

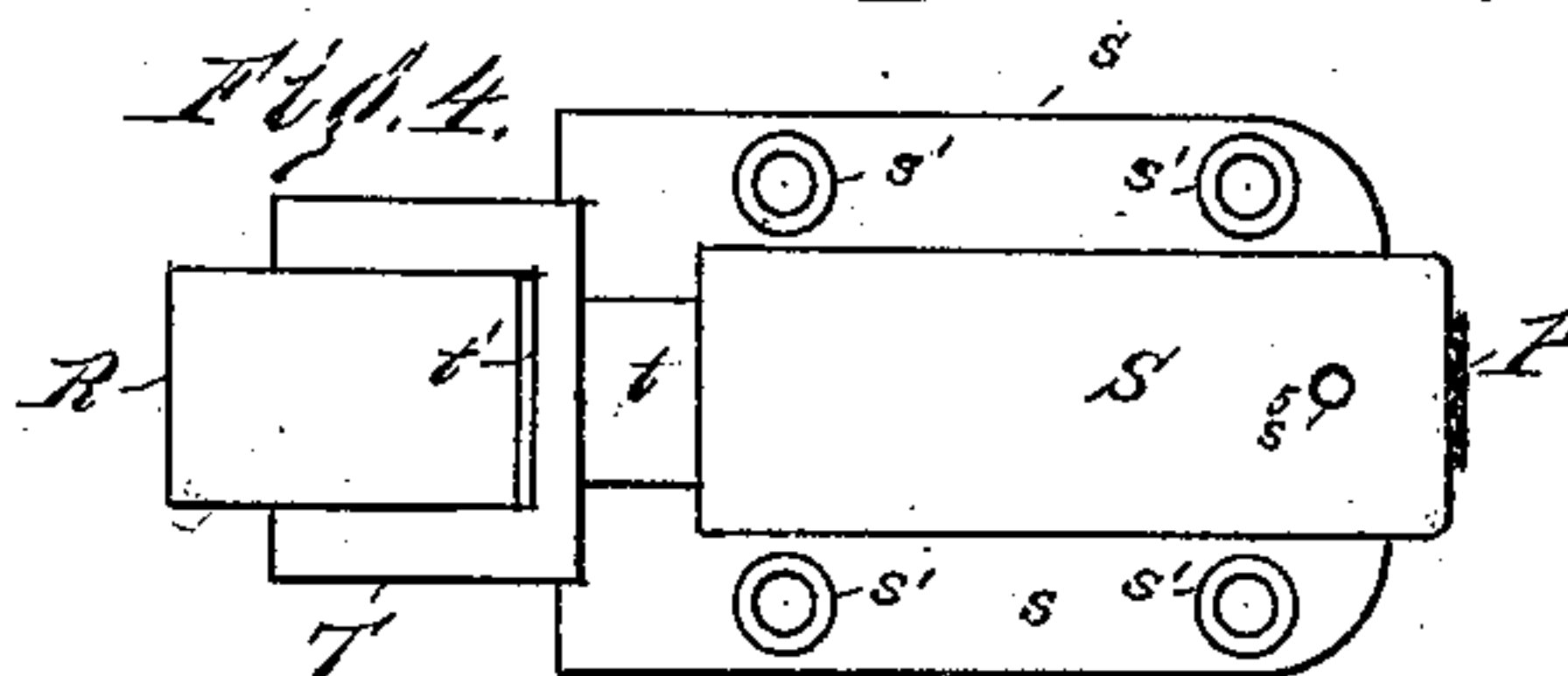
