

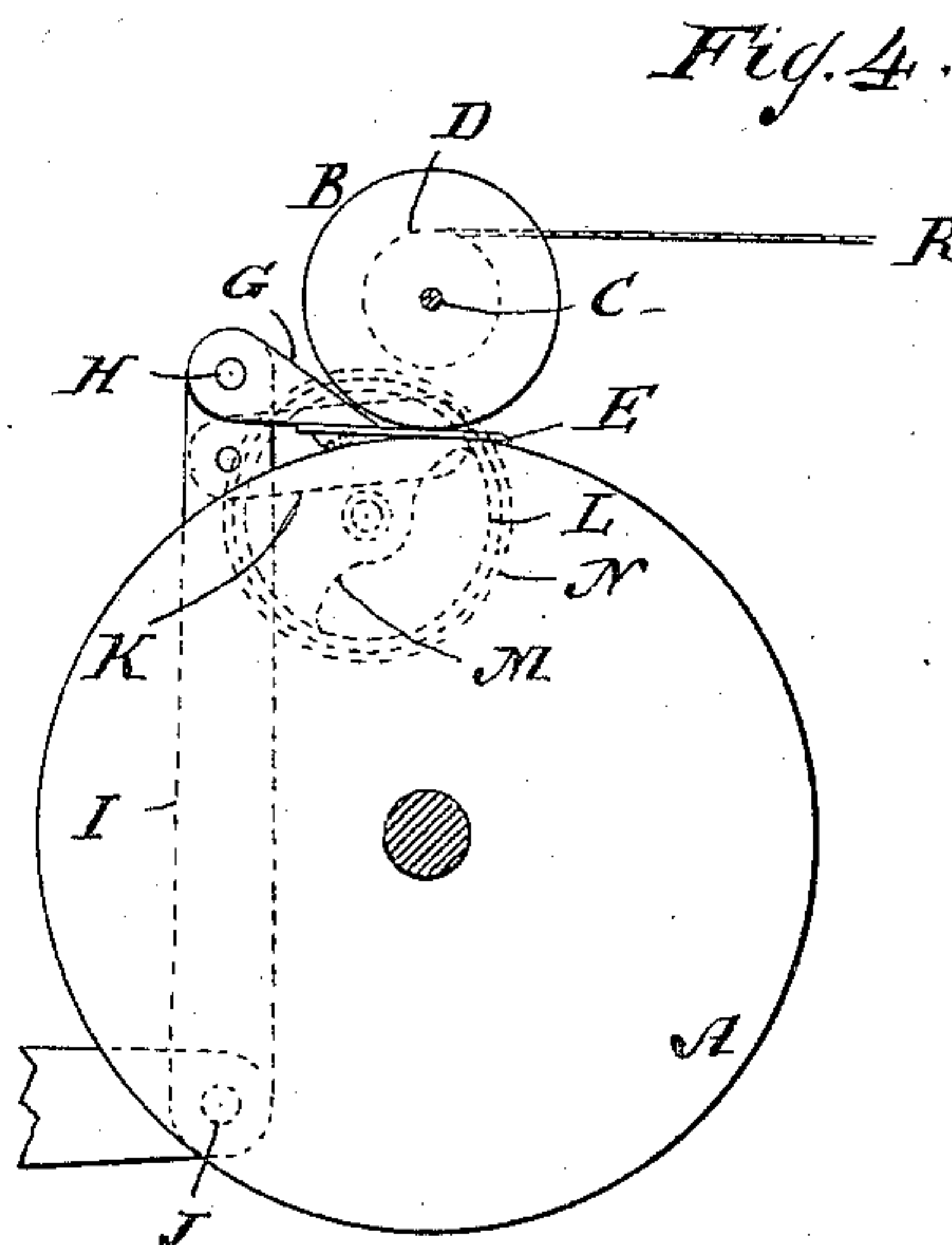
