

(No Model.)

W. B. COGGER.

DOOR HANGER.

No. 375,342.

Patented Dec. 27, 1887.

Fig. 1.

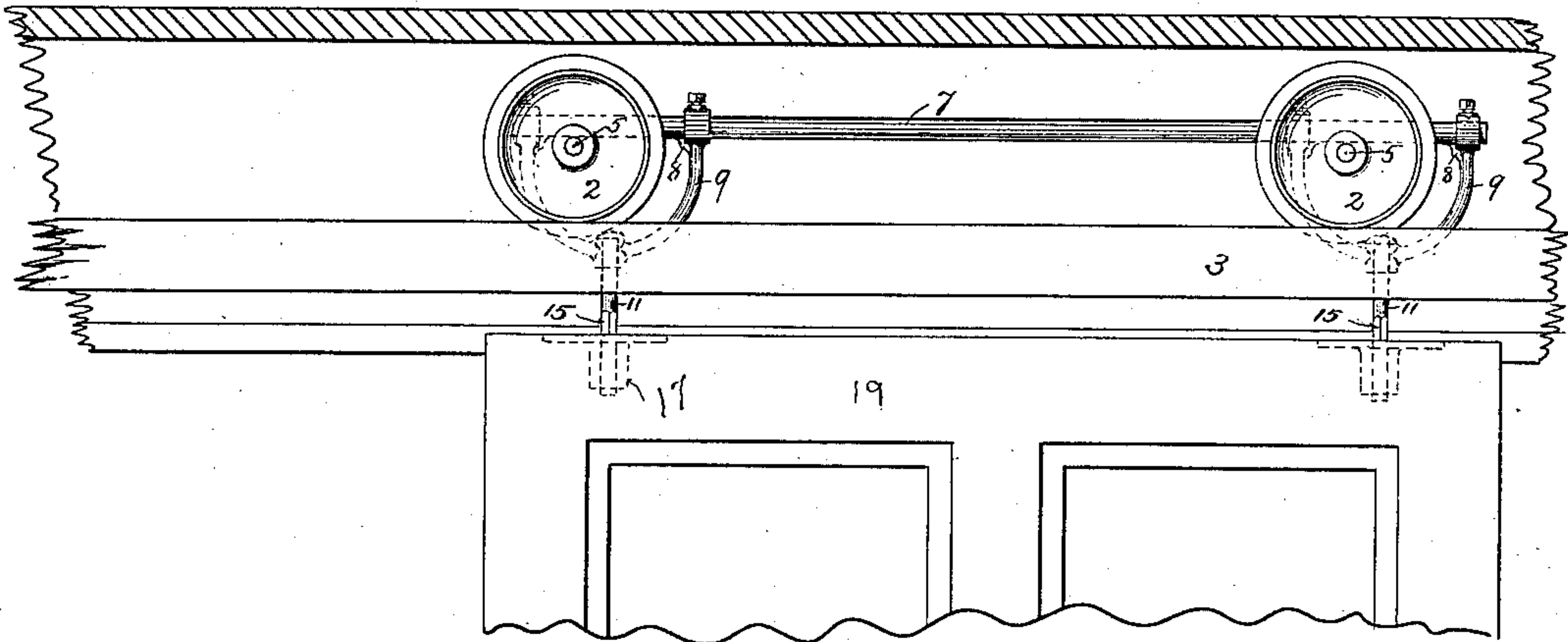


Fig. 3.