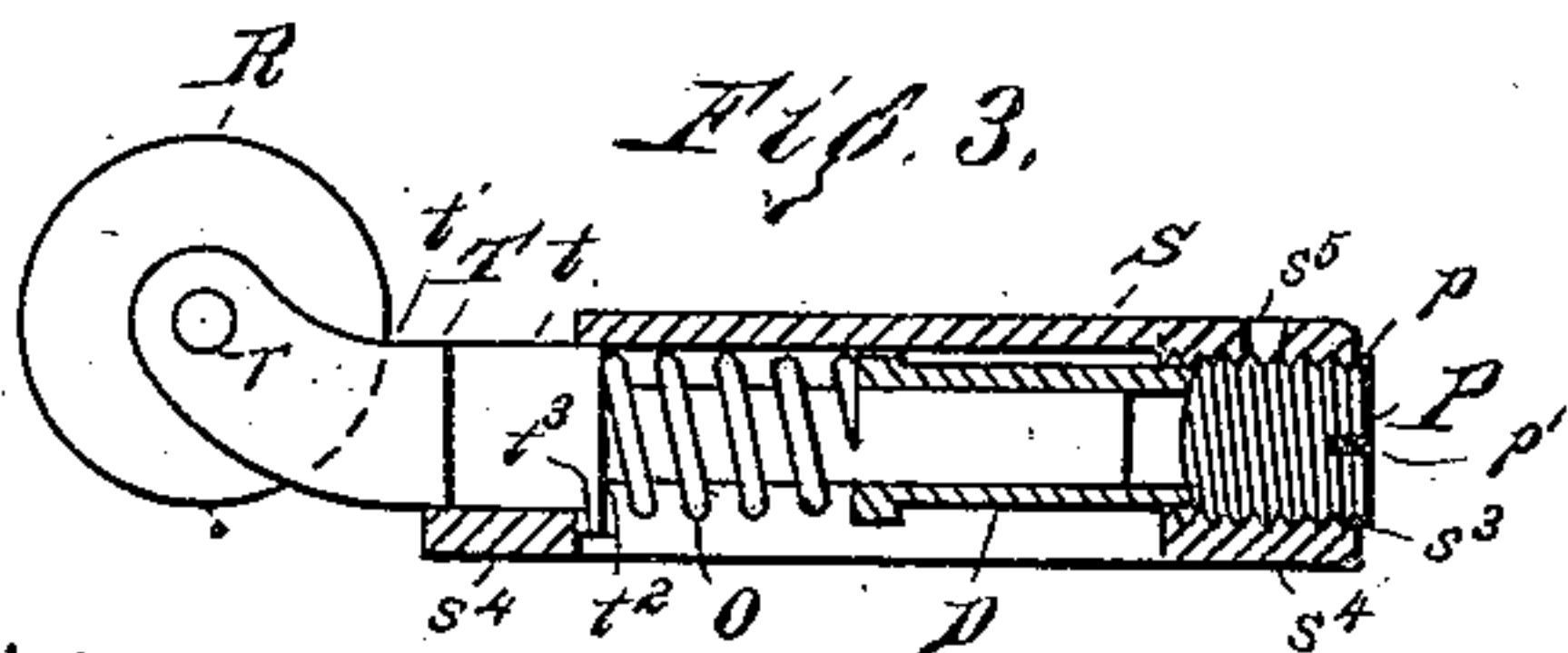
