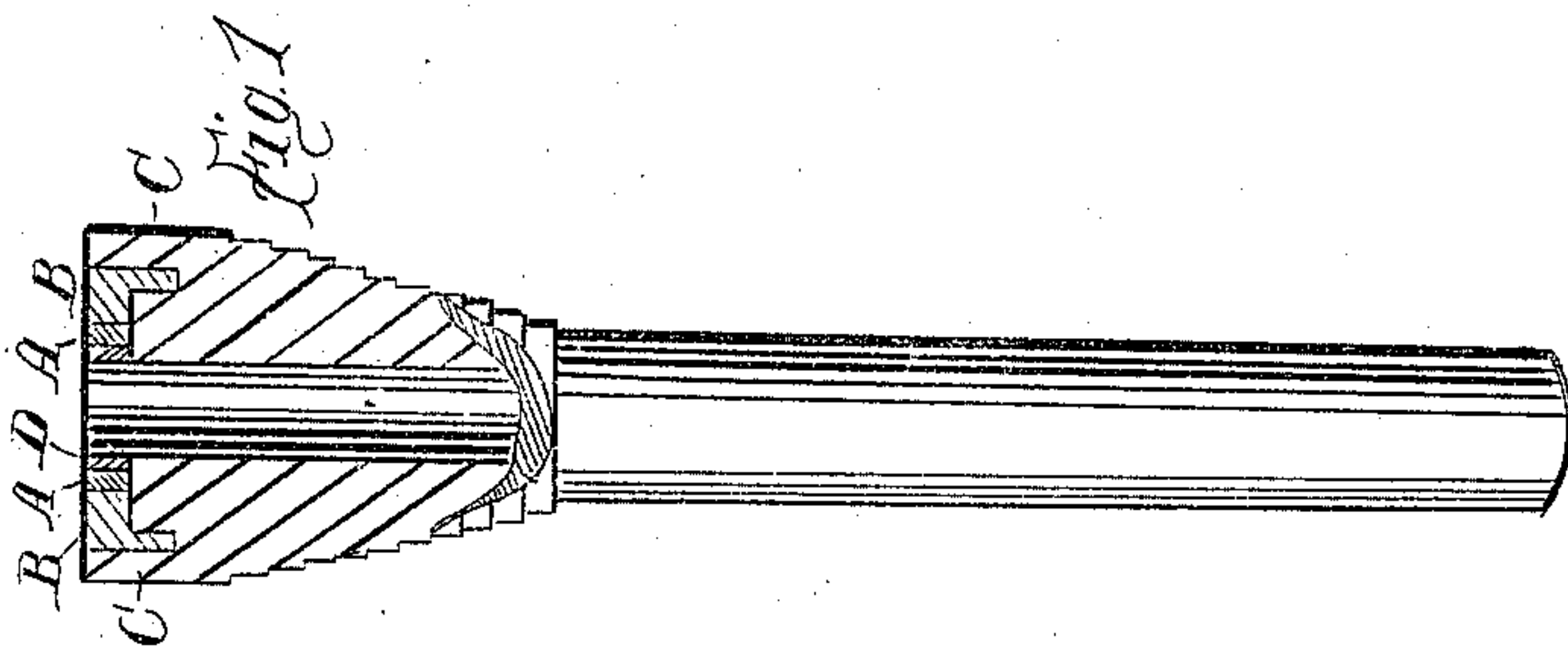
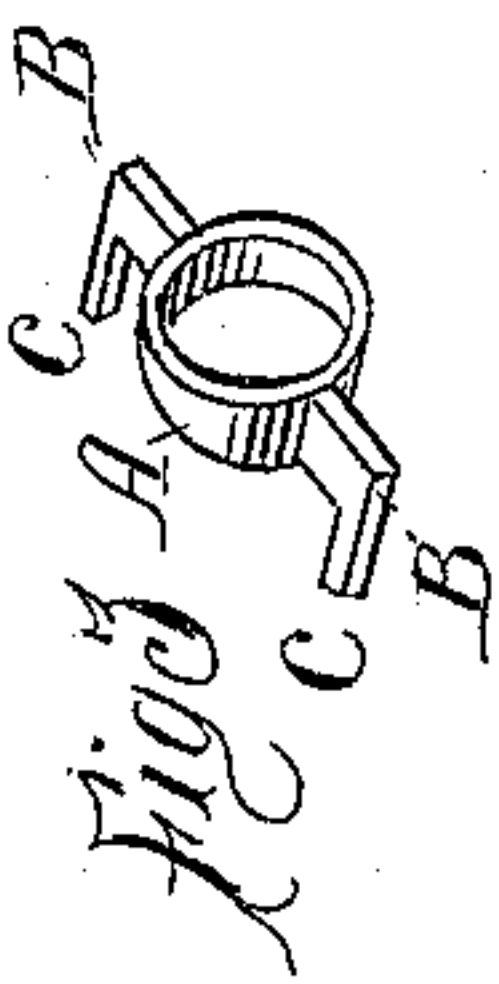
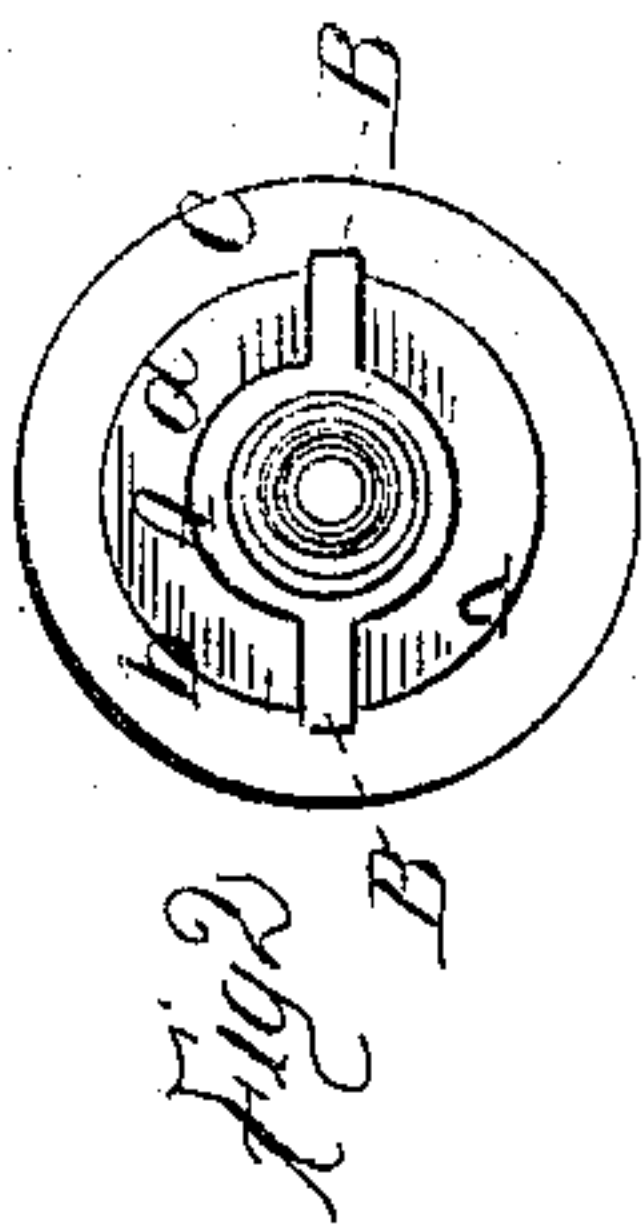


