

No. 696,287.

Patented Mar. 25, 1902.

A. WEINGAERTNER.
REVOLVING WINDOW SASH.

(Application filed June 12, 1901.)

(No Model.)

2 Sheets—Sheet 1.

Fig. I.

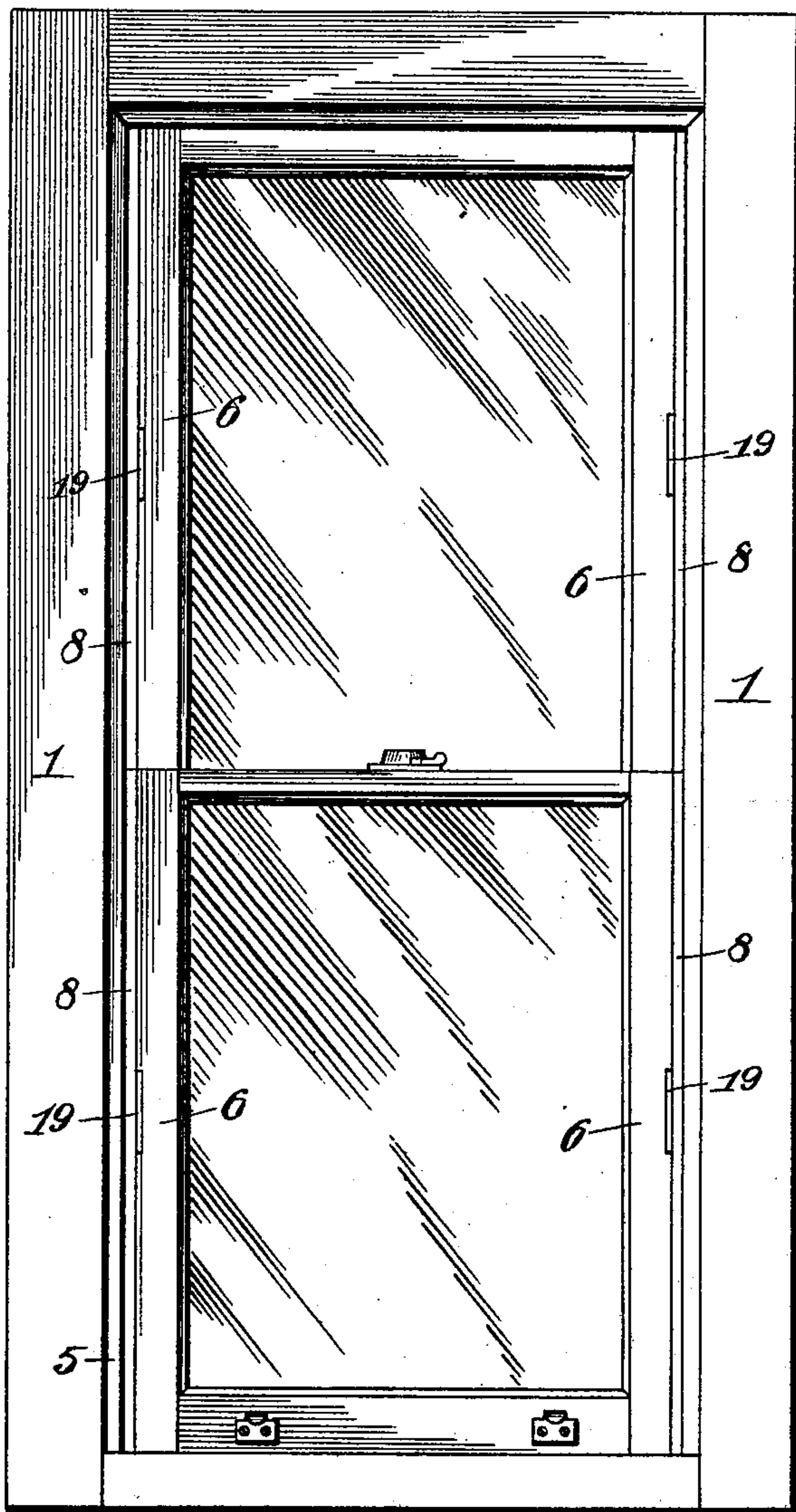


Fig. II.

