

No. 840,779.

PATENTED JAN. 8, 1907.

E. D. LIBBY.
ROLL STAND FOR SPINNING FRAMES.
APPLICATION FILED OCT. 20, 1905.

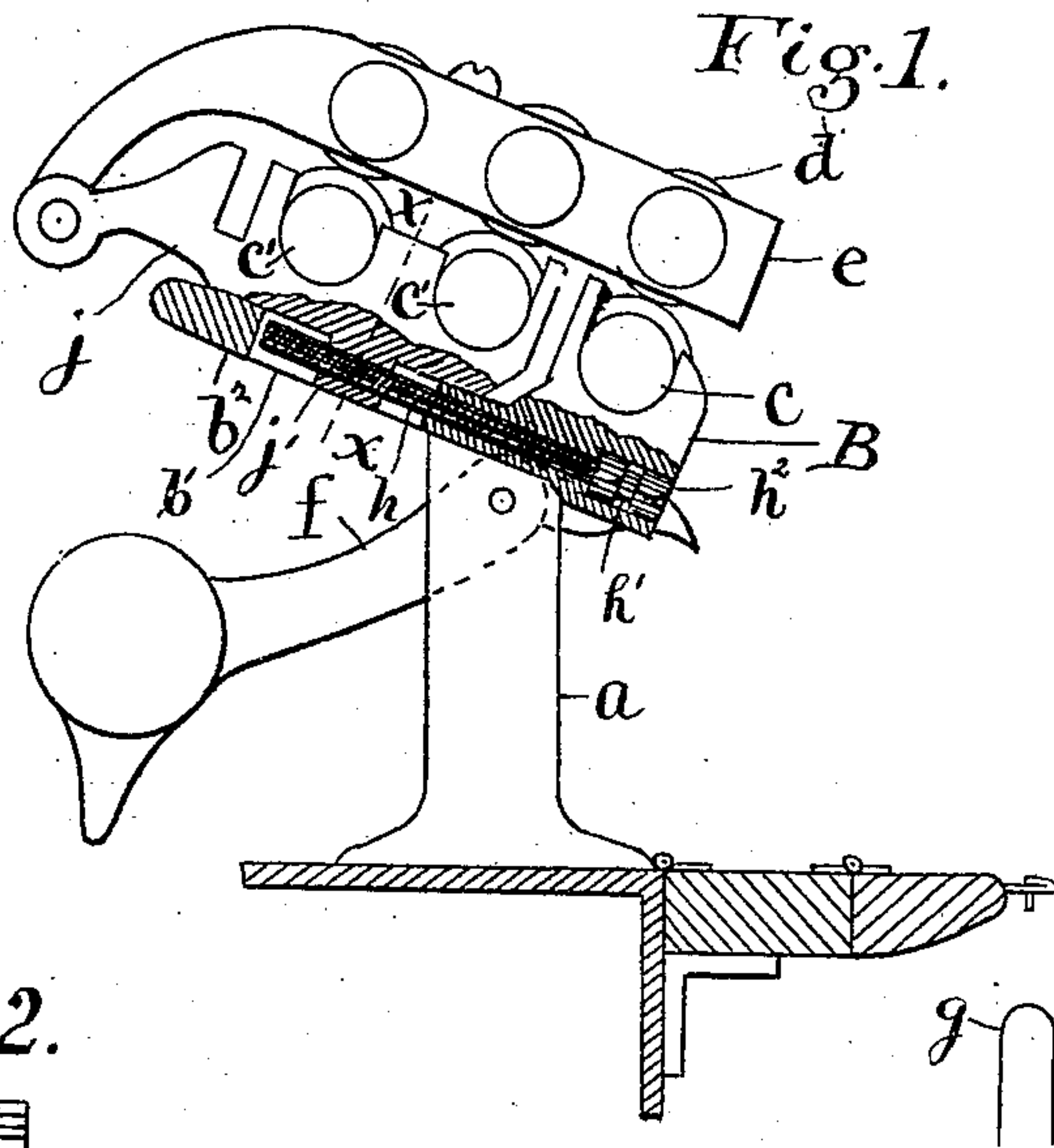


Fig. 2.

