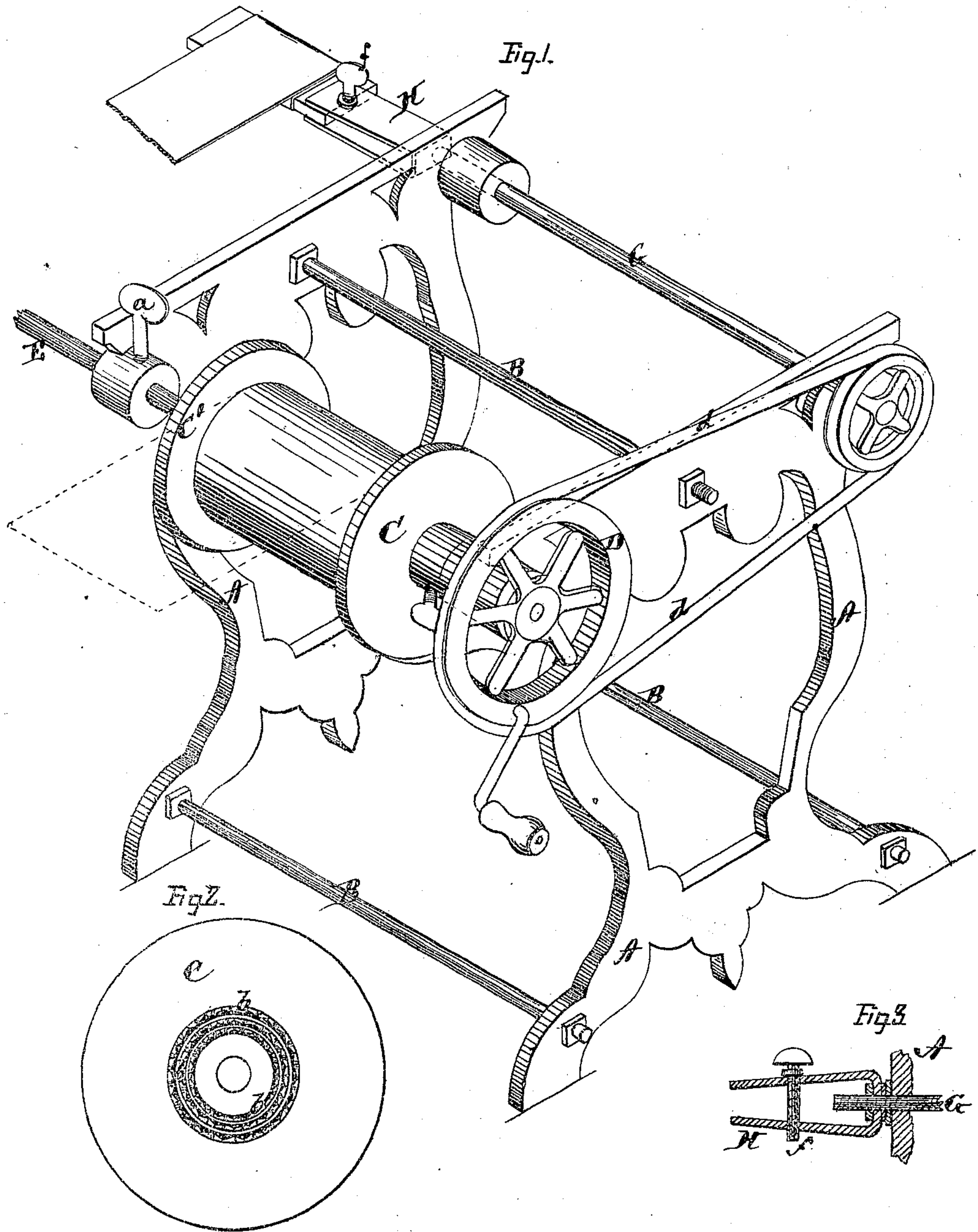


M. HAYES.

Improvement in Machines for Winding Ribbons, &c.

No. 128,143.

Patented June 18, 1872.



Witnesses:

James E. Hutchinson
C. L. Every.

Inventor.

Michael Hayes.
per Alexander Mason

Attorneys.

UNITED STATES PATENT OFFICE.

MICHAEL HAYES, OF OWEGO, NEW YORK.

IMPROVEMENT IN MACHINES FOR WINDING RIBBONS, &c.

Specification forming part of Letters Patent No. 128,143, dated June 18, 1872.

To all whom it may concern:

Be it known that I, MICHAEL HAYES, of Owego, in the county of Tioga and in the State of New York, have invented certain new and useful Improvements in Machines for Winding Ribbons, &c.; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing 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 "machine for winding ribbons, braids, laces, &c.," in a retail dry-goods store, while measuring the same in taking invoices and the like, 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 the entire machine. Fig. 2 is an enlarged side view of one of the face-plates used in the same; and Fig. 3 is a longitudinal section of a clamp also used in my machine.

The frame of my machine consists simply of two cast-iron end pieces, A A, connected by rods B B. C C' are two face-plates, one, C, of which is connected to a crank-wheel, D, having its bearing in one side of the frame. The other face-plate, C', is fitted so as to revolve upon the end of another shaft, E, which slides through a hole in the frame opposite to the center of the face-plate C, and fastens with a set-screw, *a*, and thus accommodates to any

desired width of ribbon-block, whether of wood or paper, as the case may be, between said face-plates. The face-plates C C' are provided with two or more concentric circles of teeth, *b b*, upon their inner surfaces, so as to firmly hold the ribbon-block, which will thus be made to revolve with the face-plates by the turning of the crank-wheel D. This crank-wheel is provided with a circumferential groove for a band, *d*, to connect onto another smaller pulley, *e*, placed upon the end of another shaft, G, which runs through the other side of the frame. This shaft has upon its other end a clamp, H, with set-screw *f*, so as to draw the clamp together and fasten a board firmly for winding braids, laces, &c. By removing the clamp H a spool may be put on the end of the shaft G for winding anything upon it very rapidly.

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

1. The combination of the frame A B, face-plates C C' with concentric toothed rings *b b*, crank-wheel D, sliding shaft E, and set-screw *a*, all substantially as and for the purposes herein set forth.

2. The combination of the grooved crank-wheel D, belt *d*, pulley *e*, shaft G, and clamp H with set-screw *f*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 29th day of April, 1872.

MICHAEL HAYES.

Witnesses:

E. L. EVERT,

C. E. HOLLENBACK.