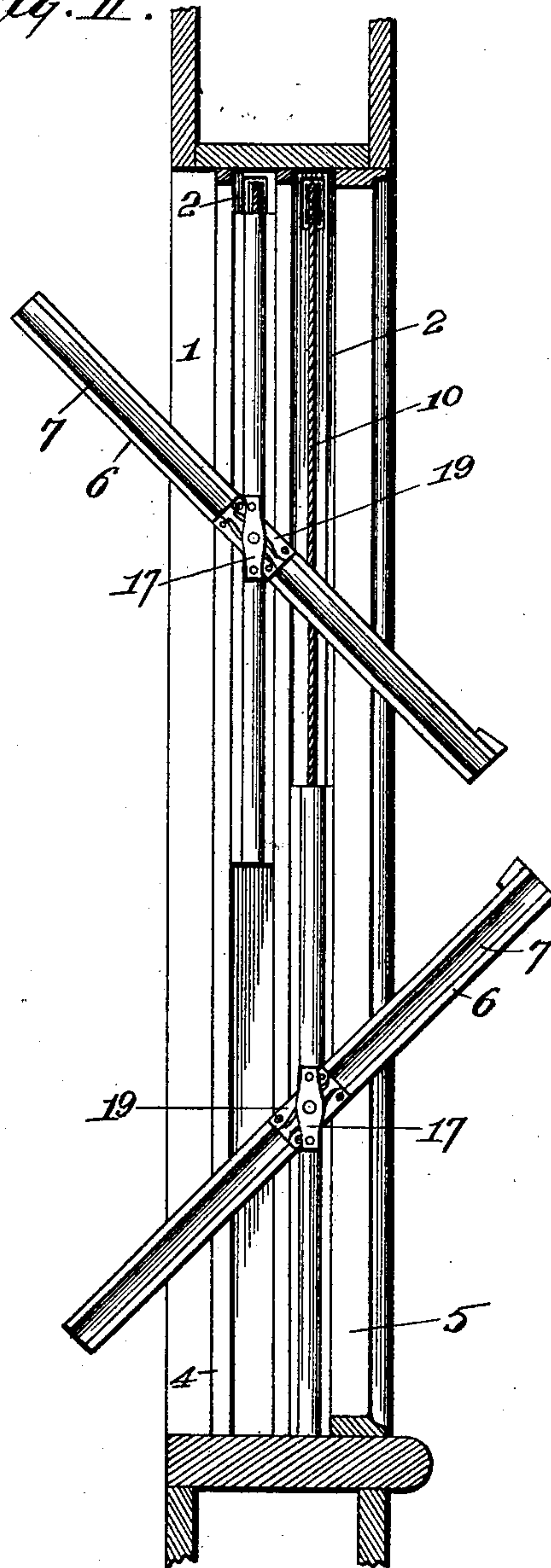
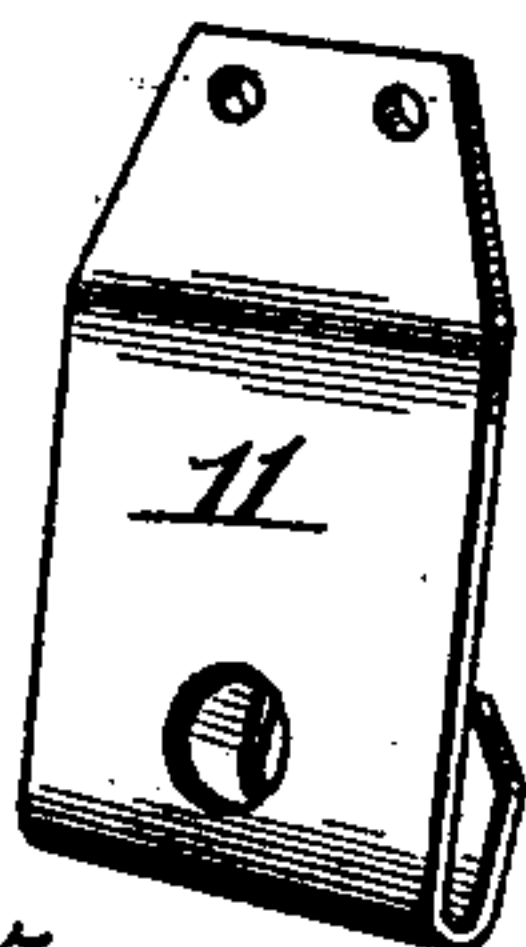


Fig. III.



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Fig. IV.

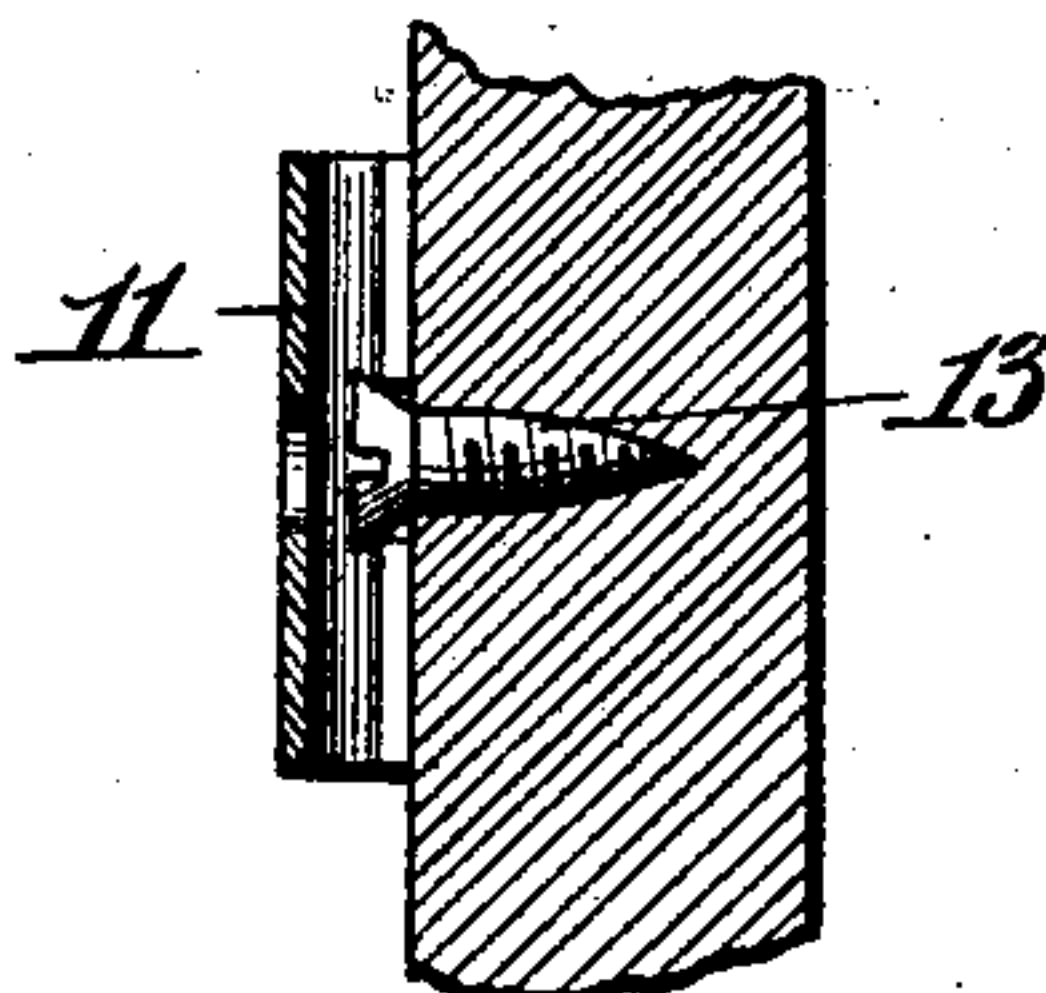
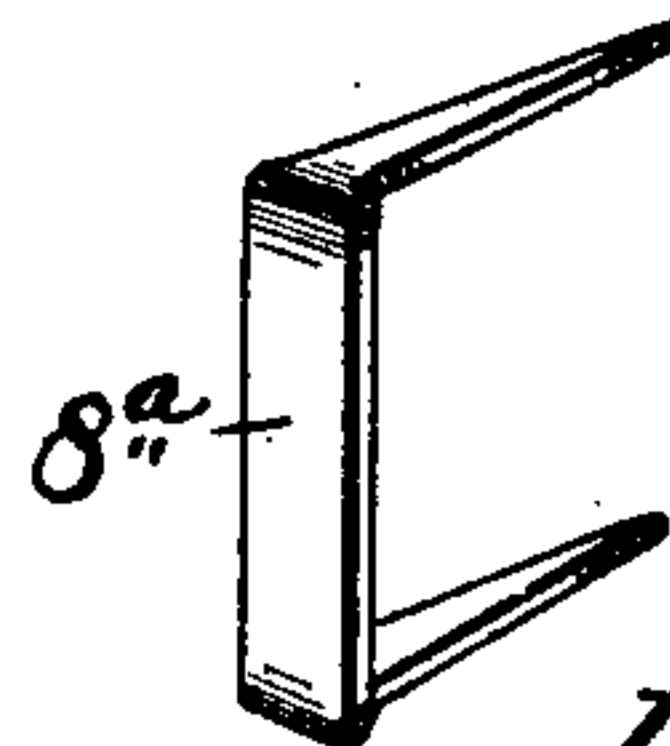


