

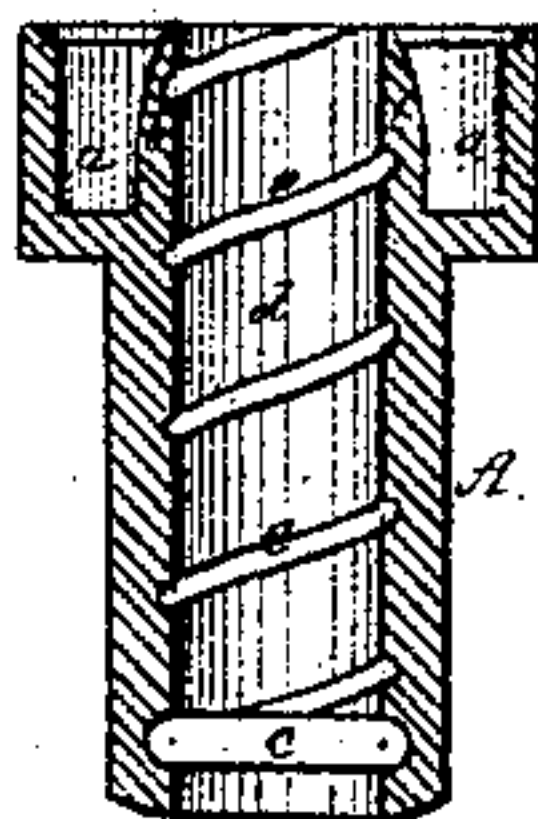
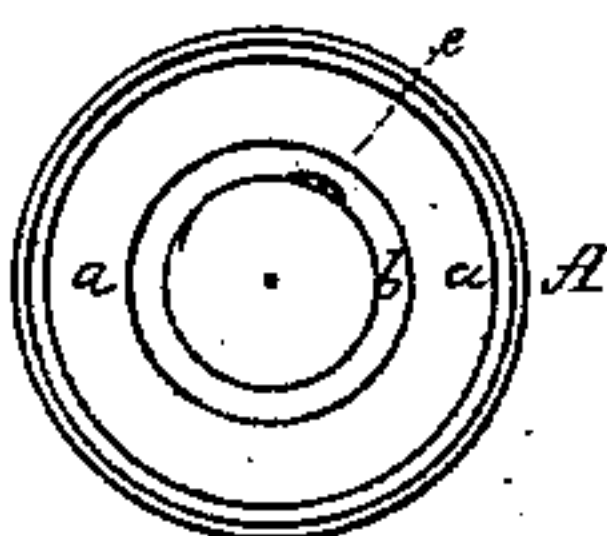
W. F. Draper,

Spindle Bolster.

No. 106,567.

Patented Aug. 23. 1870.

Fig. 1.



Witnesses.

S. H. Piper

L. N. Miller

Wm. F. Draper

by his attorney

W. H. Ledy

UNITED STATES PATENT OFFICE.

WILLIAM F. DRAPER, OF HOPEDALE, MASSACHUSETTS.

IMPROVEMENT IN SPINDLE-BOLSTER.

Specification forming part of Letters Patent No. **106,567**, dated August 23, 1870.

To all persons to whom these presents may come:

Be it known that I, WILLIAM F. DRAPER, of Hopedale, of the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in the Bolsters of the Spindles 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 top view, and Fig. 2 a vertical section, of a bolster of the improved kind.

My improvement has reference to the bolster constituting the subject of Letters Patent No. 92,647, dated July 13, 1869, and granted to Isaac P. Richards, the distinctive feature of novelty of such bolster being a conical or tapering oil-elevator arranged within the oil-reservoir of the bolster and about the spindle bearing or passage of the bolster.

In carrying out my invention I have combined with such a bolster not only an annular groove in the lower part of the spindle-bearing, but a helical groove to lead from the said annular groove up to and out of or near to the top of the oil-elevating cone, the purpose of the helical groove being to raise back into the oil-reservoir any surplus of oil that may be carried into the spindle-bearing. The said spindle-bearing may have the helical groove

alone, but with the annular groove the helical groove will operate to better advantage, and there will be little or no waste of the oil resulting from escape of it to the lower end of the bolster.

I would remark that more than one annular groove may be used.

In the drawing, A denotes the bolster; *a*, its oil-reservoir; *b*, the tapering oil-elevator or cone; *c*, the annular groove in the lower part of the spindle passage or bearing, *d*, the helical groove leading upward in such passage *d* and around the spindle when therein, and to the top of the cone *b*, being shown at *e*.

I herein make no claim to the bolster as described in the aforesaid patent.

What I claim as my invention in the bolster as specified is—

The arrangement and combination of the helical groove *e*, or such and the annular groove *c* on the spindle-bearing *d*, with the oil-elevator or cone *b* and reservoir *a*, disposed in the bolster, and with respect to the spindle-bearing, as explained.

WM. F. DRAPER.

Witnesses:

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