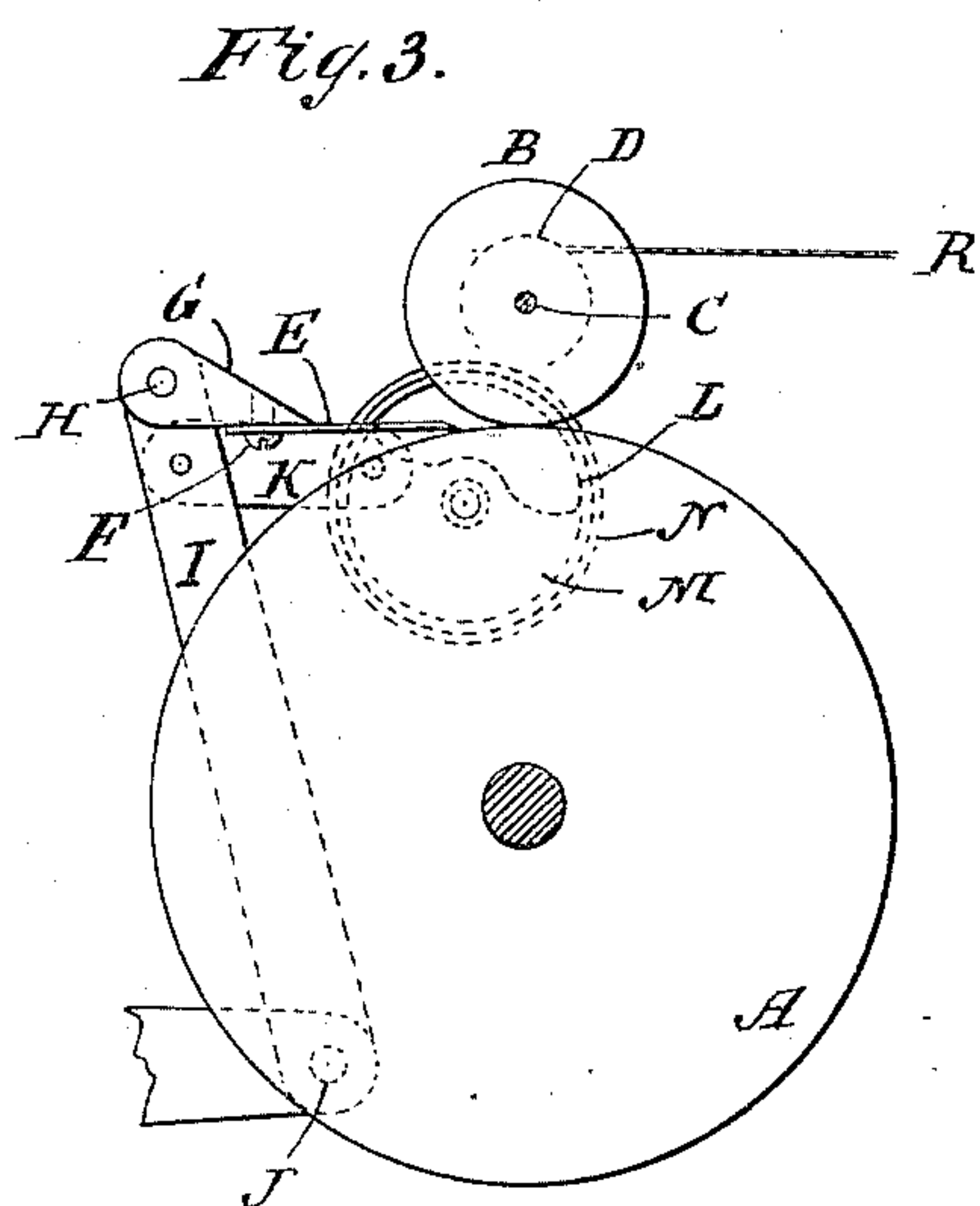