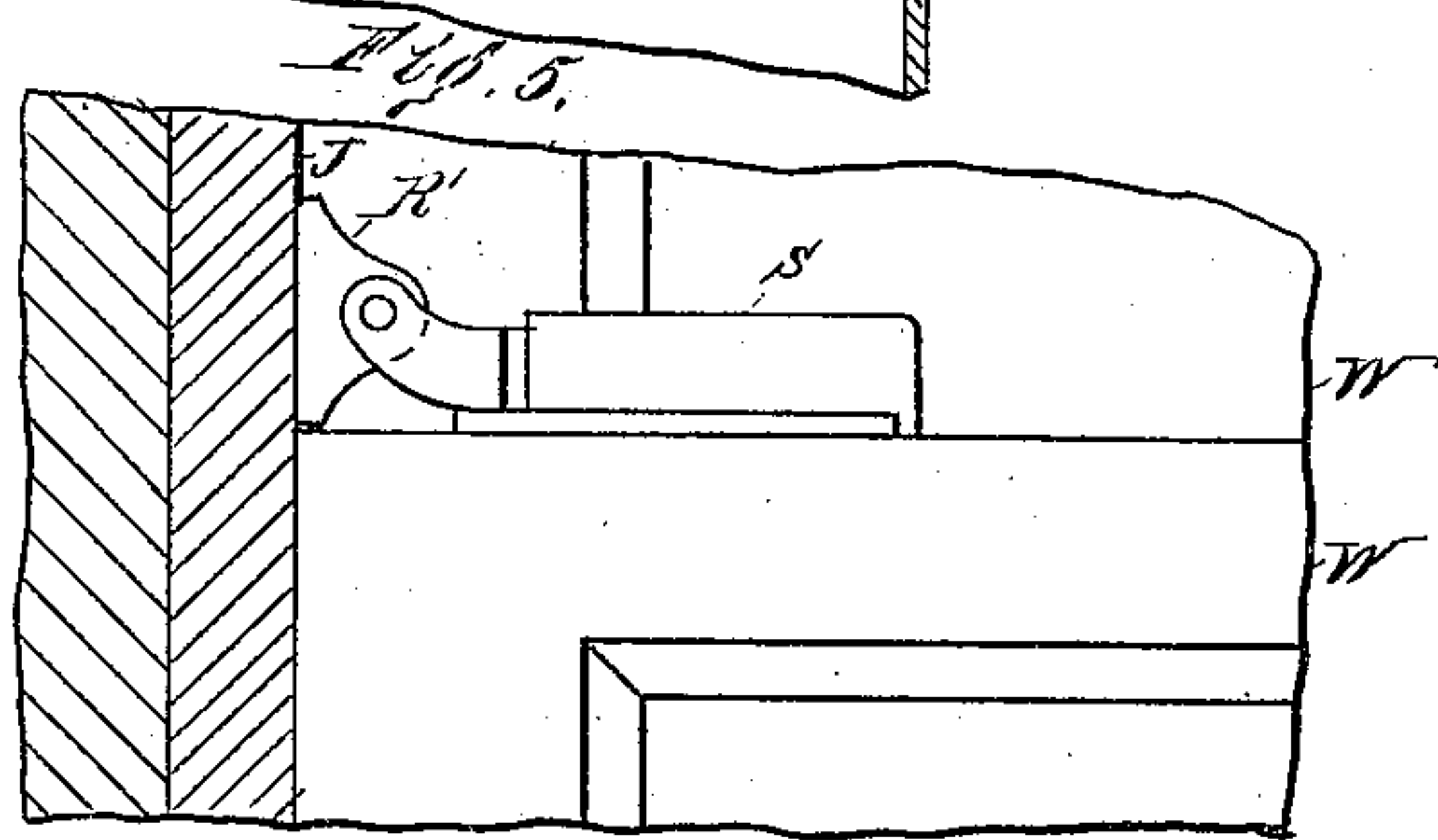