Fig. V.



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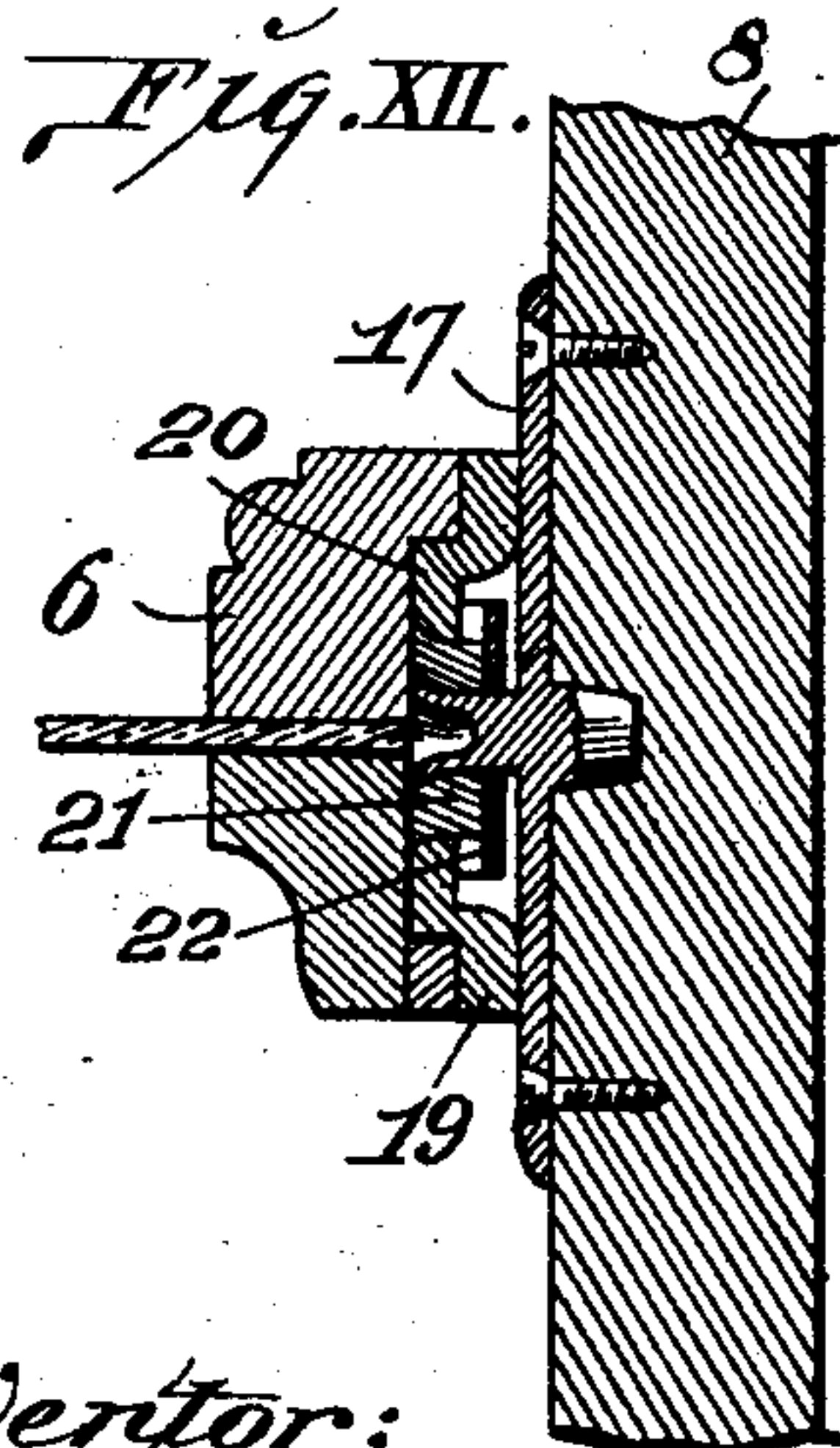
