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PATENTED DEC. 4, 1906.

A. J. DRONSFIELD.

ADJUSTABLE GUIDE WIRE HOLDER FOR YARN WINDING MACHINES.

APPLICATION FILED OCT. 30, 1905.

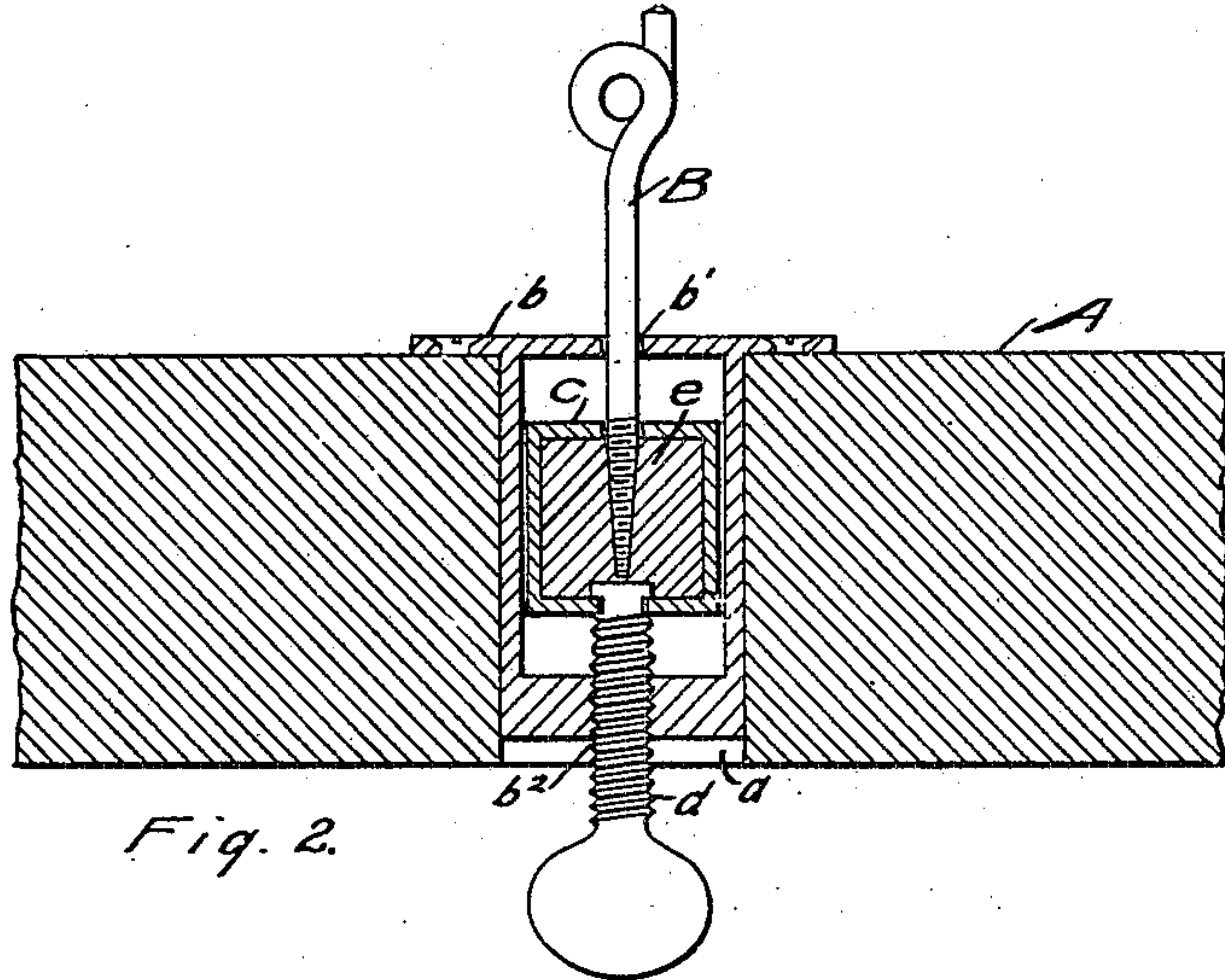


Fig. 2.