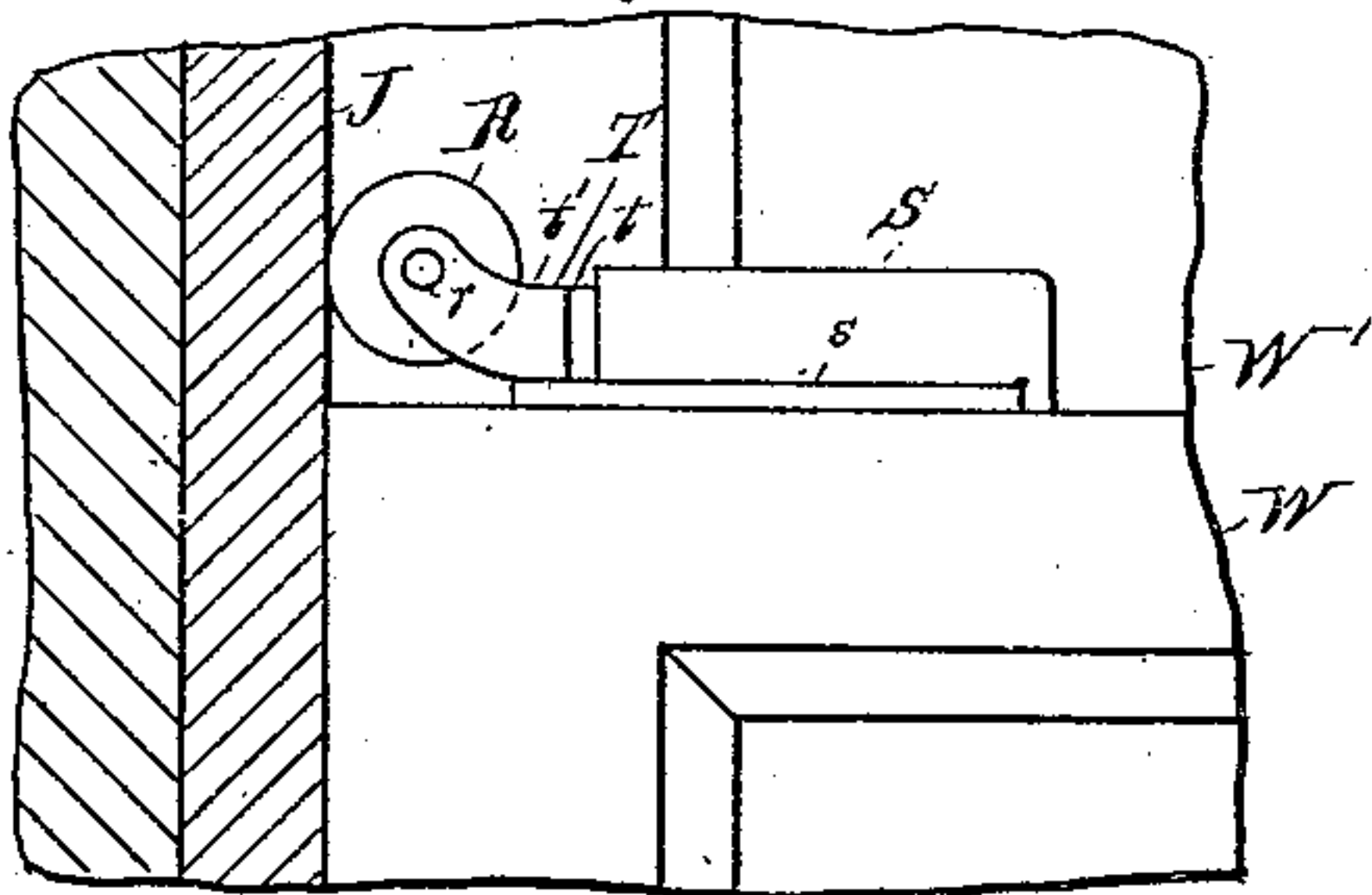
