Feb. 2, 1926. 1,571,350

L. WASHBURN

MUNTIN BAR LOCK FOR METAL WINDOWS

Filed Oct. 27, 1925

Fig. 1.

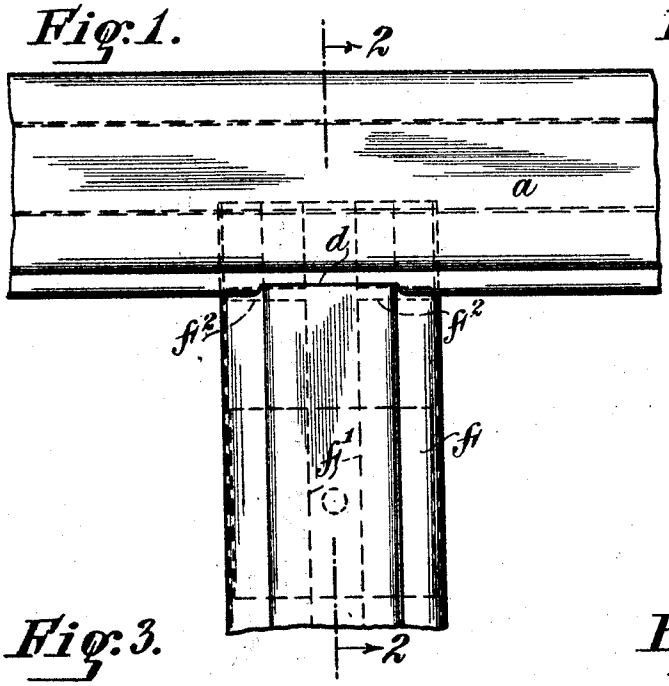



Fig. 2.

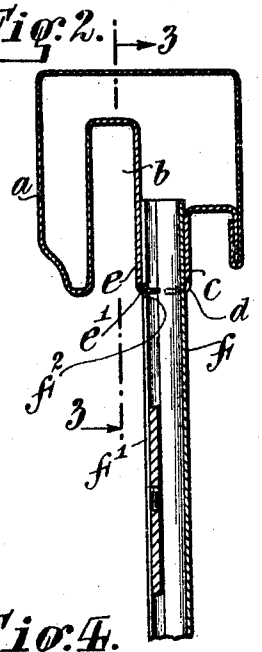



Fig. 3.

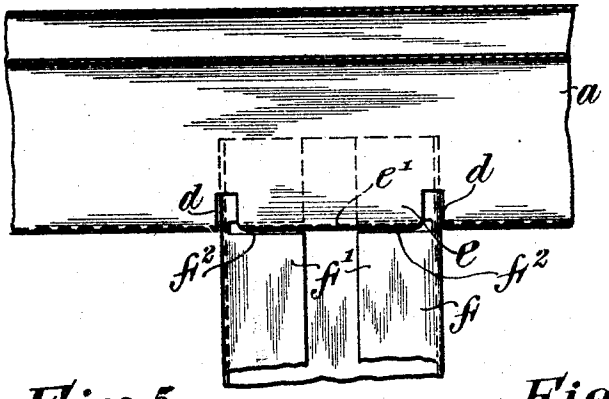



Fig. 4.

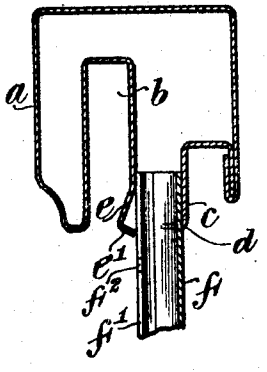



Fig. 5.

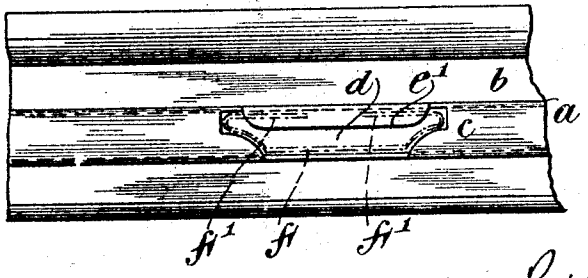
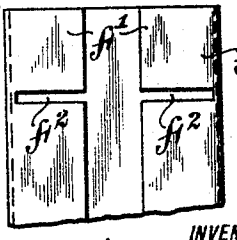



Fig. 6.




INVENTOR

Loring Washburn

BY

Redding, Greeley, O'Shea & Campbell

ATTORNEYS

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# UNITED STATES PATENT OFFICE.