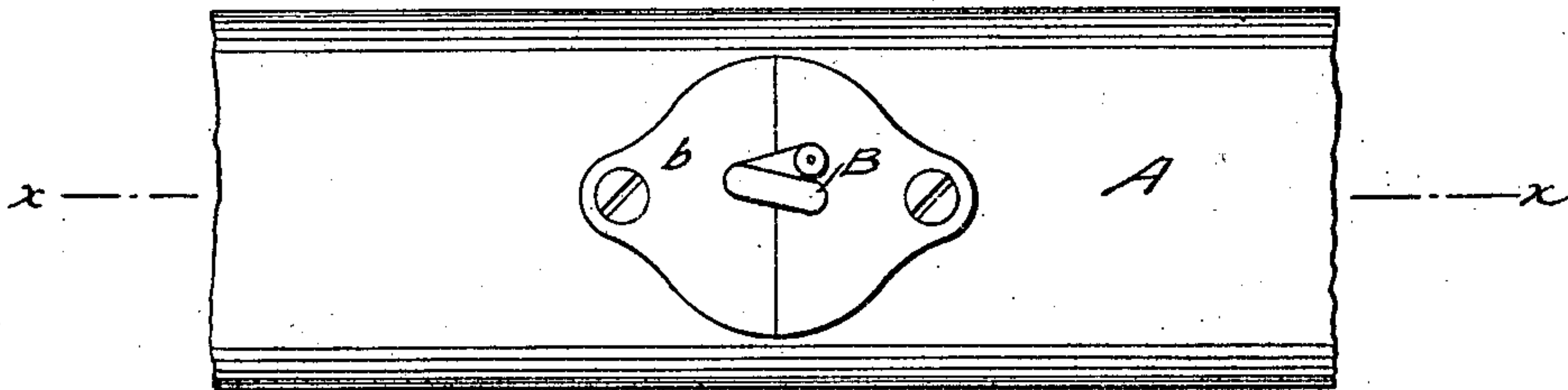


Fig. 1.

