

GEORGE DRAPER.

Improvement in Device for Holding Spinning-Bobbins on Spindles.

No. 116,168.

Patented June 20, 1871.

Fig. 1.

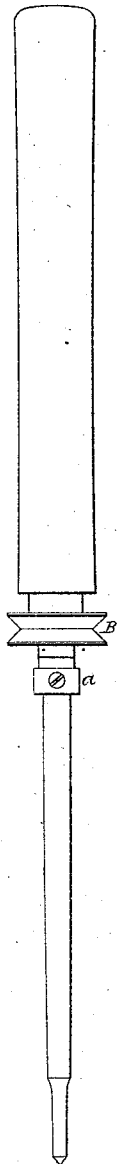
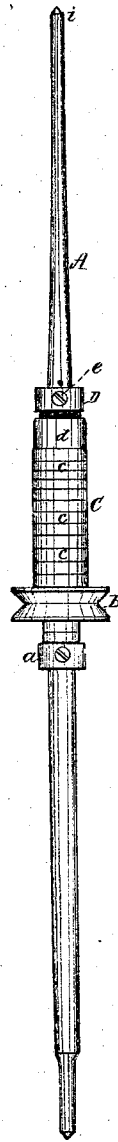
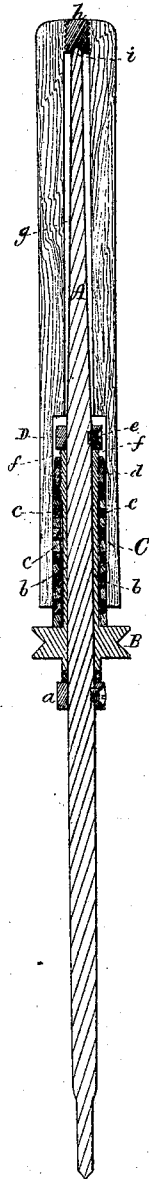


Fig. 2.



Witnesses

S. N. Piper

J. H. Snow

Geo. Draper

by his attorney

R. W. H. Day

UNITED STATES PATENT OFFICE.

GEORGE DRAPER, OF HOPEDALE, MASSACHUSETTS.

IMPROVEMENT IN DEVICES FOR HOLDING SPINNING-BOBBINS ON SPINDLES.

Specification forming part of Letters Patent No. 116,168, dated June 20, 1871.

To all whom it may concern:

Be it known that I, GEORGE DRAPER, of Hopedale, of the county of Worcester and State of Massachusetts, have made a new and useful invention having reference to the Spindles and Bobbins of Spinning-Machines; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a side elevation, Fig. 2 a vertical section of a spindle and bobbin provided with my invention. Fig. 3 is an elevation of the spindle, the whirl, and the friction-bobbin supporter as they appear without the bobbin.

The spindle A in this case is what is termed a "dead spindle," the whirl B being revolvable on and arranged on such spindle in manner as shown. Below the whirl is a collar or bearing, *a*, which is fixed on the spindle so as to extend a little above its supporting-rail. Projecting up from the whirl, and encompassing the spindle, is the friction-bobbin supporter C, which in this instance is represented as a tube, *b*, and a series of leather or caoutchouc washers, *c c c*, arranged on or about the tube and one another, and confined on it and together by a cylindrical clamp-nut, *d*, screwed upon the upper end of the tube. Just above the friction-bobbin supporter there is a stop-collar, D, arranged on the spindle, and fixed to it by a set-screw, *e*. The bobbin, shown at E, has two bores, *f g*, the lower one being to fit to or closely upon the friction-bobbin supporter, the other being to receive that part of the spindle which is above the stop-collar, the spindle at its upper end or part being pivoted

in the head or upper part of the bobbin, which, as shown in the drawing, is provided with a metallic step, *h*, to receive the upper end or pivot *i* of the spindle. This step revolves with the bobbin, and serves to support it on the head of the spindle, the spindle being revolved by the whirl and the friction-bobbin supporter while they are in revolution. The bobbin is to fit closely upon the elastic friction-bobbin supporter so as not only to enable the latter to revolve the bobbin, but to steady it so as to prevent it from vibrating the pivot and step at the heads of the spindle and bobbin, serving, also, to sustain the bobbin and prevent it from vibrating. The object or purpose of the stop-collar D is to prevent the whirl and the friction-bobbin supporter from being drawn off the spindle by the bobbin during an attempt to remove it from them.

What I claim as my invention is as follows:

1. In combination with the dead spindle A and its whirl B, the friction-bobbin supporter C, extended from and above the whirl and on the spindle, and constructed substantially in manner and for operation with the bobbin and spindle, as described.

2. In combination with the subject of the above claim, the bobbin and spindle-pivot *i* and step *h*, or the equivalent thereof, arranged at the head or upper part of the bobbin, as set forth.

GEORGE DRAPER.

Witnesses:

R. H. EDDY,
J. R. SNOW.