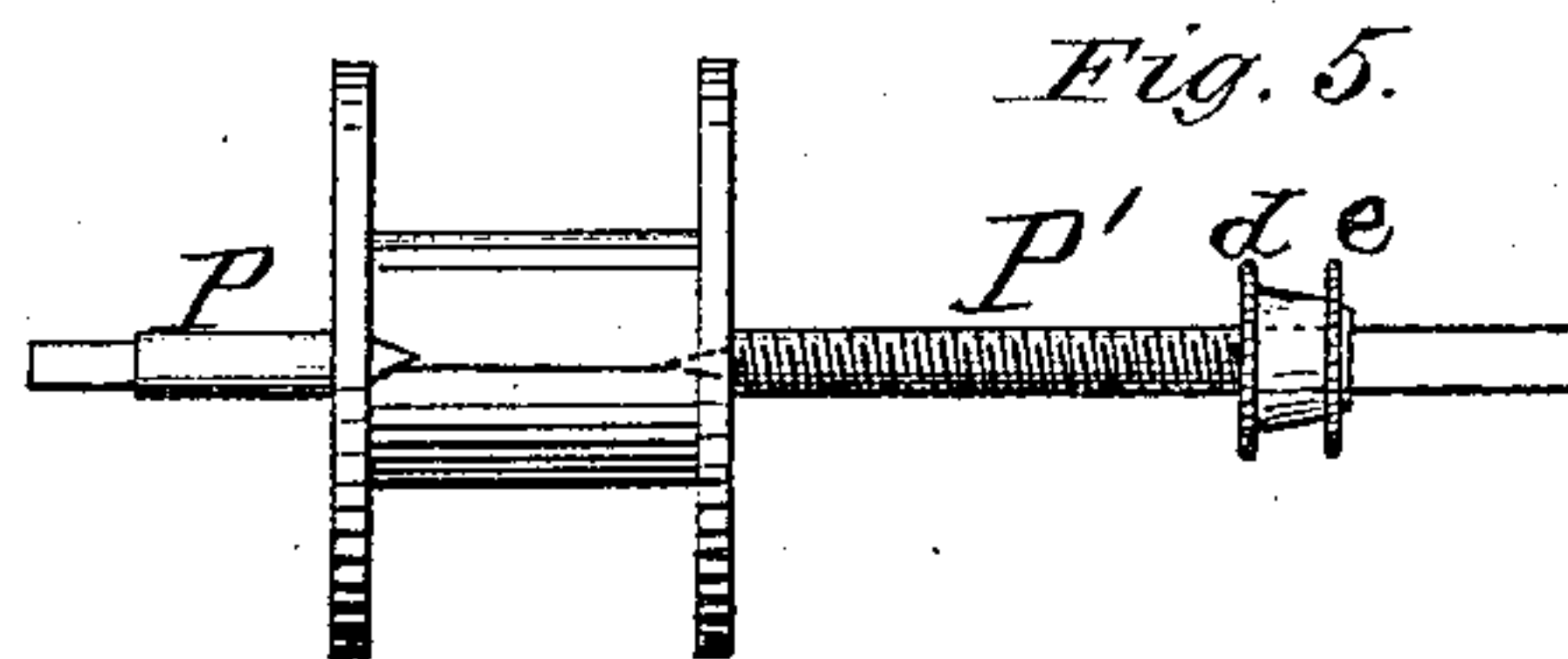
