

No. 776,410.

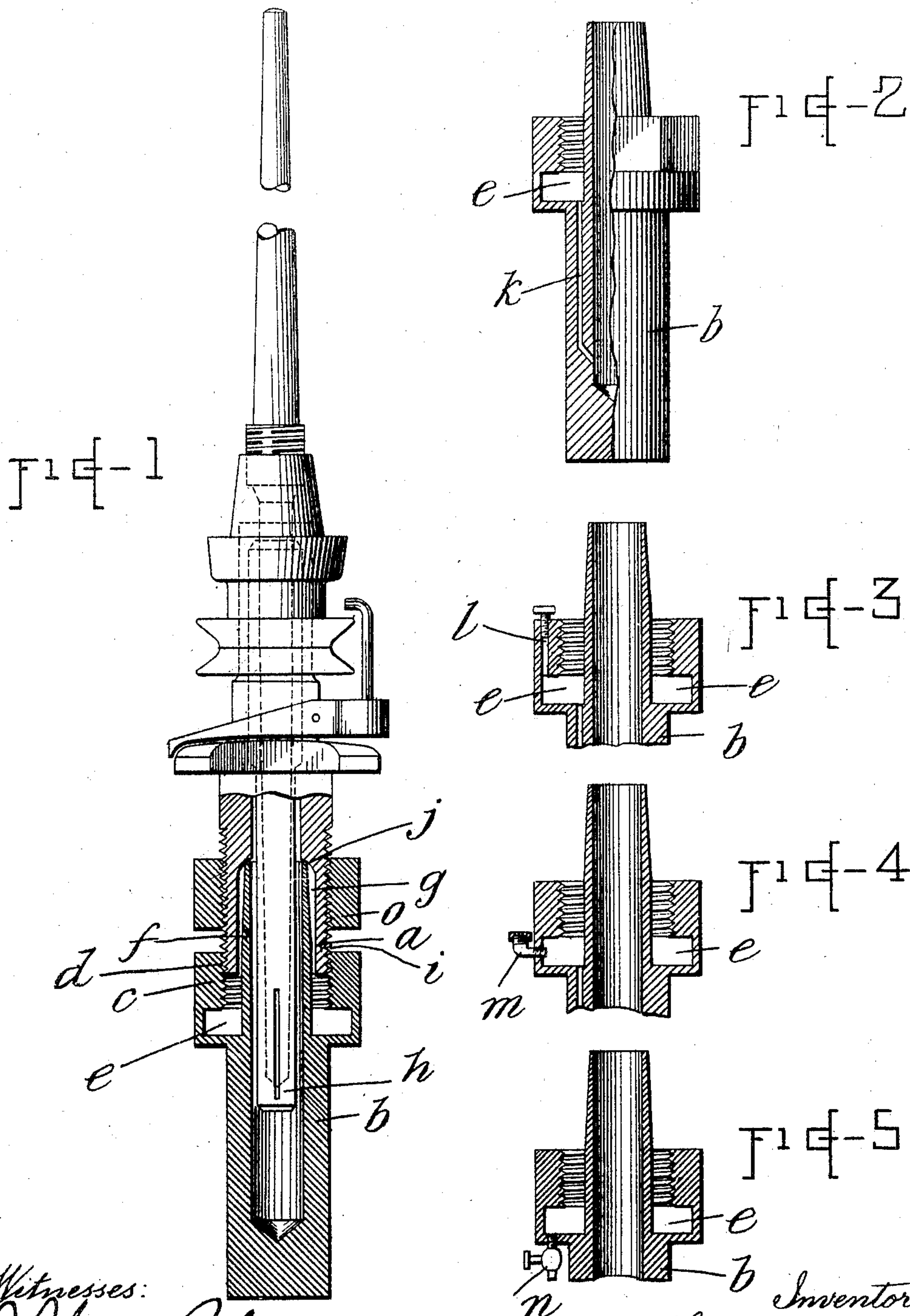
PATENTED NOV. 29, 1904.

H. MEYNELL.

SELF CONTAINED SPINDLE FOR SPINNING AND DOUBLING FRAMES.

APPLICATION FILED APR. 16, 1904.

NO MODEL.



Witnesses:

J. C. Mogg Pool
L. B. Middleton.

Inventor.
Henry Meynell.
by *Herbert W. Jenner.*
Attorney.

UNITED STATES PATENT OFFICE.