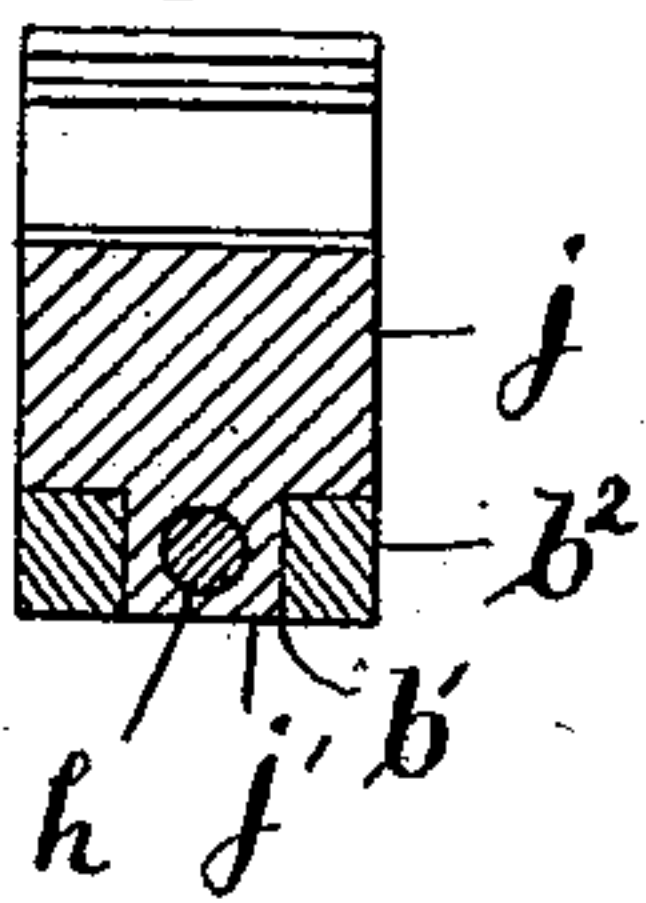
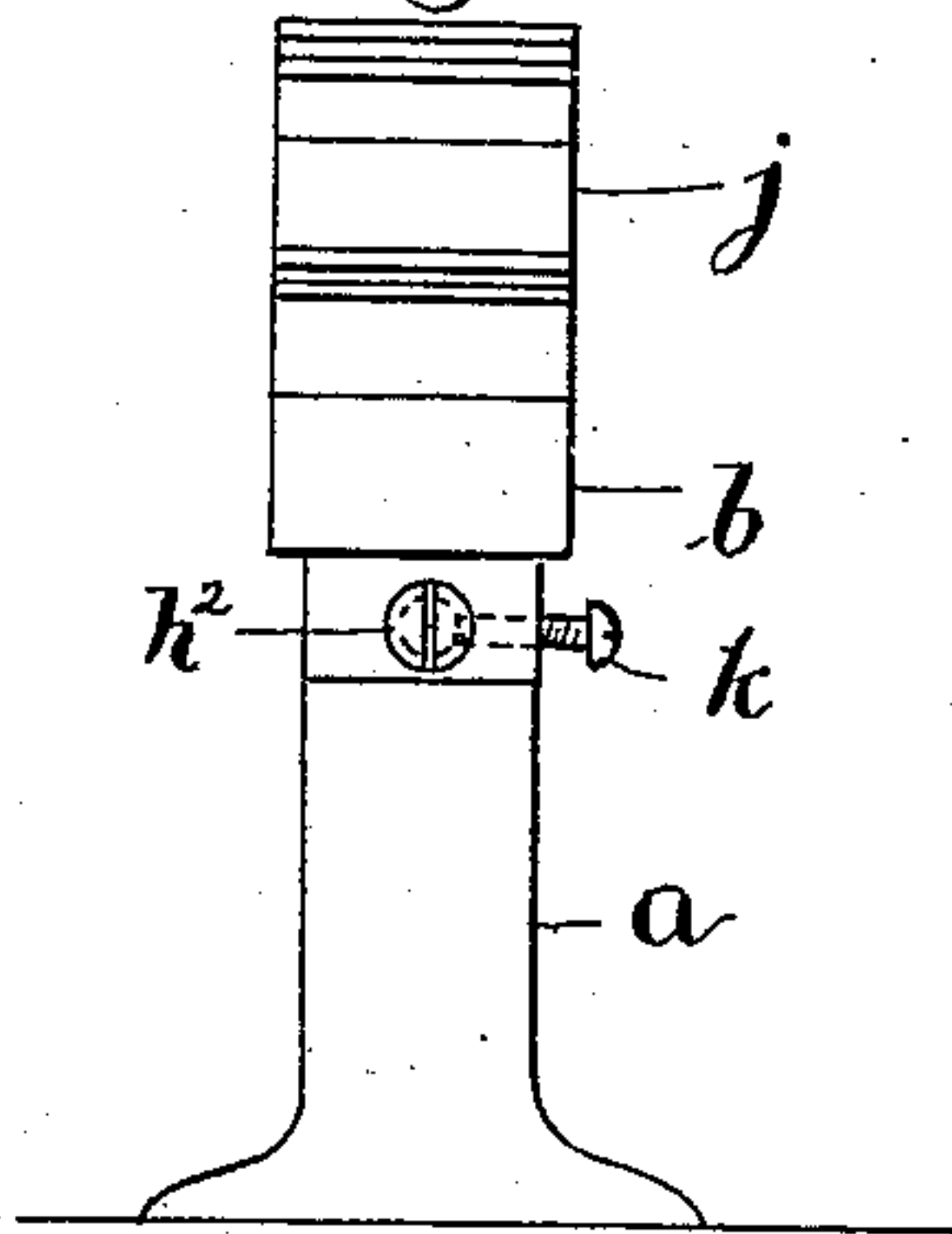


Fig. 3.