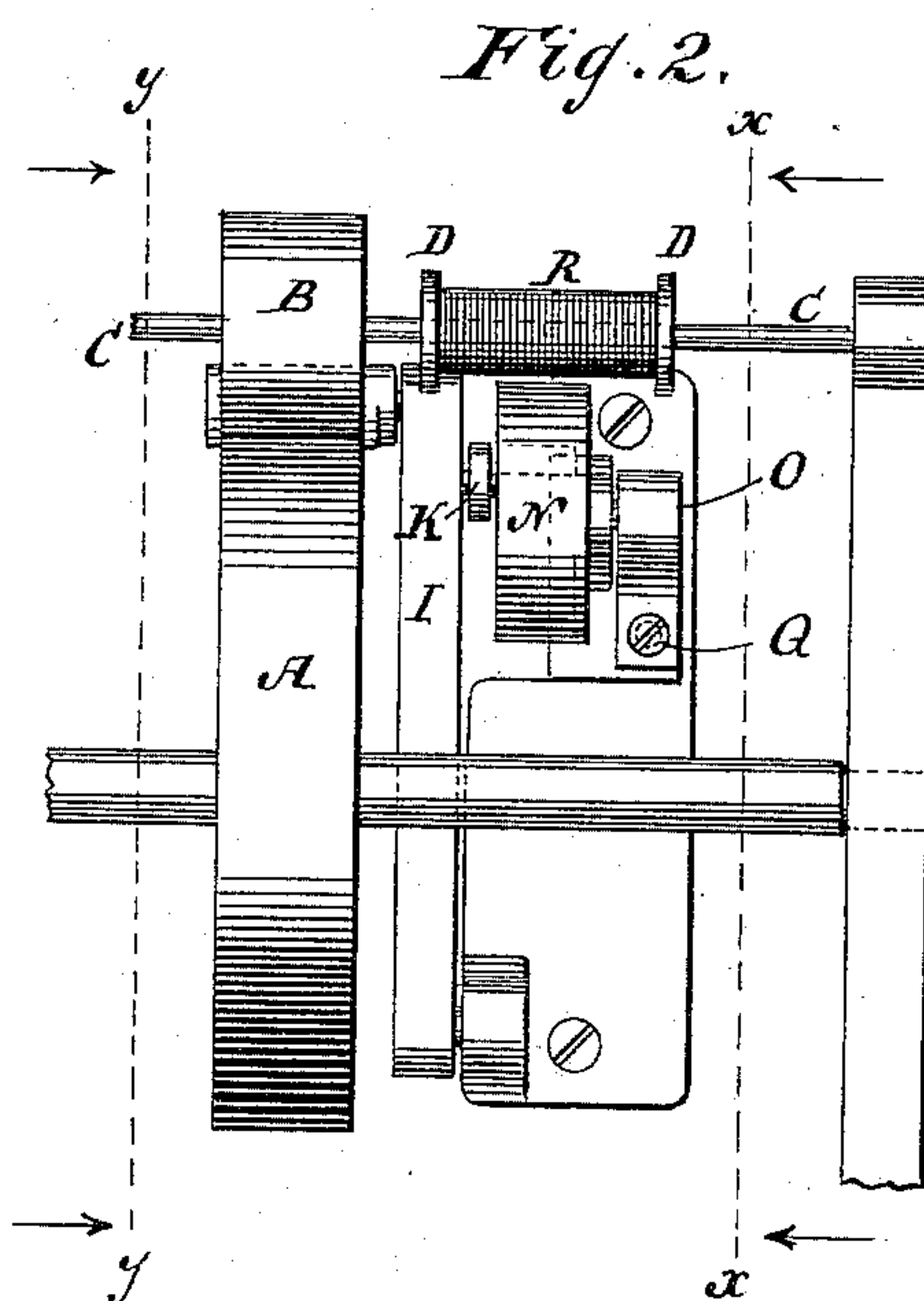
