(No Model.)

O. C. BURR.

THREAD HOLDER FOR SPINDLES.

No. 578,810. Patented Mar. 16, 1897.

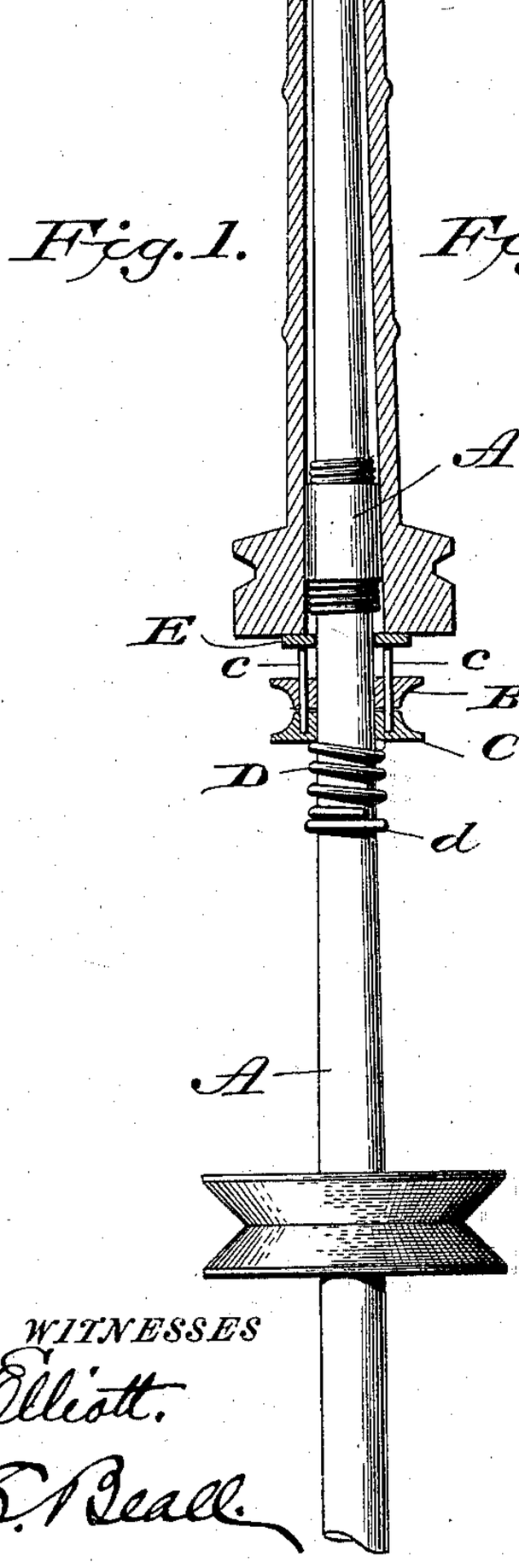

Fig. 1.

