

A. H. Gilman.

Lubricating Spindle.

N^o 72285

Patented Dec. 17, 1867

Fig. 2

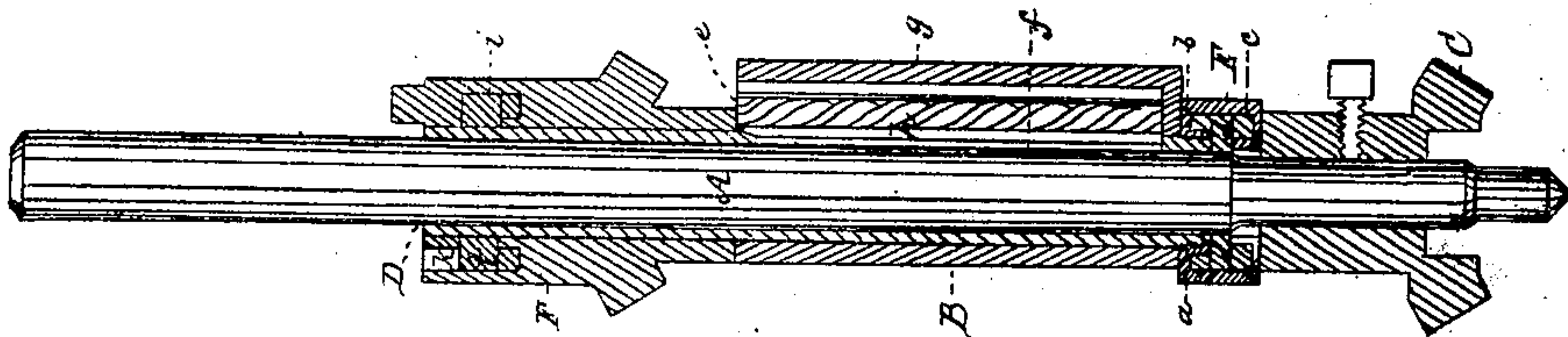


Fig. 3

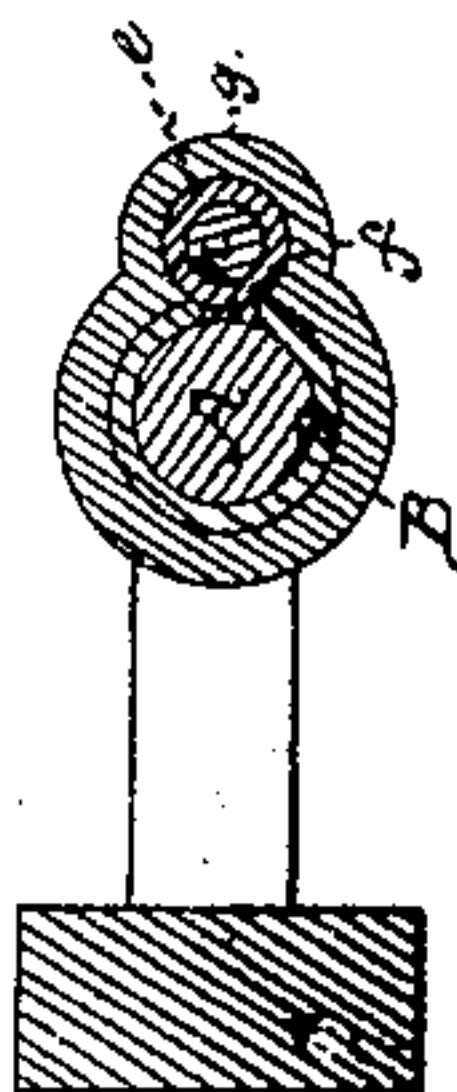
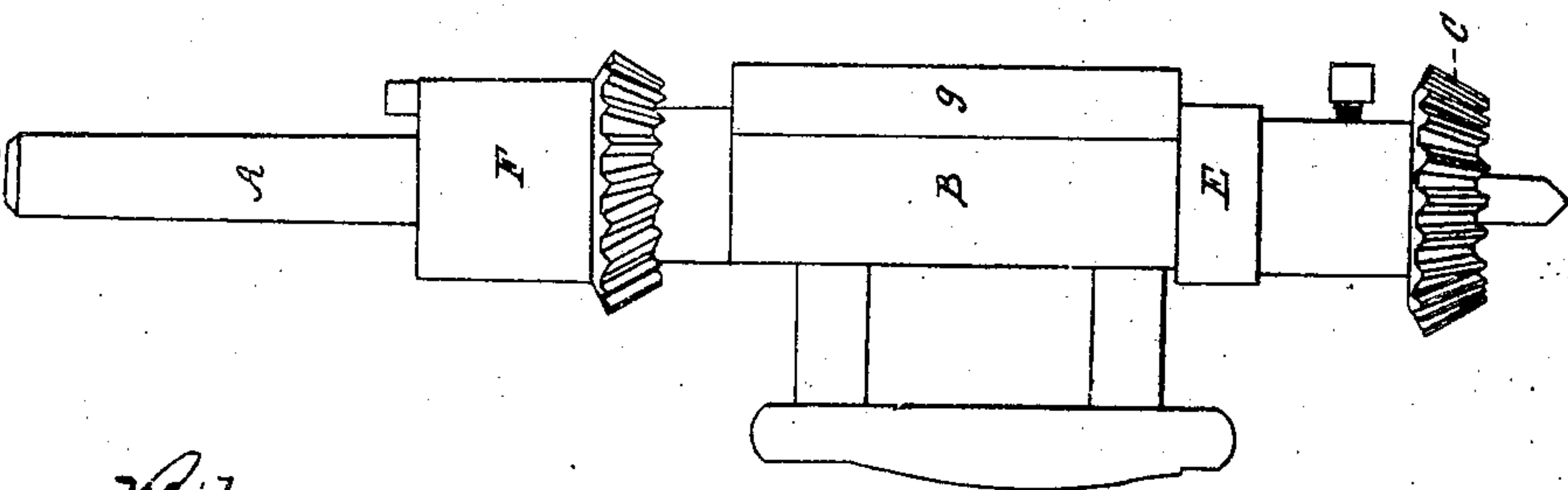


