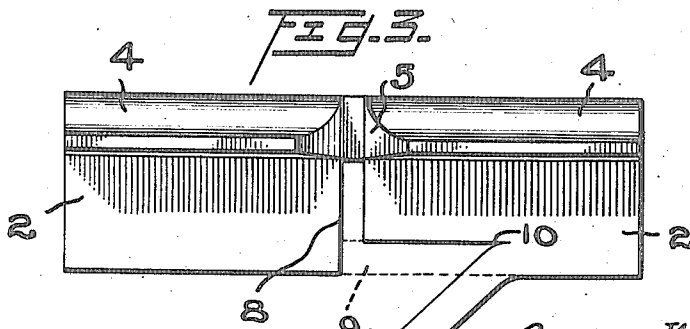
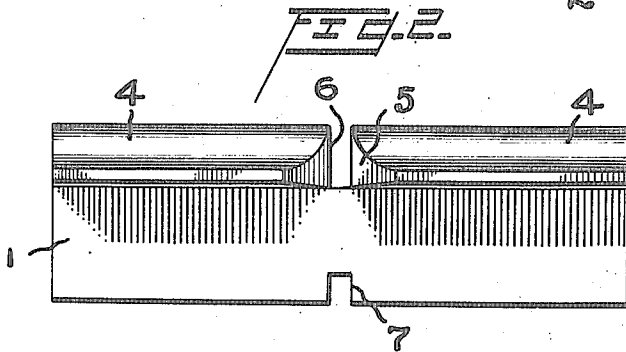
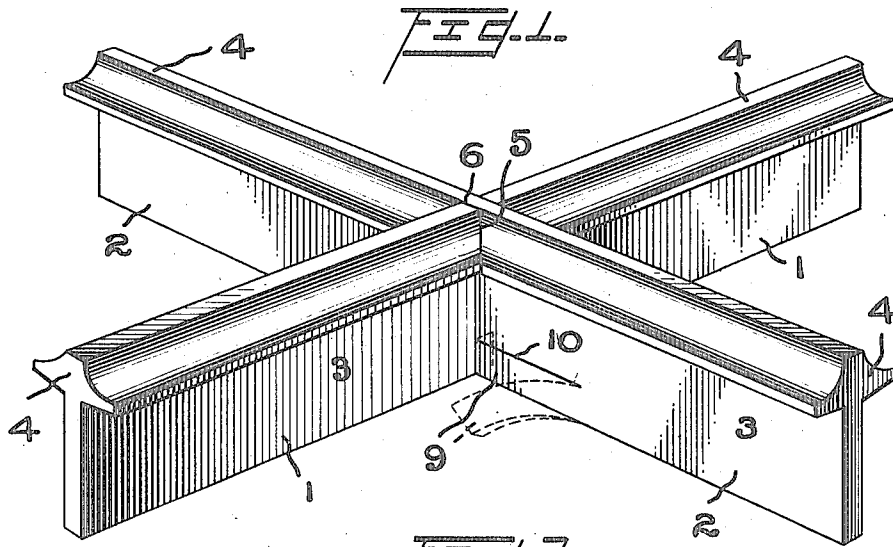


A. CLARK & G. WARREN.
METAL SASH JOINT.
APPLICATION FILED FEB. 20, 1914.

1,123,847.

Patented Jan. 5, 1915.



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UNITED STATES PATENT OFFICE.

ALFRED CLARK AND GEORGE WARREN, OF PHILADELPHIA, PENNSYLVANIA.

METAL-SASH JOINT.

1,123,847.

Specification of Letters Patent.

Patented Jan. 5, 1915.

Application filed February 20, 1914. Serial No. 819,928.

To all whom it may concern:

Be it known that we, ALFRED CLARK and GEORGE WARREN, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Metal-Sash Joints, of which the following is a specification.

Our invention relates to improvements in metal sash joints, the object of the invention being to provide improved constructions of muntins so that they securely lock at their joint or point of crossing, and provide a smooth outer surface to the joint so that the manner of locking is hid from view.

A further object is to provide improvements of this character which are of extremely simple inexpensive construction, strong and durable in use.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claim.

In the accompanying drawings: Figure 1 is a perspective view illustrating our improved joint, and Figs. 2 and 3 are views in side elevation of the respective muntins.

1 and 2 represent crossed muntins each having a web portion 3 with integral beads 4 which may be of any suitable design, but which as is ordinarily the case, project from both sides of the web. The beads 4 of both muntins at opposite sides are provided with beveled recesses 5, so that when the muntins are together, the lines of juncture will be at an angle of ninety degrees (90°) to each other, so that the design of the bead will not be destroyed. The muntin 1 is provided at one edge with a slot 6 which extends through the bead 4, and at its opposite edge is provided with a slot 7 in the web portion 3, said slots 6 and 7 being in alinement as shown clearly in Fig. 2. The muntin 2 has a slot 8 in its web portion extending from the inner edge of the bead 4 with its lower end closed by means of a tongue 9 which is formed at the edge of the web by a longi-

tudinal slit 10 of the proper length to form the tongue, the tongue being severed from the slotted portion of the web by cutting the same off on a line constituting an extension of one wall of the slot 8.

To assemble the muntins, the tongue 9 is bent away from the web as shown in full lines in Fig. 3, or as shown in dotted lines in Fig. 1. The muntin 2 is then positioned at right angles to the muntin 1 with the slot 8 extending across the web 3 of muntin 1, and the slot 6 of muntin 1 receiving the recessed bead portion of muntin 2. When in this position, the tongue 9 is bent upwardly to its normal position as shown in full lines in Fig. 1, and in dotted lines in Fig. 3, so that the tongue closes the end of slot 8, and securely locks the muntins together. When in this position, the tongue 9 extends into the slot 7 in the web portion 3 of muntin 1, so that the two muntins are rigidly locked together at right angles to each other, and cannot be separated until the tongue 9 is bent as shown in Figs. 1 and 9. The tongue 9, therefore, completes the locking action of the muntins and insures a rigid joint when the parts are assembled.

Various slight changes might be made in the general form and arrangement of parts described without departing from our invention, and hence we do not limit ourselves to the precise details set forth, but consider ourselves at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claim.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

A metal sash joint, comprising two muntins at right angles to each other, each muntin constituting a straight bar having parallel straight edges, and both muntins of the same width, one muntin having slots in alinement in its opposite edges, the other muntin having a slot intermediate its edges and of a length corresponding to the length of the web portion between the slots of the first-mentioned muntin and receiving said web portion, one end wall of the slot in the

last-mentioned muntin formed by a single tongue cut from the muntin and extending entirely across the slot, said tongue adapted to be bent to admit the web of the first-
5 mentioned muntin in the slot of the last-mentioned muntin, substantially as described.

In testimony whereof we have signed our

names to this specification in the presence of two subscribing witnesses.

ALFRED CLARK.
GEORGE WARREN.

Witnesses:

M. E. DITTUS,
CHAS. E. POTTS.