

No. 632,768.

Patented Sept. 12, 1899.

D. J. WAUGH.
WINDOW SASH.

(Application filed Feb. 25, 1898.)

(No Model.)

Fig. 1.

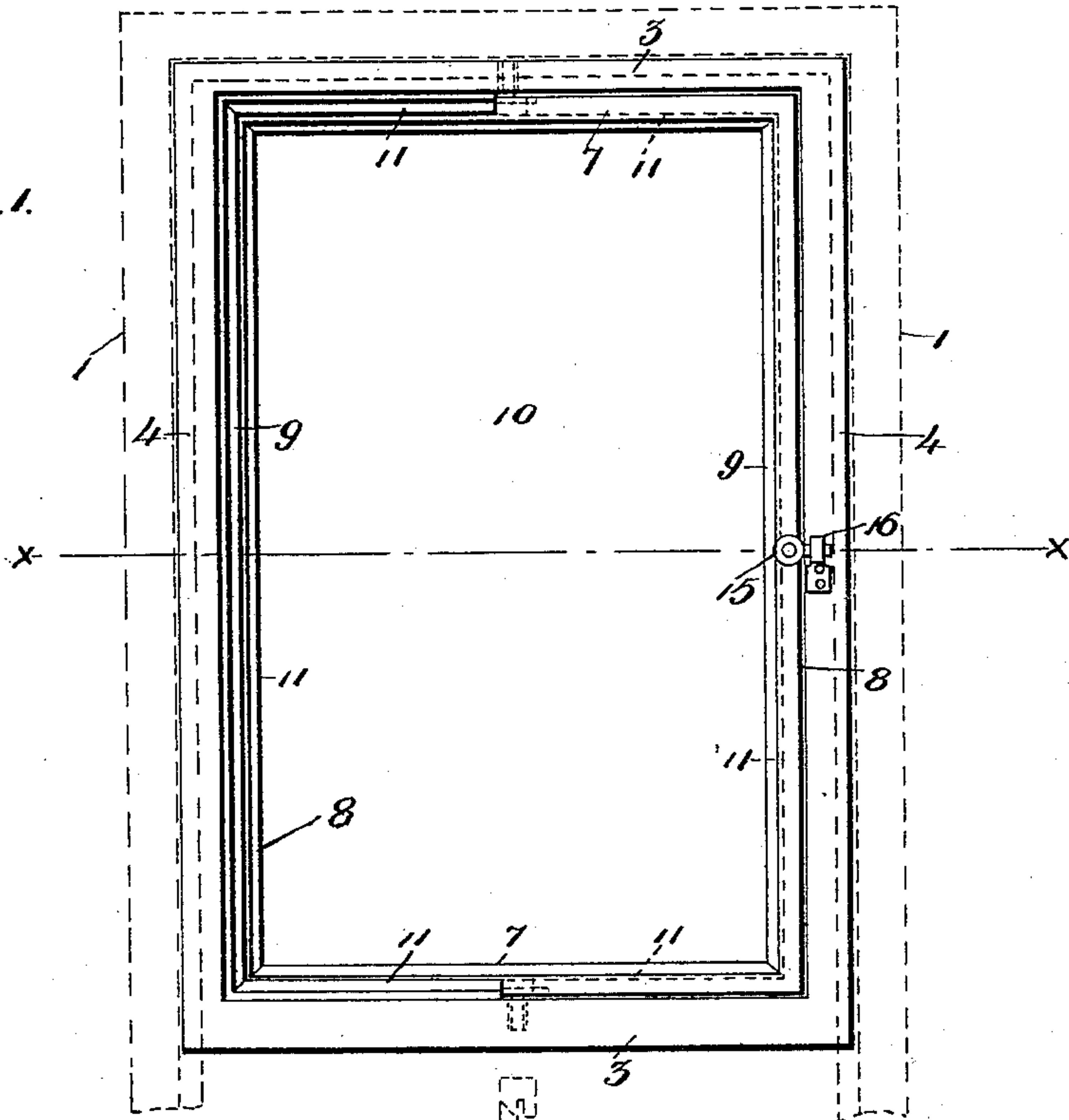


Fig. 2.