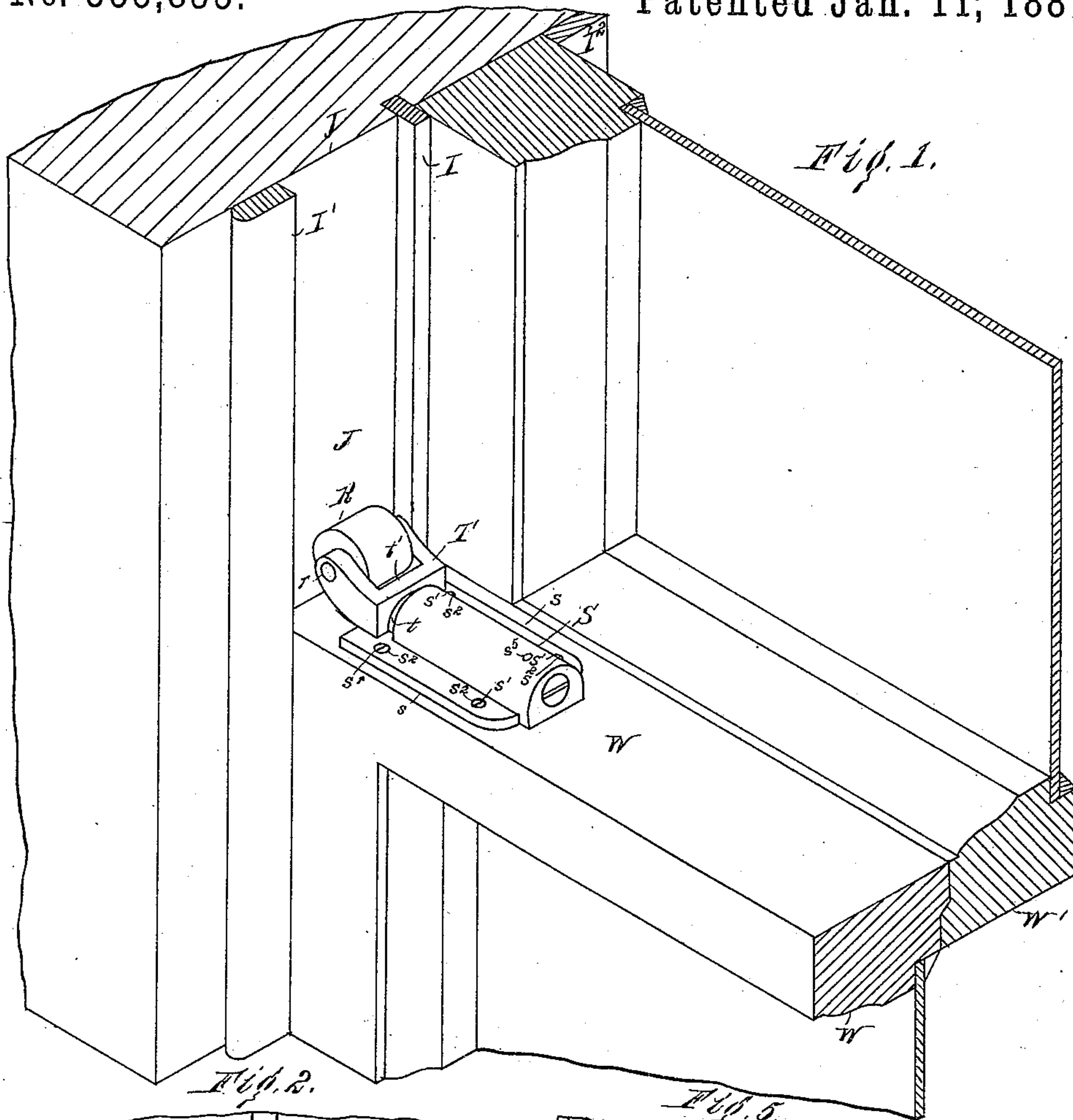
(No Model.)

