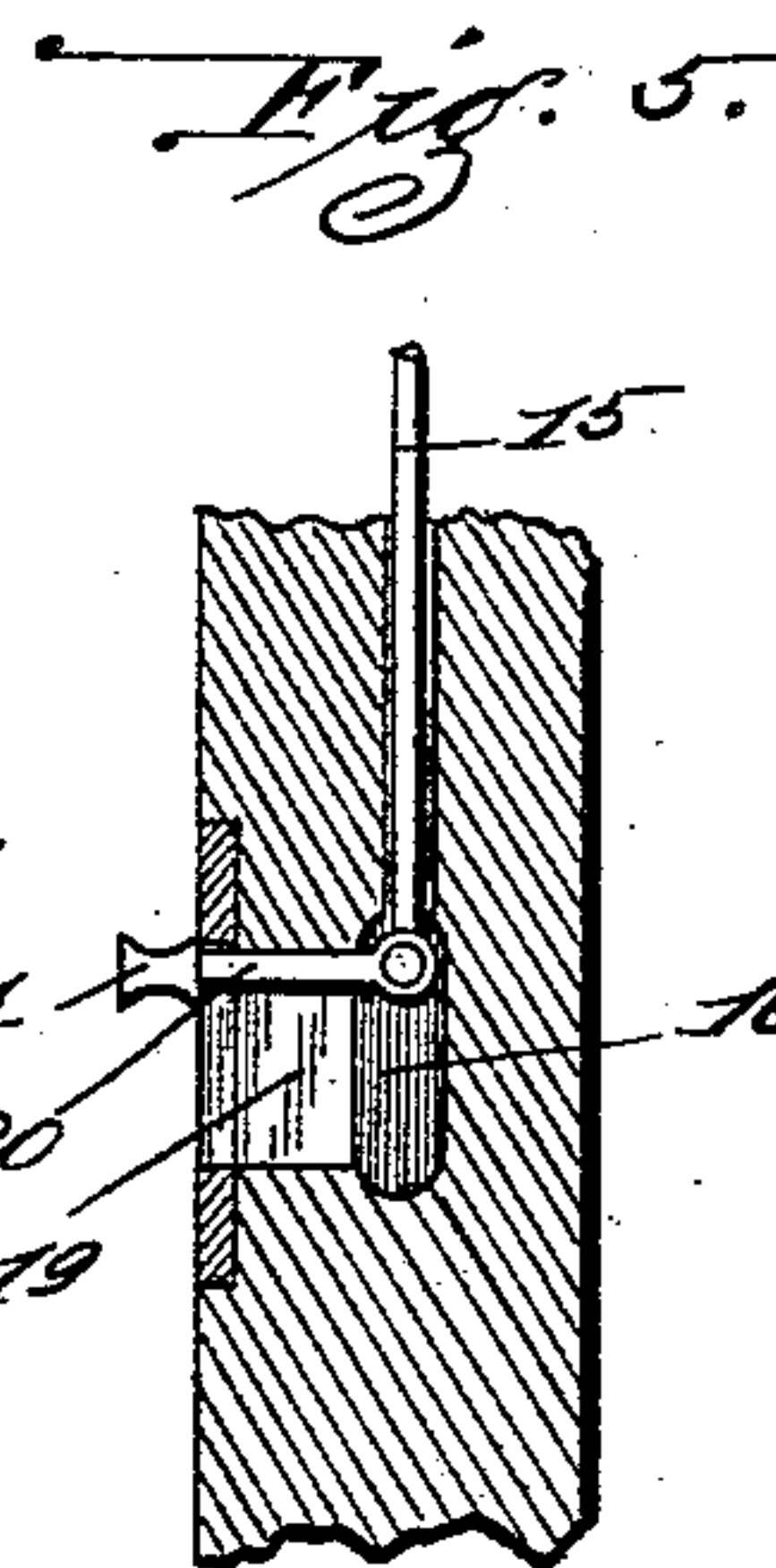
