

(No Model.)

H. A. CORDRAY.
CONSTRUCTION OF DOORS OR WINDOW SASHES.

No. 564,780.

Patented July 28, 1896.

Fig. 1.

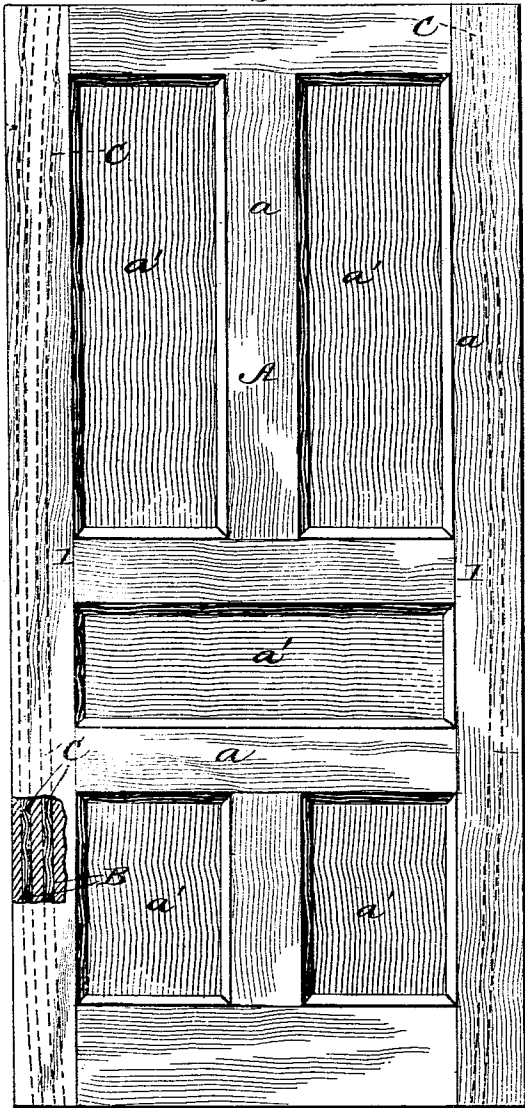


Fig. 3.

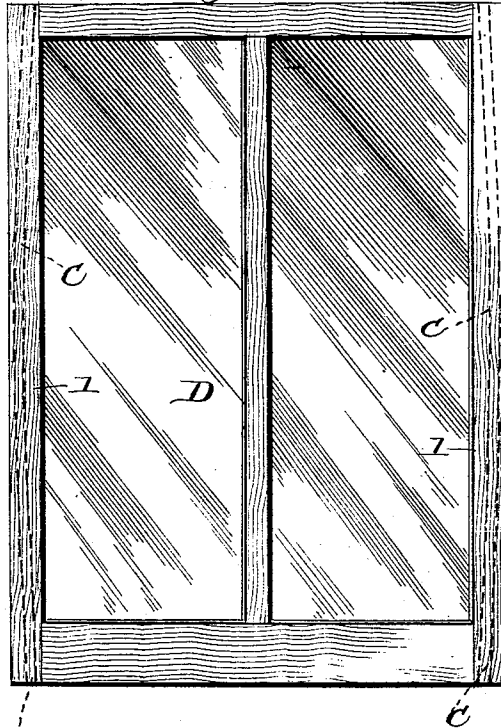


Fig. 4.

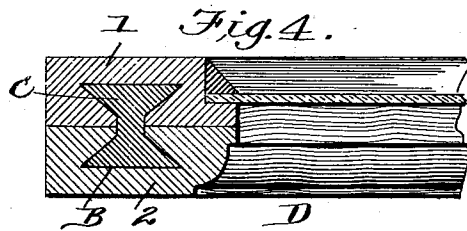
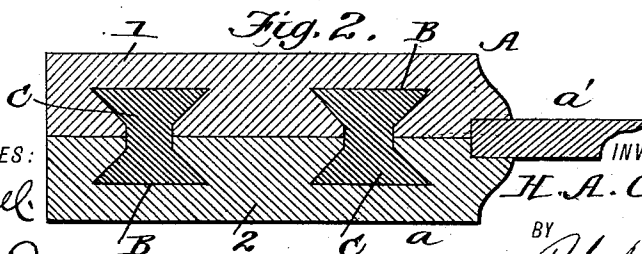


Fig. 2.



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HENRY A. CORDRAY, OF BRENHAM, TEXAS.

CONSTRUCTION OF DOORS OR WINDOW-SASHES.

SPECIFICATION forming part of Letters Patent No. 564,780, dated July 28, 1896.

Application filed January 8, 1896. Serial No. 574,712. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. CORDRAY, of Brenham, in the county of Washington and State of Texas, have invented an Improved Construction of Doors or Window-Sashes, of which the following is a specification.

This invention relates to certain improvements in the construction of doors and window-sashes, the object being to provide a door or window-sash which shall be constructed of two pieces of timber united by means of a key to prevent warping or twisting. Furthermore, the panel of the door or the pane of glass can be secured between said pieces of timber and locked therein by means of the key, if so desired.

Another object in constructing the door in this manner is to cheapen the construction of doors and window-sashes, inasmuch as heavy doors and sashes can be made up from exceedingly light material.

With these objects in view my invention consists in the details of construction herein-after fully described, and pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 is a view of a door constructed in accordance with my invention, parts being broken away to disclose the composite construction of such door. Fig. 2 is a cross-sectional view. Fig. 3 is a view of a window-sash, and Fig. 4 a cross-sectional view thereof.

Referring to the drawings, A indicates a door composed, as usual, of the frame portion *a* and the panels *a'*. The frame portion is preferably built up of two pieces of timber 1 and 2, arranged with their grain either in the same or opposite direction. Each piece of timber has one or more dovetail grooves B cut therein, which grooves are adapted to register when the timbers are placed face to face, and thus provide a double dovetail or X

shape channel or passage into which is passed the double dovetail or X shape key C, preferably made from wood much harder than the timbers 1 and 2, and not so liable to warp or twist.

The stiles of the sash D are built up of two pieces of timber 1 and 2, the same as the door, and such pieces have the dovetail grooves B arranged, as described, to receive the key C.

In making up the doors and windows, the pieces of timber 1 and 2 are first glued together, and then the key of hard wood is inserted, securely locking said timbers together.

Now in order to prevent any possible warping of the key, I may make the grooves upon a slight curve, as shown most clearly, at one side of both the door and window-sash, and the key being threaded into this curved channel it is obvious that it is under a certain tension or strain, which would act, in addition to the one already described, to prevent any possible warping of the door or window-sash. The glass can be secured between the timbers 1 and 2 the same as the door-panel, if desired, or said glass can be secured in the ordinary way by putty.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In the construction of doors and window-sashes, the combination with the timbers 1 and 2 having the registering dovetail grooves made in their opposing faces, said grooves being slightly curved, and the double dovetail key of hard wood, adapted to be forced into the said registering dovetail grooves, substantially as shown and described.

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

HENRY A. CORDRAY.

Witnesses:

M. M. GINN,

HENRY HARRISON.