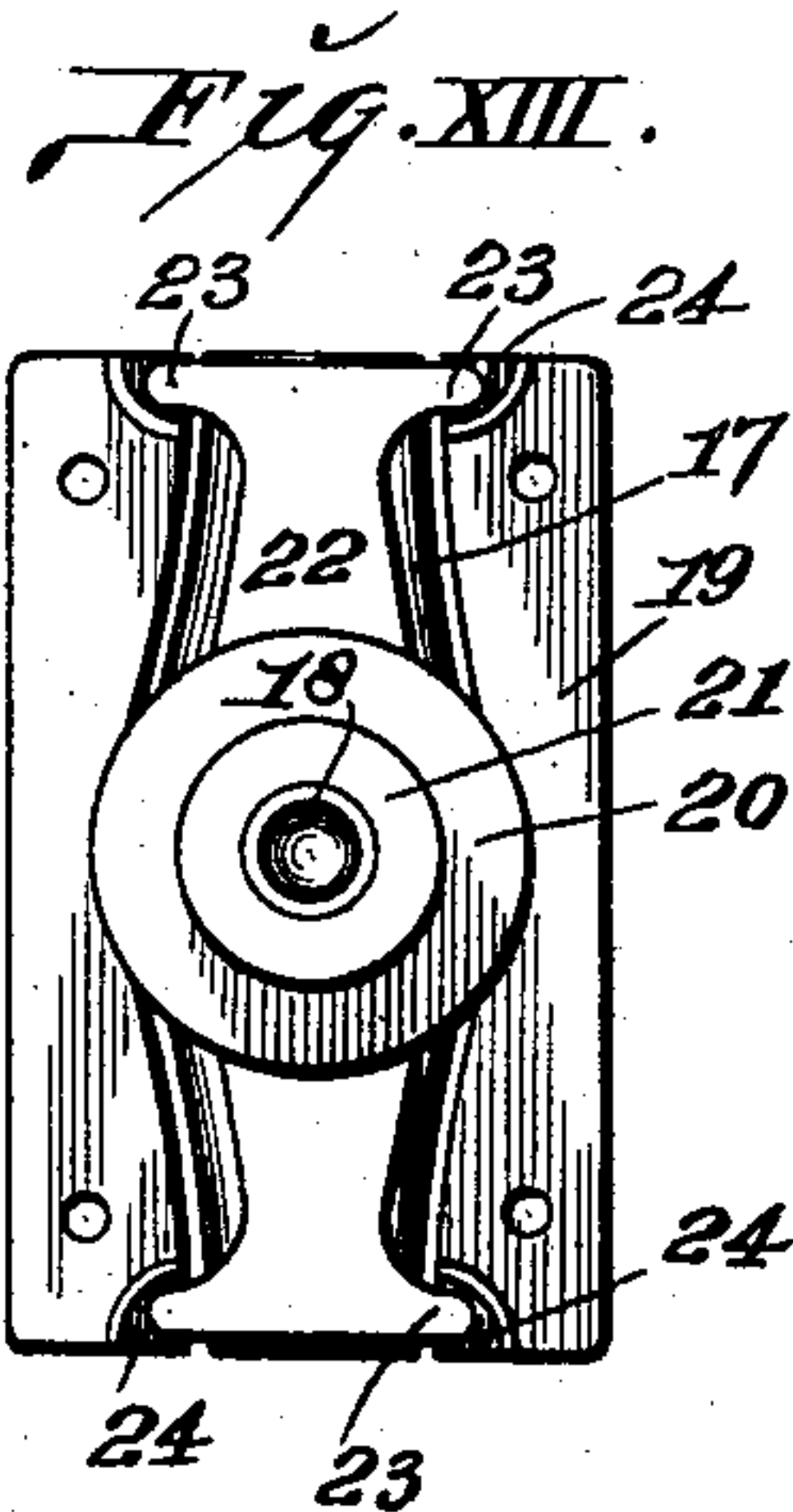
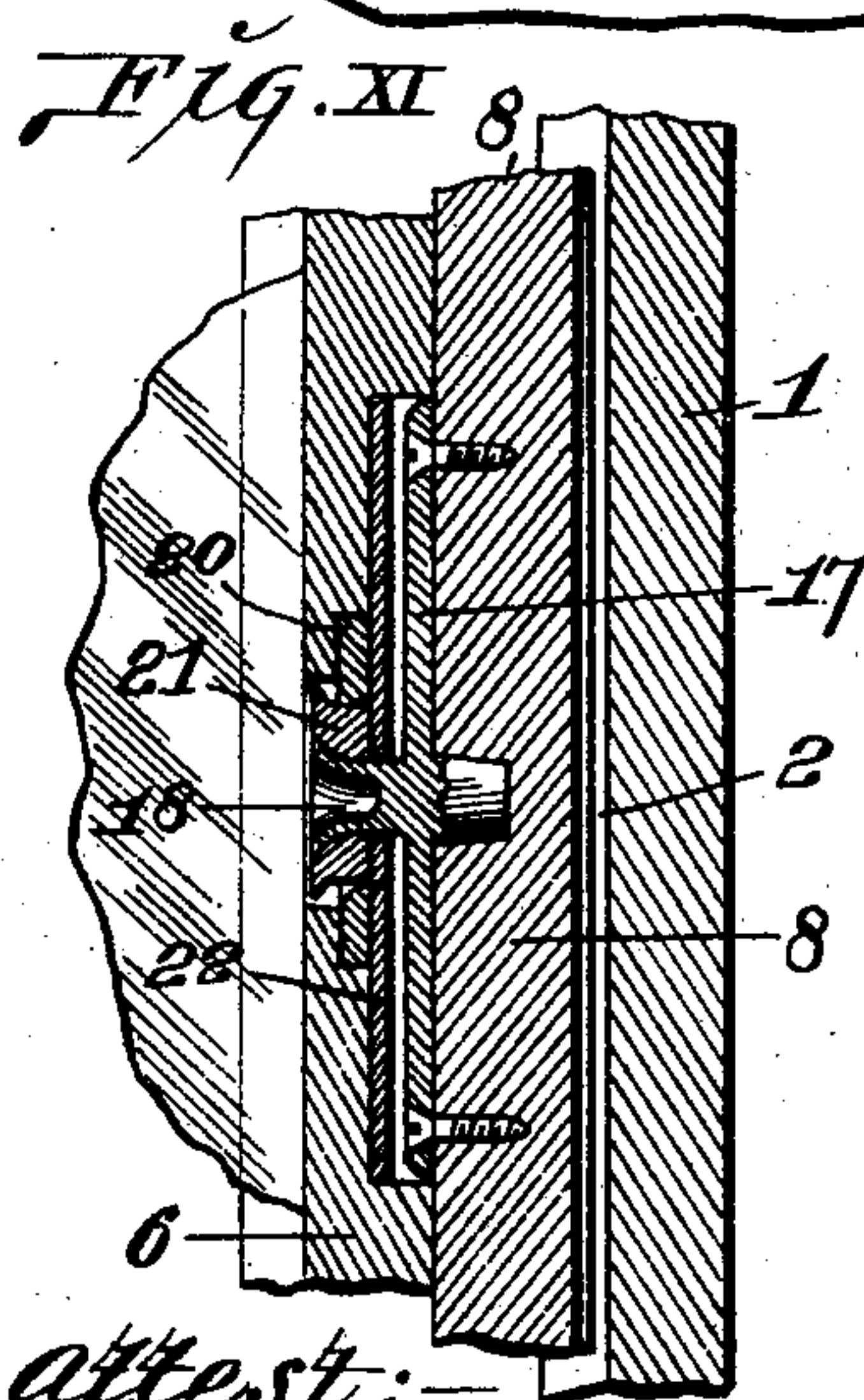
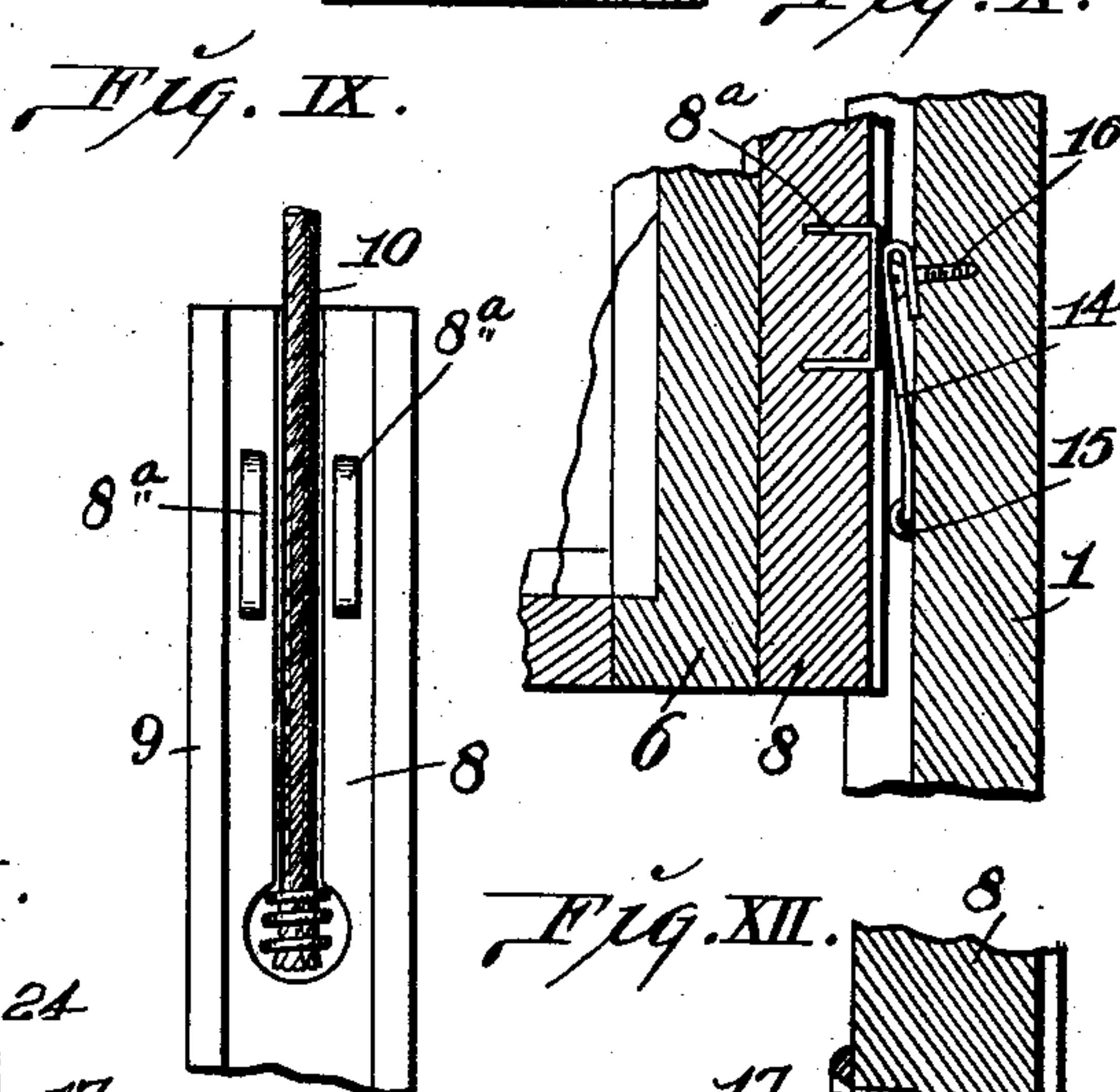