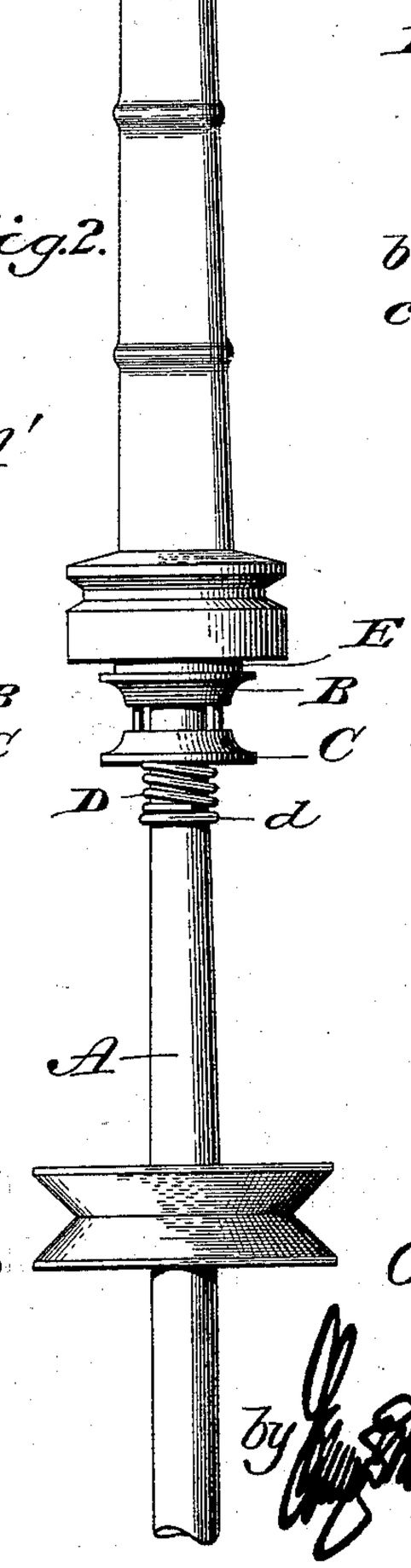

Fig. 2.

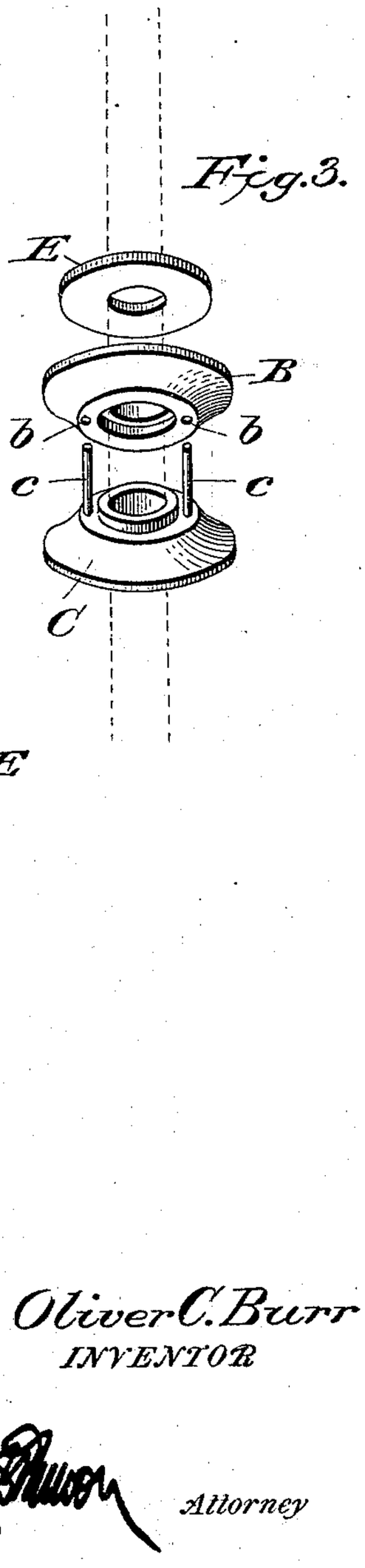

Fig. 3.

WITNESSES

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OLIVER C. BURR, OF WESTVALE, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO WALDO L. CURTISS, OF WINSTED, CONNECTICUT.

THREAD-HOLDER FOR SPINDLES.

SPECIFICATION forming part of Letters Patent No. 578,810, dated March 16, 1897.

Application filed February 15, 1896. Serial No. 579,389. (No model.)

To all whom it may concern:

Be it known that I, OLIVER C. BURR, a citizen of the United States of America, residing at Westvale, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Thread-Holders for Spindles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a cheap, simple, and effective means for holding the end of the thread or yarn to be wound upon the bobbin; and it consists in providing the spindle with a fixed collar beneath which is loosely mounted a collar having pins which pass through apertures in the fixed collar, the loose collar being spring-actuated toward the fixed collar to hold the yarn between said collars, such construction providing means for holding the end of the thread or yarn during the process of doffing instead of winding a number of turns on the spindle, as is the common practice, thus effecting a great saving in time and material, as there is no accumulation or waste of yarn below the bobbin.