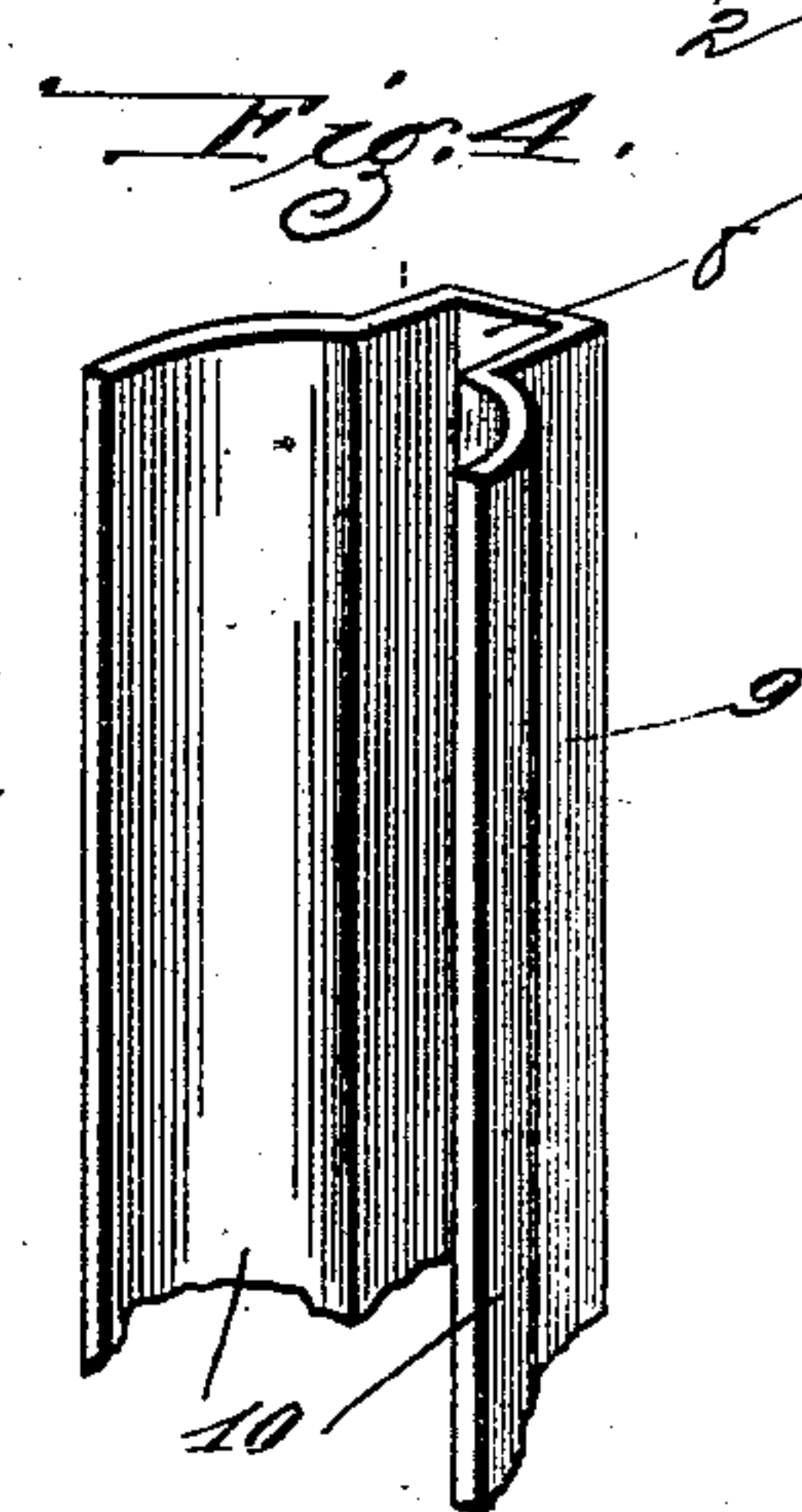
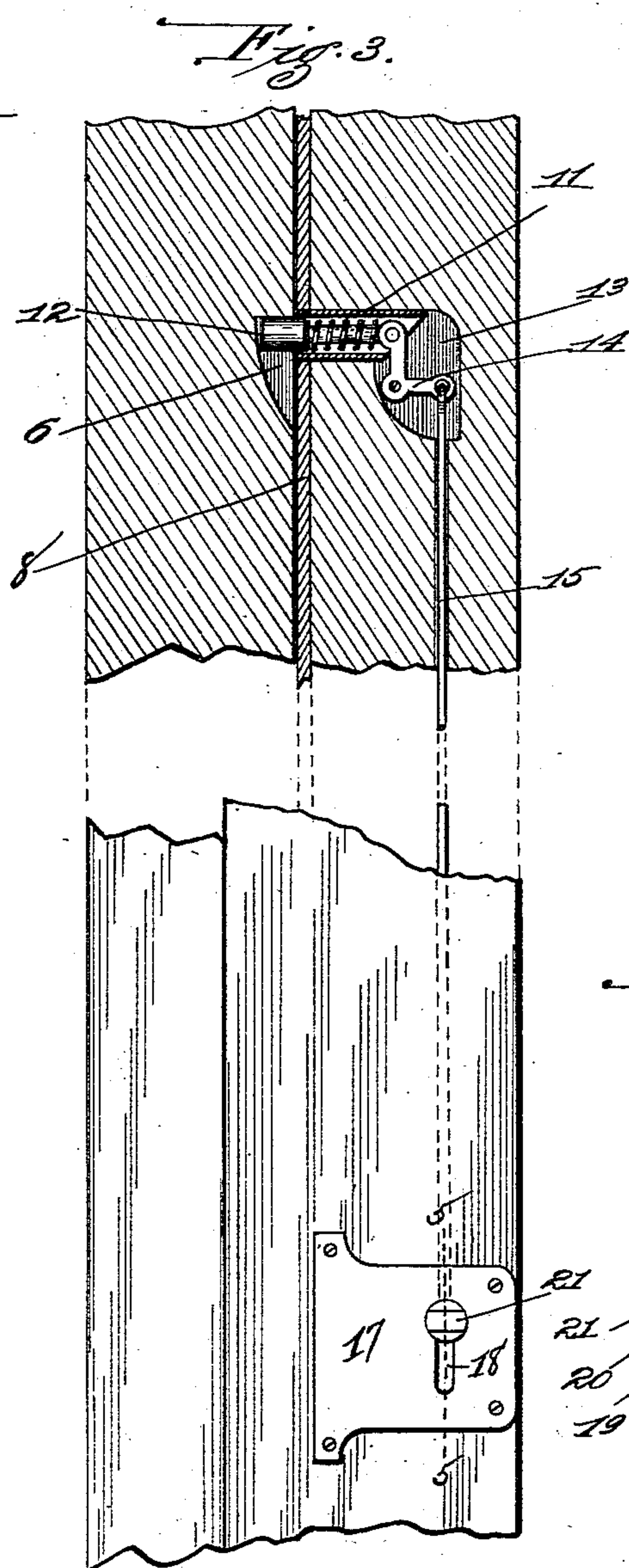