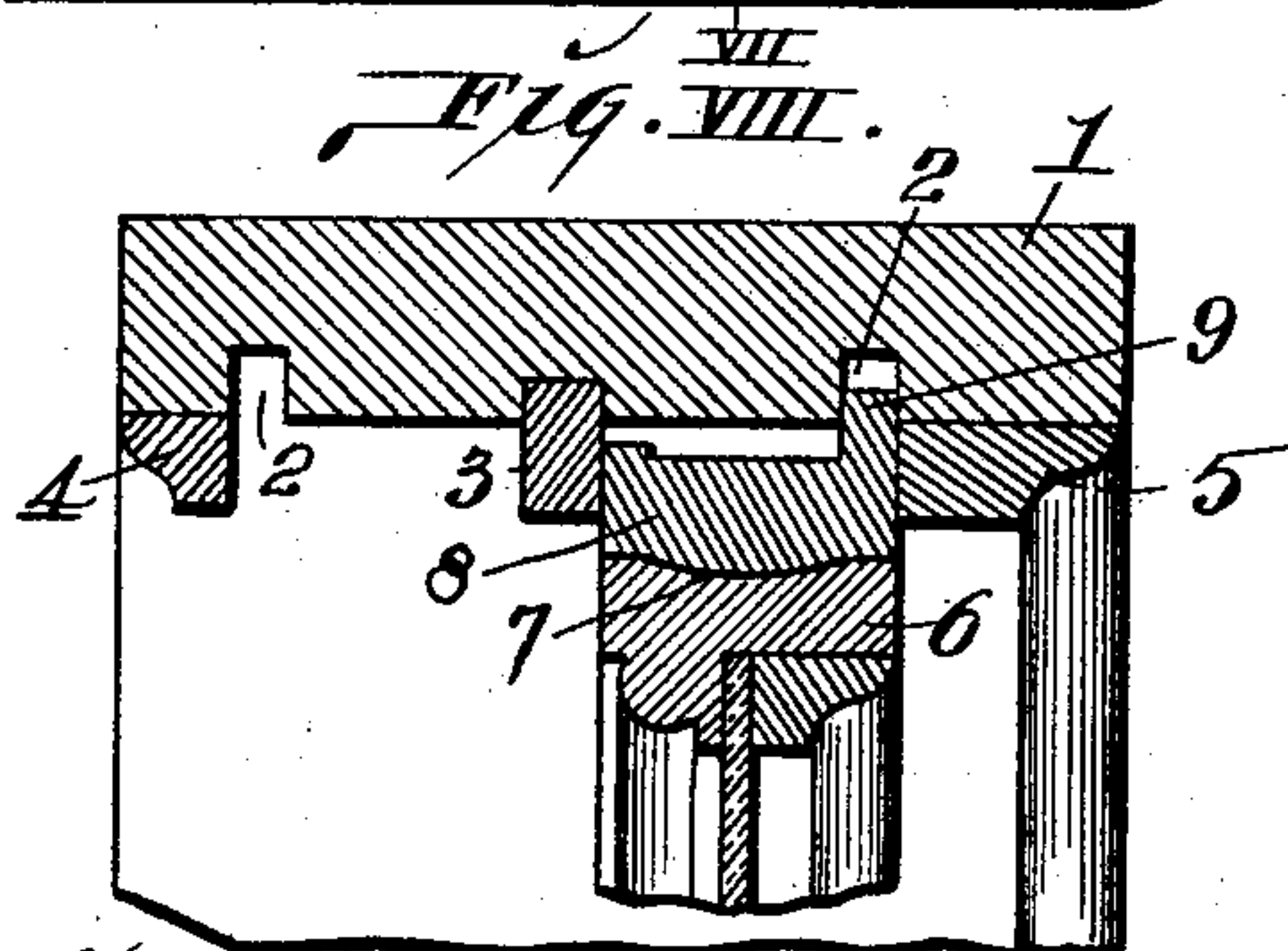
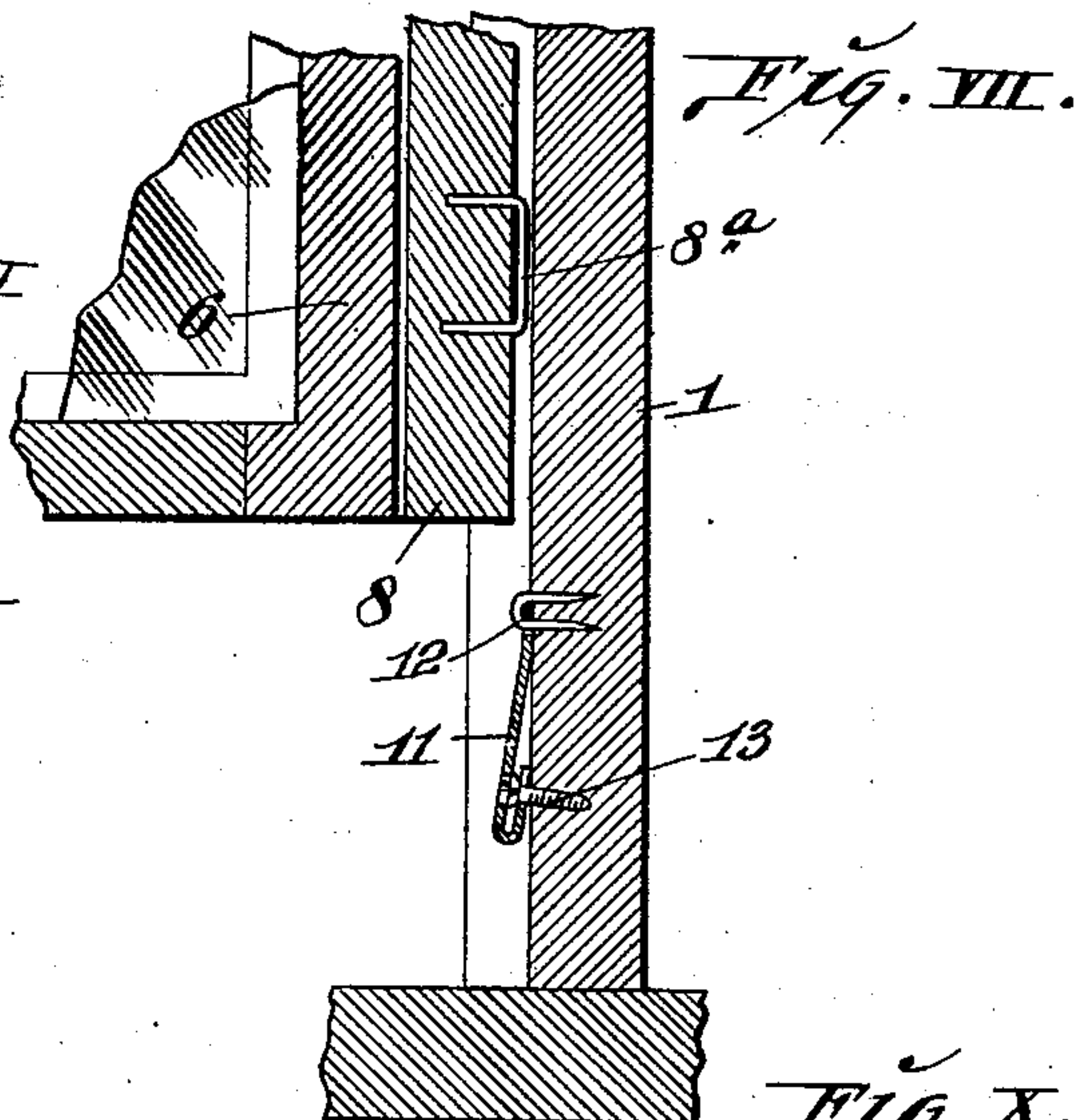
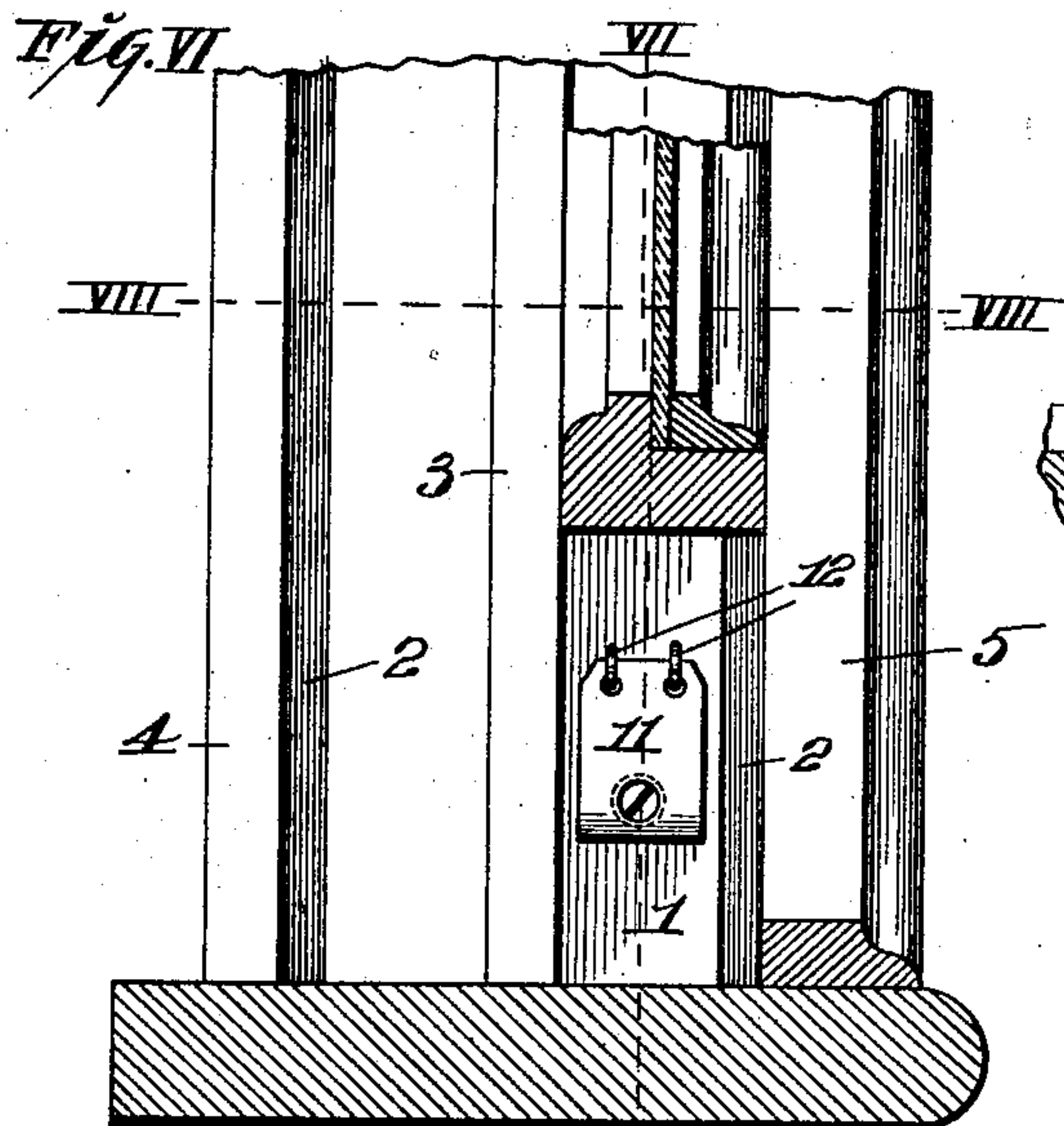
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2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

