

No. 708,468.

Patented Sept. 2, 1902.

J. H. DONALDSON.
WINDOW SHADE HOLDER.

(Application filed Aug. 5, 1901.)

(No Model.)

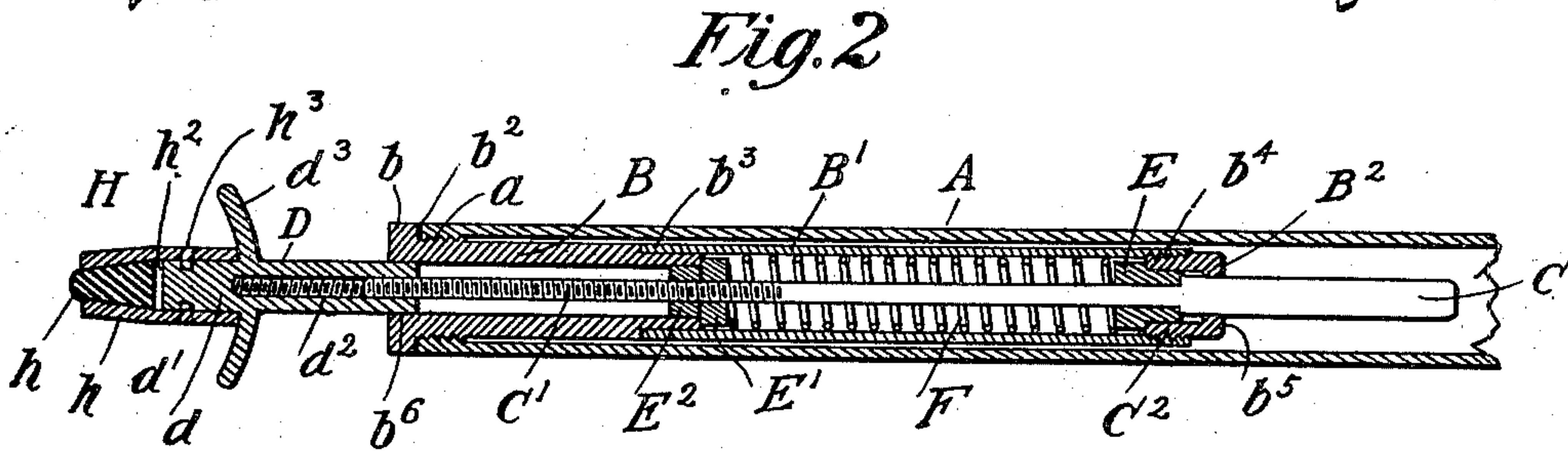
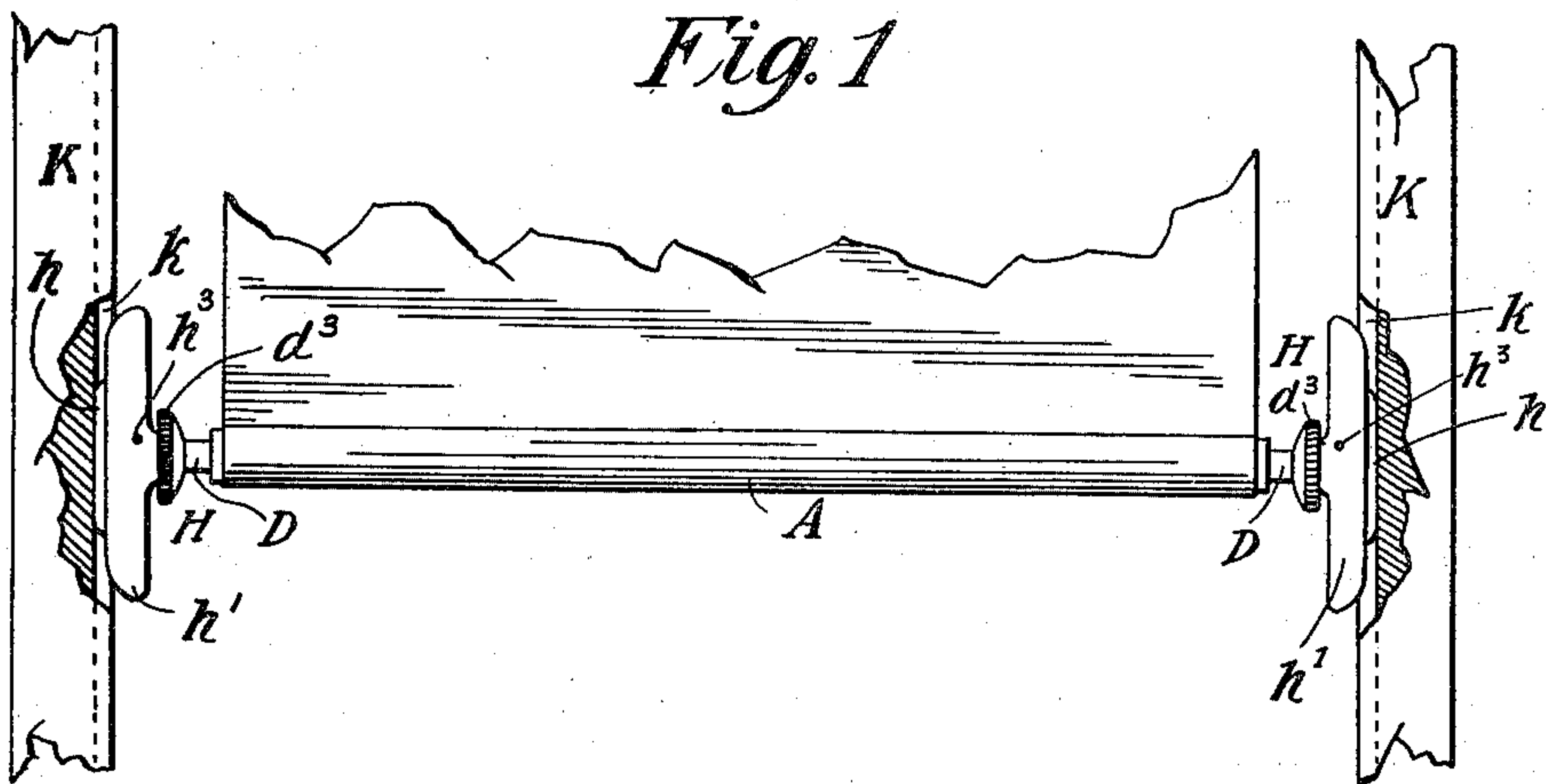


