots *x* in the wheel-hub, the wheel becomes coupled to the shaft, and will therefore rotate therewith; but when the key is pushed inward till said projections enter the notches *y* in the bearing B, the wheel will turn loosely on the shaft.

The movement of the key D is limited by means of a pin, *b*, passing through the end of the shaft, and through a slot, *z*, in the key. This pin also prevents any lateral movement of the wheel.

On the end of the key is fastened a disk or cap, G, by means of which the key D is moved out and in, as required, to connect or disconnect the wheel with the shaft.

This invention is applicable to fly-wheels on sewing-machines, and for many other purposes.

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

The combination of the shaft A, slotted longitudinally, as described, the bearing B, provided with slots *y y*, the fly-wheel C, provided with slots *x x* in its hub, the slotted T-shaped sliding spring-key D, pin *b*, and cap G, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of April, 1876.

RICHARD A. YORK.

Witnesses:

A. M. R. FITZSIMMONS,  
H. P. PARMELEE.