

No. 816,807.

PATENTED APR. 3, 1906.

F. W. MELLOWES.

GLAZING DEVICE.

APPLICATION FILED NOV. 14, 1905.

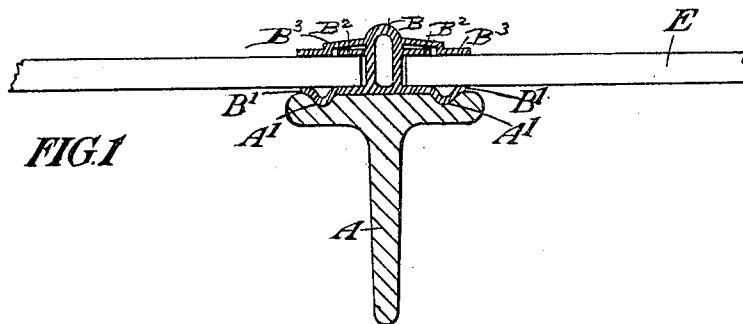


FIG. 1

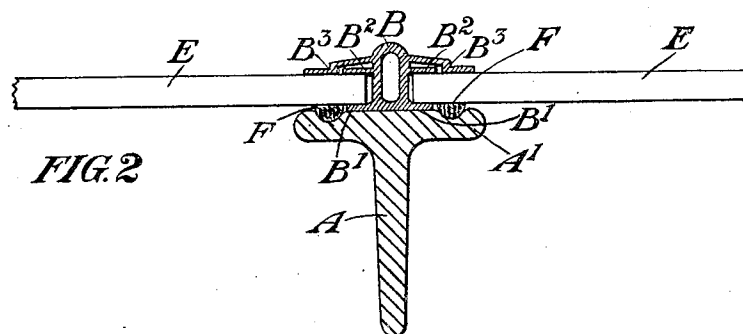


FIG. 2

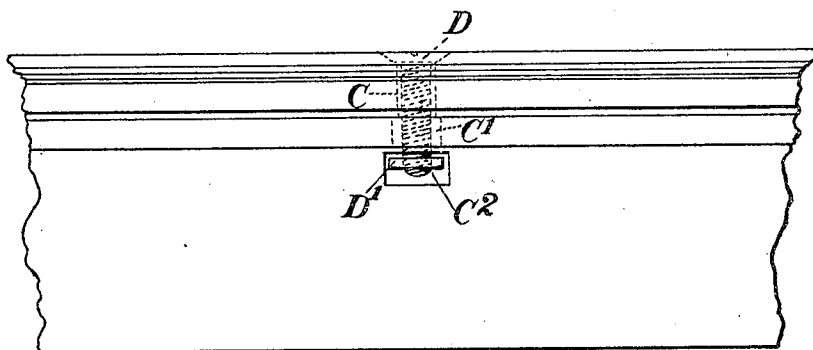
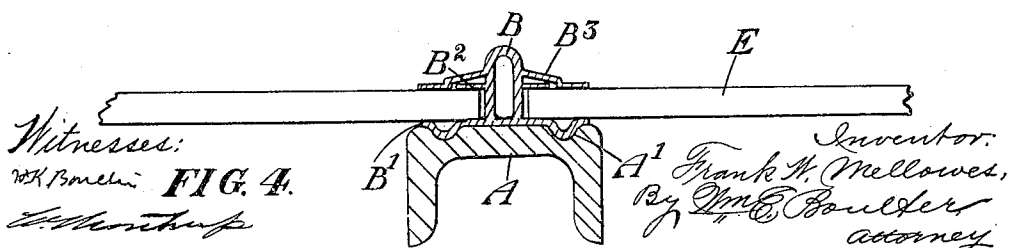


FIG. 3.

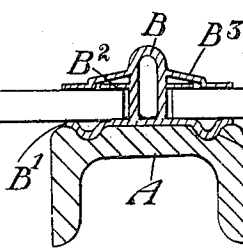


Witnesses:

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FIG. 4.



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UNITED STATES PATENT OFFICE.

FRANK WILFORD MELLOWES, OF SHEFFIELD, ENGLAND.

GLAZING DEVICE.

No. 816,807.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed November 14, 1905. Serial No. 287,287.

To all whom it may concern:

Be it known that I, FRANK WILFORD MELLOWES, a subject of the King of England, residing at Sheffield, Yorkshire, England, have
5 invented certain new and useful Improvements in or Relating to Glazing Devices, of which the following is a specification.

This invention relates to glazing devices, its object being to provide means for supporting and fixing in position glass plates
10 without the use of putty or other mastic material in as cheap a manner as possible consistent with thorough efficiency.