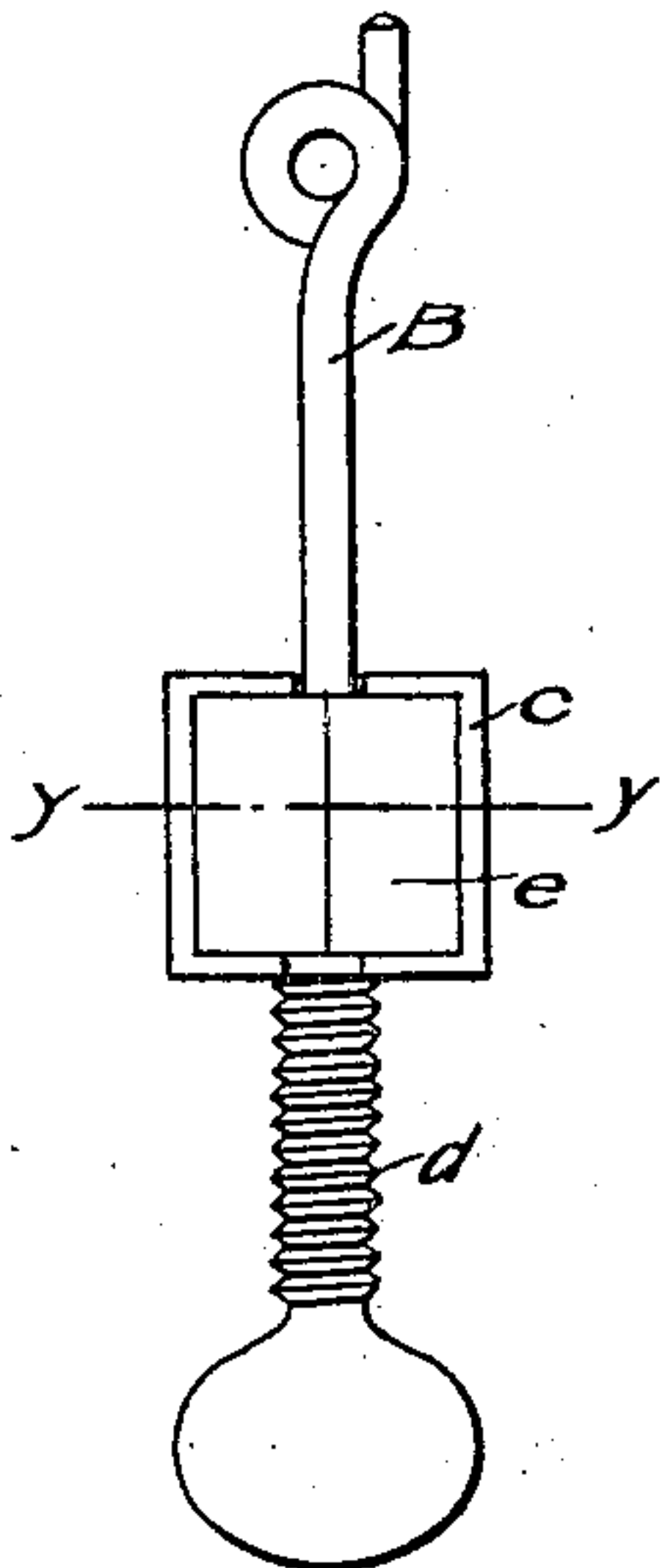


Fig. 3.



Fig. 7.

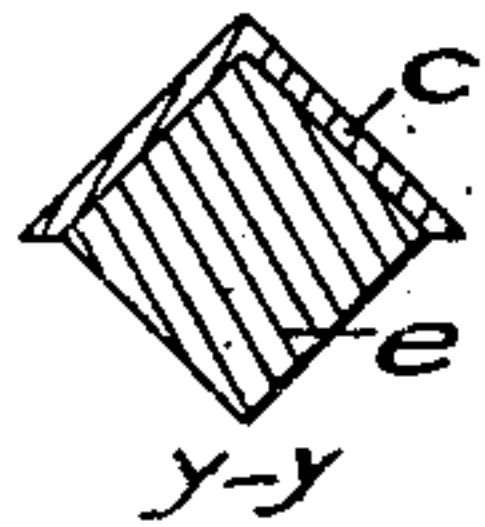


Fig. 4.

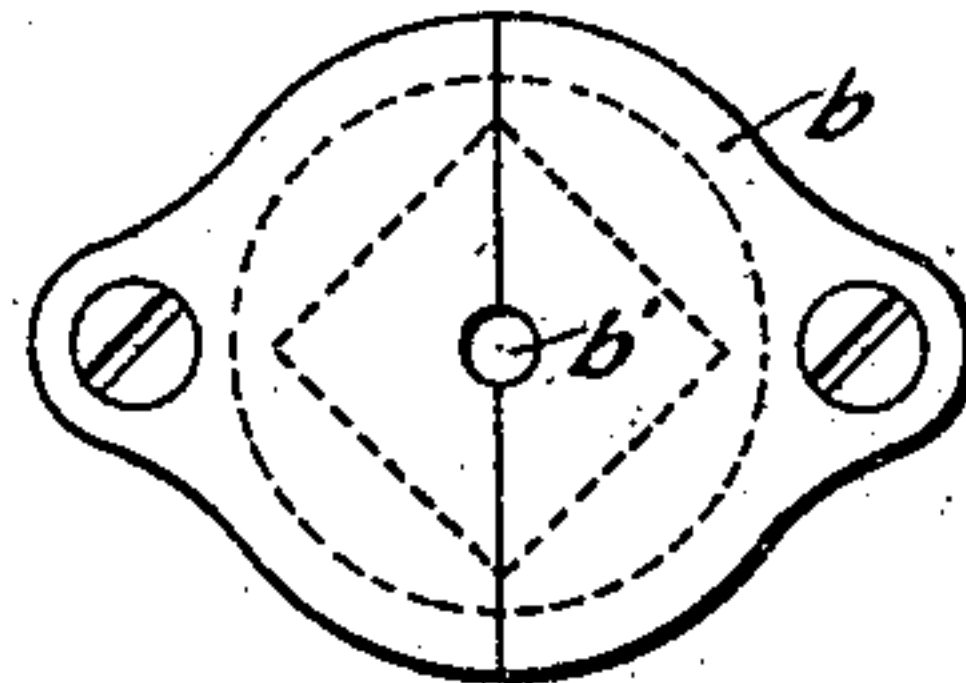


Fig. 8.