In the accompanying drawings, forming part of this specification, Figure 1 is a vertical sectional view showing a spiddle provided with my improved thread-holder, the parts being in position for holding the thread between the collars. Fig. 2 is a side elevation showing the bobbin pressed down upon the spindle to separate the collars and release the thread; and Fig. 3 is a detail perspective view showing the parts separated, the construction of the collars being slightly modified.

A designates the spindle, which is provided with a bobbin-holder A′ of the type known to the trade as "Burr's Patent Bobbin-Holder." The spindle is also provided with a fixed collar B, having vertical apertures *b b*, through which pass pins *c c*, carried by a loosely-mounted collar C, located below the fixed collar. Against the under side of the loosely-mounted collar C bears a helical spring D, which encircles the spindle and bears at its lower end upon a ring *d*, attached to the spindle. This spring acts to force the loose collar against the fixed collar, and when the collars are together the pins *c* project above the upper edge of the fixed collar.

The adjoining edges of the collars B and C are preferably beveled, as shown, so that the end of the thread or yarn can be readily guided between said collars, and, if desired, one of the collars may be provided with an annular flange and the other with a corresponding socket, as shown in Fig. 3, so that the parts will fit one within the other and give a better hold or grip upon the yarn.

Over the spindle and upon the upper ends of the pins *c* is placed a washer E, against which the lower end of the bobbin will bear when placed in position upon the spindle.

The device hereinbefore described can be readily applied to spindles already manufactured, and the opening in the washer being smaller in diameter than the bobbin-holder A′ will be retained in position thereby.

In operation the end of the thread or yarn is placed between the collars B and C, and the bobbin being placed upon the spindle to bear lightly upon the upper ends of the pins the thread or yarn is guided so as to be wrapped upon the lower part of the bobbin a sufficient number of times to insure its engagement therewith, after which the bobbin is forced down upon the upper ends of the pins *c* to move the collar C away from the collar B and thus release the end of the thread. When the bobbin has been filled, the yarn is placed between the collars, so that when said bobbin is removed the thread or yarn will be broken between the bobbin and the collars and the end held thereby.

This invention provides a very simple, cheap, and effective means for holding the end of the thread or yarn until the wrapping of the same upon the bobbin has been fairly started.

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

1. In a thread-holder for spindles, the combination with a revoluble spindle having a fixed member thereon, of a second member

independent of the fixed member and reciprocally mounted on the spindle, means to move said member away from the fixed member controlled by the bobbin as it is placed on the spindle, and a spring for actuating the movable member against the movement imparted thereto by the bobbin.

2. The combination with the spindle, of a collar fixed thereon, a second collar movable on the spindle and spring-actuated against the fixed collar, and pins projecting from the movable collar and adapted to contact with the bobbin when said bobbin is placed upon the spindle, substantially as shown and for the purpose set forth.

3. The combination with the spindle A having a fixed collar or ring, of a movable collar or ring having pins which project above the fixed collar or ring, and a spring mounted upon the spindle and in engagement with the movable collar, the bobbin when placed upon the spindle being adapted to bear against the upper ends of the pins, substantially as shown and for the purpose set forth.

4. In a thread-holder for spindles, the combination of a spindle having a suitable bobbin-holder mounted thereon, a fixed collar mounted upon the spindle below the bobbin-holder, a movable collar located below the fixed collar and provided with pins which project above the same, and a spring mounted on the spindle so as to force the movable collar against the fixed collar, the parts being organized substantially as shown and for the purpose set forth.

5. The combination with the spindle A having a fixed collar B mounted thereon and provided with vertical apertures *b b*, of a movable collar having pins which pass through the apertures in the fixed collar, a spring mounted upon the spindle to bear against the movable collar, and a washer E mounted upon the spindle to rest upon the upper ends of the pins; together with a bobbin-holder carried by the spindle above the washer, the parts being organized substantially as shown and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

OLIVER C. BURR.

Witnesses:
JOHN F. MACK,
CHARLES GLIDDEN.