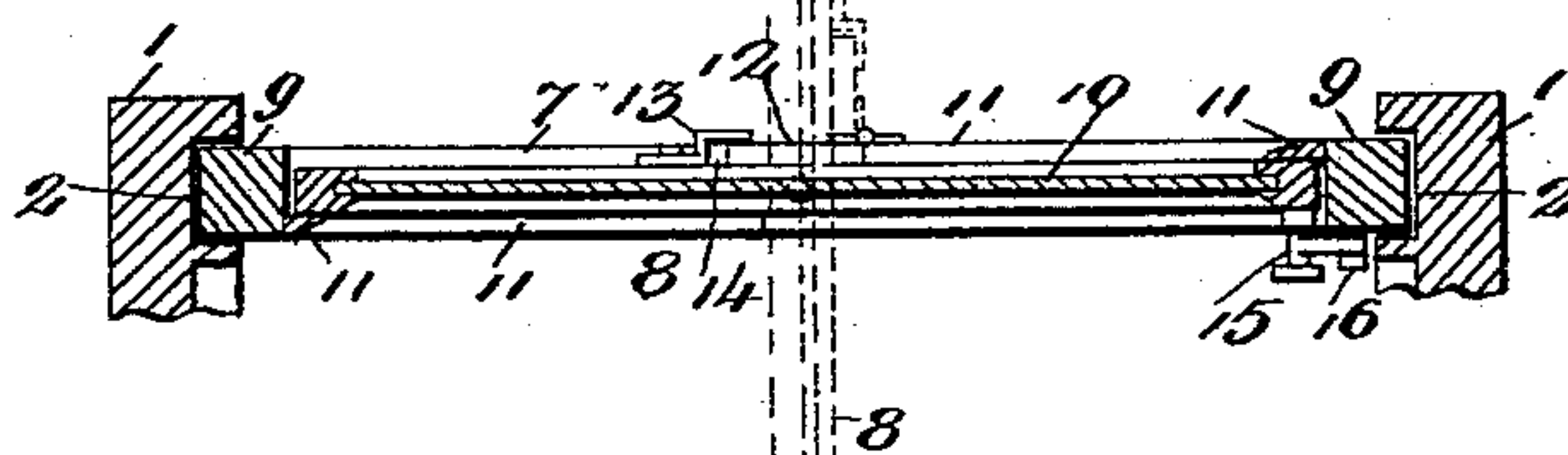
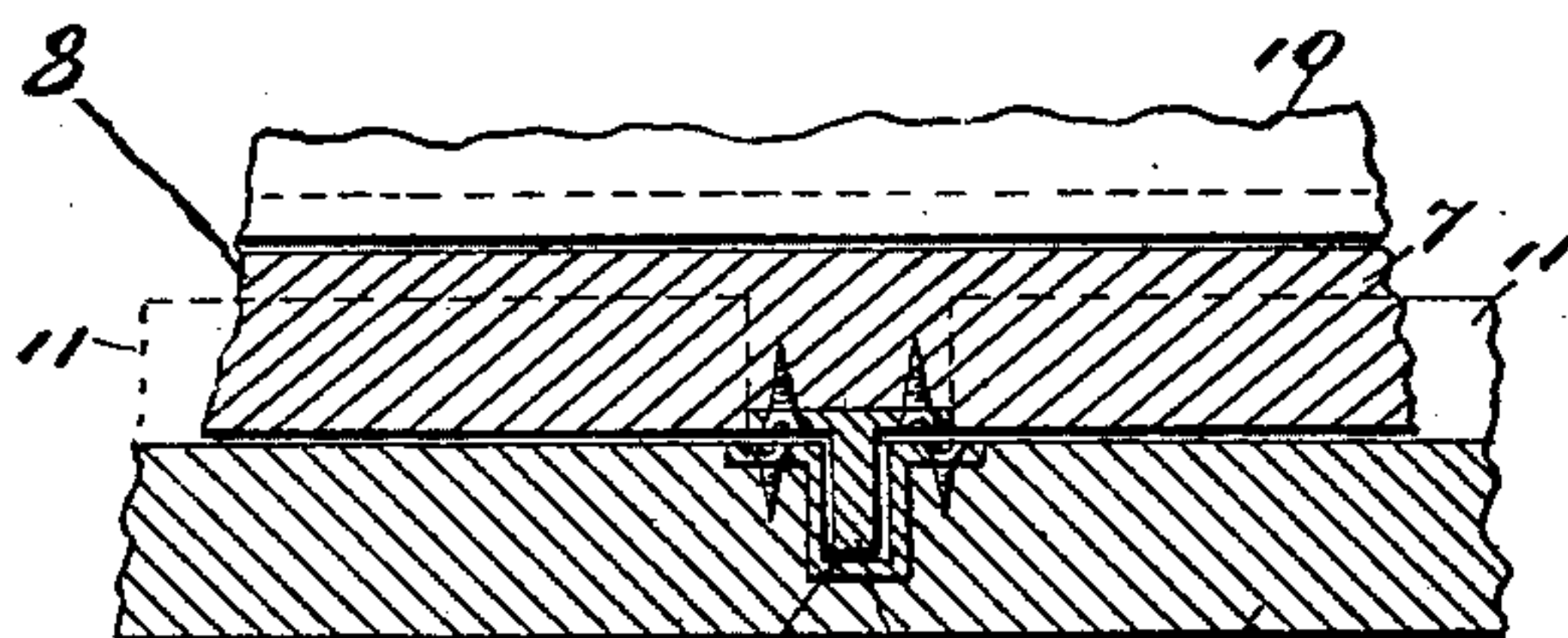


