

No. 871,217.

PATENTED NOV. 19, 1907.

E. M. ERB.
SASH CONSTRUCTION.
APPLICATION FILED JAN. 10, 1907.

Fig 1-

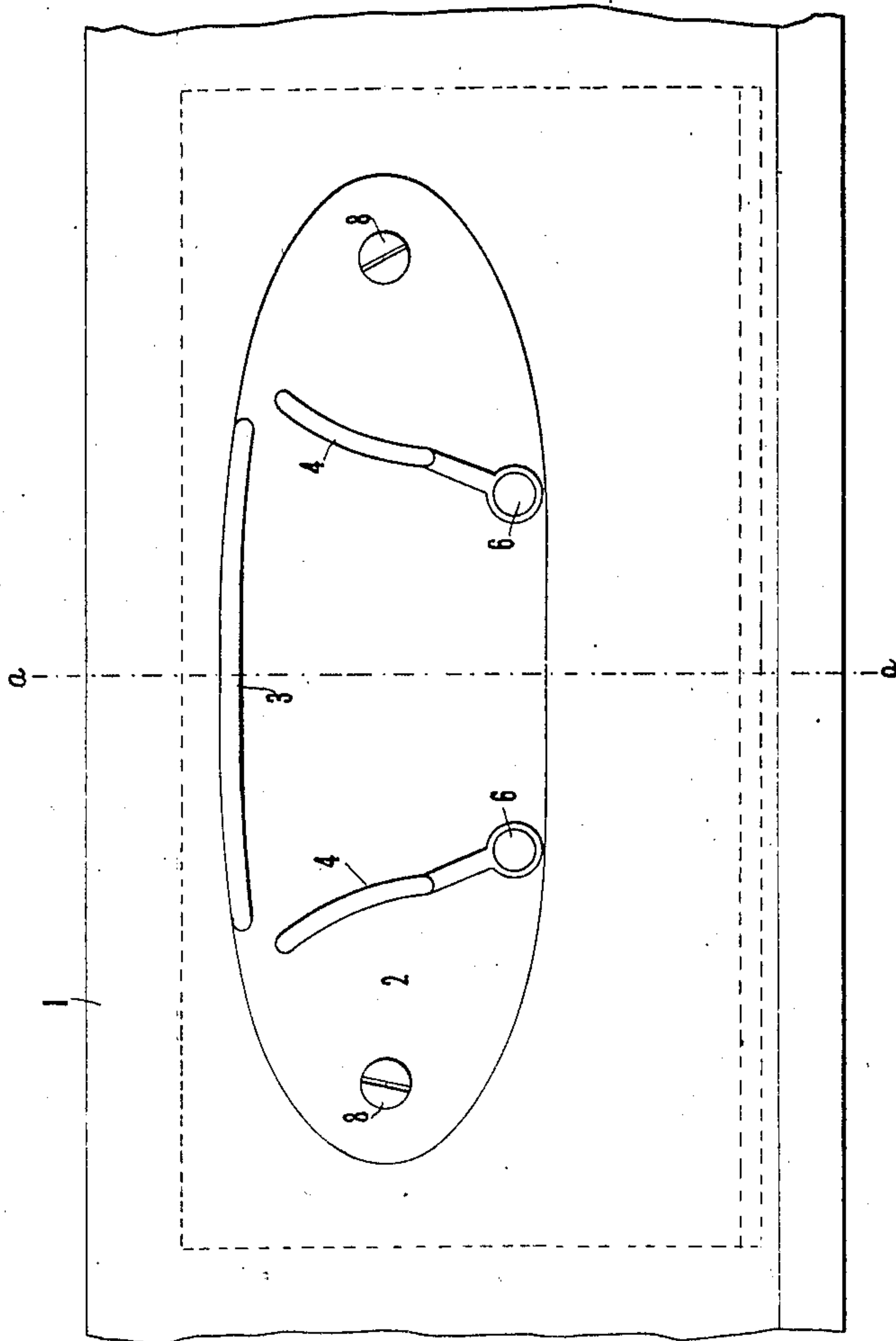
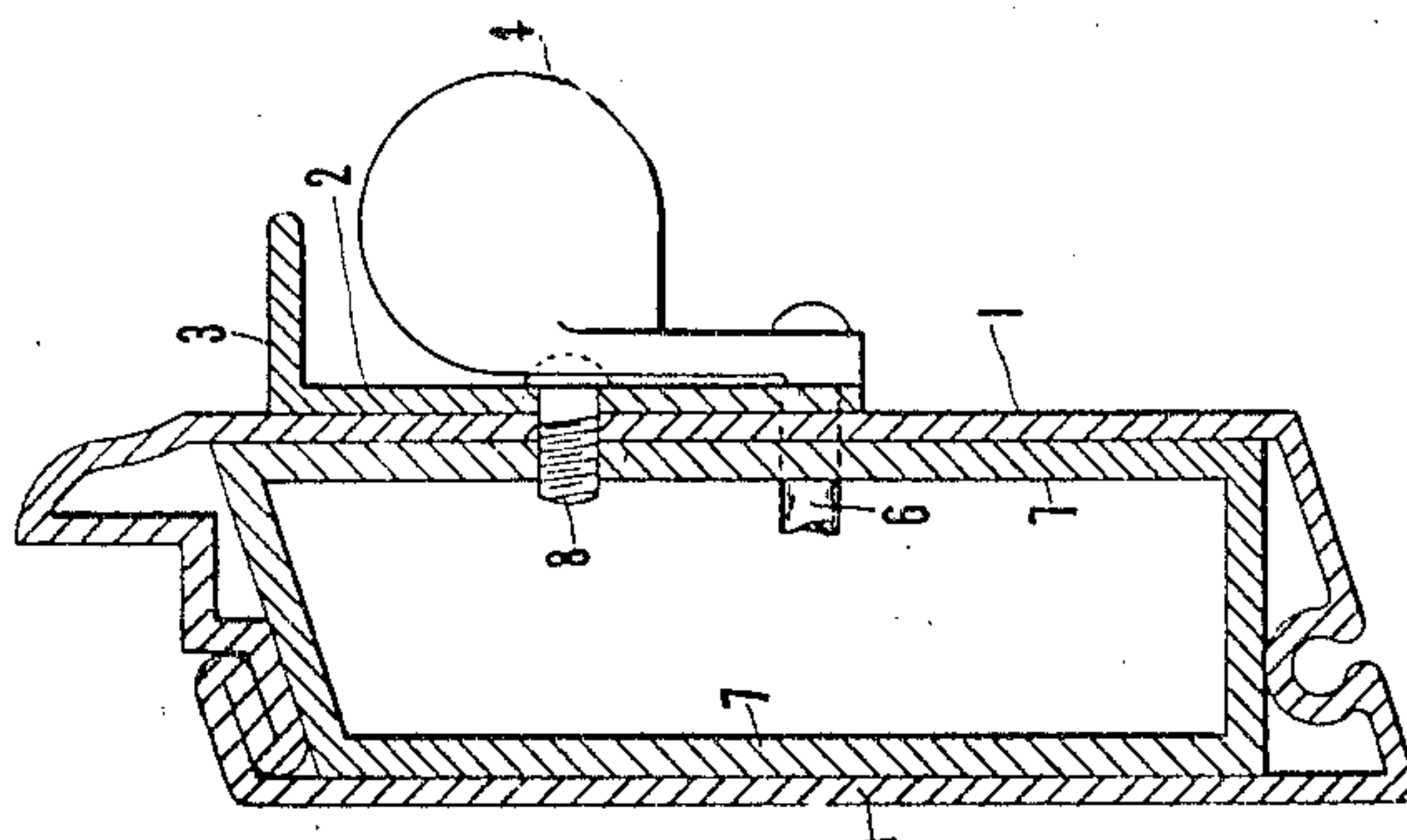


Fig 2-



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SASH CONSTRUCTION.

No. 871,217.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed January 10, 1907. Serial No. 351,650.