In the most satisfactory methods heretofore practiced the glazing-bar has been incased in a sheath of lead or other non-corrodible sheath, which forms the most expensive item in the construction; but according
20 to the present invention the glazing-bar is not incased nor has the lead or non-corrodible metal to be carried so far above the upper surface of the glass as in former constructions, and therefore a considerably less quantity of lead or the like is employed.

In the accompanying drawings, Figure 1 is a transverse section of a glazing-bar, showing the method of attaching the glass thereto according to the present invention. Fig. 2 is a
25 similar view to Fig. 1, showing a slight addition. Fig. 3 is a side view of a portion of the bar shown in Fig. 1. Fig. 4 is a transverse section of a modified shape of a glazing-bar, showing the method of attaching the glass thereto according to this invention.

In carrying out the present invention the glazing-bar A may be of T-section with a flat-top table having two longitudinal grooves A' therein, one being near each edge, as shown. A bar B, of lead or other incorrodible metal or
40 alloy softer than the T-bar, if the latter be of metal, is centrally situated on the top of the glazing-bar A. The bar B is provided with three flanges on each side—i. e., a pair of flanges B', one on each side, adapted to extend outward over the top of the glazing-bar
45 A, a second pair of flanges B² on the bar B at a distance above the flanges B', approximately corresponding to the thickness of glass to be secured, and a third pair of flanges
50 B³, arranged close above the second or intermediate pair B² and adapted to cover the latter in the manner shown in order to protect them from the action of the sun or atmospheric influences tending to warp them or
55 otherwise render the joint between the glass and these flanges imperfect.

The bar B is preferably made hollow, as shown, in order to reduce weight and cost, and is secured to the glazing-bar A as follows: A number of holes C are made through the
60 central part of the bar B, and each hole is continued by another and coaxial hole through the top of the glazing-bar A, as shown at C', to meet a slot C², made through the web of the glazing-bar at its junction
65 with the top part thereof. A bolt or screw D is passed through each hole C and its continuation C' into the slot C², where it engages with a nut D', situated in the slot. Thus by
70 screwing up the bolts D the bar B is firmly secured to the glazing-bar A, the nuts D' being preferably angular or so engaged with the slots C² or the adjacent parts of the bar A that they cannot be turned by the bolts.

The flanges B' are rubbed down onto the
75 top of the glazing-bar, and the edge of the glass E is laid on these flanges, as shown, the intermediate flanges B² are rubbed down onto the top of the glass, and the upper flanges B³ are similarly rubbed down, overlapping
80 the intermediate ones, all in a manner well understood. Thus the glass is firmly secured to the glazing-bar by the bar B and screws D. In some cases the flanges B' are made so as to extend outward beyond the top edges of the
85 bar and are bent round under the latter.

The grooves A' perform two distinct functions: First, if it should happen that any moisture found its way past the flanges B² and B³ to the under side of the glass E it
90 would be collected by the grooves A' and delivered outside the structure; secondly, the grooves leave two separated bearing-surfaces, one on each side of each groove, for the glass, so that the latter has more chance of being
95 properly supported along its whole length, with less liability to crack, than if there were but one such support.

Fig. 2 shows a construction similar to that described above. In this case the flanges B'
100 extend only up to the grooves A', and the latter are filled with some suitable packing F, such as asbestos, thus securing a tight joint between the glass and glazing-bar and providing a yielding material to bear a portion
105 (in some cases the whole) of the weight of the glass.

A channel-bar may be substituted for a T-bar, as illustrated in Fig. 4, in which case
110 depressions made in the under face of the channel-bar would engage the nuts D' to prevent their rotation.

Any glazing-bar with a flat-top table is suited to the purposes of the present invention.

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

1. In a glazing device the combination with a glazing-bar having a flat-top table longitudinally grooved between the center and each edge of the table and provided with
10 holes through the table, a web with slots in it constituting terminations of the holes, nuts engaged by the glazing-bar at the slots, an incorrodible bar on the top table with holes coaxial with those of said table, three inte-
15 gral flanges above the top table on each side of the incorrodible bar, the lower pair extending upon the top of the glazing-bar to form bearings for the glass, and bolts one extending through each set of the coaxial holes
20 into engagement with the nut appropriated thereto.

2. In a glazing device the combination

with a glazing-bar having a flat-top table longitudinally grooved between the center and each edge of the table and provided with
25 holes through the table, a web with slots in it constituting terminations of the holes, nuts engaged by the glazing-bar at the slots, an incorrodible bar on the top table with holes coaxial with those of said table, three inte-
30 gral flanges above the top table on each side of the incorrodible bar, the lower pair extending upon the top of the glazing-bar to form bearings for the glass, bolts one extending through each set of the coaxial holes into
35 engagement with the nut appropriated thereto and packing in the longitudinal grooves.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK WILFORD MELLOWES.

Witnesses:

ARTHUR H. EVENWOOD,
CHAS. N. DANIELS.