HENRY MEYNELL, OF ACCRINGTON, ENGLAND.

SELF-CONTAINED SPINDLE FOR SPINNING AND DOUBLING FRAMES.

SPECIFICATION forming part of Letters Patent No. 776,410, dated November 29, 1904.

Application filed April 16, 1904. Serial No. 203,472. (No model.)

To all whom it may concern:

Be it known that I, HENRY MEYNELL, residing at Accrington, in the county of Lancaster, England, have invented certain new and useful Improvements in Self-Contained Spindles for Spinning and Doubling Frames; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has reference to the lubrication of self-contained spindles for ring and traveler and like spinning and doubling frames. The usual type of oil-cup at present employed in connection with such spindles is inserted into the bottom of the bolster and secured therein by multiple screw-threads. It is found, however, that when the oil-cup has been filled and is being fitted into position a portion of the oil is displaced by the spindle-bearing and necessarily overflows and runs to waste.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of a self-contained spindle having my improvements applied thereto; and Figs. 2, 3, 4, and 5 are respectively section and part sections of the oil-cup detached and illustrate certain modifications which will be hereinafter referred to.

Referring to Fig. 1, I make the bolster *a* somewhat shorter than usual and provide the same with a detachable extension *b*, adapted to act as a cup for holding the oil for lubricating the spindle. The oil-cup *b* has formed integral therewith a nut *c*, which is recessed from the top and tapped at *d* and is further hollowed out to form a reservoir or chamber *e*. The tube *f*, which forms the upper part of the oil-cup, is made in one piece therewith and is of such a diameter that when inserted in the bolster an annular space or ring *g* is left between the periphery of such tube and the internal surface of the bolster. The cup having been filled with a suitable quantity of oil, the tube *f* is inserted in the bolster, where it fits nicely around the spindle-bearing *h*, and the nut *c* is then screwed onto the thread *i* on the bolster until the upper part of the tube *f* comes into contact with the shoulder *j*. The oil which is displaced by the spindle-

bearing *h* runs down the channel or annular space *g* and so into the reservoir *e*, whence it can be removed and used again when the spindle requires a fresh supply of oil. As the reservoir *e* may be made sufficiently large to accommodate any desired quantity of oil, absolutely no loss thereof can take place and a great economy is effected. The oil-cups can of course be removed and replaced while the spindles are in motion.

In Fig. 2 I have shown a canal or channel *k*, of which one or more may be employed and by means of which the reservoir *e* may empty itself into the oil-cup *b* as the level of the oil becomes gradually lower therein, and the reservoir might be provided with a thoroughfare or channel *l*, as shown in Fig. 3, or with a projecting spout *m*, as shown in Fig. 4, by means of which the cup could be filled from an oil-can without detaching the same. When constructed in this manner, the oil-cup *b* may receive its supply of oil entirely from the reservoir. The various parts may be made of any desired size or proportion, so that the oil can be used to the best advantage. A jam-nut *o* is provided on the bolster *a* for securing the oil-cup.

Fig. 5 illustrates the reservoir fitted with a small cock *n*, through which the surplus oil could be drained off, if required.

What I claim is—

1. The combination, with a screw-threaded bolster having a chamber and a shoulder *j*; of a detachable extension *b* provided with an oil-chamber in its lower part, an integrally-formed tube, for receiving the spindle-bearing *h*, projecting from the said extension within the said chamber of the bolster and bearing against the said shoulder and forming an annular oil-passage *g*, and a nut formed integral with the upper part of the said extension and screwed onto the said bolster and provided with an annular chamber *e* for receiving the oil from the passage *g*.

2. The combination, with a screw-threaded bolster having a chamber and a shoulder *j*; of a detachable extension *b* provided with an oil-chamber in its lower part, an integrally-formed tube, for receiving the spindle-bearing *h*, projecting from the said extension

within the said chamber of the bolster and bearing against the said shoulder and forming an annular oil-passage *g*, and a nut formed integral with the upper part of the said extension and screwed onto the said bolster and provided with an annular chamber *e* for receiving the oil from the passage *g*, said extension being also provided with an oil-pas-

sage *h* extending between the chamber *e* and the oil-chamber in its lower part. 10

In testimony whereof I affix my signature in presence of two witnesses.

HENRY MEYNELL.

Witnesses:

LEONARD H. CROSSLEY,

ERNOLD SIMPSON MOSELEY.