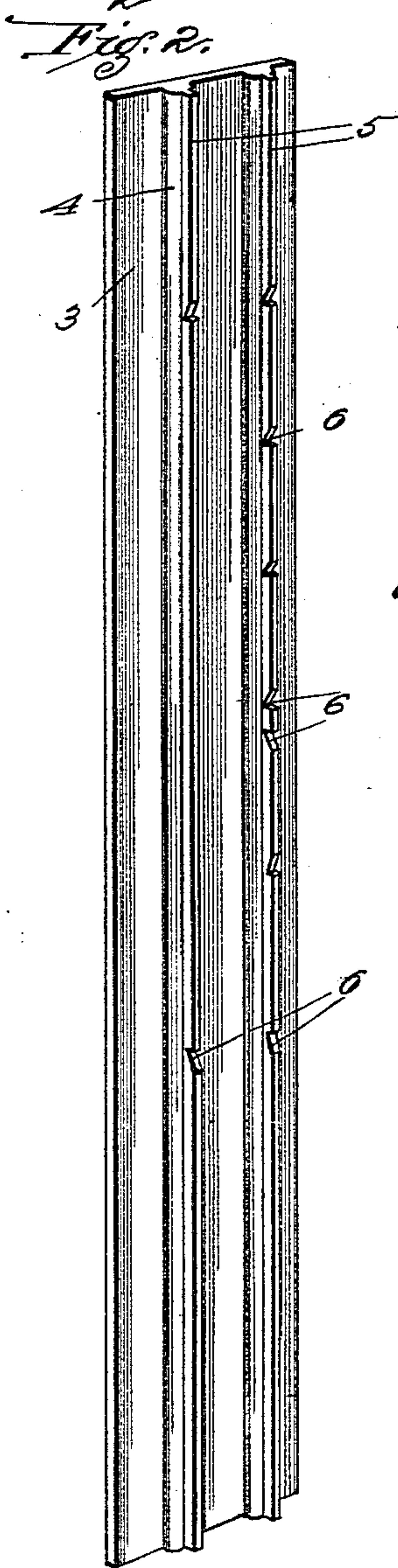