G. H. NOBLE.

SASH HOLDER.

No. 355,835.

Patented Jan. 11, 1887.



Witnesses.

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UNITED STATES PATENT OFFICE.

GEORGE H. NOBLE, OF LOWELL, MASSACHUSETTS.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 355,835, dated January 11, 1887.

Application filed June 9, 1886. Serial No. 204,566. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. NOBLE, a citizen of the United States, residing at Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Window-Sash Holders, of which the following is a specification.

My invention relates to window-sash holders; and it consists in the devices and combinations hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an isometric view of a part of a window-jamb, inside bead, parting-bead, outside bead, and a part of the upper sash, and a part of the lower sash adjacent to said jamb; Fig. 2, an inside elevation of adjacent parts of the upper sash and the lower sash, and a vertical transverse section of a part of the jamb and adjacent wall flush with the inner face of the lower sash; Fig. 3, a vertical central section of the socket and sleeve, and a side elevation of the roller, stock, spring, and tension-plug; Fig. 4, a plan of the holder detached. Fig. 5 shows a modification of the holder, a non-rotary block being substituted for the roller.

My improved holder consists of a socket, S, of the form shown, provided at its lower side edges with longitudinal ears s , having screw-holes s' , through which screws s^2 are driven vertically into the top rail of the lower sash, W, or vertically upward into the bottom rail of the upper sash, W'. Within the socket S is placed the shank t of the stock T, the projecting end of which is provided with a fork, t' , between the tines of which, on a horizontal axle, r , turns a roll, R, preferably of hard wood, as box-wood. In use the roll R bears against the jamb J, between the parting-bead I and the inside bead, I', if the holder is attached to the lower sash, and between the parting-bead and the outside bead, I², if the holder is applied to the upper sash. The shank t of the stock T is surrounded by a spiral spring, O, which is compressed between a shoulder, t^2 , on said shank and the end of a sleeve, D, which surrounds the end of the shank; the spring crowding the roll R against the jamb. The sleeve D is large enough to slide freely on the shank t , and is crowded against the inner end of the spring O by a tension-plug, P, provided with a screw-thread, p ,

which engages with an internal screw-thread, s^3 , formed in the inner end of the socket S. The sleeve D is long enough to reach for some distance beyond the inner end of the shank t . The tension-plug is provided with a slot, p' , into which the blade of a screw-driver may be introduced to turn said plug and force said sleeve against the spring to increase the tension of the spring and the pressure of the roll upon the jamb.

The stock T is prevented from being thrown out of the socket S when the holder is not in use by a downward projection, t^3 , with which said stock is provided, and which reaches nearly through the slotted under side of the socket S, the under side of said socket being slotted or open, except near the ends, as shown at s^5 in Fig. 3, the bar s^4 , which closes the front end of the slot s^5 , acting as a stop to receive the thrust of the projection t^3 .

When the holder above described is applied to the window-sash, it should be so applied that the outer end of the socket or bar s^4 shall be near enough to the jamb to hold the projection t^3 out of contact with the outer edge of the bar s^4 , and at such a distance from said bar that any inequalities of the jamb will not allow of such contact. It will be much easier to apply the holder if the plug P is first loosened. It will be better to use two holders for each sash at opposite ends of the same rail, and of course turned in opposite directions to bring the rolls outward against the jambs.

The holder above described is capable, when applied as above described, of holding a window-sash at any desired height without the use of balancing-weights and sash-cords.

The modification shown in Fig. 5 is applied and used as above described, and its construction is the same as the holder above described, except that, instead of the roll R, a block, R', is used, it being supported in the forked end of the stock T, just as the roll R is supported. The block R' is preferably triangular in cross-section, one of its flat sides bearing against the jamb, just as the face of the roller is represented as bearing against said jamb in Fig. 2, and operates to hold the sash at any desired height, just as the roll R does, by frictional contact with the jamb. The roll is preferred as holding the sash with sufficient firmness and opposing less resistance to the raising or

lowering of the sash in the ordinary manner when desired, the roll or block remaining in contact with the jamb during such raising and lowering.

5 The plug P may be entirely removed from the holder while the same is being secured to the sash, and the sleeve be allowed to project through the plug-hole during the operation. After the holder is secured to the sash the
10 sleeve may be crowded back into the holder by the point of a screw-driver, and retained therein by a pin inserted in the hole s^5 , and reaching into the holder back of said sleeve until the plug can be replaced.

15 I am aware that a sash-supporter consisting of a forked plunger carrying an anti-friction roll and having a shank surrounded by a case has been applied to the jamb of a window-case, the plunger being forced outward by a spring
20 contained within said case, to press said roll against the side of a window-sash; but such an arrangement renders it necessary to remove the window-sash while the supporter is being
25 erse of the sash is greater than the length of

the sash. In the supporter referred to the only means of varying the pressure of the roll upon the sash is by turning the case, which is externally screw-threaded in the hole which receives said case.

I claim as my invention—

The combination of the socket adapted to be attached to the rail of a window-sash, a stock having a shank placed within said socket and provided with a fork, a roll or block sup-
35 ported in said fork, a spring surrounding said shank within said socket and compressed between a shoulder with which said shank is provided, and a sleeve surrounding said shank and reaching beyond the end thereof, and a
40 tension-plug provided with an external screw-thread, and turning in a threaded hole in said socket and thrusting against the end of said sleeve, to compress said spring between said
45 shoulder and said sleeve, as and for the pur-
pose specified.

GEORGE H. NOBLE.

Witnesses:

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