J. B. Bancroft,

Spindle Lubricator.

No. 65,530. Patented June 11, 1867.

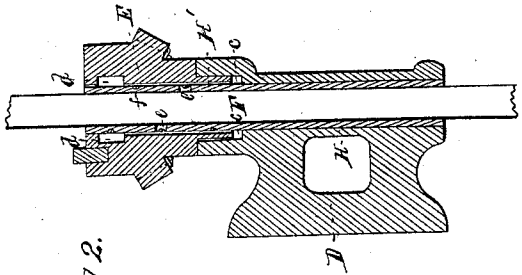

Fig 2.

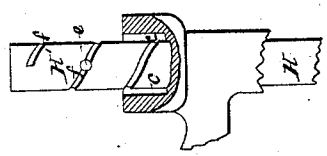

Fig 4.

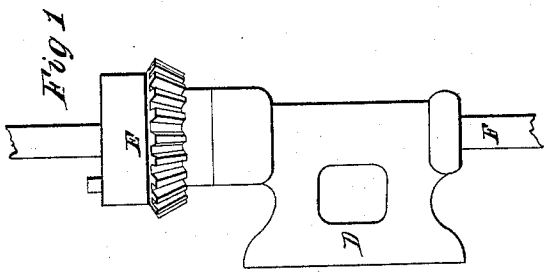

Fig 1

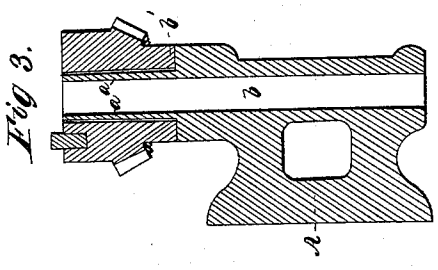

Fig 3.

Witnesses.

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JOSEPH B. BANCROFT, OF HOPEDALE, MASSACHUSETTS.

Letters Patent No. 65,530, *dated June* 11, 1867.

IMPROVEMENT IN LUBRICATORS FOR SPINNING MACHINES.

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

TO ALL PERSONS TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, JOSEPH B. BANCROFT, of Hopedale, in the county of Worcester, and State of Massachusetts, have invented a new and useful Improvement in Spinning Mechanism; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side elevation; and

Figure 2, a vertical section of a spindle and the flyer or driving-gear and supporting bracket with my invention applied to them.

Figure 3 is a section of the bracket and the gear as usually made and applied together.

In the last-mentioned figure the spindle bracket is shown at A as provided with a cylindrical neck, *a*, which, with the bracket, is bored vertically, as shown at *b*, to receive and support the spindle. The gear, *c*, for revolving the flyer, encompasses and turns on the neck *a*, and rests on a shoulder, *b'*. When the bearing surfaces of the neck *a* and bore *b* require lubrication, it is customary to pour oil upon the upper ends of the neck and the gear. In carrying out my invention I provide the bracket D (see figs. 1 and 2) with an annular chamber, *c*, formed on its upper end and around the neck H', which I prefer to make a cylindrical tube of copper or composition metal, to extend through the bracket in manner as shown at H in fig. 2. I form also within the upper part of the fly or driving-gear, E, an annular chamber *d*, to encompass the neck H'. The gear E may extend a short distance into the oil-chamber *c*, if desirable. Through the neck H' I make two or any other proper number of holes, *e e*, for the conveyance of oil from the chamber *c* into the bore of the said neck, and upon the spindle F, when therein. I also form in the external surface of the neck *a*, helical groove *f*, to extend from one of the oil-chambers *c d* to the other of them, the hole or holes *e* being led into such groove. Figure 4 exhibits a side view of the neck H' with such groove therein. The groove *f*, instead of being formed in the neck, may be made in the bore of the gear E, so as to extend downward from the chamber *d* to the chamber *c*. If desirable, there may be another such helical groove formed within the bore of the tube H H', and such groove may be filled with cotton, wool, or other fibrous material which will absorb oil. By means of the chambers *c d*, the helical groove *f*, and the hole or holes *e*, I am enabled, when oil is within the chamber *c* and the gear is in revolution, to keep the bearing surfaces of the tube H H' well lubricated, for the oil will be forced from the chamber *c* through the groove *f* and the hole or holes *e*, and also into the chamber *d*, which will arrest it and aid in preventing it from flowing out upon the top of the gear.

I claim as my invention—

The combination and arrangement of the oil-chambers *c d*, the groove *f*, and the hole or holes *e*, with the bracket D, the neck H', and the gear E, the whole being substantially as described

JOSEPH B. BANCROFT.

Witnesses:

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