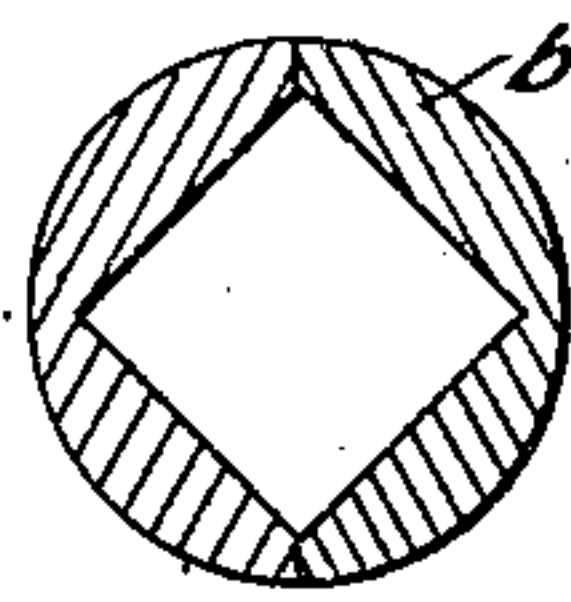


Fig. 6.

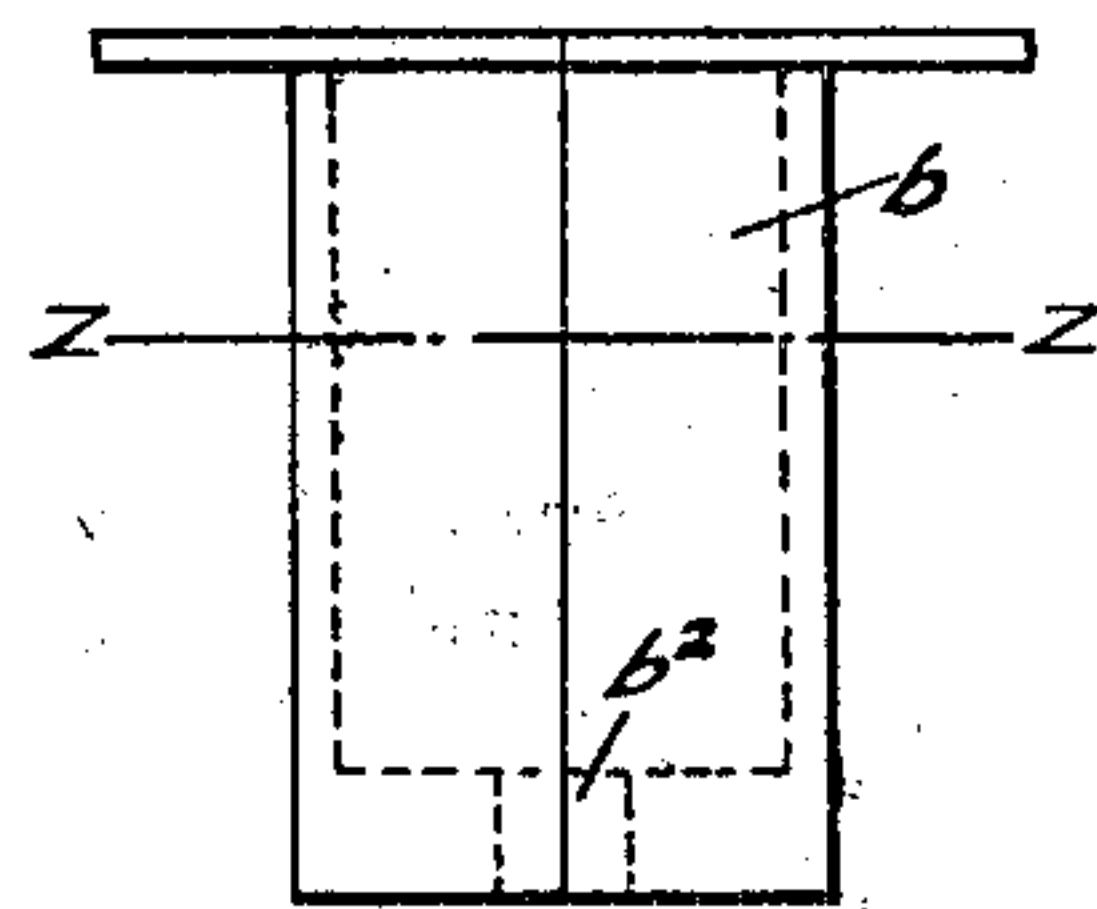


Fig. 5.

