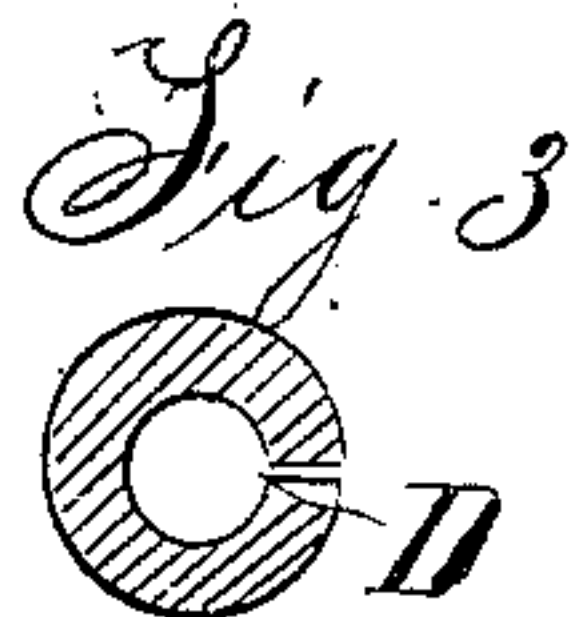
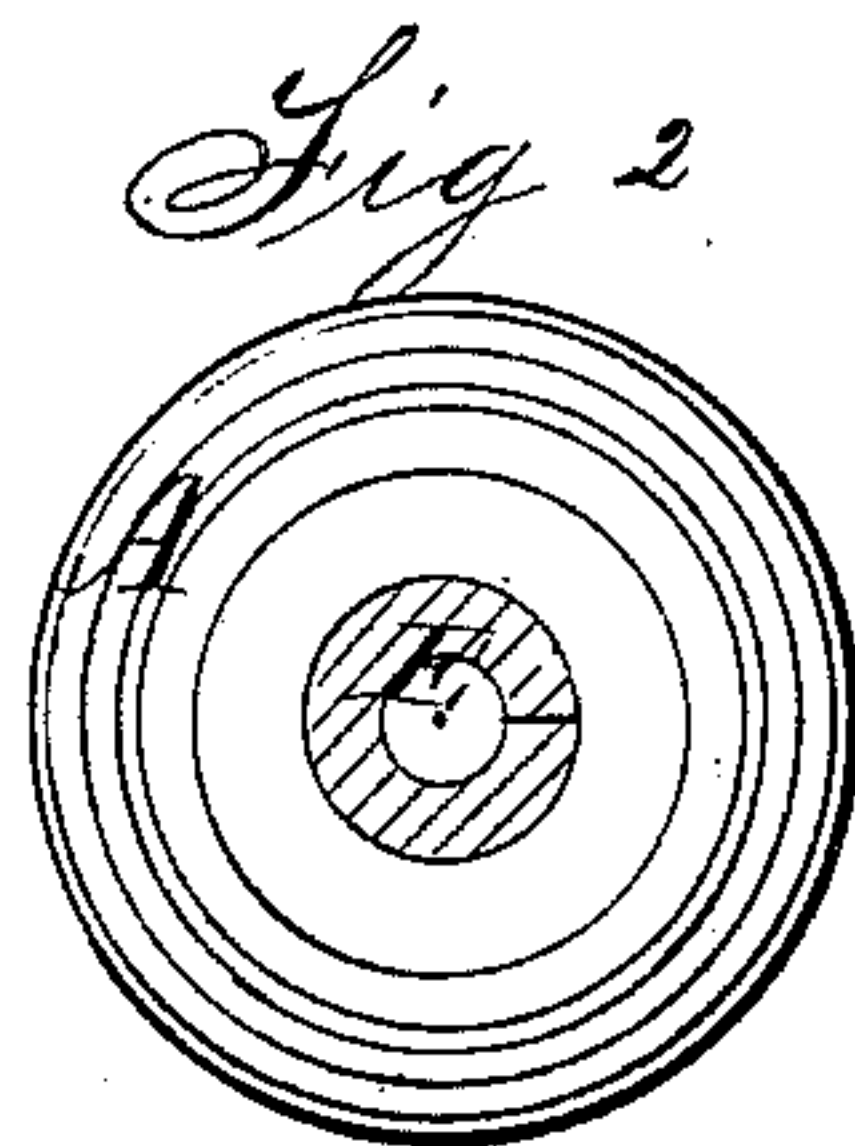
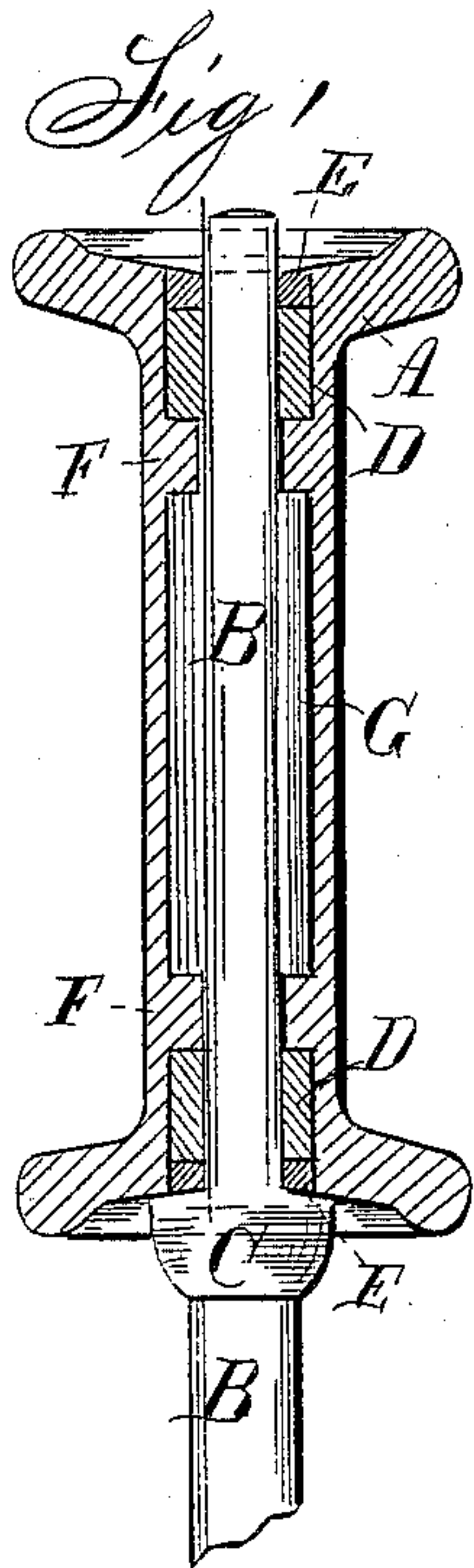