ALBERT WEINGAERTNER, OF ST. LOUIS, MISSOURI.

REVOLVING WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 696,287, dated March 25, 1902.

Application filed June 12, 1901. Serial No. 64,208. (No model.)

To all whom it may concern:

Be it known that I, ALBERT WEINGAERTNER, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Revolving Window-Sash, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of window-sash shown and described in Letters Patent of the United States granted to the Simplex Revolving Sash Company October 30, 1899, No. 634,384, the present improvement having reference to means for holding the slide-strips of the window tightly to the window-sash and also to the sash-pivots.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a view of a window constructed according to my invention, shown in elevation. Fig. II is a side view showing the sash in open position and the window-frame in vertical section. Fig. III is a detail perspective view of one of the pressure-plates attached to the window-frame and adapted to bear against the slide-strips. Fig. IV is a cross-sectional view of the pressure-plates with a fragment of the window-frame shown in section. Fig. V is a detail perspective view of one of the staples carried by the slide-strips and adapted to ride into contact with the pressure-plates shown in Figs. III and IV. Fig. VI is a view, partly in elevation and partly in vertical section, of the lower portion of the window, showing the lower sash raised. Fig. VII is a vertical sectional view taken on line VII VII, Fig. VI. Fig. VIII is a horizontal sectional view taken on line VIII VIII, Fig. VI. Fig. IX is a detailed edge view of the upper end of the upper sash. Fig. X is a vertical sectional view taken through the window-frame and one of the lower corners of the upper sash and showing the pressure-plate at such location and one of the staples adapted to contact with said plate. Fig. XI is a vertical sectional view with the window frame and sash at the location of one of the pivots. Fig. XII is a view similar to Fig. XI, showing the sash turned on its pivot into a posi-

tion at right angles to one of the slide-strips. Fig. XIII is a detail face view of one of the pivots.

