

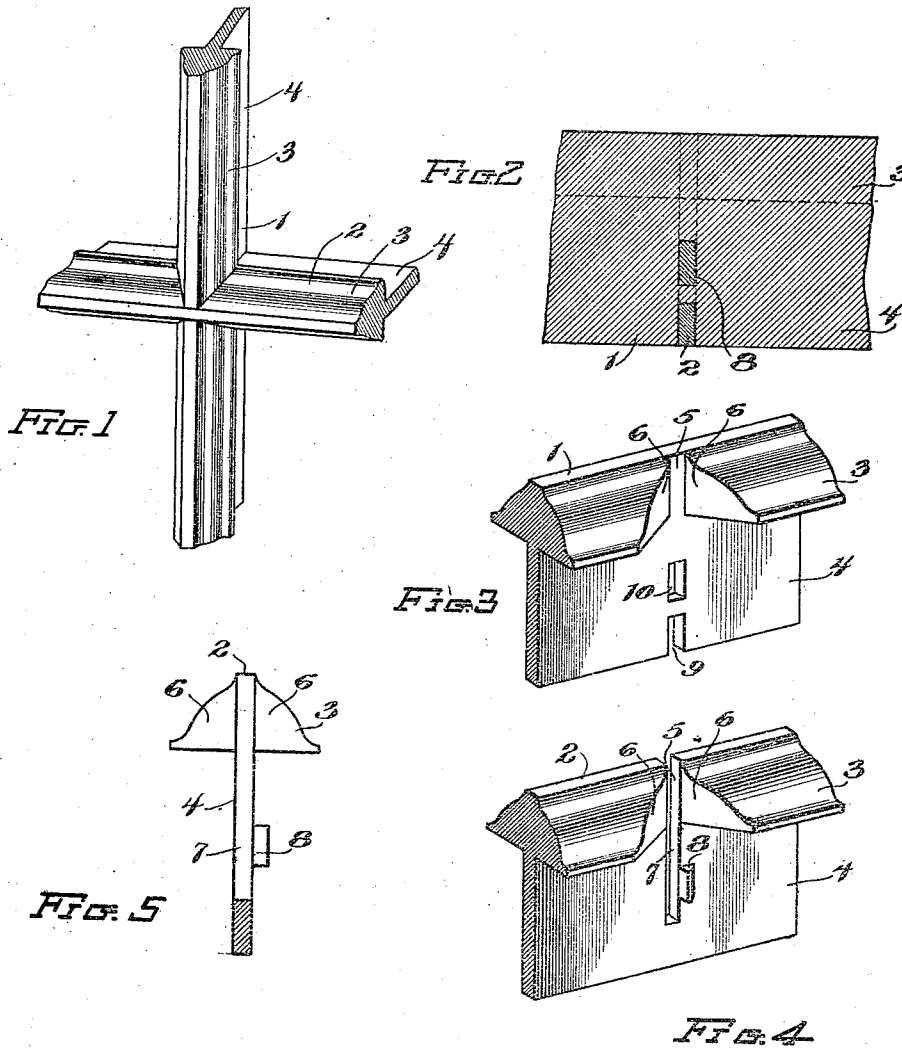
J. MATTHEWS & E. W. FREEMAN.

SASH CONSTRUCTION.

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1,054,585.

Patented Feb. 25, 1913.



Witnesses

Wm. H. Mulligan

John J. McCarthy

Inventors

Joseph Matthews,

Edward W. Freeman.

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

JOSEPH MATTHEWS AND EDWARD W. FREEMAN, OF PHILADELPHIA, PENNSYLVANIA,
ASSIGNORS OF ONE-THIRD TO ALFRED F. DAUBERT, OF PHILADELPHIA, PENNSYLVANIA.

SASH CONSTRUCTION.

1,054,585.

Specification of Letters Patent.

Patented Feb. 25, 1913.

Application filed February 7, 1912. Serial No. 676,031.

To all whom it may concern:

Be it known that we, JOSEPH MATTHEWS and EDWARD W. FREEMAN, citizens of the United States of America, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Sash Constructions, of which the following is a specification.