W. H. Ramsdell,
Bobbin.

No. 79687.

Patented July 7. 1868.



Witnesses.
Hamilton A. Sawyer.
Benj. Lawrence.

W. H. Ramsdell.

United States Patent Office.

W. H. RAMSDELL, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO HIMSELF
AND H. J. SAWYER, OF SAME PLACE.

Letters Patent No. 79,687, dated July 7, 1868.

IMPROVEMENT IN BOBBINS.

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

Be it known that I, W. H. RAMSDELL, of Lowell, county of Middlesex, and State of Massachusetts, have invented a new and improved Method for Lubricating Bobbins; and I hereby declare the following to be a full and exact description of the same, reference being had to the annexed drawings, and the letters marked thereon.

Figure 1 represents a vertical section of the bobbin as placed upon the spindle when in operation.

Figure 2 is an end view of the bobbin.

Figure 3 is an end view of the lubricating-felt.

The bobbin A is of the usual form, chambered on the inside at G, fig. 1, having its bearings on the spindle B at the two points F F. From these two bearings to the ends of the bobbin the hole is enlarged sufficiently to allow of a thick piece of felt cloth to encircle the spindle between the two bearings F F and the two metallic rings E E.

The metallic rings are made of brass or other suitable material cut open, as shown at E, fig. 2, so as to allow it to be sprung into place, to prevent the felt D D from being pushed out when placing the bobbin upon the spindle.

The collar C is made of wood, and encircles the steel spindle, resting on the shoulder of the same; the bobbin resting on the collar, as shown.

When placing the bobbin on the spindle, the felt should be well saturated with oil, which will last several days, saving time, labor, trouble, and oil.

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

A bobbin, constructed as described, in combination with the spring-rings E, and felt or suitable absorbent packing, as and for the purpose described.

W. H. RAMSDELL.

Witnesses:

HAMILTON J. SAWYER,
BENJ. LAWRENCE.