B. KATUSKY.

WINDOW SASH.

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1,032,143.

Patented July 9, 1912.

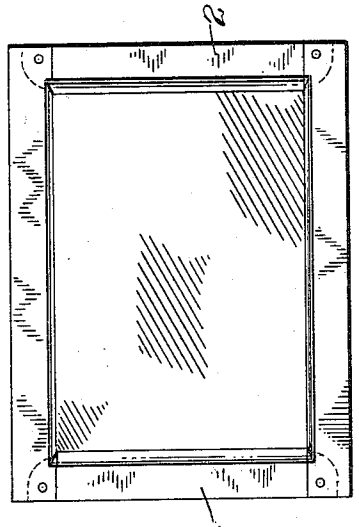

FIG. 1.

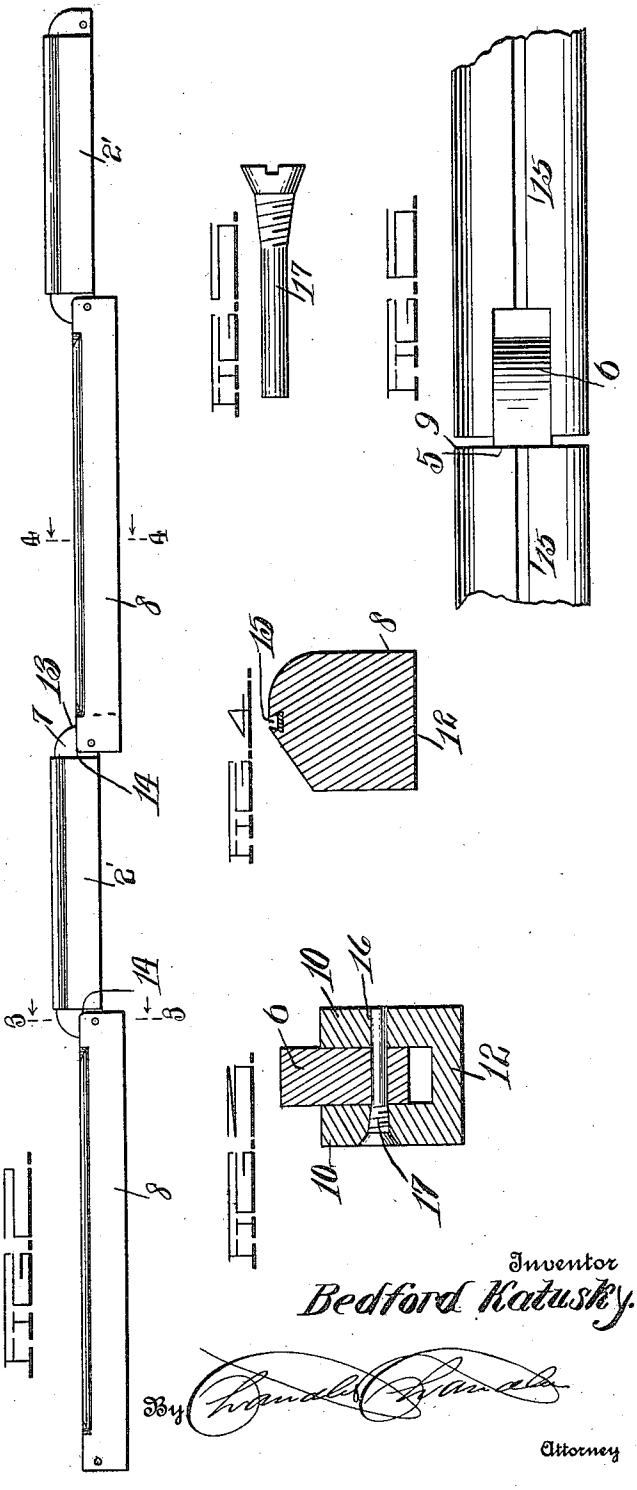

FIG. 2.

FIG. 3.

FIG. 4.

FIG. 5.

Witnesses

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BEDFORD KATUSKY, OF JACKSON COUNTY, MINNESOTA.

WINDOW-SASH.

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To all whom it may concern:

Be it known that I, BEDFORD KATUSKY, a citizen of the United States, residing in the county of Jackson, State of Minnesota, have invented certain new and useful Improvements in Window-Sashes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in window sashes, and my object is to improve the construction and increase the utility of devices of this character.

A further object is to provide a form of sash frame which may be extended into a straight line by means of pivot points located at the intersection of the frame members.

A further object is to provide a form of sash frame in which the glass is secured by the frame itself, thus eliminating the additional securing means now used for this purpose.

A further object is to provide a weather-proof joint between the glass and frame.

