W. SCHMIDT.

FIREPROOF WINDOW CONSTRUCTION.

APPLICATION FILED JAN. 22, 1910.

966,364. Patented Aug. 2, 1910.

Fig. 1.

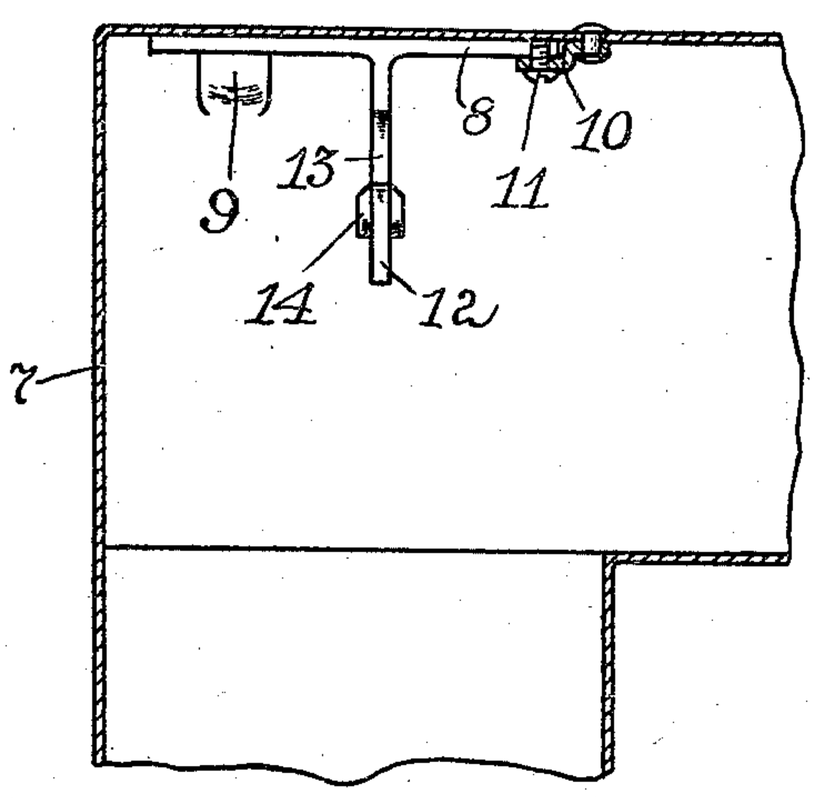


Fig. 3.

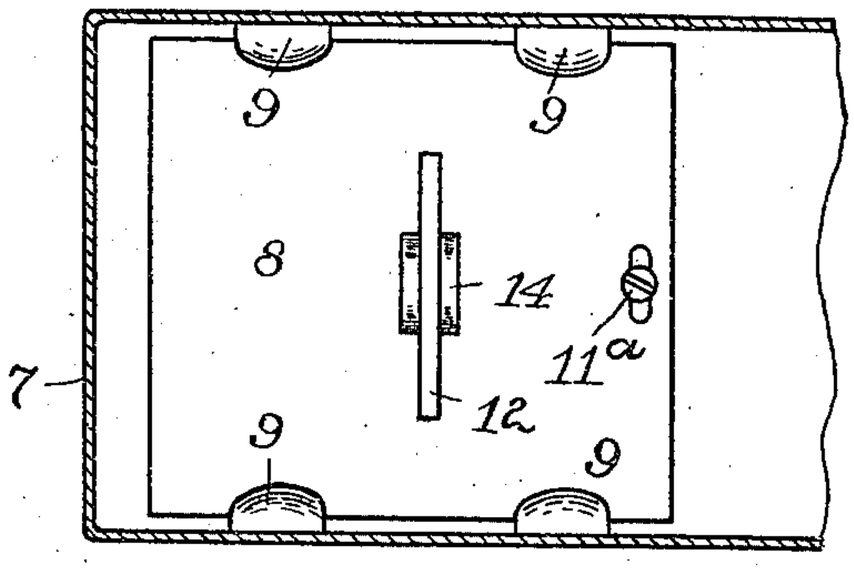


Fig. 2.

