D. HUSSEY.

Banding Spindles.

No. 146,391. Patented Jan. 13, 1874.

Fig. 3.

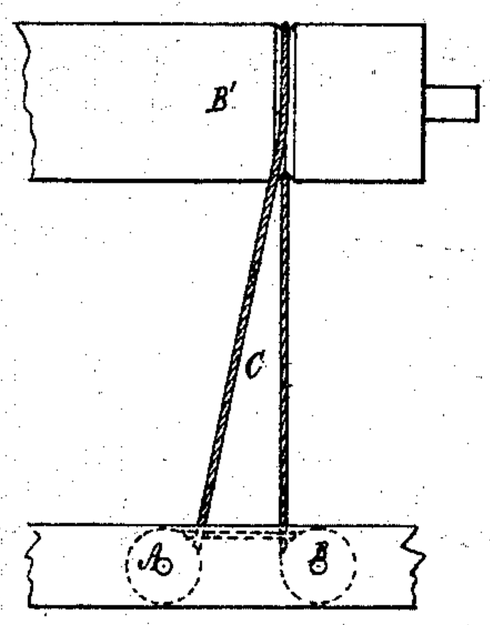


Fig. 4.

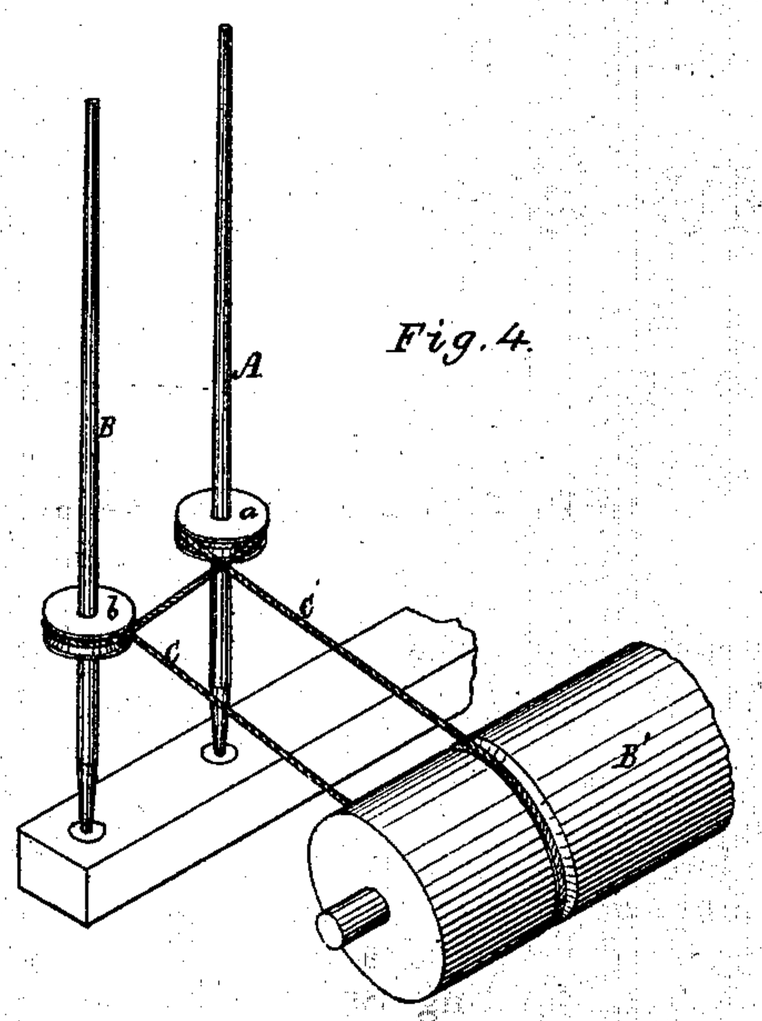


Fig. 1.