(No Model.)

W. H. WASSMANN.
WINDOW.

No. 555,350.

Patented Feb. 25, 1896.



Attest
M. Smith,
John L. Junison

Inventor:-
Wm H. Wassmann:-
by Higdon & Higdon & Tongan.
Attys:-

UNITED STATES PATENT OFFICE.

WILLIAM H. WASSMANN, OF ST. LOUIS, MISSOURI.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 555,350, dated February 25, 1896.

Application filed July 22, 1895. Serial No. 556,676. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WASSMANN, of the city of St. Louis, State of Missouri, have invented certain new and useful
5 Improvements in Windows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in
10 windows, especially for railway and street cars; and it consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

In the drawings, Figure 1 is a horizontal sectional view of a window constructed in accordance with my invention. Fig. 2 is a view in perspective of one of the stiles of my improved window. Fig. 3 is an enlarged vertical sectional view taken approximately on
15 the indicated line 3 3 of Fig. 1. Fig. 4 is a view in perspective of a portion of one of the metallic tracks that are located in the edges of the side rails of the sash. Fig. 5 is a vertical sectional view taken approximately on the
20 indicated line 5 5 of Fig. 3.

Referring by numerals to the accompanying drawings, 1 1 indicate the vertical posts of the window-frame, and 2 2 the face-casings of said frame. Extending vertically the entire length of the inner faces of the side rails
30 1 of the window-frame are the stiles 3, the same having formed integral with their inner faces parallel beads 4, the same being semi-circular in cross-section and performing the
35 function of tracks.

Formed integral with and projecting laterally from the beads 4 are rectangular beads 5, and in said beads 5 at certain distances apart are formed notches 6. In the outer pair
40 of rectangular beads 5 there is formed a series of these notches 6, and the notches below the centers of said beads are oppositely arranged from those above the center. In each of the inner pair of beads 5 but a single pair
45 of notches is formed.

7 7 indicate the window-sash, the same being glazed in the ordinary manner, and let into and lying flush with the side edges of said window-sash are metallic tracks or guides
50 8, the same comprising rectangularly-bent portions 9, the ends 10 of which are curved in order to fit the curvature of the semicircu-

lar beads 4. These tracks or guides 8 are of such size as that they will fit snugly around the integral beads 4 and 5. 55

Arranged in the vertical rails of the sash 7 and at one side thereof are short casings or tubes 11, in which are arranged spring-actuated bolts 12. Located in recesses 13, formed adjacent the rear ends of these casings or
60 tubes 11, are fulcrumed bell-cranks 14, to the vertical arms of which are secured the rear ends of the bolts 12. To the ends of the horizontal arms of said bell-cranks 14 are fixed the upper ends of vertically-moving rods 15, 65 the same extending downwardly through the side rails of the sash and terminating in recesses 16, adjacent the lower ends of said side rails of the sash. Located upon the faces of the side rails of the sash, immediately opposite these recesses 16, are metallic plates 17, 70 in which are formed vertical slots 18. Slots 19 connect the slots 18 and recesses 16.

Fixed to the lower end of the rod 15 and extending laterally through the slots 18 and
75 19 is an arm 20, to the outer end of which is fixed a button 21.

In ordinary car-windows there are usually two sashes, the same being located side by side, thus forming a double window. When
80 said sashes are properly positioned in a window of my improved construction, the bolts 12 occupy the lowermost notches 6 in the rectangular beads 5. To raise said sash when in this position, the operator engages the buttons 21, moves the same downwardly, and by
85 so doing moves the rod 15 downwardly. This movement necessarily moves the bell-crank 14, and the spring-actuated bolts 12 will withdraw from the notches 6. Said sashes are
90 now free to be moved upwardly to whatever point desired. The uppermost notches being oppositely arranged from the lower ones, the bolts 12 will engage in said notches and hold the sash in elevated positions. By letting
95 the metallic tracks or sections 9 into the edges of the window-sash a window may be constructed that is entirely dust-proof, and said metallic tracks or sections, bearing directly upon the beads 4 and 5, allow the window-
100 sash to be raised or lowered very easily.

It is the intention to manufacture the stiles by passing the timber from which the same are formed through a suitable machine, the

knives of which form the beads 4 and 5 on the faces of said stiles.

A window of my improved construction is inexpensive, easily constructed, and possesses superior advantages in point of simplicity, durability, and general efficiency.

I claim—

1. In a window, a pair of stiles having parallel semicircular beads formed integral with their inner faces and extending their entire lengths, and rectangular beads formed integral with said semicircular beads.

2. In an improved window for cars and the like, a pair of stiles having parallel beads or tracks formed integral with their inner faces and extending their entire lengths, a pair of sashes arranged to move vertically upon said tracks or beads, metallic sections located in

the faces of the side rails of the sash, and spring-actuated bolts arranged within the side rails of the sash and adapted to engage in notches formed in the beads or tracks of the stiles.

3. In a window, the combination of a sash having grooves formed in the faces of the side rails, and metallic sections or tracks located in said grooves, said sections comprising rectangularly-bent portions the same having integral curved ends.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. WASSMANN.

Witnesses:

MAUD GRIFFIN,
E. E. LONGAN.