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1,465,380

I. TAJIMA

SASH FRAME

Filed April 9, 1920

Fig. 1.

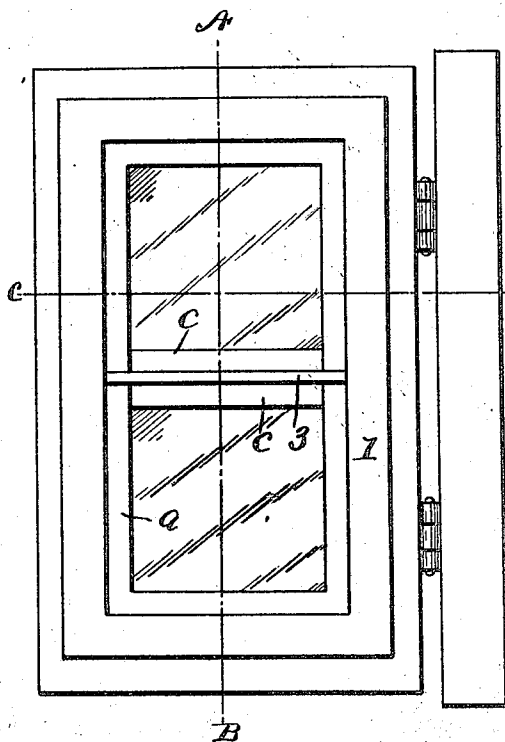


Fig. 2.

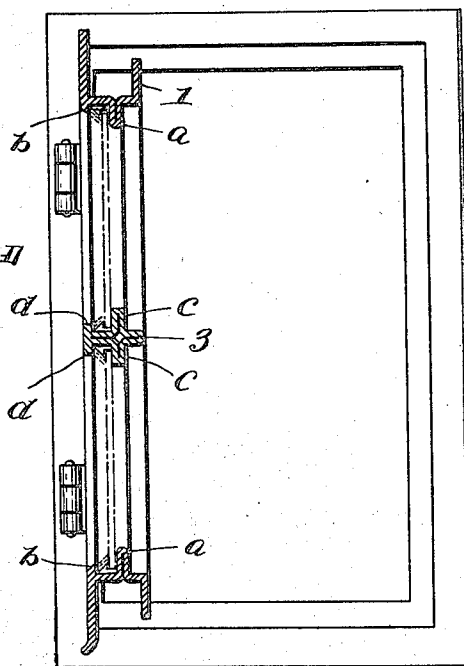
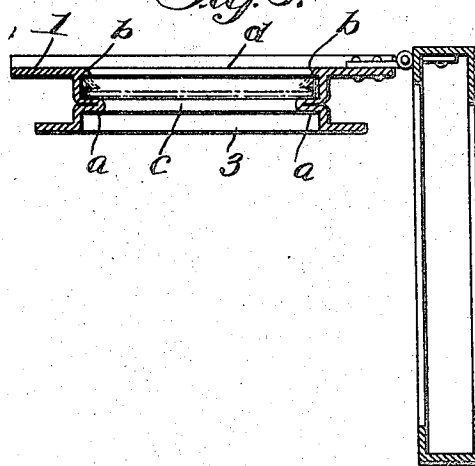


Fig. 3.



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SASH FRAME.

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To all whom it may concern:

Be it known that I, ICHIGO TAJIMA, a subject of His Majesty, the Mikado of Japan, residing at Sugamo-machi VI, No. 3 Kitatoshima-gun, Tokyo, Japan, have invented new and useful Improvements in Sash Frames, of which the following is a specification.

This invention relates to improvements in metal sashes for windows, wherein a frame member is formed from a single strip of sheet metal which is bent to a U-shaped cross section, said U-shape being open outwardly of the sash.

The object of the invention is to provide a sash frame which is stronger in construction than those now in use, possessing comparatively great resiliency, and which may be manufactured simply, with reduced cost of manufacture.

The accompanying drawing illustrates my invention.

In said drawing:—

Fig. 1 is a front view showing the new metal sash constructed for use in connection with a glass window.

Fig. 2 is a side view thereof, partly in section, taken on line A—B of Fig. 1.

Fig. 3 is a horizontal section taken on line C—D of Fig. 1.

Similar reference characters designate similar parts throughout the views.

According to this invention, the frame member 1 is formed from a single strip of sheet metal of suitable length, breadth and width. The sheet metal is first pressed and bent to a U-shaped cross section, a comparatively wide web *a* being formed on the said bar during the pressing and bending operations, as shown in Figs. 2 and 3. The bar of U-shaped cross section thus produced is then bent at three points so as to form a rectangular frame of predetermined size with the web *a* extending inwardly and

the said U-shape opening outwardly of the sash, as shown in the drawing. The bar is welded together at its ends by any suitable means.

The intermediate member 3 is horizontally disposed and is secured at its ends to the frame member 1 by suitable means, preferably by welding process. This member 3 consists of a single strip of sheet metal which is bent to a cross-shaped cross section, upwardly and downwardly extending flanges *d* being formed at the edge of one of the webs, as shown in Fig. 2. From this figure it will be seen that a pane of glass is positioned against the web *a* of the frame member 1, and the web *c* of the intermediate member 3, and is retained in position by putty and spring pieces 2, the latter being held by the flanges *b* and *d*.

As before described, the frame member 1 being formed entirely from a single strip of sheet metal by pressing and bending operations, it is stronger than that of the existing metal sashes which consist of several pieces assembled. Moreover, its U-shaped cross section permits the frame to effectively absorb any objectionable shocks by reason of its great resiliency, as the result of its outer side being open.

What I claim is:—

1. A metal sash, comprising a frame member of a U-shaped cross section having an inwardly extending web and a flange formed on the base part of said U-shape which is open outwardly of the sash, and an intermediate member of a cross shaped cross section having flanges for retaining putty and spring pieces.

2. A cross sectionally U-shaped metal sash member having an inwardly extending web and a flange on the base part of said U-shape, the said U-shaped portion of the said member being open on the outer side.

ICHIGO TAJIMA.