WITNESSES,

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# UNITED STATES PATENT OFFICE.

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ADJUSTABLE GUIDE-WIRE HOLDER FOR YARN-WINDING MACHINES.

No. 837,389.

Specification of Letters Patent.

Patented Dec. 4, 1906.

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*To all whom it may concern:*

Be it known that I, ALBERT J. DRONSFIELD, of the city and county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Adjustable Guide-Wire Holders for Yarn-Winding Machines; and I do hereby declare the following specification, taken in connection with the accompanying drawings, forming a part of the same, to be a full, clear, and exact description thereof.

My invention relates to the holder for the guide-wires in yarn-winding machines.

The guide-wires almost universally employed in said machines are provided with a wood-screw thread at their ends and are screwed directly into the wooden guide-rail. With this construction and arrangement when an adjustment of the guide-wire is necessary in order to have the yarn follow the entire length of the spool on which it is being wound said guide-wire is raised or lowered by unscrewing or screwing the same in the guide-rail. Such an adjustment is objectionable because said wire must be given an entire revolution, as a partial revolution would bring the coiled end in the wrong position. A whole revolution of the guide-wire does not, however, in many cases produce the desired adjustment, and the spool is as a result improperly wound.

The object of my invention is to overcome this objection and to provide for a very fine adjustment of the guide-wire to any desired height or position; and it consists in securing the guide-wire in a holder which is adjustably mounted in the guide-wire rail.

In describing my invention in detail reference will be had to the accompanying drawings, in which—

Figure 1 is a plan view of a portion of the guide-wire rail of a yarn-winding machine provided with my improved guide-wire holder. Fig. 2 is a vertical section on the line  $x x$ , Fig. 1. Fig. 3 is a view of the guide-wire holder removed from the guide-wire rail. Fig. 4 is a horizontal section on the line  $y y$ , Fig. 3. Fig. 5 is a view of the casing or chamber in which the guide-wire holder is mounted removed from the guide-wire rail. Fig. 6 is a horizontal section on the line  $z z$ , Fig. 5; and Figs. 7 and 8 are details.

Referring to the drawings, A is a portion of the wooden guide-wire rail of a yarn-winding machine, and B is the old and well-known form of guide-wire used in such machines. The rail A is provided with a hole  $a$ , extending through the same for receiving a removable casing  $b$ . The casing  $b$  is preferably made in two halves to facilitate the assembling of the parts and is provided with a hole  $b'$  in the top and a screw-threaded hole  $b^2$  in the bottom thereof.

Arranged to slide in the casing  $b$  is a smaller casing  $c$ , which is provided with an adjusting thumb-screw  $d$ , loosely mounted in the bottom thereof and extending through the screw-threaded hole  $b^2$  in the bottom of the casing  $a$ . Held within the casing  $c$  is a block of leather or wood  $e$ , in which is screwed the guide-wire B, which extends through the hole  $b'$  in the casing  $b$  and the slot  $c'$  in the top of the casing  $c$ .

To adjust the guide to any desired position, all that is necessary is to operate the thumb-screw  $d$ . The casing  $c$  is preferably cut away on one side, so that the block of leather  $e$  will be in frictional engagement with the inner surface of the casing  $b$ , and thus serve to hold the parts in their adjusted position.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. An adjustable guide-wire holder comprising an exterior casing, a second casing within said exterior casing, and means for adjusting one of said casings with relation to the other, substantially as described.

2. An adjustable guide-wire holder comprising an exterior casing, a casing mounted to slide in said exterior casing, and an adjusting-screw loosely mounted in the interior casing and passing through and adjustable in the exterior casing, substantially as described.

3. An adjustable guide-wire holder comprising an exterior casing, an interior casing mounted to slide in said exterior casing and provided with means for receiving the end of a guide-wire, and means for adjusting the interior casing with relation to the exterior casing, substantially as described.

4. An adjustable guide-wire holder comprising an exterior casing, an interior casing mounted to slide in said exterior casing,

means for holding said interior casing in frictional engagement with said exterior casing, and means for adjusting said interior casing with relation to the exterior casing, substantially as described.

5. The combination, with the guide-wire rail of a yarn-winding machine, of a guide-wire holder adjustably mounted in said rail,

and means on the outside of said rail for adjusting said holder, substantially as described.

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