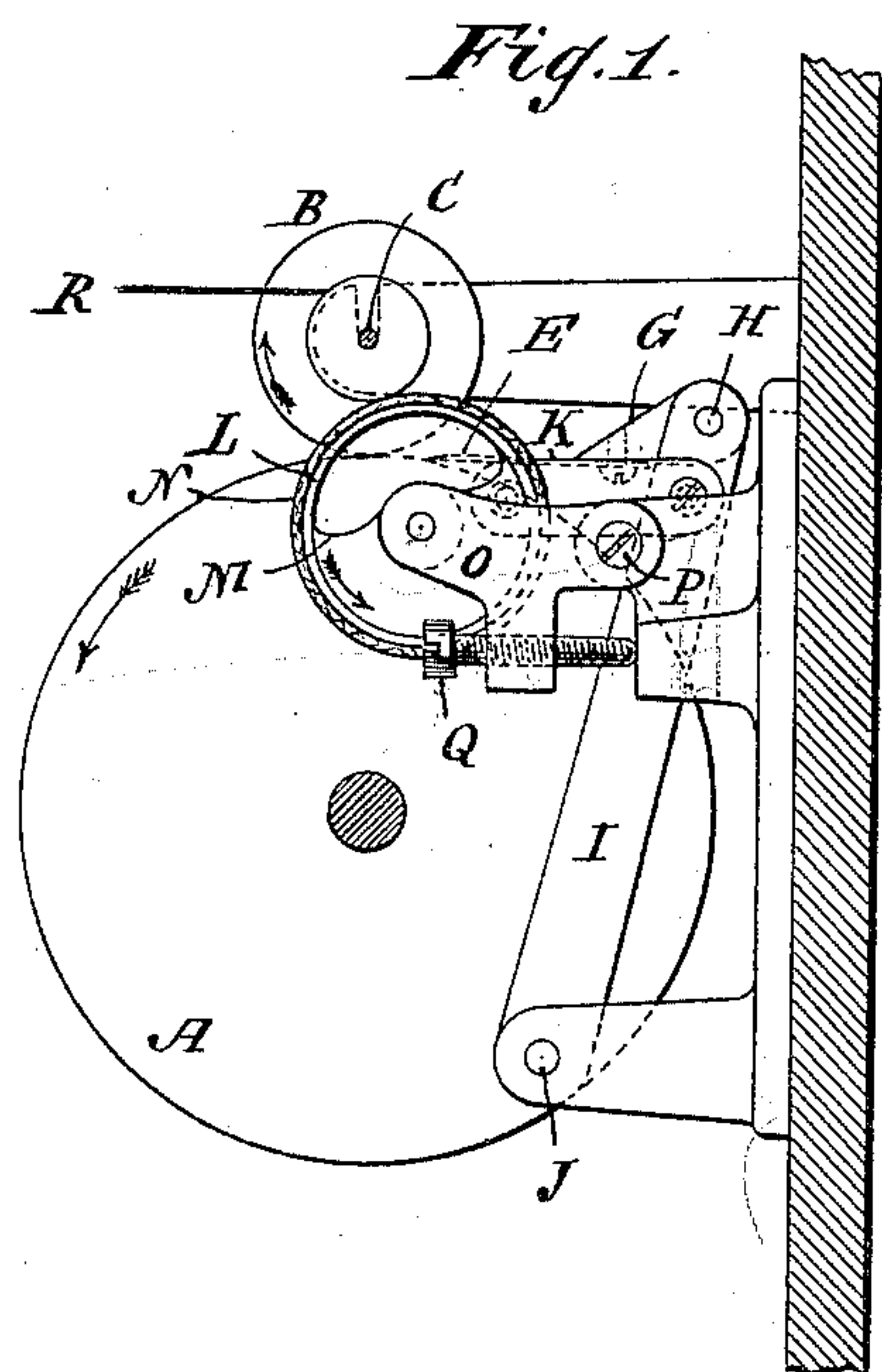
(No Model.)