This invention relates to improvements in window sash construction and has particular application to a construction of muntin joint.

Heretofore, in the joining of the muntins of the sash frame, it has been necessary to bend portions of one of such muntins in order to receive the adjacent muntin to lock the parts in position. This bending action upon the parts and at the joint thereof is conducive to a weakening of the joint and results in a crystallization of the parts in the opening and closing action thereof to facilitate the joining of the muntins.

Therefore, one object of the present invention is the provision of a joint of this type wherein bending of the parts is eliminated and the muntins joined together in a manner eliminating the above stated weaknesses.

Furthermore, we aim to provide a joint of this class wherein the muntins after joining are securely locked in their respective positions against displacement, one of the muntins for this purpose embodying means designed to engage both muntins at the joint to facilitate this locking action.

In the accompanying drawing forming a part of this specification; Figure 1 is a broken perspective view of the muntins of a window sash joined together and constructed in accordance with the present invention. Fig. 2 is a section through the joint. Fig. 3 is a detail perspective view of a portion of one of the muntins. Fig. 4 is a similar view of the adjacent muntin. Fig. 5 is a sectional view of the muntin disclosed in Fig. 4.

Similar reference characters designate like parts throughout the several views.

Referring to the accompanying drawing in detail, the muntins of a window sash are designated by the numerals 1 and 2 and each, as shown, embodies a web 3 and a bead 4 integral with the web. The beads, as illustrated, project beyond the opposite sides

of the webs of the muntins and each bead, at a suitable point in its length, has its opposite sides cut away as at 5 and beveled outwardly of its webs to provide oppositely disposed inclined walls 6, the beveled walls 60 of one of the muntins cooperating with those of the adjacent muntin in the joining operation so that the muntins may be disposed at direct right angles to each other in order to securely hold the muntins in sash formation.

The muntin 2 is provided with an elongated transverse slot 7 opening on to the upper surface of the bead thereof and extending well into the web of such muntin. Immediately adjacent this slot 7 and projecting laterally of the web 2 is a key 8 the purpose of which will presently appear. The muntin 1 is provided with a slot 9 opening onto the web portion thereof at the side of such web opposite the bead and immediately above this slot 9 and out of communication therewith is a key way 10 designed to receive the key 8 in the assembling of the muntins in sash formation. From this construction it will be seen that, the muntin 1 is adapted for insertion into the muntin 2 and at direct right angles thereto, and owing to the slot 9 opening through the web portion of the muntin 1, it will be noted that the outer edges of the webs will lie flush with each other. In this position of the parts, the key way 10 in the web of the muntin 1 aligns with the key 8 carried by the web of the muntin 2 whereby the key, being of malleable metal, may be forced into the key way 10 thus securely locking the muntins together and in sash formation, the inclined walls 6 of the beads cooperating with one another to form a continuous and unbroken surface in this assembling and locking of the parts, as will be readily understood.

While we have described one form of the invention, by way of illustration, we desire to have it understood that we do not limit ourselves to all of the details herein shown and described, as modification and variation may be made within the scope of the appended claim without departing from the spirit or sacrificing any advantages of the invention.

We claim:

In a muntin joint for window sashes, a plurality of muntins each comprising a web

and a bead intersecting each other at right angles, one of said muntins at the point of intersection being provided with an elongated slot extending well into the web thereof and opening onto the bead, the other of said muntins at the point of intersection having a slot in the web thereof and opening onto the edge of the web opposite from the bead, said last-named muntin being further formed with a key way in the web thereof above the slot therein and out of communication therewith, and a key com-

posed of malleable metal carried by the web of the first-named muntin adjacent to the slot therein and adapted to be driven into the key way in the second-named muntin.

In testimony whereof we affix our signatures in presence of two witnesses.

JOSEPH MATTHEWS.
EDWARD W. FREEMAN.

Witnesses:

NEWBERRY EDWARD FRETZ,
LOUIS M. FRIDENBERG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."