

H. T. Robbins.
Spindle.

N^o 8,807.
Fig. 1.

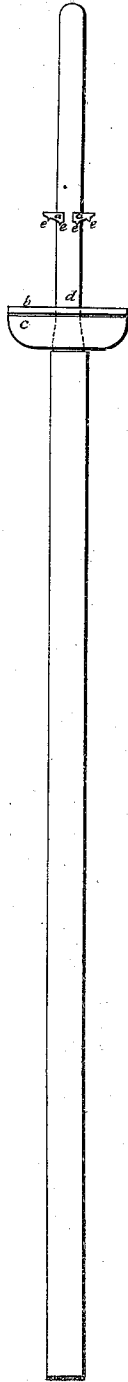


Fig. 2.

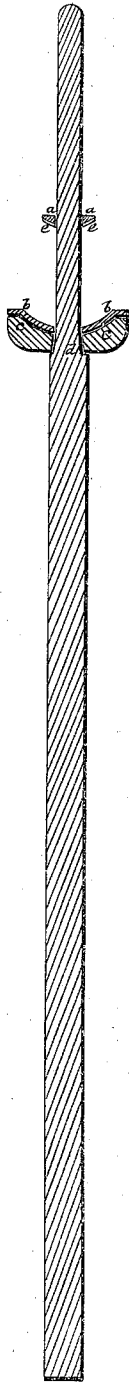
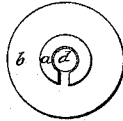
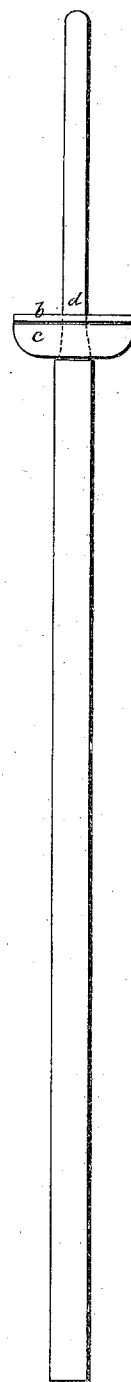
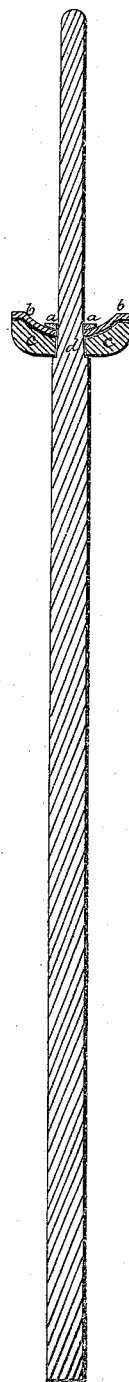


Fig. 3.



Patented Mar. 16, 1852
Fig. 4. *Fig. 5.*



UNITED STATES PATENT OFFICE.

HORACE T. ROBBINS, OF LOWELL, MASSACHUSETTS.

CONNECTING WASHERS WITH SPINDLES IN SPINNING MACHINERY.

Specification of Letters Patent No. 8,807, dated March 16, 1852.

To all whom it may concern:

Be it known that I, HORACE T. ROBBINS, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful improvement in the mode of holding or fastening the washers to the spindles to prevent the washers turning around or working loose on the spindles in the throttle or other spinning where it is necessary to have washers for the bobbins to run on; and I do hereby declare that the same is fully described in the following specification and accompanying drawings. letters, figures, and references thereof.

Of the said drawing, Figure 1 denotes a side view of a spindle having my improvement applied to it, Fig. 2 is a central and longitudinal section of it in which the spring, clasp or holder is represented as elevated above the washer so as to show the form of it, Fig. 3 is a top view of it, Fig. 4 is a longitudinal section taken so as to exhibit the spring, clasp or holder as depressed, or driven down on to the washer as I design to have it, so as to have the desired effect, and to have the top of the spring, clasp or holder entirely below the top of the outer surface of the washer, leaving the outer surface of the washer so elevated that the bobbin may run on the outer surface of the washer without coming in contact with the spring, clasp or holder.

The nature of my invention consists in substituting a circular spring, clasp or holder *a*, Fig. 4 for the old mode of gluing, or cementing the washers *b*, to the button *c*, which is driven tight on to the spindle *d*. By this arrangement I am enabled when one side of the washer has become glazed over or worn out, to turn the washer over and use the other side of the washer, thus getting double the service from the washer which is obtained in the old mode of cementing the washer to the button, besides holding the washer much more firm to the spindle. In the old mode the washer *b*, is cemented

to the button *c*, which is driven tight on to the spindle *d*, as seen in Fig. 5 but the large amount of friction from the bobbin frequently works the button *c*, loose on the spindle *d*, which difficulty is entirely overcome by the use of my spring, clasp or holder *a*, Fig. 4 the said spring, clasp or holder *a*, being made from a wire ring which has its two ends brought snug together so as to form a circular spring, the hole in the spring, clasp or holder *a*, being a trifle smaller than the spindle *d*, causes it when driven on to the spindle *d*, to cling tight to the spindle *d*, and the spring, clasp, or holder *a*, having teeth *e*, *e*, &c. on the bottom as shown in Fig. 1 which being drove down on to the washer *b*, Fig. 4 and the washer *b*, driven in to the countersink or cavity in the button *c*, the teeth *e*, *e*, &c., stick in to the washer *b*, and hold it firmly to the spindle *d*, the said teeth are made by driving or pressing the wire ring in to a die of the proper form.

I do not intend to confine my invention to the application of the spring, clasp or holder *a*, to the countersunk button, as the same holder may be used with a flat button by having the bobbin countersunk so as to let the bobbin down over the spring, clasp or holder, such in fact constituting the peculiar essence of my invention.

I therefore claim as my invention—

The spring, clasp or holder *a*, or its equivalent either with, or without teeth in combination with the spindle or as applied and used therewith substantially in the manner and for the purpose of holding the washer as specified.

In testimony whereof I have hereto set my signature this seventh day of November A. D. 1851.

HORACE T. ROBBINS.

Witnesses:

LORENZO S. SHAW,
WM. P. WEBSTER.