A. A. KRAMER.

WINDOW FRAME.

APPLICATION FILED MAR. 3, 1916.

1,226,776. Patented May 22, 1917.

Fig. I.

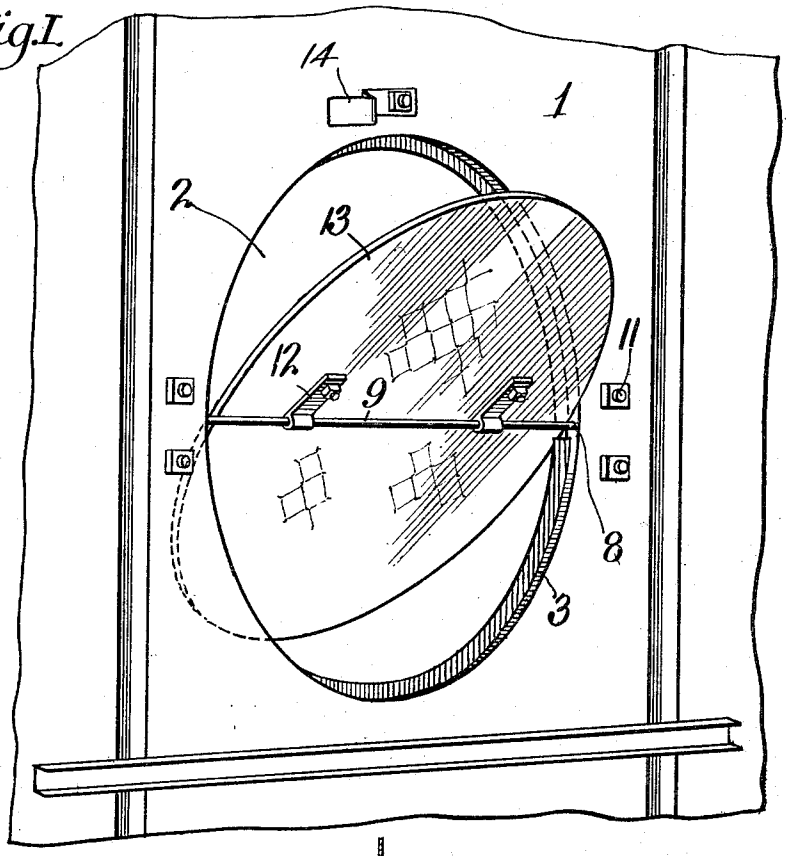


Fig. II.

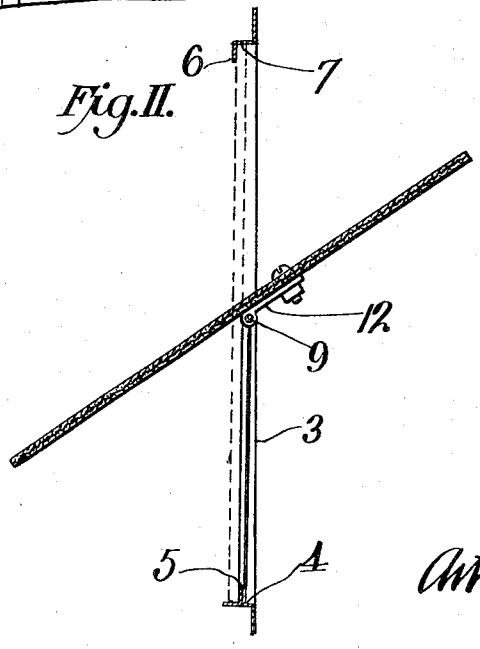
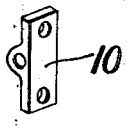


Fig. III.



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WINDOW-FRAME.

1,226,776. Specification of Letters Patent. Patented May 22, 1917.

Application filed March 3, 1916. Serial No. 81,834.

To all whom it may concern:

Be it known that I, ANDREW A. KRAMER, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented certain new and useful Improvements in Window-Frames; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to window frames and more particularly to a window frame for sheet metal structures, the principal object of the invention being to provide a frame that may be stamped from the metal of which the building is composed, to form supporting and stop members integral with the structure and thereby avoid the expense of an auxiliary frame and provide an economical and sightly structure.

In accomplishing this object I have provided improved details of structure, the preferred forms of which are illustrated in the accompanying drawings, wherein:—

Figure I is an interior perspective view of part of a building structure, including my improved frame and illustrating the mounting of a window in the frame.

Fig. II is a vertical section of the same.

Fig. III is a detail perspective view of one of the bearings for mounting the window rod.

Referring more in detail to the drawings:—1 designates part of the wall of a sheet metal building, having a window opening 2 formed therein by stamping out a portion of the material to leave the window aperture. In forming the opening the material is cut on a smaller diameter than the ultimate opening and the material along the edge of the opening is bent outwardly to form the annular flange 3 of the diameter of the ultimate opening. The said flange, from points slightly below the horizontal center of the opening, is back lapped within the flange and forming an outwardly opening seat 5 within which the lower portion of a window pane may rest, the upper portion of the flange being provided with an inwardly turned lip 6, forming an inwardly facing seat 7 for the upper part of the window pane.

Extending through apertures 8 in the flange 3, at the horizontal center of the opening, is a rod 9, the ends of which are rotatably mounted in bearing blocks 10 that are attached to the wall 1, adjacent the window opening, preferably by bolts 11.

Mounted on the rod 7 are brackets 12, and fixed to said brackets is a circular pane of glass 13, which is adapted to fit within the window opening, so that it may swing inwardly, as illustrated in Fig. II, and may seat in the upper and lower frame seats 7—5 closed. In order to hold the pane in closed position I provide a latch 14 which is preferably pivotally mounted on the outer face of the side wall of the structure and may swing down to form an obstruction for the upper portion of the window pane.

With the frame constructed and the window mounted as described, the window pane may be pivoted on its mounting to open or closed position, so that when it is open the interior of the structure may be properly ventilated, and when closed the lower edge of the window will abut against the stop 4, and the upper portion against the stop 6 to hold the pane in closed position. It is apparent that the upper seat 7 not only serves as a stop for the window pane, but further serves to prevent wind, rain or snow from entering the structure as the lip 6 extends over the window pane so that a direct opening is avoided and drip directed away from the edge of the pane.

It is also impossible for water passing down the pane to enter the structure from below the center of the pane as the upturned flange at the bottom will turn the same back to the exterior of the wall.

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

1. A sheet metal wall structure, having an opening therein and having an outturned flange integral therewith at the edge of the opening, the said flange having an inturned lip at one side of the center of the opening, a rod mounted in said flange at the center of the opening and extending thereacross and a window pane on said rod adapted for inward movement through the unlipped portion of the flange and for abutment against the said instanding lip.

2. A sheet metal wall structure having an opening therein and having an outturned flange integral therewith at the edge of the

opening, the said flange having an inturned lip at one side of the center of the opening, a rod mounted in said flange at the center of the opening and extending thereacross, a window pane on the said rod adapted for abutment against the said inturned lip, and a stop on said wall member adapted for movement into the path of the window frame to prevent movement of the pane to open position.

3. A sheet metal wall comprising a circular opening and having a flange integral therewith extended outwardly from the opening, an inturned lip on the flange above the horizontal center of the opening, forming an inwardly opening seat, a back turned lip on the flange below the horizontal center of the opening having an inturned lip forming an outwardly facing seat, and a window pivotally mounted in said opening and adapted for seating in said seats substantially as set forth.

In testimony whereof I affix my signature.

ANDREW A. KRAMER.

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