

(No Model.)

T. WALKER.

TAKE-UP DEVICE FOR SPINDLE BANDS OF SPINNING MACHINES.

No. 434,852.

Patented Aug. 19, 1890.

Fig. 1.

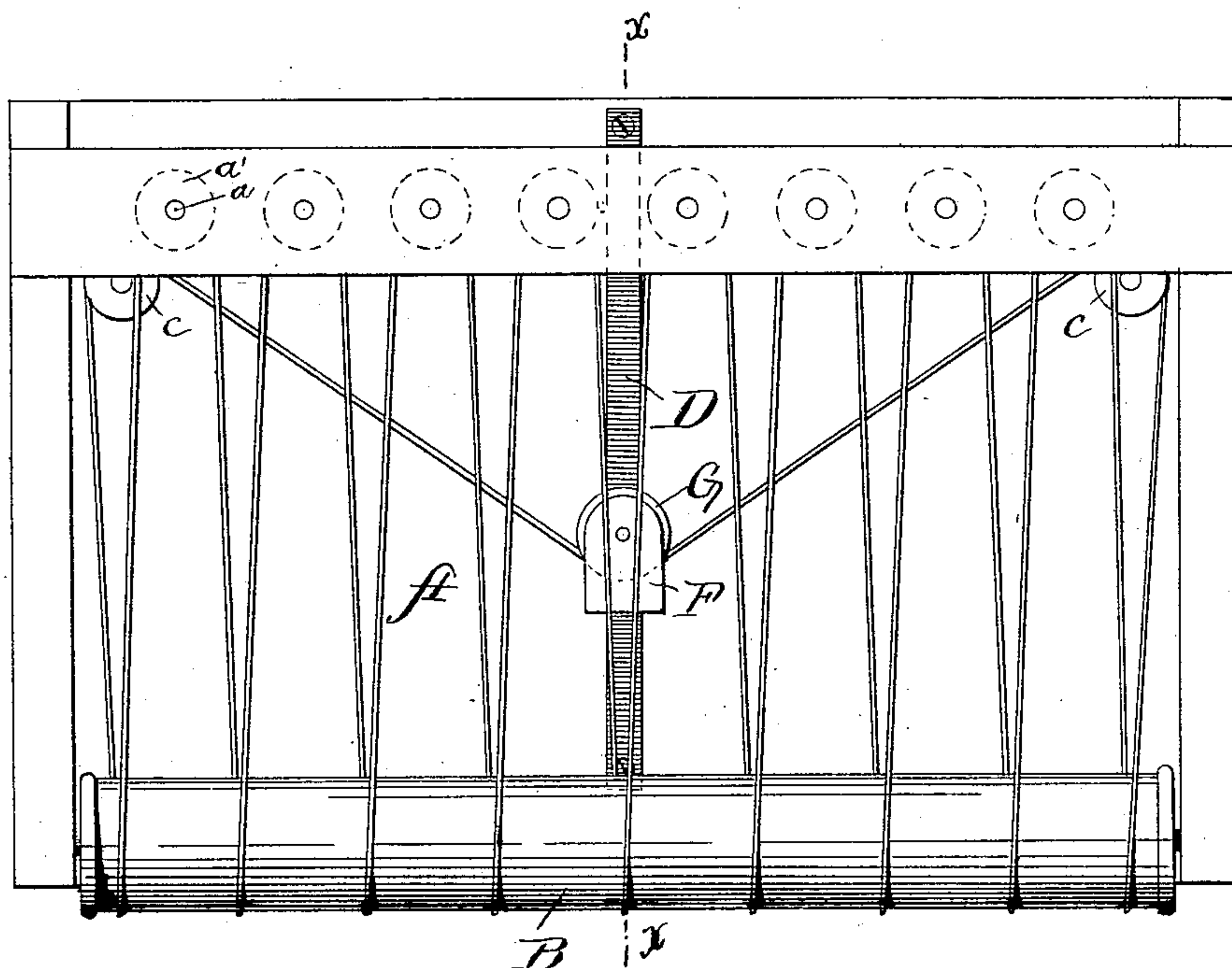
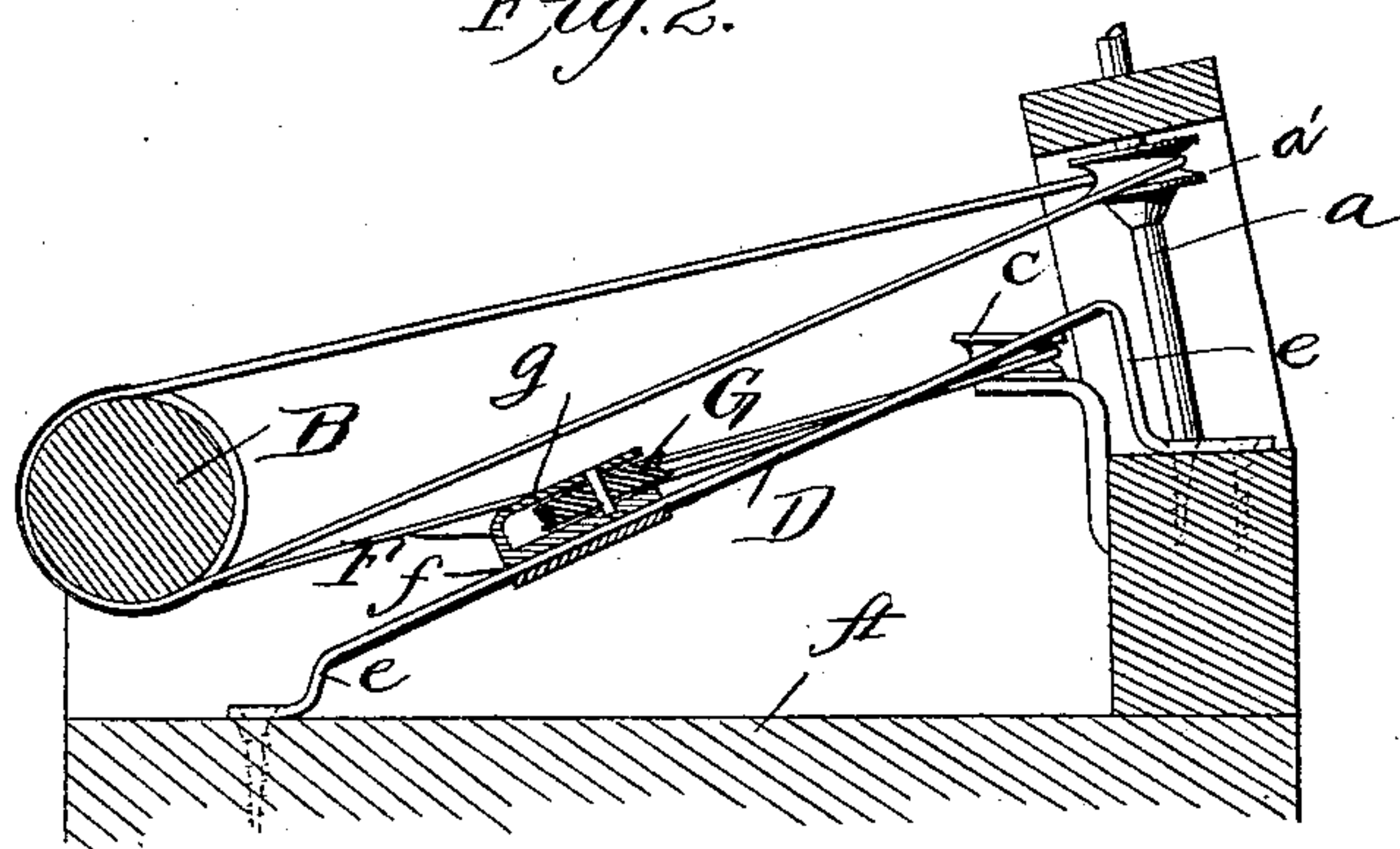