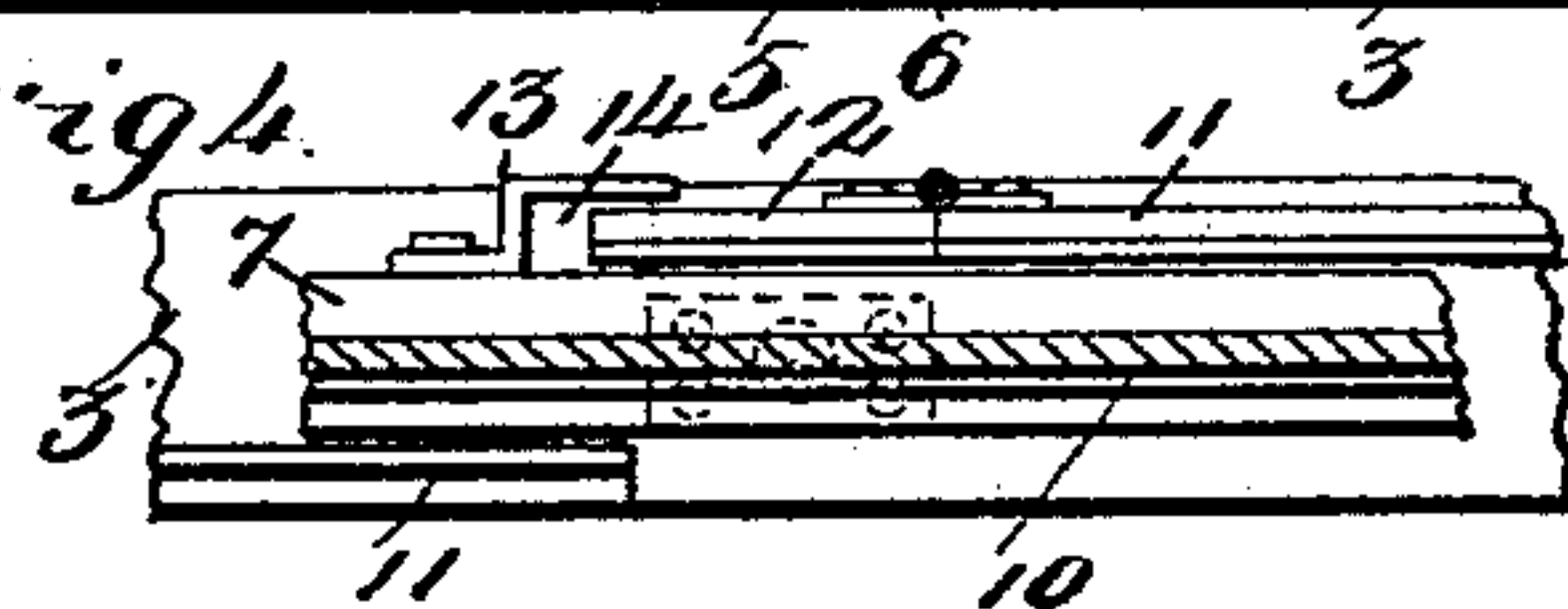
Fig. 3.



WITNESSES:

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Fig. 4.



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WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 632,768, dated September 12, 1899.

Application filed February 25, 1898. Serial No. 671,603. (No model.)

To all whom it may concern:

Be it known that I, DANIEL J. WAUGH, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Window-Sashes, 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 window-sashes; and it consists in the novel combination and arrangements of parts, as will be hereinafter more particularly described, and pointed out in the claim.

