

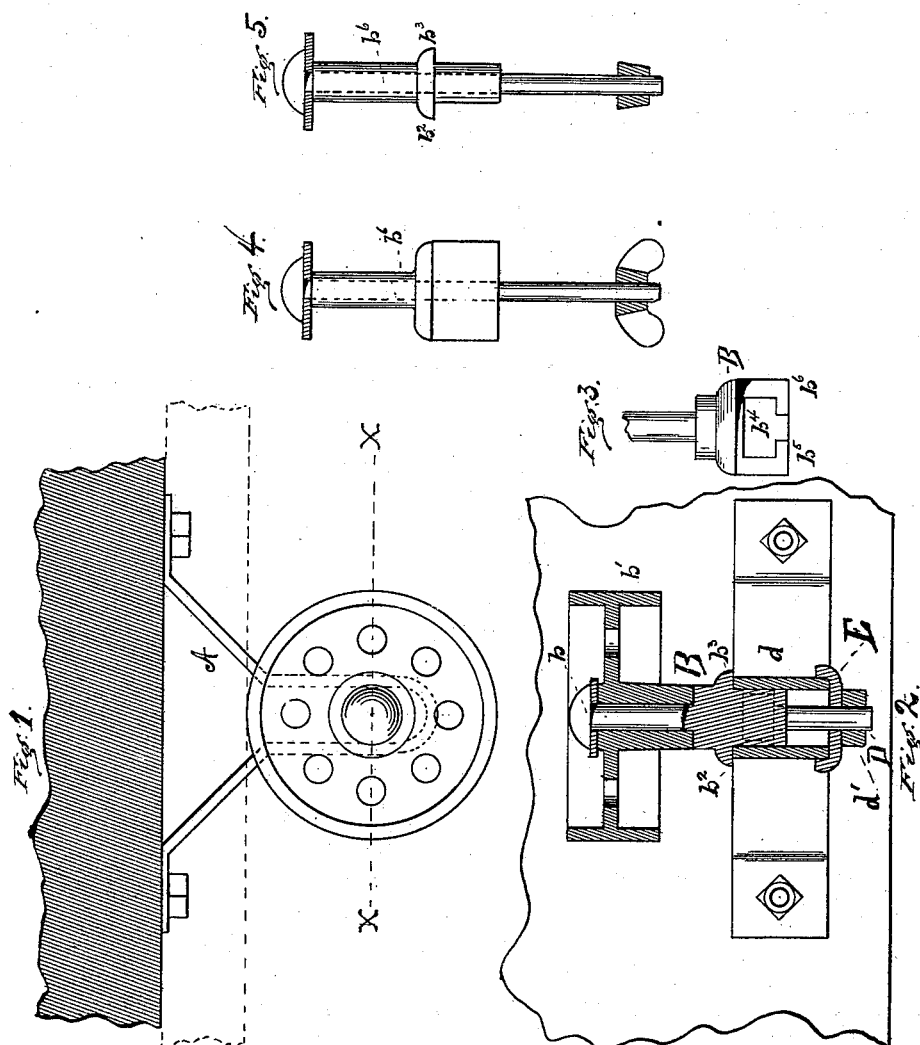
No. 647,686.

Patented Apr. 17. 1900.

J. D. SWACICK.
DOOR STAY ROLLER.

(Application filed Mar. 13, 1899.)

(No Model.)



WITNESSES
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UNITED STATES PATENT OFFICE.

JUDSON D. SWACICK, OF CANTON, OHIO, ASSIGNOR TO THE NEY MANUFACTURING COMPANY, OF SAME PLACE.

DOOR-STAY ROLLER.

SPECIFICATION forming part of Letters Patent No. 647,686, dated April 17, 1900.

Application filed March 13, 1899. Serial No. 708,838. (No model.)

To all whom it may concern:

Be it known that I, JUDSON D. SWACICK, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented new and useful Improvements in Door-Stay Rollers, of which the following is a specification.

My invention relates to improvements in door-stay rollers; and it consists of the new and novel features of construction and arrangement of parts, as will be hereinafter more fully described and claimed.

Figure 1 is a top view of my invention. Fig. 2 is a sectional view through the roller-head on the line X X. Fig. 3 is a perspective view of the roller-head. Fig. 4 is a side view of a modified form of the head. Fig. 5 is a front view of a modified form of the roller-head.