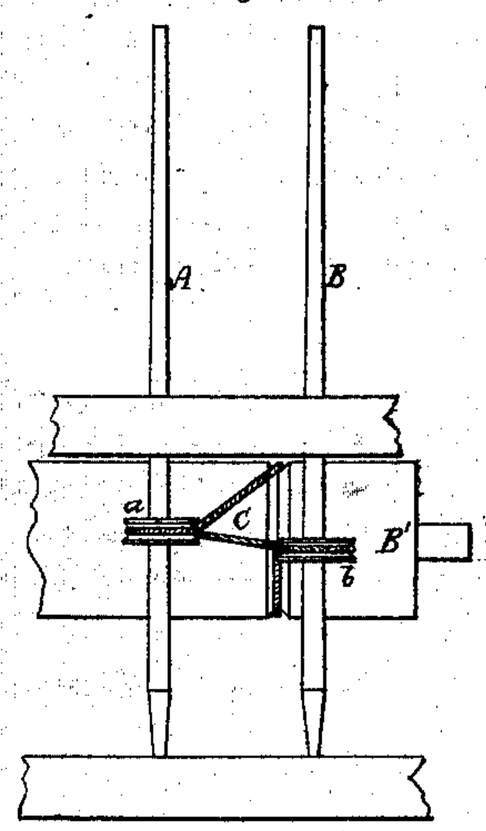
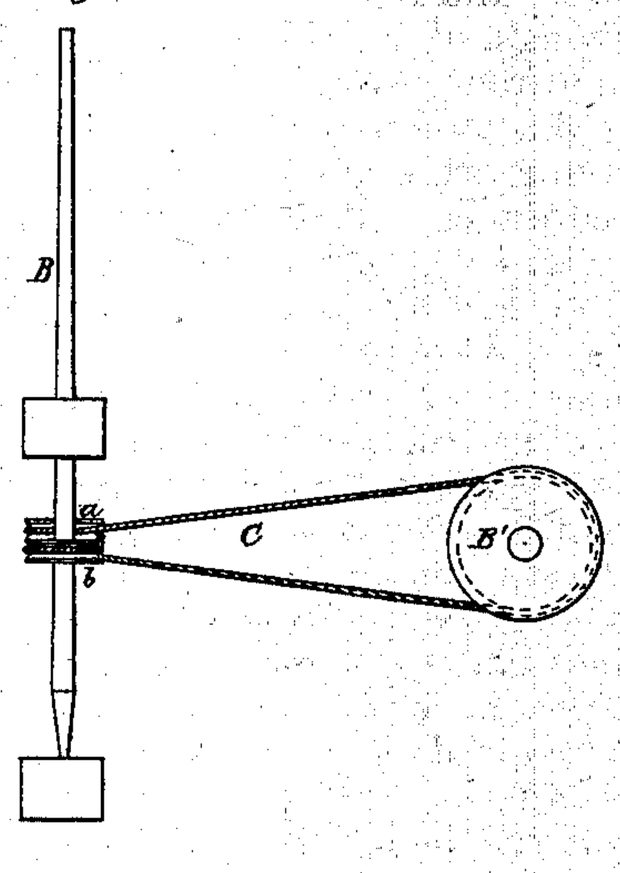


Fig. 2.



Witnesses.
S. N. Pipes
L. A. Miller

Daniel Hussey.
by his attorney
R. H. Eddy

UNITED STATES PATENT OFFICE.

DANIEL HUSSEY, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN BANDING SPINDLES.

Specification forming part of Letters Patent No. **146,391,** dated January 13, 1874; application filed December 27, 1873.

To all whom it may concern:

Be it known that I, DANIEL HUSSEY, of Lowell, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Banding Spindles of Spinning or Winding Machines; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a front elevation, Fig. 2 a side view, and Fig. 3 a top view, of two spindles and their driving-drum with a band applied thereto in accordance with my invention or improvement. Fig. 4 is a perspective view of the spindles, band, and driving-drum.

In such drawings, A B are the two spindles; B′, the driving-drum; and *a* and *b*, the whirls of the two spindles. The endless band shown at C goes partially around the drum B′; thence nearly around the whirl *a;* thence to and nearly around the whirl *b;* and thence to the drum. When the drum is in revolution, both spindles will be turned in the same direction. The two whirls may be on a level; but in order that the portion of the band extending from one whirl tangentially to the other may be sure to run clear of the parts of the band which cross it and extend to the drum, I arrange one whirl out of level with, or below the level of, the other, as shown.

By such method of banding a great saving in amount of band used is obtained over the mode of banding usually adopted, viz., by having a separate band to each spindle. Furthermore, as the band encompasses each whirl an arc nearly double what it would were it to go from the whirl directly to the drum without going about another whirl, the friction of the band on the whirl is greatly increased; consequently with my mode of banding much less power will be required to drive each of the spindles.

I claim—

The endless band C, arranged and combined with the driving-drum B′ and the whirls *a b* of two spindles, A B, all substantially as shown and described, whether the whirls of the spindles be in or out of level with each other, as specified.

DANIEL HUSSEY.

Witnesses:
R. H. EDDY,
J. R. SNOW.