In the drawings, Figure 1 is a plan view of a sash constructed according to my invention, the window-frame being shown in dotted lines. Fig. 2 is a transverse horizontal section taken on line *x x* of Fig. 1. Fig. 3 is a vertical section of a portion of the lower part of the sash, and Fig. 4 is an enlarged section similar to that shown in Fig. 2.

The object of my invention is to construct a window-sash in such a manner that the same can be turned when desired to bring the outside of the glass forming a part of the sash in a position to be easily and conveniently cleaned from within the room and further provide means for thoroughly excluding dust, water, and the like, which is very necessary where hinged or movable parts are employed.

Briefly stated, the invention consists of an outer sliding frame which is guided in the usual channels of an ordinary window-frame, a movable frame located within the sliding frame, the upper and lower rails of which are pivoted or hinged, respectively, to the upper and lower rails of the outer sliding frame at a point midway between the ends of the said rails, weather-strips forming jambs located on either side of the inner frame and secured to the outer frame, the strips on one side being located opposite those on the other side in order to allow the inner frame, and consequently the glass carried thereby, to be turned, a short strip hinged to each of the horizontal extensions of the outer weather-strip and forming a continuation thereof, a clip secured to the upper and lower rails of the inner frame and coöperating with each of

said hinged strips, and other details in the construction, as will be hereinafter described.

Referring to the drawings, 1 represents the ordinary window-frame, which is shown in dotted lines and provided with the usual oppositely-located vertical channels or grooves 2 for receiving the sash.

The sash which embodies my invention comprises an outer frame which is adapted to slide within the grooves 2 of the window-frame 1 in the usual manner, and secured within and to the upper and lower members 3 of the same, midway between the vertical members 4, are sockets 5, which receive the projecting pins 6 secured to the upper and lower rails or members 7 of the inner movable frame 8, which are also located midway between the vertical members 9 of said movable frame. By this construction and arrangement of frames the inner frame can be turned independent of the outer frame to a position to bring the outside surface of the glass 10, carried by the same, in easy and convenient reach of the operator from within the room, as shown in dotted lines, Fig. 2, thus dispensing with all kinds of appliances or supports in order to reach either side or surface of the glass.

In order to accomplish the result above stated and at the same time provide a perfect weather-proof sash, I employ the construction and arrangement of weather-strips now to be described.

Secured along the inner edge of the vertical members 4 and to the upper and lower members 3 are strips 11, one half of which is located on one side of the hinged inner frame and the other half on the opposite side of said frame, sufficient space being left between the opposite ends of the strips 11 in order to permit the inner frame to be turned as before stated. It will thus be seen that in order to allow for the free operation of said inner frame a space will also be left between the upper and lower rails or members of the two frames which would allow air, dirt, and the like to enter the room. This objection I overcome by the construction now to be described.

Hinged to the ends of the upper and lower strips 11, on the outside of the inner hinged frame, are short strips 12 of a length suffi-

cient to cover the space between the opposite ends of the strips 11, and secured to the upper and lower members 7 of the inner movable frame are angular clips 13, leaving spaces 5 14 between the said members and ends of said clips which loosely receive the free ends of the short strips 11. Thus it will be seen that when the inner frame carrying the glass is turned the short strips will also be turned 10 or moved simultaneously, and when this frame is completely closed all space between the ends of the fixed strips which permits of the free operation of said frame is completely closed automatically.

15 In carrying out my invention I employ ordinary rubber weather-strips in addition to that described and shown wherever it is necessary.

It is to be further observed that if desired 20 the inner frame can be opened any distance to permit of a sufficient amount of air into the room.

Secured to one of the vertical members of the inner frame is a turn-latch 15, which co- 25 operates with a keeper 16, secured to the ad-

jacent vertical members of the outer frame for locking the said inner frame to the outer frame.

Having fully described my invention, what I claim is—

A window-sash comprising an outer sliding frame, an inner frame hinged centrally within said outer frame, strips secured to the vertical and horizontal members of the outer frame, on either side of the inner frame to permit 35 the same to be turned, short strips hinged to the ends of the strips secured to the upper and lower members of the sliding frame, on the outside of the inner frame, and clips secured to the said inner frame, and coöperat- 40 ing with the free ends of said short strips for automatically closing all space left when the inner frame is completely closed substantially as described.

In testimony whereof I affix my signature 45 in presence of two witnesses.

DANIEL J. WAUGH.

Witnesses:

C. F. KELLER,

ALFRED A. MATHEY.