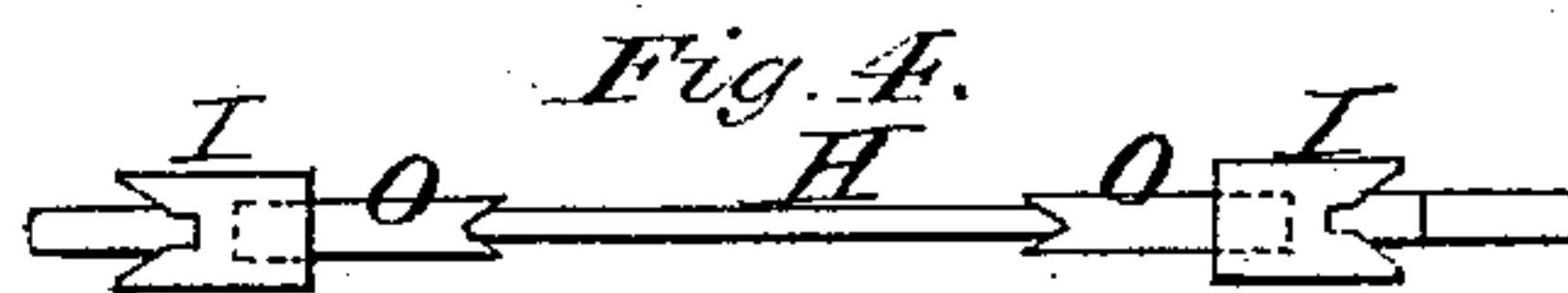
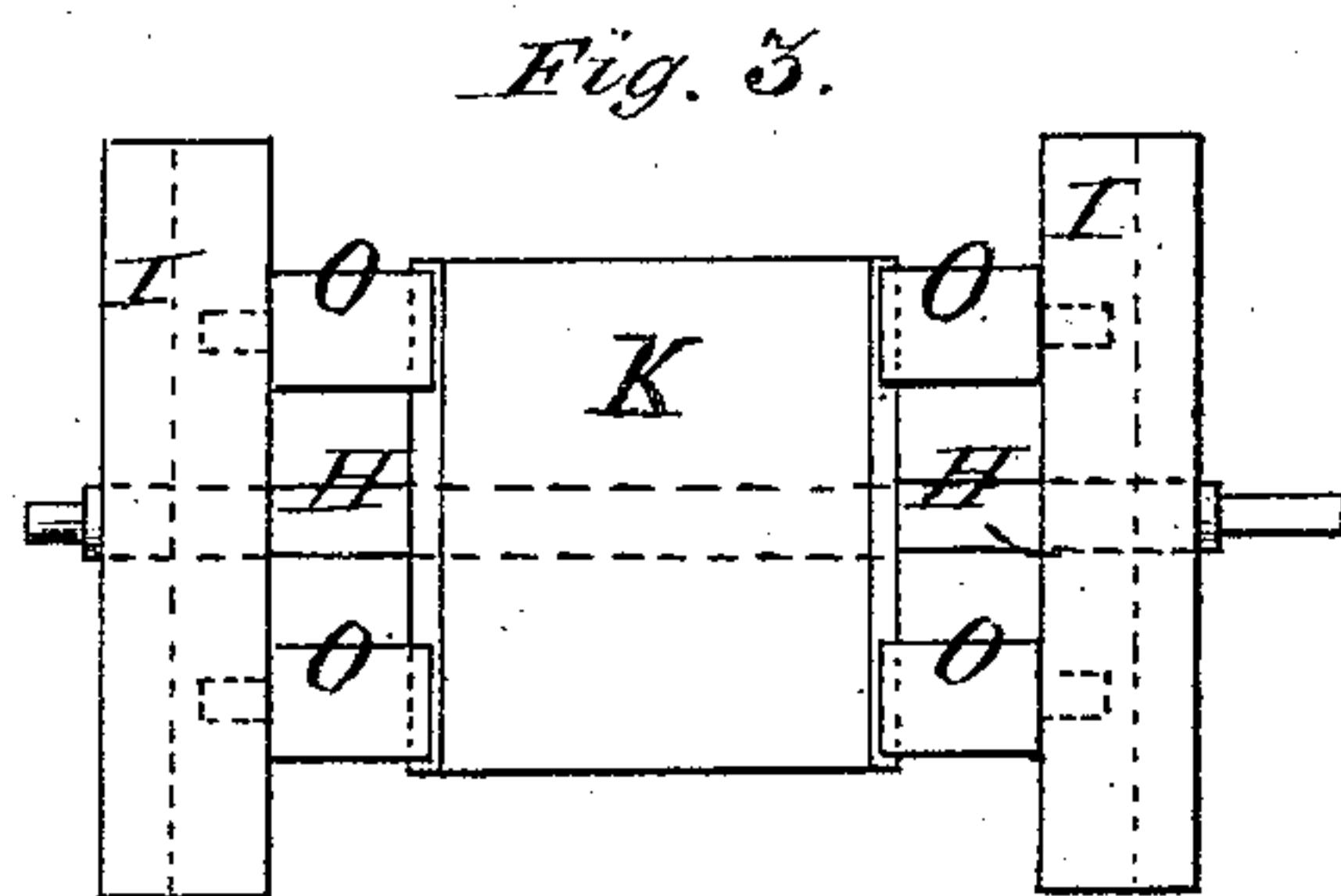
