J. L. JOYCE.
Window-Sash.

No. 205,101. Patented June 18, 1878.

Fig. 1

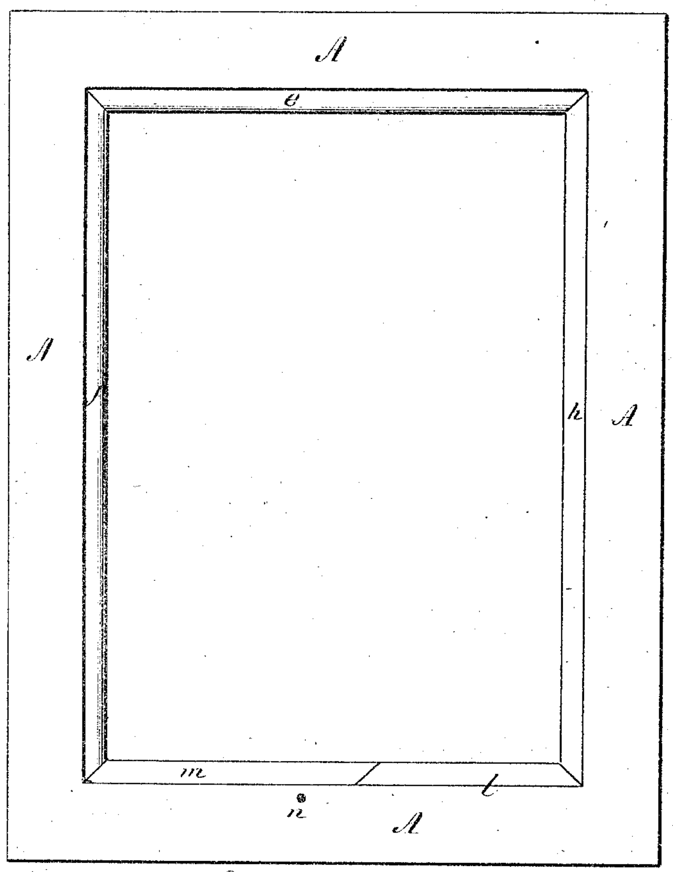


Fig. 2

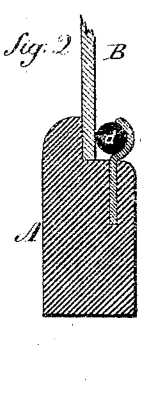
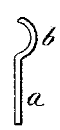


Fig. 3



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UNITED STATES PATENT OFFICE.

JOSEPH L. JOYCE, NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN WINDOW-SASHES.

Specification forming part of Letters Patent No. **205,101**, dated June 18, 1878; application filed April 19, 1878.

To all whom it may concern:

Be it known that I, JOSEPH L. JOYCE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Window-Sashes; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a front view; Fig. 2, a sectional view, enlarged; and Fig. 3, a section of the fastening-bead detached.

This invention relates to an improvement in the method of securing glass in sashes, with special reference to land-carriages, but applicable to other places, the object being to completely pack the glass, so as to prevent its rattling, and also to make it perfectly tight without the possibility of admission of dust or water; and it consists in the construction, as hereinafter described, and more particularly recited in the claims.

A represents the sash; B, the glass. The sash is rabbeted to receive the glass in the usual manner as for putty. Around the rabbet, and distant from the shoulder the thickness of the glass, or a little more, a thin groove is made. Into this groove the fastening-bead is set. This bead is made of sheet metal of substantially the form as seen in Fig. 3—that is, so as to form a plain flange, *a*, and a bead, *b*, forming a groove on the opposite side. This material is cut to the required lengths, and the flange *a* introduced into the grooves in the sash after the glass has been placed. Before doing this, however, a cord or strip of india-rubber or other suitable flexible or elastic packing, *d*, is placed in the groove formed by the bead, as seen in Fig. 2. This lies and is pressed upon the glass, so as to hold and press it hard against the shoulder on the opposite side when the bead is in its place. These beads may be secured in the sash by pins set into the sash through the flange; but the better method is to cut the three sides *e*, *f*, and *h* of the full length required, mitered at the angles. In that case *f* and *h* serve to hold *e* in its place, as does *e* to hold that end of *f* and *h*. On the side opposite *e* the bead is cut diagonally, being first mitered to fit the ends *f* and *h*, and then the part *l* set in place secures that end of *h;* and, finally, the last piece *m* is introduced, which secures that end of *f*, and also holds *l* in place. Then, by simply passing a pin into the sash through the flange *m*, as at *n*, all are secured, and cannot be removed until the single pin *n* is taken out.

I do not broadly claim a securing device for glass in sashes in which india-rubber is used as a packing. Neither do I broadly claim a thin metallic molding inclosing a packing of rubber against the glass, as such, I am aware, is not new; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. The grooved metallic bead *b*, constructed with a flange, *a*, the sash rabbeted to receive the glass, a groove in the said rabbet parallel with the surface of the glass to receive the said flange and support the bead, and the elastic packing *d* within the said bead, and between it and the glass, substantially as described.

2. In a sash inclosing glass, the flanged beads on the several sides, each part, save the last, cut as described, to secure the others, and the last secured directly to the sash, as a means for locking the whole, substantially as described.

JOS. L. JOYCE.

Witnesses:
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