Fig. 5

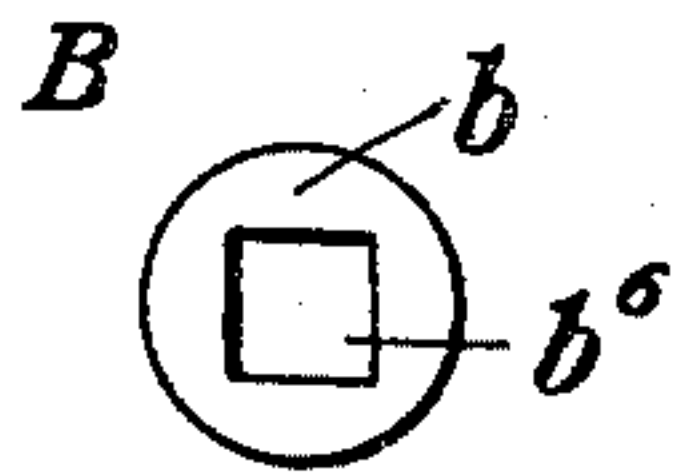
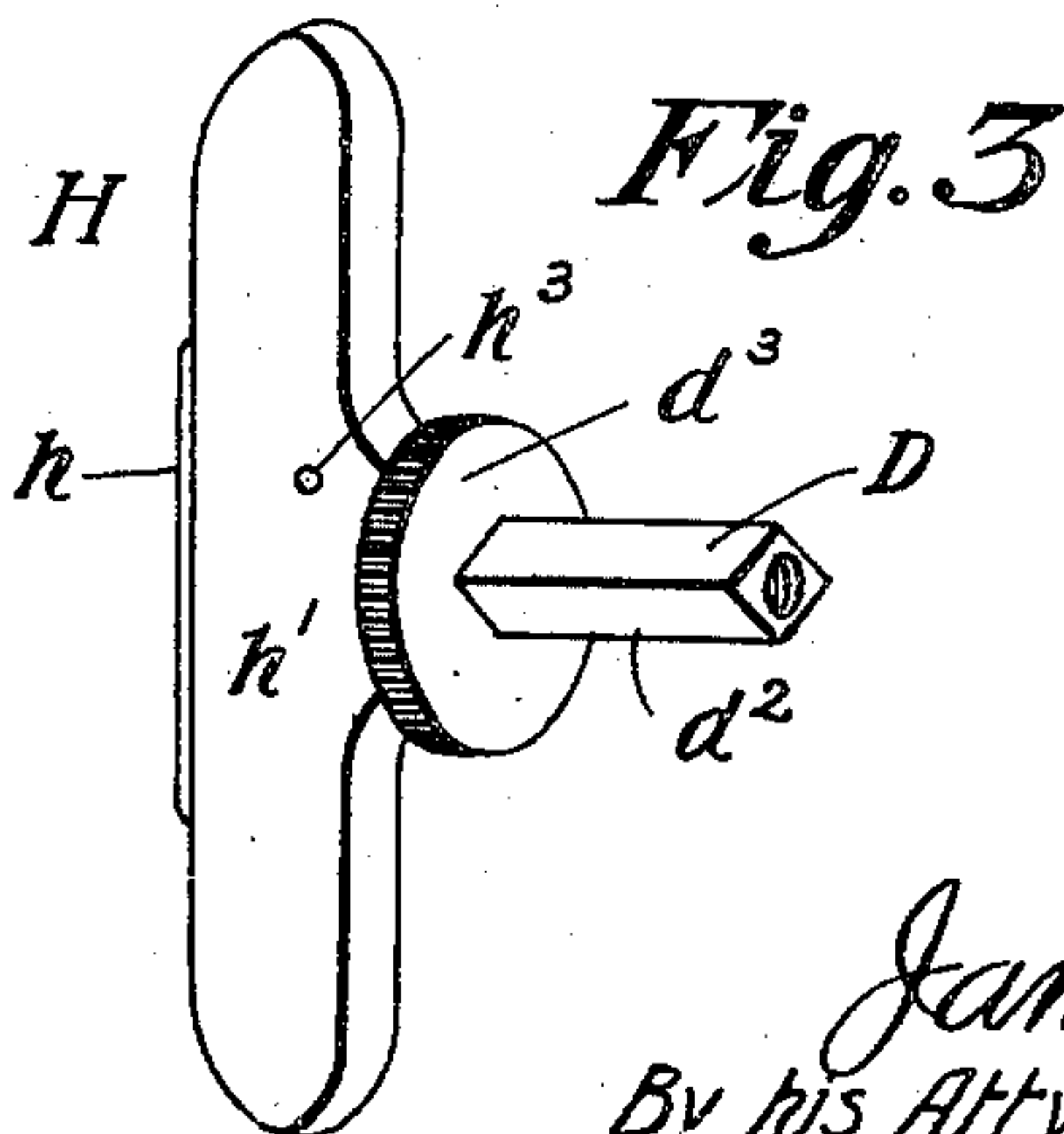
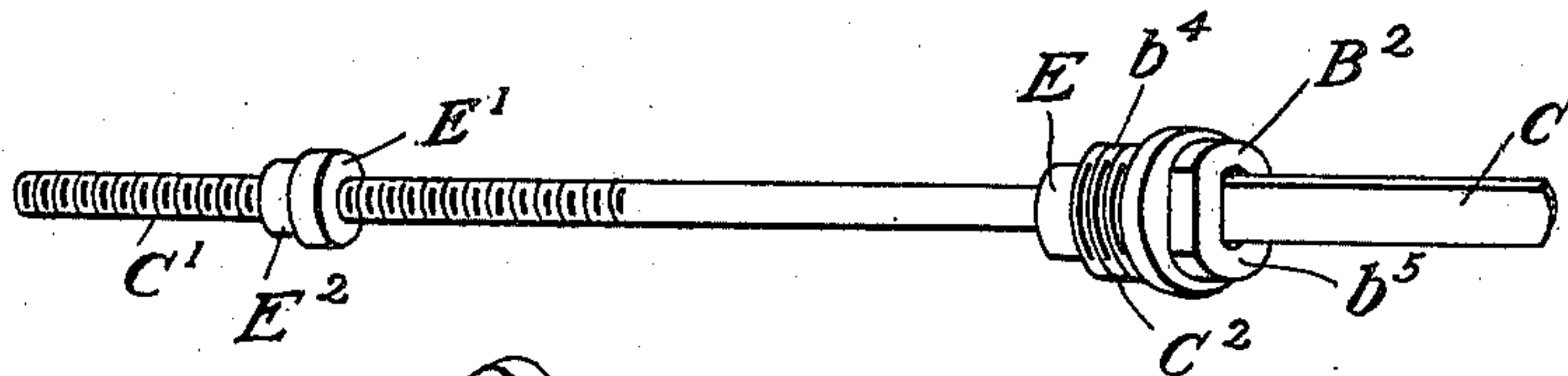


Fig. 4



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES H. DONALDSON, OF CHICAGO, ILLINOIS.