Fig. 2.



Witnesses

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THOMAS WALKER, OF WARREN, MAINE.

TAKE-UP DEVICE FOR SPINDLE-BANDS OF SPINNING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 434,852, dated August 19, 1890.

Application filed November 14, 1889. Serial No. 330,313. (No model.)

To all whom it may concern:

Be it known that I, THOMAS WALKER, of Warren, in the county of Knox and State of Maine, have invented a new and useful Improvement in Take-Up Devices for Spindle-Bands of Spinning-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in tension devices for the spindle-bands of spinning-jacks, twisting-machines, and the like. It is an improvement upon the tension devices shown in an application filed by me in the United States Patent Office on the 2d day of March, 1889, the said application having the Serial No. 301,784, and in view of that application the claim herein is limited to the specific form, all as hereinafter described.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view, and Fig. 2 a section on line *xx* of Fig. 1.

In the drawings, A represents in general form the spinning-jack, or so much thereof as is necessary to illustrate my invention, and *a* indicates the spindle.

On the drum B is wound a band, the loops of which pass alternately around the pulley *a'* of a spindle *a* and the drum B', and at each end of the drum the band passes back to a guide-pulley *c*. The tension device is applied to the loop between these two guide-pulleys *c*. Its general form is that of a pulley mounted in a block, which slides on an inclined guide, as described in my aforesaid application.

In the form heretofore shown by me the guide consisted of an upper and a lower bar longitudinally slotted and the block which carried the pulley was provided with projections entering the slots, whereby the block was guided in its up-and-down movement on the ways. The bands require delicate tension, and consequently easy and uniform movement of the block and pulley. The double and slotted bars afford a large surface to catch the lint, which tends to obstruct the free and easy movement of the block and at

the same time are more expensive to make, and if cast add materially to the weight of the jack on which they are carried.

In order to furnish a simpler and less clumsy guide, having less exposed surface, and at the same time by very simple and inexpensive means provide stops for the sliding block at the upper and lower limits of its movement, I form the guide of a single plain bar D. This is bent at its upper and lower ends to form upper and lower supporting-brackets *e*, the ends of which are fixed to the frame of the jack. Upon this bar is placed a block F, carrying a pulley G. The block has a longitudinal slot *f* fitted to the bar, so as to slide freely thereon. The block may be made of wood or metal, and is provided with a plate underneath, which holds the block to the bar. It has also an upper plate *g*, between which and the upper surface of the block the pulley is pivoted. The loop in the band passes around the pulley on its lower edge. In this form the apparatus may be made light enough to meet the requirements of any size of jack. The body of the block may be made of wood and the upper and lower plates of sheet metal, and thus may be made very light. With this device it has been found by actual experiment that the tension on each spindle is always the same without regard to the number the band operates.

I claim as my invention—

In combination with the spindle-band of a spinning-jack, a tension device consisting of a pulley-block having a longitudinal slot and an inclined way composed of a single bar fitted to the slot of the block, said bar being fixed in an inclined position on the jack and carrying the sliding block, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS WALKER.

Witnesses:

N. B. EASTMAN,
CHAS. C. ATKINS.