To all whom it may concern:

Be it known that I, EDMUND M. ERB, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Sash Construction, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to sash construction, and more particularly to the construction of sliding sashes adapted for use in railway cars or like structures.

One of the objects of the invention is to construct a hollow metallic sash in such manner that the same will not tend to become sprung or distorted when raised within the frame.

Another object thereof is to provide a secure support upon the sash frame for the devices employed for releasing the sash from the window frame during the raising or lowering of the sash.

Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements and arrangement of parts which will be exemplified in the construction hereinafter set forth, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawing, wherein one of several various possible embodiments of my invention is shown, Figure 1 is a view in elevation of a portion of the bottom rail of a metallic sash having my invention applied thereto. Fig. 2 is a cross sectional view taken substantially on line *a-a*, Fig. 1.

Similar reference characters refer to similar parts throughout both views of the drawing.

Referring now to the drawing, 1 indicates the middle portion of the bottom rail of the sash, which, as shown in Fig. 2 of the drawing, is formed by a hollow metallic member suitably bent and shaped into the desired form.

Inasmuch as considerable strain is imposed upon the bottom rails of sashes when a lifting stress is placed thereon, as when they are raised in the frame, it is desirable that the devices mounted thereon employed for releasing the locking devices and lifting the

sashes be supported in such manner that the sashes will retain their shape during the raising and lowering thereof. In the present instance, a lifting plate 2 is mounted upon bottom sash rail, said plate being provided with a finger or hand-hold shelf as at 3, and upon plate 2, in the present instance, are pivotally mounted finger levers 4. The shafts 6 upon which these finger levers are mounted extend within the interior of the sash and are connected with levers or similar devices, catches, wedges or other sash releasing means, not herein shown as the same comprise no essential part of my invention.

In order to stiffen the sash and to provide a firm support for plate 2, there is driven into the interior of the sash a hollow reinforcing section 7, the exterior of which substantially conforms to the interior shape of bottom rail 1. The exterior walls of member 7 and the interior walls of bottom rail are in tight engagement. Clamp screws, such as shown at 8, are passed through plate 2 and tapped into the exterior wall of bottom rail and into the reinforcing member.

It will accordingly be seen that I have provided a construction well adapted to attain the ends and objects of my invention. The lifting plate being supported by means located interiorly of the hollow rail is given a firm and rigid support and lifting stresses will accordingly be distributed throughout the entire section of the bottom rail engaged by the reinforcing member. This will not only prevent the clamp screws from working loose or from stripping the threading in the wall of the rail, but will at all times insure that the lifting plate be immovably attached to the rail.

While I have shown the reinforcing member located in the bottom rail of the sash, it is obvious that the same may be provided at any desired portion of the sash frame.

Certain features directed to the specific structure of the sash rail shown herein are described and claimed in my application Serial No. 351,650, filed of even date herewith.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be in-

terpreted as illustrative and not in a limiting sense.

It is also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention, which, as a matter of language might be said to fall therebetween.

10 Having described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A sash frame comprising, in combination, a hollow metallic member, a reinforcing member seated therein and engaging the inner walls thereof, a plate located exteriorly of said first-mentioned member, and means extending through said plate and said members adapted to secure said plate in position thereon.

2. A metallic sash frame the bottom rail of which is comprised by a hollow metallic member having a hollow reinforcing mem-

ber seated therein and in tight engagement with the inner walls thereof, a lifting plate 25 carrying sash releasing devices located exteriorly of said rail, and clamp screws extending through said plate and threaded into said rail and into said reinforcing member.

3. A sash frame having a bottom rail comprised by a hollow metallic member having driven therein a hollow reinforcing member the exterior walls of which are in close fitting engagement with the interior walls of said first-mentioned member, a lifting plate carrying sash releasing devices located exteriorly of said first-mentioned member, and clamp screws extending through said plate and tapped into said members.

In testimony whereof I affix my signature, 40 in the presence of two witnesses.

EDMUND M. ERB.

Witnesses:

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H. M. SEAMANS.