Fig. 1



Witnesses.
J. N. Piper
J. R. Snow

Inventor
Albert H. Gilman
by his attorney
R. H. Lacy

United States Patent Office.

ALBERT H. GILMAN, OF HOPEDALE, MASSACHUSETTS.

Letters Patent No. 72,285, dated December 17, 1867.

IMPROVEMENT IN LUBRICATING SPINDLES.

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

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, ALBERT H. GILMAN, of Hopedale, in the county of Worcester, and State of Massachusetts, have made a new and useful Invention having Reference to Machinery for Spinning Roving; and 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-bolster and bobbin-rotator or gear, containing my invention.

Figure 3 is a horizontal section of the bolster.

In such drawings, A denotes a spindle, extending through a bolster, B, and provided with a bevel-gear, C, for effecting rotary motion of such spindle. A brass bushing or tube, D, goes through the bolster, and projects both above and below it, in manner as represented in fig. 2. A small screw, *a*, is cut on the lower part of the said bushing for the purpose of receiving an annular nut, E, which is constructed with a female screw, *b*, to fit the screw *a*. The said nut encompasses the spindle, and is formed with an annular chamber, *c*, arranged so as to encircle the spindle and open against it. Within such chamber is a stuffing, *d*, of felt, woollen, cloth, or other suitable absorbent, the purpose of which is to catch and retain oil which may run down the spindle, and to reapply such oil to the spindle during its vertical and rotary motions relatively to the bolster. The bolster I form with a lateral chamber, *e*, which should open into or communicate with the spindle by a slot, *f*, formed vertically through the bushing. This chamber I prefer to make in an extension, *g*, of the bolster. The chamber is open at top, and is to contain a stuffing or tube, *h*, of felt or other proper absorbent material, which is to extend from the chamber *e*, through the slot *f*, and against the spindle. By pouring oil into the mouth of the chamber *e*, and saturating the absorbent material contained therein, we shall have a means of effectually lubricating the spindle, the surplus oil being caught by the stuffing of the chamber *e*. The bobbin-rotator or gear is shown at F as encompassing the upper parts of the bushing and resting on the top of the bolster. An annular chamber, *i*, is formed in and around the bore or eye of the said bolster, and there is a hole or passage, *k*, leading upward from such chamber to the top of the rotator. Within the said chamber is a stuffing or annulus, *l*, of felt or other suitable absorbent material, which is designed to hold oil when poured upon it through the passage *k*, the object being to lubricate that part of the bushing on which the bobbin-gear is placed.

From the above, it will be seen that we have a ready means of lubricating those surfaces of the bushing against which the spindle and the bobbin-gear or rotator may revolve.

By making the chamber *e* open at top, it will catch the surplus oil that may escape from the bearing of the gear F, or the upper part of the bushing, and will lead such oil against the spindle.

I claim the combination of the chambered nut E, provided with an absorbent material, as set forth, with the bolster, or with the same and the bushing, to extend down from such bolster, as explained.

I also claim the combination of the chambered nut E, provided with an absorbent, as set forth, with the bolster and its chamber *e*, furnished with an absorbent material, arranged so as to lie against the spindle, as specified.

I also claim the combination of the chambered nut E, the chambered bolster and bushing, provided with a passage and an absorbent material to extend through such passage and against the spindle, as described.

I also claim the combination of the lubricating-chamber *i* and its supply-passage *k* with the gear F, the bearing thereof, and the conduit *e*, or its equivalent, arranged in the bolster and to open against the spindle, as specified.

ALBERT H. GILMAN.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.