It will also be understood that a primary object which governs to some extent every other consideration is to reduce the cost of the device to the lowest limit possible consistent with efficiency, sightliness and durability.

With the above and other objects in view the invention consists primarily of a plurality of rectilinear frame members having glass retaining grooves in one face thereof, mortised joints between said members, means whereby said joints will permit angular movement of said members, and means for locking the frame in a closed position.

The invention further consists in a certain construction, combination and arrangement of parts and details as is hereinafter more fully described, particularly pointed out in the appended claim, and illustrated in the accompanying drawings, which show a preferred embodiment of the invention.

Referring to these drawings which are attached to and form a part of this application, Figure 1 is an elevation of my improved window sash showing the glass in place therein. Fig. 2 is a side elevation of the sash-frame in the extended position, Fig. 3 is a sectional view on the line 3—3 of Fig. 2, Fig. 4 is a sectional view on the line 4—4 of Fig. 2, Fig. 5 is a detail view of the pivot screw used in my mortise joint, Fig. 6 is a side view of a corner joint when open.

Referring more specifically to these views, in which similar reference numerals designate corresponding parts throughout, 1 indicates the top transverse member of the sash frame and 2 the bottom transverse member; the two being identical in construction the description of one will be understood to apply to the other. The member 1 comprises a body section, here designated 2′, of approximately rectangular section as shown in Fig. 4, on the ends of said body section the material being reduced as shown at 5 to form tenons 6, said tenons terminating in arcuate portions 7. At the juncture of the tenons with the body portion a squared shoulder 9 is formed, the purpose of said shoulder being as will hereinafter appear.

Referring to the longitudinal frame members by the numeral 8 it will be seen from Fig. 4 that these members are of a section identical with that of the transverse member and are provided at the extremities with bifurcated portions 10 between the confronting inner faces of which the tenons 6 are pivoted.

Referring to the sectional view of Fig. 3 it will be seen that the before mentioned bifurcation is not complete, the lower or outer faces of the members 8 being left uncut as shown at 12. The inner faces of the bifurcated ends are squared as shown at 13 while the outward corners of said ends are cut arcuately as shown at 14.

Referring again to the sectional view of Fig. 4 it will be seen that between the inner faces of the frame members a central groove 15 is formed, and it is preferable that this groove should be slightly undercut. Along the bottom of the groove is laid a strip of packing material, preferably weather-proof felt. In order to assemble the frame above described, transverse bores here designated 16 are formed in the bifurcated end portions of the longitudinal members and in the tenons of the transverse members. Fitting said members together as shown in Fig. 2, they are pivotally secured by means of the fastening screws or pivot screws here designated as 17 and shown in Fig. 5. It will be seen that these screws have an outer plain cylindrical portion, an upper tapering portion, and a slotted head formed integrally

with the upper taper portion. The diameter of the cylindrical portion is approximately equal to that of the bores in the frame members, it will be seen that on entering said screw into the bores that the tapered portion may be engaged in the outer bifurcated sections thus providing a securing means for the cylindrical pivot or bearing portion.

To secure the glass in the frame, the latter is extended in the position shown in Fig. 2 and one edge of the glass then introduced into the groove of one of the frame members. The adjacent member is then pivoted on the bearing screw before described until the shoulders 9 contact with the squared inner faces of the longitudinal members, at the same time the inner face of the tenon contacting with the rear wall of the recess formed by the bifurcated portions. It will be seen that when the members are in rectangular relation as shown in Fig. 1 they are positively locked against angular movement inwardly. After the frame members have been closed in the position shown in Fig. 1 the final fastening is effected by means of a pivot screw passing through the registering bores of tenon and mortise, as described above.

It will be seen from the above description that I have provided a form of extensible or knock-down sash which may be opened or extended into an approximately straight line and which may thus be packed in quantities for shipment without wasting space. It will further be seen that to assemble this sash no tools, except possibly a screw driver is needed, and that putty, molding and such fastenings as have been applied in the past are not necessary in order to secure the present sash about its glass. It will further be observed that when so secured the frame is absolutely rigid, and that the resilient packing material in the bottom of the glass retaining grooves forms a weather-proof joint.

The improved sash may be made in any desired form or size and of any desired material, although as described it is conventional in shape and made of wood.

What I claim is;

A window sash, comprising side members, a top member, and a bottom member, each of said members being provided with a longitudinally extending glass receiving groove, the sides of said groove diverging inwardly whereby the base of the groove is wider than the opening thereto, and packing strips seated in the bases of said grooves.

In testimony whereof, I affix my signature, in presence of two witnesses.

BEDFORD KATUSKY.

Witnesses:
Jos. J. Pribyl,
C. H. Fisher.