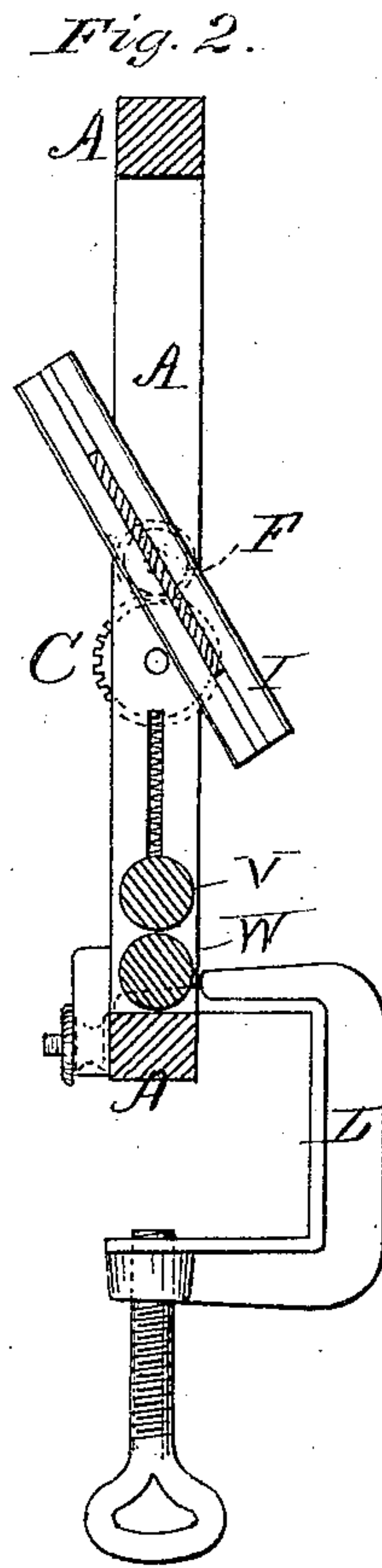