WINDOW-SHADE HOLDER.

SPECIFICATION forming part of Letters Patent No. 708,468, dated September 2, 1902.

Application filed August 5, 1901. Serial No. 70,891. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. DONALDSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Window-Shade Holders, of which the following is a specification.

My invention relates to that class of shade-holders which are attached to the stick at the lower marginal edge of the shade to guide it in its adjustment within a groove in the window-stop and is thrust outwardly by a spring to hold it in any desired position therein.

The object of my invention is to provide a shade-holder of the class named which may be readily adapted to window-openings of various widths and to adjust the spring in such manner that longitudinal adjustment to suit the width of the window will not change the pressure of the spring against the holder and also to provide means for readily removing the stick and holders from engagement with the groove in the window-stop without varying the various adjustments, as will hereinafter appear.

In the accompanying drawings, which illustrate my invention, Figure 1 is a front elevation of my improved shade-fixture in position within the window-frame. Fig. 2 is an enlarged longitudinal section of one end of the stick and holder attached thereto. Fig. 3 is a perspective view of the holder detached from the shade-stick. Fig. 4 is a perspective view of the end cap of the casing and of the expansion-rod passing through the slot therein with its nuts and washers on. Fig. 5 is an end elevation of the casing which engages the holder.

As shown in the drawings, the stick A, to which the curtain is attached, in this instance is a tube having an internal screw-thread a at its end to receive and hold the casing B, which comprises a cylindric sleeve provided with a peripheral flange b at its extremity and is screw-threaded adjacent to said flange, as shown at b^2 , to fit the thread in the end of the tube A. The inner end b^3 of said casing is reduced to closely fit in the outer end of a cylindrical sleeve B' . The inner end of said sleeve B' is threaded, as shown at b^4 , to receive an apertured end cap B^2 , the diameter of which is approximately equal to that of the

casing B. An extension-rod C passes through said cap, sleeve B' , and casing B. Said extension-rod C is threaded from its outer end inwardly, as indicated at C' , and an adjustable bar D is provided with an axial longitudinal threaded aperture complementary therewith and adapted to receive the same and to afford means for adjustment. The inner end of the extension-rod is flat to pass through a slot in the cap B^2 , and to hold the same from rotation in the cap a shoulder C^2 is provided, against which abuts a washer E, which bears against the inner face of the cap B^2 and receives the end pressure of the inner end of a coiled spring F, which encircles the rod C and fits within the casing B' . The pressure of the outer end of said spring is received by a washer E' , which bears against a nut E^2 , engaged upon the thread C' of the extension-rod and by means of which the initial pressure of the spring may be set to a nice adjustment. The thrust upon the adjusting-bar D and the degree of frictional contact of the shoe H, journaled upon the outer end of said bar within the groove k' in the window-stops K, and the initial pressure of the spring when thus adjusted are constant so long as the nut E^2 remains in the same position upon the rod.

The shoe H has a leather bearing-block h inserted in a recess therein in a well-known manner, and the outer end of the adjusting-bar D has a journal d , which fits into an aperture h^2 of a hub h' upon the inner face of the shoe. A pin h^3 through the said hub, approximately at a tangent with the aperture h^2 , engages in a circumferential groove d' in the journal d of the adjusting-bar and serves to hold the journal within the bore and allows it to turn freely therein. The shank of the adjusting-bar D is square, as shown at d^2 , and passes through a square aperture b^6 in the axis of the casing B, though obviously any angular form in cross-section will suffice. A milled disk d^3 is rigidly secured on said shank, by means of which it may be readily turned upon the threaded end of the extension-bar. The shank may thus be drawn out of the casing B to admit of its being screwed inwardly and outwardly upon the adjusting-bar to adapt the holder to suit windows of different widths.

The operation is as follows: The outer end

of the spring F is pressed inwardly when the shoe is to be disengaged from the groove in the window-stop to admit of the removal of either the shade entire or the lower end thereof from the window-frame, as when the window is to be washed or for other purposes, and the angular shank of the extension-bar, engaging in the aperture in the casing, then prevents said bar from turning upon the extension-rod and changing its adjustment thereon. The adjustment of the holder either as to the width of the window-opening or the pressure exerted by the spring as a friction-brake therefore remains unchanged by any accidental movement of the parts. The spring when supported in the casing and held upon the extension-bar between the nuts and washers and slotted casing-cap thereon exerts its pressure upon both the bearing-points—that is to say, upon the nut and the cap—in opposite directions and serves to force the extension-rod and shoe outwardly against the bottom of the groove in the window-frame. It also draws the squared locking portion of the extension-bar inwardly and serves both as a friction-brake and lock.