J. KOERBER.

MACHINE FOR WINDING BOBBINS.

No. 387,080.

Patented July 31, 1888.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JACOB KOERBER, OF NEW YORK, N. Y.

MACHINE FOR WINDING BOBBINS.

SPECIFICATION forming part of Letters Patent No. 387,080, dated July 31, 1888.

Application filed February 2, 1888. Serial No. 262,714. (No model.)

To all whom it may concern:

Be it known that I, JACOB KOERBER, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Machines for Winding Bobbins, of which the following is a specification.

This invention has for its object to provide novel, simple, and efficient mechanism for winding thread and similar material on spools or bobbins; and it consists in the features of construction and combination of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a section in the plane xx , Fig. 2, of my improved winding mechanism. Fig. 2 is a front elevation of the same. Fig. 3 is a section in the plane yy , Fig. 2. Fig. 4 is a section similar to Fig. 3, with parts of the mechanism in different position.

Similar letters indicate corresponding parts.

In the drawings, the letter A indicates a main actuator in the form of a disk, the action of which tends to rotate the transmitter, in the form of a disk, B, with its shaft C, in the direction of the arrow shown on the transmitter B in Fig. 1. On the transmitter shaft C, and rotating therewith, is a spool or bobbin, D.

E is a stop, which in the example shown in the drawings consists of a plate of metal or other suitable material. Said stop is secured by a screw or fastening, F, to a bracket, G, and when the stop E is worn out or unserviceable said stop can be removed from the bracket G and replaced by another stop. The bracket G is jointed or pivoted at H to a lever or arm, I, which lever or arm is adapted to move about a pivot or joint, J.

A link, K, Fig. 3, connects the arm I with a stop-actuator, L. The stop-actuator is shown in the form of a wheel or rotary frame, and a weight, M, tends to hold the stop-actuator in the position shown in Fig. 3. The stop-actuator is shown mounted on a frame or support, O, Fig. 1, jointed or pivoted at P, and a set-screw, Q, is adapted to adjust the support O so as to bring the stop-actuator nearer to or farther from the thread or material, R, which is being wound onto the spool or bobbin D.

The device operates as follows: The rotation

of the spool or bobbin D causes the thread or material R to be wound onto said spool. When the material R on the spool has acquired such a bulk that said material comes into contact with the stop-actuator L, said stop-actuator is rotated in the direction of the arrow shown on said stop-actuator in Fig. 1. The movement of the stop-actuator is transmitted through the link K to the arm I and the parts are brought into the position shown in Fig. 4, with the stop E resting between the main actuator A and the transmitter B, thereby stopping the movement of the transmitter B and of the spool D, so that no more material is wound. The stop E, being pivoted or jointed at H, can readily assume the positions shown in Figs. 3 and 4. The stop-actuator L being adjustable, as already mentioned, said stop-actuator can be set toward or from the thread or material, R, which is being wound, so that said stop-actuator will secure a stoppage of the winding operation when a less or greater bulk of material has been wound, as desired. By having the stop-actuator L provided with a contact-surface, N, of soft material—such as rubber or cloth—the material R is enabled to obtain a sufficient grip or hold on the stop-actuator to impart motion thereto. When the stop E is pressed or moved out from between the main actuator A and transmitter B, the weight M tends to restore the stop-actuator from the position shown in Fig. 4 to the position shown in Fig. 3. When a spool or bobbin has been supplied with its proper bulk or amount of material, said spool or bobbin can be dismantled from the shaft C, and a fresh spool or bobbin being then mounted on said shaft C, so as to rotate with said shaft, the winding operation can be continued. The actuator A for the bobbin or spool is shown in the form of a rotary disk or wheel, to which motion can be imparted from any suitable well-known source.

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

1. The combination, with the spool-carrying shaft C, having the transmitter B, the actuator A, for revolving the transmitter, and a movable stop, E, of a rotary stop-actuator, L, and connections between the latter and the stop, said stop-actuator being adapted to be rotated

by the material being wound for moving the stop between the actuator and the transmitter, substantially as described.

2. The combination of the spool-carrying shaft C, having the transmitter-disk B, the actuator-disk A, for revolving the latter, the pivoted swinging lever I, the stop E, pivotally connected with the upper portion of the lever, the rotary stop-actuator L, adapted to be rotated by the material being wound, and the link K, connecting the stop-actuator with the stop-carrying lever for moving the stop between the transmitter and the actuator, substantially as described.

3. The combination of the spool-carrying shaft C, having the transmitter-disk B, the actuator-disk A, the pivoted swinging lever I, carrying the stop E, the pivoted support O, and the weighted rotary stop-actuator L, journaled on said support, and the link K, connecting the stop-actuator with the stop carry-

ing lever to move the stop between the transmitter and the actuator disks, substantially as described.

4. The combination of the spool-carrying shaft C, having the transmitter B, the actuator A, the pivoted lever I, the stop E on the lever, the pivoted support O, the set-screw Q, for adjusting the support, the rotary stop-actuator L, carried by the support, and the link K, connecting the stop-actuator with the pivoted lever to move the stop between the transmitter and the actuator, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

JACOB KOERBER. [L. S.]

Witnesses:

W. C. HAUFF,

E. F. KASTENHUBER.