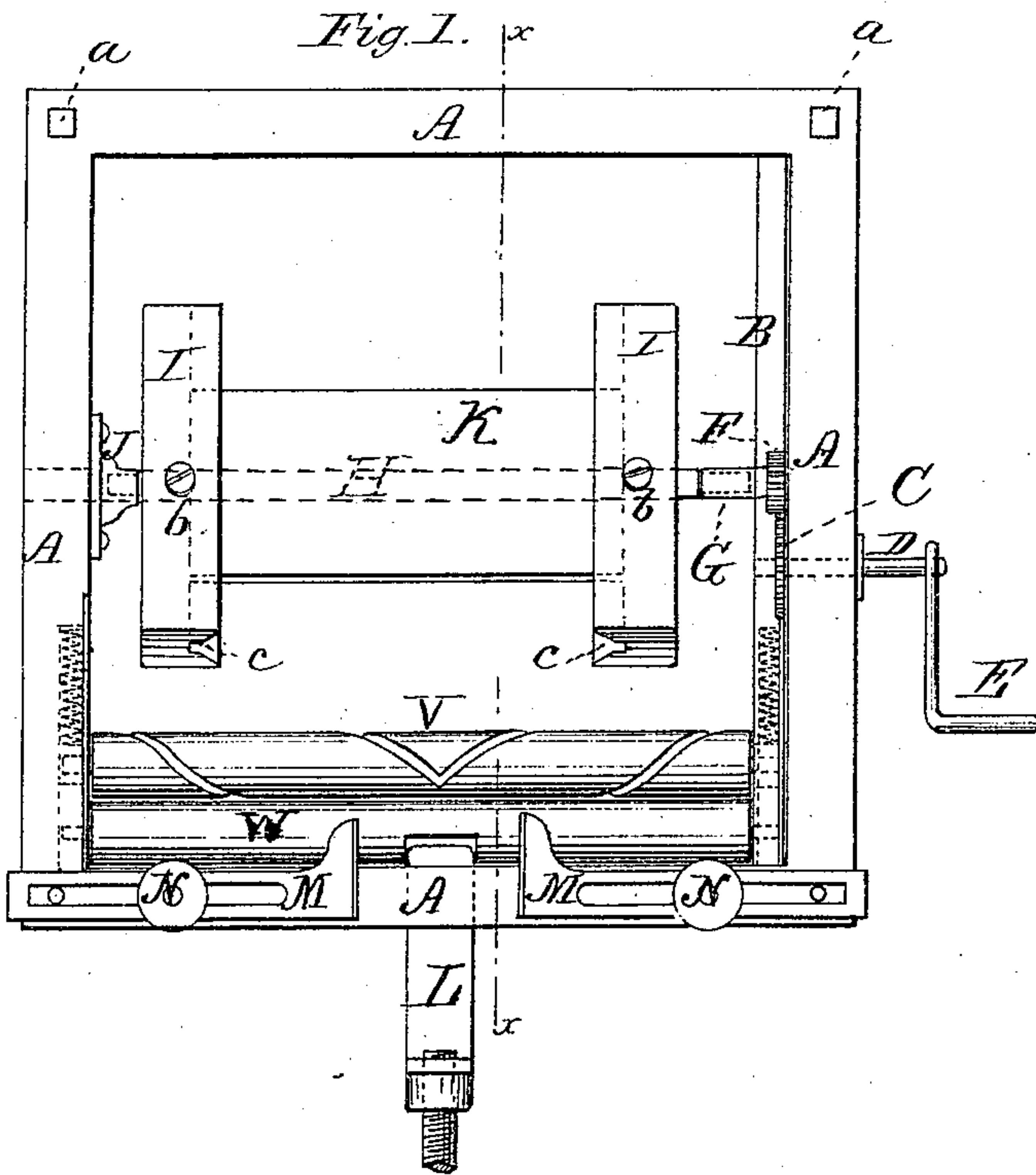