Witnesses:
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EDWARD D. LIBBY, OF WESTBROOK, MAINE.

ROLL-STAND FOR SPINNING-FRAMES.

No. 840,779.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed October 20, 1905. Serial No. 283,594.

To all whom it may concern:

Be it known that I, EDWARD D. LIBBY, a citizen of the United States of America, and a resident of Westbrook, county of Cumberland, State of Maine, have invented certain new and useful Improvements in Roll-Stands for Spinning-Frames, &c., of which the following is a specification.

My invention relates to a roll-stand for ring-spinning frames, railway-heads, fly-frames, and other similar machines for spinning and twisting yarn in the manufacture of textile fabrics; and the object of the invention is to construct such a roll-stand which will permit the ready adjustment of the rear rolls without disturbing or breaking the yarn.

These roll-stands as they have hitherto been made have consisted of a standard on the upper end of which was an inclined head having on its forward end a bearing for the front roll and on the rear end a flange upon which rested the rear-roll bearing. The rear-roll bearing was connected to the flange by a clamping-bolt passing through a longitudinal slot in the flange, which had a clamping-nut on the under side to hold it in position. In practice it was necessary to reach over in the rear of the stand, with a liability of breaking or injuring the roving, and with a wrench loosen up the nut and then slide the rear-roll bearing one way or the other, as the distance between the rear and front rolls was to be increased or diminished. This operation took considerable time, it could not be done while the machine was running, and there was, as stated, great danger of breaking the roving, as it was directly in the way when the adjustment was to be made.

According to my present invention, I adjust the two parts by means of a screw which extends from the forward end of the head and engages a nut on the under side of the rear-roll bearing, said nut sliding in a longitudinal groove or slot. By this arrangement the bearing may be quickly adjusted by a screw-driver from the front while the machine is running, with no interference with the yarn whatever. The ease and quickness with which this adjustment can be made enable the operator to do much better work and to always keep the distance between the rolls right for whatever staple is used.

I illustrate my invention by means of the accompanying drawings, in which—

Figure 1 is a side elevation of the roll-stand with a portion in section. Fig. 2 is a section on *xx* of Fig. 1, and Fig. 3 is a front elevation.

In the drawings, *a* represents the standard; *B*, the head, having on its front end the bearing for the front rolls *C* and on the rear end the flange *b*², containing the longitudinal slot *b'*. *d d* are the top rolls; *e*, the cap-bar for the top rolls. *g* is the upper end of the spindle, and *f* is one of the scavenger-roll weights. The rear-roll bearing *j* carries the rear rolls *c' c'* and rests on the flange *b*², being adapted to slide thereon longitudinally for adjusting the space between the front and rear rolls. To effect this adjustment, I form on the under side of the bearing *j* a nut *j'*, which fits in the slot *b'* and is moved longitudinally therein by means of a screw *h*, which extends through from the forward end of the head and engages the nut. The screw is held against any longitudinal motion, as here shown, by means of a screw *k*, which extends laterally through the head *B* and enters an annular groove *h'*, formed in the screw-head. The screw *k* is thus used for limiting the motion of the screw longitudinally and also for clamping it to hold it from turning.

It will be seen that by this construction the adjustment-screw may be worked easily and quickly from the front without disturbance of the roving and without stopping the machine, so that more accurate adjustment and more perfect work will result.

I claim—

A roll-stand for ring-spinning frames and the like including a standard having on the upper end thereof a head comprising the front-roll bearing, a flange extending rearward from said bearing having a longitudinal slot therein and the head being provided with a bore extending therethrough from the front thereof to the slot in the flange, a sliding bearing for supporting the rear rolls having on its under side a nut adapted to fit in the slot of the flange, a headed adjusting-screw in cross-section throughout its length smaller than the bore in the head and adapted to be inserted through the bore in the head from the forward end thereof to engage the nut,

and the adjusting-screw head having an annular groove therein and a set-screw passing laterally through the head and entering the groove to prevent longitudinal movement of
5 the adjusting-screw relative to the head and adapted to be adjusted to engage the adjusting-screw to prevent any movement thereof.

Signed at Portland, Maine, this 18th day of October, 1905.

EDWARD D. LIBBY.

Witnesses:

S. W. BATES,

MARY A. DONALDSON.