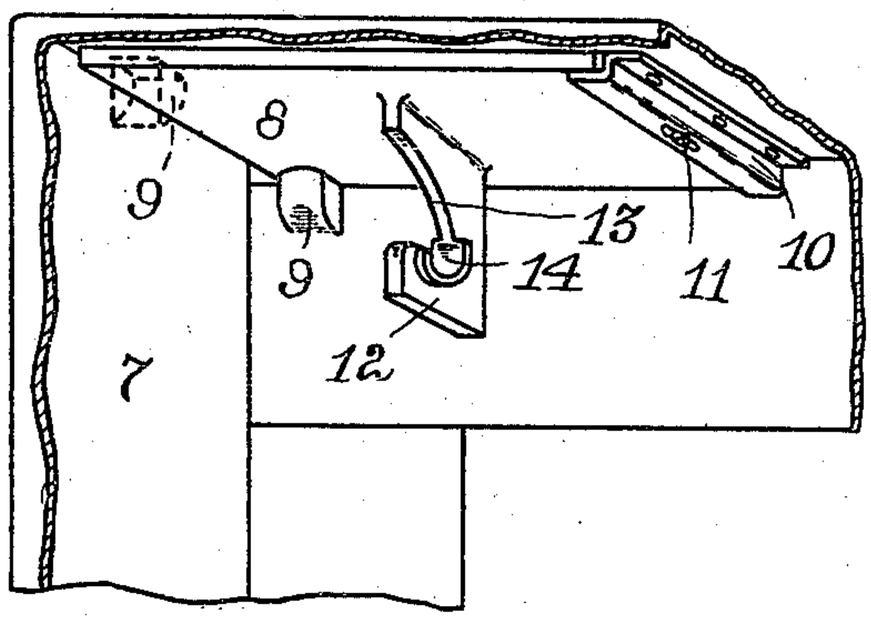


Fig. 4.

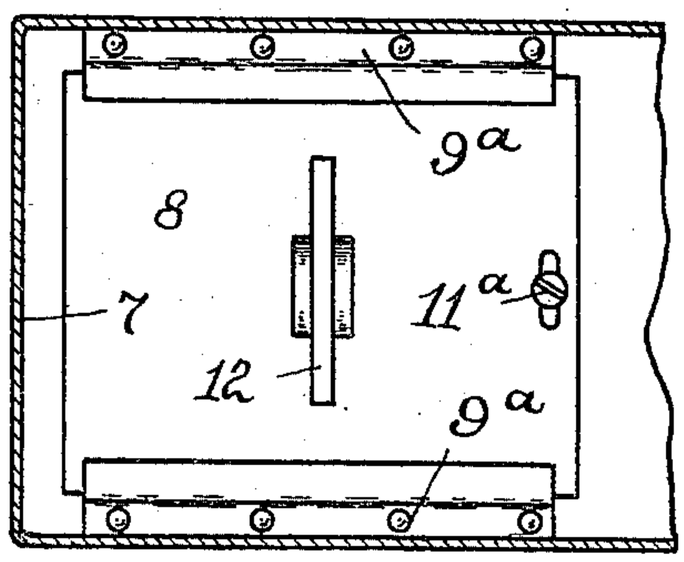


Fig. 5.

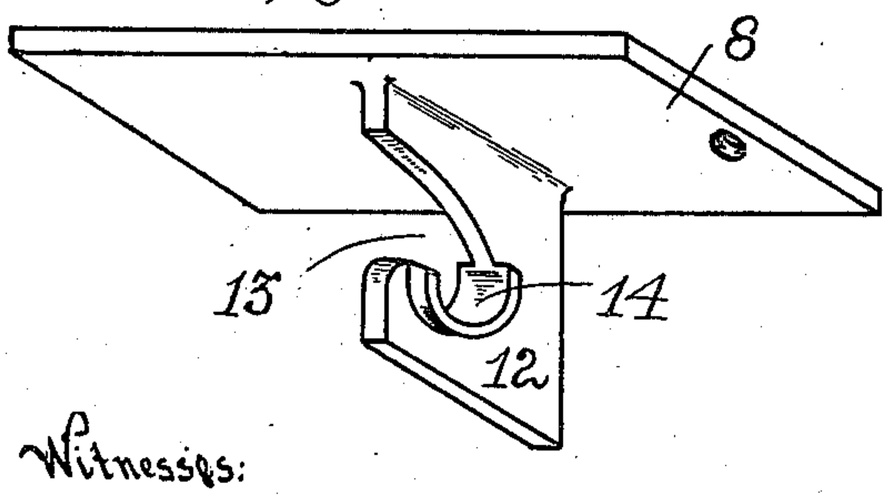
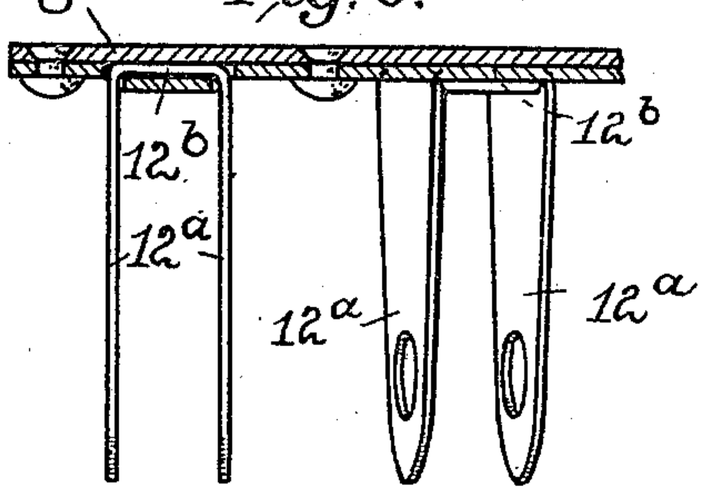


Fig. 6.