S. C. DICKINSON.
Cloth Winding Machine.

No. 169,240.

Patented Oct. 26, 1875.



Witnesses:
R. W. Grant.
Arthur L. McIntire

Inventor:
Sam'l. C. Dickinson
by atty Am. C. McIntire

UNITED STATES PATENT OFFICE

SAMUEL C. DICKINSON, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN CLOTH-WINDING MACHINES.

Specification forming part of Letters Patent No. **169,240**, dated October 26, 1875; application filed July 8, 1875.

To all whom it may concern:

Be it known that I, SAML. C. DICKINSON, of Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Ribbon-Blockers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

My invention relates to a novel construction in machines for winding or blocking woven goods, as will be understood by the general description hereinafter given, reference being had to the drawings, in which—

Figure 1 is a front elevation of a winder embracing my improvements; Fig. 2, a vertical section taken at the line *x x* of Fig. 1; Fig. 3, a detail view of a modification of my invention; Fig. 4, a top view of the same, and Fig. 5 a detail view of a block and shaft for winding ribbons.

Similar letters of reference indicate like parts in the several figures.

A represents a rectangular frame, secured at the corners, preferably, by removable bolts *a*. Arranged on one side of the frame A, between it and a parallel strip, B, is a gear-wheel, C, secured to a crank-shaft, D, which passes through and extends beyond the frame A, and adapted to receive a crank, E. This gear-wheel C meshes with a pinion, F, on the end of a short shaft, G, having a square socket in its opposite end, adapted to receive one end of a flattened rod, H, which, passing through slots in two clamping-strips, I, has its other end located in a suitable bearing, J, open on top to admit of the ready introduction or withdrawal of the end of the rod. The clamps I are adapted to be held at any desirable distance apart and firmly upon the flattened rod H by set-screws *b*. In one edge of each of these clamps there is formed a groove, of V-shape or other form, as seen at *c c*, adapted to receive the ends of the ordinary flat board K, upon which woven fabrics are usually wound, the board being held in position by forcing the clamps toward each other until they bind the board, and securing them in position by the screws *b b*, the flat

rod or shaft H being passed between the fabric and the board K.

It is obvious from this construction, that by turning the crank E, the flat rod or shaft H, with the clamps and winding-board, are all rotated. In order that the fabric being wound shall be presented smoothly to the winding-board, I provide two rollers at the base of the frame, mounted in spring-bearings, in order that the bite of the rollers may vary according to the characteristics of the material fed between them. The upper roll V is provided on its circumference with a groove extending from the center spirally toward the ends. This groove serves to stretch or draw out any wrinkles there may be in the material. The bottom roll W may be stationary, as shown in the drawing, or both may rotate. L is an ordinary screw-clamp, with which the apparatus may be secured to the end of a counter or table in an obvious manner. M M are gage-plates, secured to the bottom of the frame A, which plates may be regulated and held in place by thumb-screws N, passing through slots in the said plates and into the bottom rail of the frame. These gage-plates serve to direct the material straight and properly to the rolls and to the winding-board.

Sometimes goods are wound upon boards shorter than the width of the material. In this case the board could not be located between the clamps I and in the grooves *c c*; but in order to meet this objection I construct the clamps I with two or more sockets on the edge opposite to the V-groove, and adapted to receive the square shanks of independent chucks O, as clearly shown at Fig. 3, the clamps being reversed on the flat rod H.

When a ribbon-block is to be placed in position to be rotated for winding ribbon, instead of using the flat-rod shaft H, a shaft, P P', in two parts, is used, (see Fig. 5,) the interior end of each part being chisel-edged, in order to penetrate a short distance into the block to hold it. One part, P', of this shaft is provided with a screw-thread, on which is run a thumb-nut, *d*, and a jam-nut, *e*, which form, when run together, a stop or bearing at any given point in the length of the rod, so that blocks of different lengths may be embraced

between the chisel-ends of the parts P P', and the opposite end of P' extends through the side of frame A, and is held against displacement by running the nuts *d e* up to the bearing J.

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

1. In combination with the rotary shaft H and clamps, arranged together as shown, and smoothing-rollers, the gage-plates M, substantially as and for the purpose described.

2. The clamps I, provided with V-groove on one edge, and sockets for the reception of chuck-shanks on the opposite edge, and adapted to be removed from and secured to the shaft H, substantially as and for the purposes set forth.

3. In combination with the removable reversible clamps I, the chucks O, substantially as and for the purposes described.

4. In combination with the frame A and bearings G J, the rod or shaft P and adjustable screw-shaft P', provided with chisel-ends and nuts *d e*, substantially as and for the purposes set forth.

In testimony whereof I have hereunto set my hand and seal.

S. C. DICKINSON. [L. S.]

In presence of—

RICHD. L. GIBBS,
J. P. PAGE.