1 designates the window-jambs, containing vertical grooves 2 and having applied thereto the parting-strips 3 and molding-strips 4 and 5.

6 designates the side rails of both the upper and lower sash, provided with concave faces 7.

8 designates slide-strips that receive the connection of the balance-cords 10 (see Fig. IX) and are adapted to ride between the parting-strips 3 and the molding-strips 4 and 5 in the vertical movement of the sash. Each of the slide-strips is provided with a tongue 9, that fit into the grooves 2 in the jambs 1 and provide a weather-tight joint between the slide-strips and said jambs. The side rails 6 of each sash are adapted to fit snugly to the slide-strips 8, with the rounded face of each slide-strip fitting in the concave face of each side rail in similar manner to that set forth in the Letters Patent hereinbefore referred to, and the sash are each adapted to swing with respect to said slide-strips.

In order to force the slide-strips 8 tightly against the sash side rails when the window is closed, I provide pressure-plates 11 and 14, that are attached to the window-jambs 1 in the path of travel of the slide-strips. The pressure-plates 11 are suspended from the jambs by staples 12, driven into the jambs 1, and have slotted return-bends at their lower ends through which screws 13 are inserted to hold the pressure-plates from movement. Each pressure-plate 11 is provided with an aperture positioned coincident to the slot in the return-bend of the plate through which a screw-driver may be introduced to turn the screws inserted in the slots of said return-bends into the window-jambs 1. On an inward movement of such screws into the window-jambs the degree of projection of the swinging ends of the pressure-plates into the path of vertical travel of the window-sash is diminished by reason of the screws carrying the return-bends of said plates inwardly to the jambs. To project the swinging ends of the pressure-plates outwardly and into the path of travel of the window-sash, the screws 13 are moved outwardly by turning them in

a reverse direction, and the heads of the screws being of greater diameter than the apertures in the bodies of the pressure-plates the said heads press against the bodies of the plates at the locations of the apertures therein and move said plates outwardly into any desirable position to compensate for greater or less play of the sash, as may be demanded. In the slide-strips associated with the lower sash are staples 8^a, (see Figs. V and VII,) that are adapted to ride into contact with the pressure-plates 11 when the lower sash is lowered, and at such time the pressure-plates press against said staples and force the slide-strips inwardly against the sash side rails 6, effecting a tight fit between said members. The pressure-plates 14 are attached to the window-jambs by staples 15, that extend upwardly to screws 16, by which they are attached to the jambs. The pressure-plates 14 are adapted to receive the contact of staples 8^a, that are located in the upper slide-strips 8 on each side of the balance-cord 10. I have shown but one pressure-plate and but one set of staples 8^a in connection with each sash; but it will be understood that these parts are provided to bear against both the upper and lower ends of each sash when in closed position, so as to effect uniform pressure against the upper and lower ends of each slide-strip 8. 17 designates pivot-plates attached to the slide-strips 8 and having pivot-studs 18 projecting centrally therefrom. 19 designates socket-frames, provided centrally with sockets 20, that receive washers 21, into which the pivot-studs 18 are seated and flared outwardly, so as to be retained therein. 22 designates spring-plates, through the centers of which the pivot-studs 18 pass, the central portions of said spring-plates being positioned between the pivot-plates 17 and the washers 21, as seen in Figs. XI and XII. The spring-plates 22 extend longitudinally of the frames 19 and are provided with arms 23, that rest in pockets 24, contained by said frames. (See Fig. XIII.) The spring-plates 22 rest against the socket-frames 19 at the opposite sides of said frames than that at which the pivot-plates 17 are located, and therefore normally tend to draw said pivot-plates into a position between the sides of the frames into the recesses contained thereby, these positions of the parts being those assumed when the sash are in closed positions. When the sash are swung on their pivots, the washers 21 turn on the pivot-studs 18, and the frames 19 ride onto the pivot-

plates 17, as seen in Fig. XII, and the springs 22 exert pressure against the washers and against the frames 19, causing frictional contact between said parts that holds the sash in any position to which they may be moved.

I claim as my invention—

1. In a window of the class described, the combination of the jambs, pressure-plates attached to said jambs, and provided with slotted return-bends, screws inserted through said return-bends into said jambs, slide-strips adapted to move into contact with said pressure-plates, and the sash pivotally connected to said slide-strips, substantially as described.

2. In a window of the class described, the combination of the jambs, apertured pressure-plates attached to said jambs, and provided with slotted return-bends, screws inserted through said return-bends into said jambs, the slide-strips, staples carried by said slide-strips adapted to contact with said pressure-plates, and the sash pivotally connected to said slide-strips, substantially as described.

3. In a window of the class described, the combination of slide-strips, a sash, and means whereby said sash is pivotally connected to said slide-strips, said means comprising pivot-plates provided with studs, socket-frames, and spring-plates positioned between said pivot-plates and frames, substantially as described.

4. In a window of the class described, the combination of slide-strips, a sash, and means whereby said sash is pivotally connected to said slide-strips, said means comprising pivot-plates provided with studs, socket-frames and spring-plates positioned between said pivot-plates and said socket-frames and arms carried by said spring-plates adapted to bear against said frames, substantially as described.

5. In a window of the class described, the combination of slide-strips, a sash, and means whereby said sash is pivotally connected to said slide-strips, said means comprising pivot-plates provided with pivot-studs, socket-frames, washers fitted in said socket-frames and into which said pivot-studs are fitted, and spring-plates positioned between said pivot-plates and socket-frames and arranged to bear against said frames at the ends thereof, substantially as described.

ALBERT WEINGAERTNER.

In presence of—

E. S. KNIGHT,

M. P. SMITH.