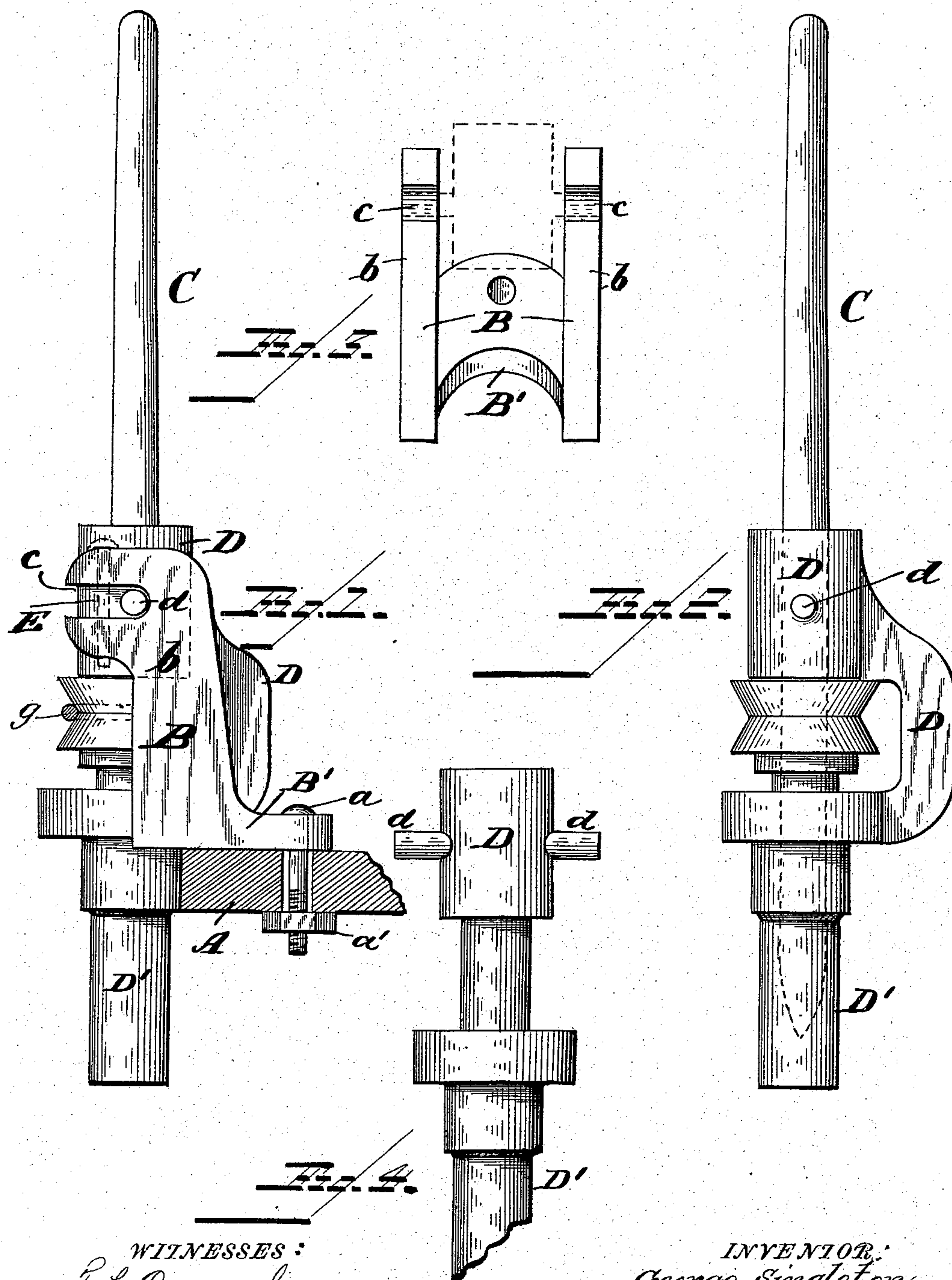


(No Model.)

G. SINGLETON.  
FLEXIBLE SPINNING SPINDLE.

No. 534,287.

Patented Feb. 19. 1895.



WITNESSES:  
*F. L. Ourand*  
*Samuel H. Jones*

INVENTOR:  
*George Singleton,*  
*by Louis Bagger & Co.*  
*his Attorneys.*



# UNITED STATES PATENT OFFICE.

GEORGE SINGLETON, OF DOVER, NEW JERSEY.

## FLEXIBLE SPINNING-SPINDLE.

SPECIFICATION forming part of Letters Patent No. 534,287, dated February 19, 1895.

Application filed April 16, 1894. Serial No. 507,718. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE SINGLETON, a citizen of the United States, and a resident of Dover, in the county of Morris and State of New Jersey, have invented certain new and useful Improvements in Flexible Spinning-Spindles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to improvements in that class of spinning-spindles having combined bolster and step-bearings, known as "single-rail spindles," and its object is to allow flexibility to the spindle and holder, so that they can move together, laterally, while the spindle is adjusting itself to variable or unbalanced loads.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 is a side elevation of a spinning spindle, constructed in accordance with my invention. Fig. 2 is a similar view of the spindle and holder, detached from the stand. Fig. 3 is a perspective view of the stand, the holder and spindle being removed. Fig. 4, is an elevation of the holder detached from the stand.

Like letters of reference designate corresponding parts in all the figures.

In the said drawings, the reference-letter A designates a portion of the rail of a spinning-frame, which may be of any approved construction, and B the standard or bearing for the vibrating or yielding spindle and holder. This stand consists of a metal casting comprising a curved base-plate B' and two parallel forwardly slanting posts or uprights *b b*, the projecting upper ends of which are slotted, as shown at *c*, so as to form boxes or bearings for the trunnions *d d* of the vibrating or yielding holder D. This latter consists of combined bolster and step-bear-

ings in one piece, in which the spindle C revolves, and is provided on opposite sides with trunnions *d d*, adapted to fit loosely in the slotted bearings *c c*, within which they are retained by a pin E. This holder is also formed with a downwardly-extending arm D', which extends below the base-plate B' of the bifurcated standard B, and impinges upon the rail A; it being kept in position by the draft or strain of the driving band *g*. The upper part of the holder D contains the bolster-bearing, and the lower part the step-bearing for the spindle C, which passes through the holder, as shown by dotted lines in Fig. 2.

The standard B is fastened to the rail of the frame A by means of a bolt *a*, inserted through an aperture in the rear end of the curved base-plate B' and secured by a nut *a'*.

From the foregoing description, the operation will be readily understood.

As above stated, the spindle-holder and spool will normally occupy the perpendicular position shown in the drawings; but if the spool, carried thereby, either varies in weight, or is improperly balanced, the spindle and holder, being loosely suspended, will move laterally until the spindle adjusts itself to the load.

Having thus described my invention, what I claim is—

In a spinning frame, the combination with the spinning rail, of the standard provided with parallel uprights having slots at their upper ends, the holder comprising a bolster bearing provided with trunnions journaled loosely in said slots and an extension formed with a step bearing and adapted to bear against the said rail, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

GEORGE SINGLETON.

Witnesses:

ISRAEL D. CONDIT, Jr.,  
CORNELIUS B. GAGE.