In the accompanying drawings similar letters of reference refer to similar parts.

A represents a bracket for supporting the roller-head, which I have shown formed of a single piece of strap-iron practically U-shaped at its outer extremity, the sides thereof being parallel for the distance it is desired to adjust the wheel in or out from the sill and thence diverging and terminating in flat ends adapted to be bolted to the sill or frame of the door. This bracket may be of two pieces of strap-iron and when placed together would perform the same function in supporting the roller-head.

B represents the roller-head, which may be made of malleable or cast iron, and consists of a shaft *b*, upon which there is mounted the roller *b'*, and has formed thereon the flanges *b²* and *b³* for engagement with the supporting-bracket A. The lower portion of the roller-head B has a slotted aperture *b⁴*, terminating in jaws *b⁵* and *b⁶* on the sides thereof, adapted to receive the screw-threaded bolt D, the head *d* of which is adapted to engage the slotted aperture *b⁴* in the bottom of the roller-head B.

E is a clamping-plate, the outer edges of which are bent upward to engage the sides of the supporting-bracket A and are held in engagement therewith by means of the nut *d'*, having a screw-threaded engagement with the bolt D. I have also shown in Figs. 4 and 5 a modified form of roller-head in which there is provided a bore *b⁶*, passing through the entire length of the roller-head and adapt-

ed to receive the elongated headed bolt which passes therethrough and holds the roller-head securely in engagement with the bracket by means of the plate E and the screw-threaded bolt heretofore described.

In operation, the roller having been previously placed upon the stem of the roller-head, a washer is then placed upon the top thereof and the stem engaged therewith by means of a rivet-head formed on the end of the stem, and the brackets having been securely bolted to the frame or sill the bolt D is engaged with the slotted aperture in the roller-head and placed between the extended arms of the bracket. The retaining-plate E is then slipped over the end of the bolt, and the nut *d'* is screwed upon the bolt. The roller-head is then placed in the desired adjustment, so as to permit of the door passing between the sill and the rim of the roller, when the nut *d'* is securely turned up against the retaining-plate E, thus securely locking the roller-head in its desired position.

It will be observed that this device permits of the ready adjustment of the roller-head to or from the door and that wherever it may be locked it retains its position, and the line of resistance is against the edges of the extended arms of the bracket, while in such devices as have heretofore been used the roller-head was either not adjustable or when adjustable was rendered so by means of a horizontal slot extending through the roller-head and a bolt passing through the extended arms of the bracket and the horizontal slot in the roller-head, which necessarily permitted of more or less vibration and resulted in the ultimate working loose of the various parts.

My invention overcomes all these difficulties and provides a device by which the roller-head may be more readily adjusted to and from the door and be held more securely in its adjusted position.

Having thus fully described my invention, what I desire to secure and claim by Letters Patent is—

1. The combination in an adjustable stay-roller for sliding doors, of an adjustable roller-head provided with extending flanges, a depending portion having a slotted aperture, an extension-bolt for engagement therewith, a retention-plate for engagement with the arms

of the supporting-bracket, and a locking-nut, substantially as described and for the purpose set forth.

2. The combination in a door-stay roller, of
5 a supporting-bracket formed of a single piece, substantially U-shaped at its center, and having parallel sides, an adjustable roller-head provided with a stem, a roller mounted thereon, extending flanges formed upon the roller-
10 head, a slotted aperture formed in the depending portion of the stem, an extension-bolt for engagement therewith, a retaining-plate, and a locking-nut, substantially as described and for the purpose set forth.
- 15 3. The combination in a door-stay roller, of a supporting-bracket having parallel extend-

ed sides, an adjustable roller-head, provided with a stem, the roller mounted thereon, extending flanges formed upon the roller-head, a slotted aperture formed in the depending 20 portion of the stem, an extension-bolt for engagement therewith, a retaining-plate, and a locking-nut, substantially as described and for the purpose set forth.

In testimony whereof I have hereunto set 25 my hand in the presence of two subscribing witnesses.

JUDSON D. SWACICK.

Witnesses:

CHAS. R. MILLER,
CHAS. M. BALL.