

G. RICHARDSON.
Improvement in Bobbins.

No. 129,682.

Patented July 23, 1872.

Fig 1

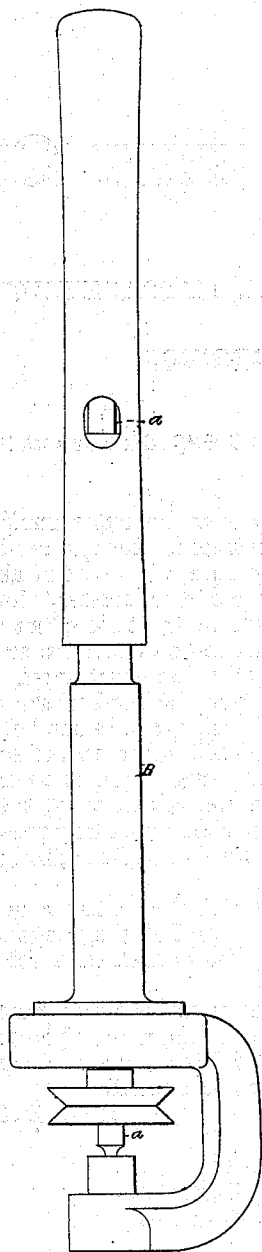
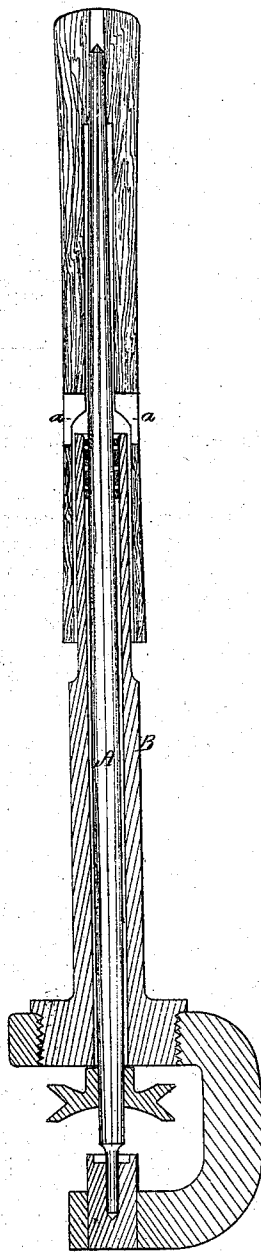


Fig 2.



Witnesses.

S. M. Piper

L. A. Möller.

G. Richardson.

by his attorney.

R. W. Bay

UNITED STATES PATENT OFFICE.

GEORGE RICHARDSON, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN BOBBINS.

Specification forming part of Letters Patent No. 129,682, dated July 23, 1872.

To all persons to whom these presents may come:

Be it known that I, GEORGE RICHARDSON, of Lowell, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Bobbins for ring-spinning or for roving machinery; 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, and Fig. 2 a vertical section of a spindle and its elongated bolster, with one of my improved bobbins applied thereto.

In such drawing, the spindle A is exhibited as provided with a bolster, B, elongated so as to extend up within the bobbin when the latter is on the spindle and supported by it, as shown, such mode of constructing a spindle and bolster and arranging them with the bobbin being known as that recently patented by J. H. Sawyer. Such a bolster cannot be oiled at its head without first removing the bobbin from it and the spindle—a matter which at times is inconvenient.

In order to save the necessity of removing the bobbin from the spindle preparatory to pouring oil upon the top of the bolster, I construct the bobbin with one or more openings, *a*, extending

laterally from its outer surface into its bore and in that part which, when the body may be in the spindle, will be at or about at the level of the top of the bolster, the same being so as to enable the tube of an oiler or lubricating-vessel to be inserted in such hole or holes, so that oil when discharged from it may be thrown upon the head of the bolster. I make two such holes, *a a*, in the bobbin, directly opposite to each other, and of equal size, and as a general thing I prefer to make each elongated in shape vertically, the same being in order that the bobbin may preserve its balance and not wobble while running at great speed.

I claim—

1. The bobbin made or provided with the oiling hole or holes arranged in it, substantially in the manner and for the purpose described.

2. I also claim the arrangement and combination of the oiling hole or holes *a* in the bobbin, with the bolster and spindle extended into the bobbin, as explained.

GEO. RICHARDSON.

Witnesses:

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