*H. J. Hubbard,
Babbin.*

No. 83,635.

Patented Nov. 3. 1868.



inventor.

*H. J. Hubbard
per Gardner & Hyde
attys*

*witnesses W. H. Emerson
C. B. Pearce.*



HORACE J. HUBBARD, OF CHICOPEE, MASSACHUSETTS.

Letters Patent No. 83,635, dated November 3, 1868.

IMPROVEMENT IN BOBBIN.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, HORACE J. HUBBARD, of Chicopee, Hampden county, Commonwealth of Massachusetts, have invented a new and useful Improved Fly-Catch for Spindles; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the drawings—

Figure 1 is a sectional view of a bobbin, with my improved catch, and

Figure 2, an end view of the same;

Figure 3 being a perspective view of the catch itself, in detail.

This invention consists of a peculiarly-shaped casting, designed to take the place of the pin used in the bottom of the bobbin for the spindle to catch upon as it revolves. This is also described in my caveat filed.

The pin used generally for this purpose is driven in the bottom of the bobbin, projecting in the groove *a*, which is formed around the bottom end of the bore.

The disadvantages of this style of catch principally lie in the fact that the pin becomes loose after a short while, and requires to be driven in again in a new place, and gradually, by it continually being removed, the bottom of the bobbin is completely honey-combed, and there is no sound stock to hold the pin, when the bobbin becomes useless. Besides this, it requires a great deal

of labor to attend these bobbins, and replace the pins when they get loose or lost.

In my invention, I obviate all these difficulties by forming my catch so that, when once in place, it cannot be loosened by the ordinary wear of the spindle against it.

In fig. 3 it is shown that my catch is formed with a ring, A, having two arms, B and B, each provided with a pin, C and C, elbowing from them, which pins are driven in the bottom of the bobbin, outside of the edge *b* of the groove *a*, so that the arms B and B cross the groove, as shown in fig. 2. The ring A encircles the projecting rim D of stock in the centre, forming a ferrule for it, and preventing its splitting out. In this manner a strong catch is made, which cannot easily be worn out or displaced, as the ends of the arms are embedded in the outside rim of stock C, and cannot turn without carrying away the stock on each side of the groove.

Now, having described my invention,

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

The combination, with the bobbin, of the fly-catch, consisting of the ring A, with one or more arms B, with pins C, constructed and arranged substantially as herein described, and for the purpose specified.

Witnesses:

EDWARD H. HYDE,
R. F. HYDE.

H. J. HUBBARD.