LORING WASHBURN, OF GREENWICH, CONNECTICUT, ASSIGNOR TO S. H. POMEROY COMPANY, INC., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## MUNTIN-BAR LOCK FOR METAL WINDOWS.

Application filed October 27, 1925. Serial No. 65,140.

*To all whom it may concern:*

Be it known that I, LORING WASHBURN, a citizen of the United States, residing at Greenwich, Fairfield County, and State of Connecticut, have invented certain new and useful Improvements in Muntin-Bar Locks for Metal Windows, of which the following is a specification, reference being had to the accompanying drawing, forming a part hereof.

This invention relates to the construction of metal window sashes and more particularly to the union of the muntin bar with the sash rail. Various means, such as spot welding and riveting, have been resorted to heretofore to meet the requirements of the underwriters' laboratories with respect to such union and it is the object of the present invention to provide a means of union which shall not only satisfy fully such requirements but shall facilitate the manufacture and reduce the cost thereof. In accordance with the invention, the hollow metal sash rail is slotted to receive the end of the muntin bar and is formed with a tongue which is displaced by bending so as to permit the introduction of the end of the muntin bar and is thereafter restored by bending to its proper position so that it shall engage and interlock with the muntin bar, which is slotted for the purpose. The invention will be more fully explained hereinafter with reference to the accompanying drawing in which it is illustrated and in which:

Figure 1 is a view in elevation showing a portion of the upper meeting rail of a sash and a portion of the co-acting muntin bar.

Figure 2 is a view in vertical section on the plane indicated by the broken line 2—2 of Figure 1 with the muntin bar locked to the sash rail.

Figure 3 is a view in sectional elevation, the plane of section being that indicated by the broken line 3—3 of Figure 2.

Figure 4 is a view generally similar to Figure 3 but showing the tongue of the sash rail displaced to permit the introduction of the muntin bar before locking.

Figure 5 is a view of the sash rail as seen from below, showing the slot and interlocking tongue.

Figure 6 is a view in elevation of the upper end of the muntin bar, showing particularly the slot with which the tongue of the sash rail interlocks.

The hollow metal sash rail *a* may be of any usual or suitable construction. As shown, it has a groove *b* to receive the glass as usual and a rib *c* adjacent to the groove *b*. The rib *c* is cut out or slotted, as clearly shown at *d* in Figures 3 and 5, and is formed with a tongue *e* which is capable of displacement by bending, as clearly shown in Figure 4 and has an interlocking lip *e'*, substantially at right angles to the body of the tongue.

The hollow metal muntin bar *f* may also be formed in any usual or suitable manner. In the construction shown, its edge portions *f'* are bent inward toward each other to lie flat against the glass. At $f^2$ the muntin bar is formed with a transverse, interlocking slot for cooperation with the interlocking tongue *e*, *e'* of the sash rail.

In assembling the sash rail and muntin bar, the tongue *e* is first displaced by bending with a suitable tool, as shown clearly in Figure 4, so as to permit the end of the muntin bar to be introduced, as shown in the same figure, and slipped into the sash rail until the slot $f^2$ is in position to be engaged by the tongue *e*, *e'*, which is then displaced by pressure so as to cause the lip *e'* to enter the slot $f^2$ of the muntin bar and engage the same, as shown clearly in Figure 2. It will be observed that, the sash rail and the muntin bar having been formed as described in the preparation of the members, the interlocking of the muntin bar with the sash rail is effected easily and quickly and forms a permanent union unless, for some reason, it should be desired to disengage the muntin bar from the sash rail. It will be understood that the invention is capable of application to various forms of hollow metal window construction and that the form of interlock will be varied to suit conditions in each case.

I claim as my invention:

1. In hollow metal window construction, the combination of a sash rail slotted to receive the muntin bar and with an interlocking tongue, and a muntin bar formed to be engaged by and to interlock with the tongue of the sash rail, the tongue of the sash rail being capable of displacement by bending to permit the introduction of the end of the

muntin bar and to be interlocked with the muntin bar.

2. In hollow metal window construction, the combination of a sash rail slotted to receive the muntin bar and with an interlocking tongue having a transverse lip, and a muntin bar formed with a transverse slot to be engaged by and to interlock with the lip of the tongue of the sash rail, the tongue of the sash rail being capable of displacement by bending to permit the introduction of the end of the muntin bar and to be interlocked with the mountin bar.

This specification signed this 22 day of Oct. A. D. 1925.

LORING WASHBURN.