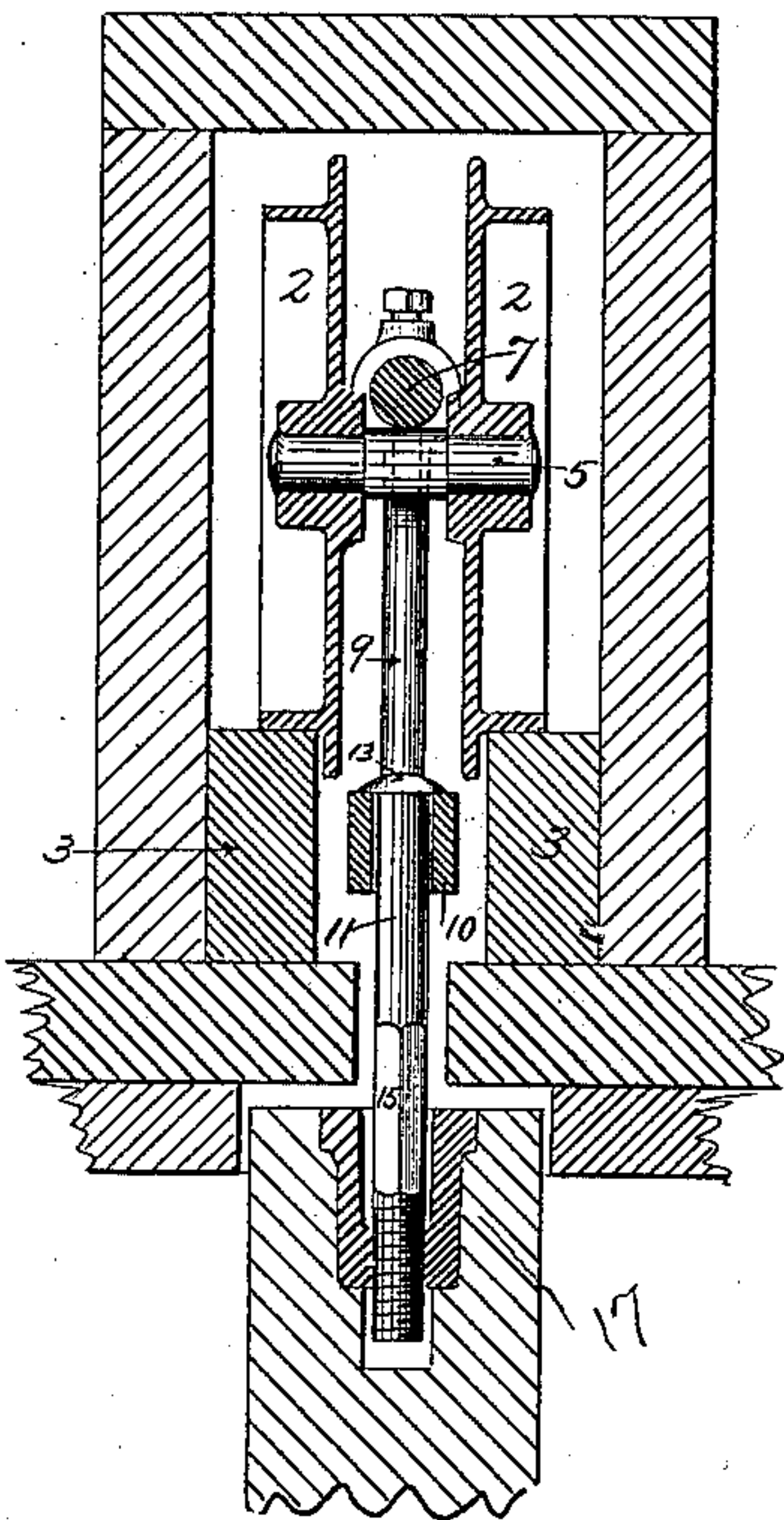
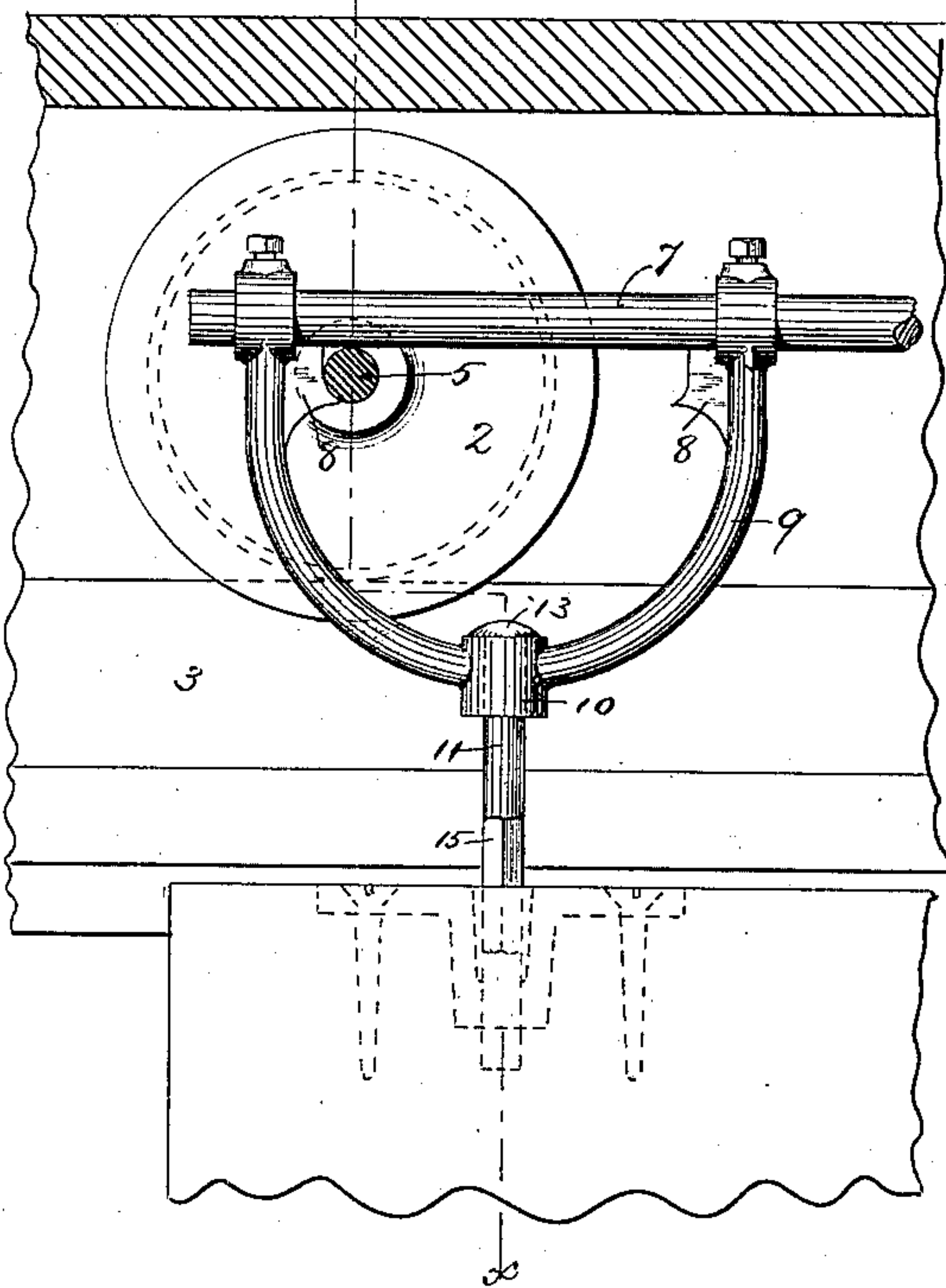