Witnesses:

Edwd. L. Tolson.

Bert. M. Stahl.

Inventor:

William Schmidt,

by Glass Middleton Arnoldson & Glass

Att'y's.

UNITED STATES PATENT OFFICE.

WILLIAM SCHMIDT, OF CINCINNATI, OHIO, ASSIGNOR TO THE LUNKEN STEEL WINDOW CO., OF CINCINNATI, OHIO.

FIREPROOF WINDOW CONSTRUCTION.

966,364. Specification of Letters Patent. Patented Aug. 2, 1910.

Application filed January 22, 1910. Serial No. 539,598.

To all whom it may concern:

Be it known that I, WILLIAM SCHMIDT, a citizen of the United States, residing at Cincinnati, Ohio, have invented certain new and useful Improvements in Fireproof Window Construction, of which the following is a specification.

My present invention relates to improvements in fire-proof window construction and has for its object to provide a simple, economical, and efficient means for supporting the sash counterbalancing devices, which means will be easily removable and interchangeable.

The invention includes the novel features of construction hereinafter described and particularly pointed out in the appended claims.

An embodiment of the invention is illustrated in the accompanying drawing, in which:—

Figure 1 is a sectional view of a corner of a window frame showing my invention applied thereto. Fig. 2 is a sectional perspective view. Fig. 3 is a bottom plan view showing a modification, and Fig. 4 is a similar view illustrating a further modification. Fig. 5 is a perspective view of one form of hanger. Fig. 6 is a view of another form of hanger.

Referring by reference characters to this drawing, the numeral 7 designates the corner of a metallic window frame or casing such, for example as described in Letters Patent of the United States #871127 dated Nov. 19, 1907. I have found that it is desirable to use in connection with such metallic windows different methods of counterbalancing the sash in some instances using weights for this purpose as disclosed in said patent, and in others using a construction in which the sashes counterbalance each other as shown and described in Letters Patent of the United States 957,693 dated May 10th 1910. In order that the frame or casing may be provided at will with either type of supporting device, I carry the part which supports the pulley or pulleys on a plate 8 which is designed to have its side edges inserted between lugs or projections 9, struck from the walls of the frame or casing, and the top wall of the frame. These lugs are preferably formed by striking or bending in tongues which are integral with the casing. The opposite end or edge of the plate 8 is supported by a strip 10 of angle iron which is riveted to the top wall of the frame and which provides a space or channel into which the edge of the plate may be inserted and held by a set screw 11. The plate is of such length that it may be first inserted over the lugs and moved far enough toward the outside wall of the frame to cause its free edge to clear the angle iron 10, after which it is raised and brought to rest in the recess formed by said iron.

Instead of providing but two lugs or indents 9, as shown in Fig. 2, I may provide four of these as shown in Fig. 3 and dispense with the angle bracket 10, using a set screw 11[a] to hold the plate against longitudinal movement.

The plate carries one or more depending brackets 12 which are designed to support the pulleys for the flexible elements which serve to balance the sashes. The bracket shown in Fig. 5 is designed to support a shaft carrying sprocket wheels over which pass sprocket chains as disclosed in said Letters Patent of the United States 957,693, the bracket comprising a plain depending web having an open recess 13 provided with a broadened and curved bearing face or journal 14. Instead of striking out the metal of the frame or casing to form integral lugs 9 I may rivet strips of angle iron at the sides as indicated at 9[a] to form grooves or channels into which the edges of the plate may be slid as indicated in Fig. 4 passing a set screw 11[a] directly through the plate and into the metal of the window frame to secure it against longitudinal movement.

When it is desired to use sash cords and weights as the sash balancing means I substitute for the plate shown in Fig. 5 a plate such as shown in Fig. 6 having a plurality of pairs of depending webs 12[a] with openings or recesses in which are journaled the hubs of the sash cord guides or pulleys.

Instead of forming the brackets as an integral part of the plate I may make the plate 8 as a composite plate, consisting of two superimposed plates, and form the bracket with a head clamped between these two plates and the vertical web or webs depending through a slot or slots in the lower plate. Such a construction is shown in Fig. 6 in which each pair of webs 12[a] is connected by a head 12[b] clamped between the plates,

the webs 12ª depending through slots in the lower plate.

Having thus described my invention what I claim is:—

1. In combination with a hollow window frame having guiding grooves at the top, a plate removably seated in said grooves, means for locking it against movement, and a supporting bracket depending from said plate, substantially as described.

2. A hollow sheet metal window frame having inwardly struck lugs forming holding grooves or recesses, combined with a bracket carrying plate having its edges held in said recesses with means for locking it in place, substantially as described.

3. A supporting device for sash balancing devices comprising a pair of plates secured one upon the other and a bracket having a head clamped between said plates and a web depending through a slot in the lower plate, substantially as described.

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

WILLIAM SCHMIDT.

Witnesses:
LANE THOMPSON,
HOWARD J. EVANS.