Obviously details of construction may be varied without departing from the principle of my invention.

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

1. In a curtain-holder, the combination with a tubular stick of a non-rotative extension-rod therein, means for holding the extension-rod yieldingly in an adjusted position, a shoe, an adjustable adjusting-bar forming the connection between the shoe and the extension-rod and adapted normally to be engaged in the end of the stick, but withdrawable therefrom for purposes of adjustment.

2. In a curtain-holder, the combination with a stick having a tubular end, of a non-rotative longitudinally-movable extension-rod therein, positive bearings within the end of the stick adjacent to the ends of the extension-rod, a spring engaging the extension-rod between said bearings and adapted to return the rod to its adjusted position when moved outwardly or inwardly of the stick, a shoe, an adjusting-bar relatively engaged on the shoe and having screw-threaded engagement with the extension-rod, and held from rotation by the end of the stick but withdrawable therefrom for purposes of adjustment.

3. In combination, a curtain-stick having a tubular end, of an extension-rod movable longitudinally in said stick and provided at its inner end with a shoulder and at its outer end with a nut and adapted to slide through fixed bearings within the stick, a spring secured on the extension-rod between said bearings and acting to return the extension-rod to its adjusted position when moved outwardly or inwardly therefrom, a shoe, an angular adjusting-bar rotatively engaged thereon and engaging in a complementary aperture at the end of the stick and having screw-threaded

engagement with the extension-rod, said adjusting-bar when withdrawn from the end of the stick being adjustable longitudinally of the rod.

4. In a curtain-holder the combination with a tubular stick of a casing therein, a non-rotative extension-rod therein, a spring on said extension-rod, a shoe, an adjustable adjusting-bar forming the connection between the shoe and the extension-rod and adapted to be engaged in and withdrawable from the outer end of the casing.

5. In a curtain-holder the combination with a tubular stick of a casing secured in the end thereof, a non-rotative extension-rod adapted for longitudinal movement within the casing, a friction-shoe adjustably connected therewith and movable longitudinally of the stick, stops adapted to limit the movement of the extension-rod and a spring engaged on the extension-rod and adapted to force the said rod outwardly as a brake.

6. In a curtain-holder the combination with a tubular stick adapted for attachment to a curtain of a casing, an extension-rod longitudinally movable therein, a spring within the casing controlling the movements of the extension-rod and acting to force the same outwardly therefrom, a shoe, a bar forming an adjustable connection between the shoe and extension-rod and a shank on said bar adapted to engage in or be drawn from a complementary aperture in the end of the casing.

7. In a curtain-holder the combination with a tubular stick of a casing, an end-threaded non-rotative extension-rod longitudinally movable within the casing, a spiral spring adapted to the rod, a nut and washer adjustable upon the rod and adapted to receive the pressure of the outer end of the spring and to permit adjustment of the tension of the same, a shoe, an adjusting-bar rotatively attached thereto and provided with a threaded aperture to receive the end of the extension-rod and a milled disk on said adjusting-bar.

8. In a curtain-holder the combination with a tubular stick of a casing therein, an end-threaded non-rotative extension-rod longitudinally movable in the stick, a slotted cap engaged on the inner end of the casing through which the inner flattened end of the extension-rod passes, a washer upon the rod adapted to bear against the cap, a nut and washer adjustable upon the rod, a spring upon the rod acting to press against the washer, an adjusting-bar adjustably secured upon the outer end of the extension-rod and a shoe carried upon the outer end of the adjusting-bar, substantially as described.

9. In a curtain-holder the combination with a tubular stick of a casing therein, an extension-rod, and a spring secured in said casing, an adjusting-bar adjustably secured upon the outer end of the extension-rod and having a journal at the outer end thereof provided with an annular groove therein, a shoe having a hub to fit the journal and a tangential pin

passing through the hub into and across the groove in the journal of the extension-bar, substantially as described.

10. The combination with a tubular stick
5 of a spring-controlled, non-rotative extension-rod therein, bearings in the stick acting to limit the movements of said rod, a shoe, and an adjusting-bar engaged thereon and having screw-threaded engagement with the ex-

tension-rod and normally engaged in and
held from rotation by the stick and adapted
to be withdrawn from the stick against the
tension of the spring for purposes of adjust-
ment.

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Witnesses:

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