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM B. COGGER, OF MINNEAPOLIS, MINNESOTA.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 375,342, dated December 27, 1887.

Application filed February 4, 1887. Renewed November 21, 1887. Serial No. 255,732. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. COGGER, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Door-Hangers, of which the following is a specification.

My invention relates to an improvement in anti-friction hangers for sliding doors, and the object I have in view is to provide a hanger which shall combine durability with lightness and simplicity of parts and cheapness of construction.

My invention consists, generally, in the combination and arrangement hereinafter described, and particularly pointed out in the claim.

In the drawings which form part of this specification, Figure 1 is a side elevation and partial section showing a portion of a door suspended by my improved hangers. Fig. 2 is a longitudinal section of a portion of a door, showing one hanger in position. Fig. 3 is a cross-section on line X X of Fig. 2.

2 2 are flanged rollers or wheels supported and traveling upon track-rails 3 3, fastened to the studs or otherwise supported above the head-jamb of the door. The rollers are preferably formed in pairs and connected by axles 5.

7 is a rod, preferably round in cross-section, which rests upon the axles 5, and also serves to connect the two hangers of each door.

9 is a yoke, which is secured to the rod 7 at the front and back of the axle 5. This yoke is preferably of cast metal and is provided with stops 8, which limit the anti-friction bearing or the travel of the wheels upon the rod 7. This yoke is rigidly attached to the rod 7, and at its lower extremity it is provided with a socket or hub, 10, having an internal opening, which receives a bolt or suspension-rod, 11. This suspension-rod is preferably formed with a head, 13, which rests upon the hub 10 and is held in suspension thereby. The lower end of this rod is preferably screw-threaded and engages a nut or screw-threaded socket, 17, properly secured to the top of the door 19. The suspension-rod is free to turn in the hub 10 and is provided with a square or hexagonal portion, 15, for convenience of turning

it in order to level or line up the door. The distance between the hub 10 and the rod 7 is less than the length of the suspension-rod 11, in order to prevent the said rod from getting out of place; but the suspension-rod may be raised through the openings in the hub or socket 10 in order to allow the door to be put in place.

In putting my hanger together the suspension-rods are first put through the yokes. The wheel-axles are then put into the yokes and the rider-bar is carried through the yokes and secured to them. The hanger is then placed upon a section of the track and is ready for the attachment of the door thereto.

To hang the door it is brought into position, the suspension-bolts raised and dropped into the socket in the top of the door, which has been previously set to suit the proper spacing of the yoke. A wrench is now applied to the square or hexagon upon the body of the said bolt, and by turning the said bolt its thread engages the nut or screw-threaded socket, and by this means the door is raised and leveled.

It will be seen that by the use of the continuous rider-bar formed by the rod 7, and by attaching the yoke to the said bar, so that the movement of the axle is circumscribed thereby, a simple device is formed, and one which is readily and easily applied, and one which, when attached to the door, will be much stronger and more durable than the ordinary arrangement, as the continuous rider bar or rod forms, as it were, an upper chord, which takes the thrust and relieves the other parts from strain.

I claim as my invention—

The combination, in a door-hanger, with the flanged wheels 2, having the axle 5, of the yoke 9, round rider-rod 7, detachably secured to said yoke and resting upon said axle, and the vertical suspension-bolt 11, supported centrally in said yoke and free to turn upon its axis therein, substantially as described.

In testimony whereof I have hereunto set my hand this 29th day of January, 1887.

WILLIAM B. COGGER.

In presence of—

R. H. SANFORD,

A. M. GASKELL.