

F. I. FISCHER.
WINDOW FRAME AND SASH.
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950,765.

Patented Mar. 1, 1910.

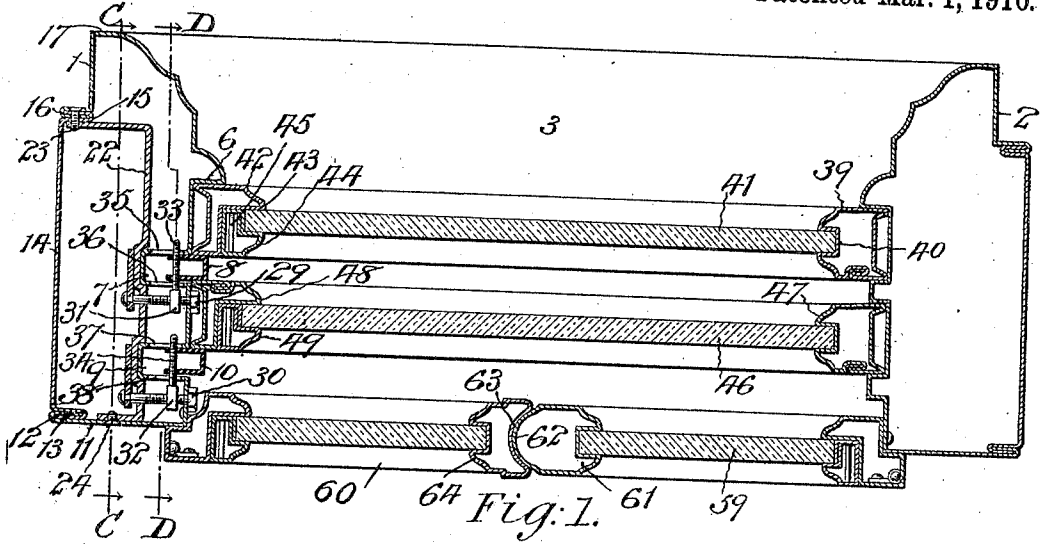


Fig. 2.

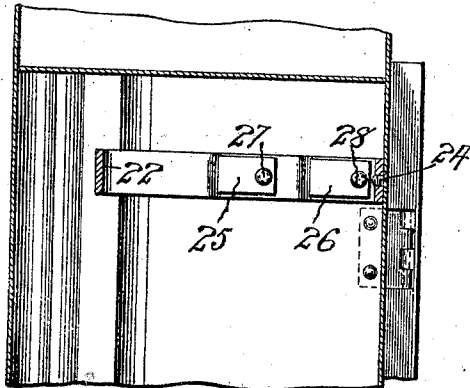
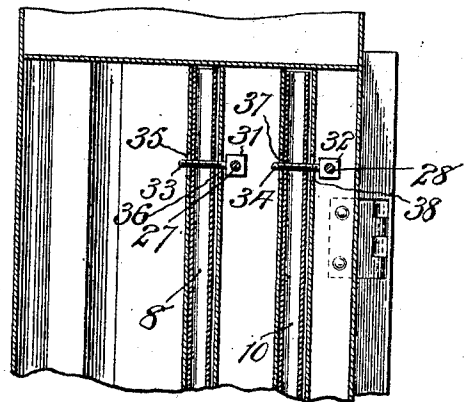


Fig. 3.



Witnesses:
Henry Thiem.
J. George Barry.

Inventor:
Florence I. Fischer
By Brown & Wood
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UNITED STATES PATENT OFFICE.

FLOREAN I. FISCHER, OF NEW YORK, N. Y.

WINDOW FRAME AND SASH.

950,765.

Specification of Letters Patent.

Patented Mar. 1, 1910.

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To all whom it may concern:

Be it known that I, FLOREAN I. FISCHER, a subject of the Crown of Roumania, and resident of the borough of Manhattan, in the city and State of New York, have invented a new and useful Window Frame and Sash, of which the following is a specification.

My invention relates to a window frame and sash, the object being to provide an all-metal window frame and sash in which the parting strip may be readily and effectively adjusted to remove or replace the sash.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a transverse section through the window frame and sash, Fig. 2 is a partial vertical section in the plane of the line C—C of Fig. 1, and Fig. 3 is a similar section in the plane of the line D—D of Fig. 1.

The frame and sash are constructed of sheet metal of just sufficient thickness to give the structure the required stability and this sheet metal may be tinned or galvanized to protect it from rust. The frame is made hollow, the metal being crimped, off-set and depressed at the proper points to produce the necessary retaining shoulders while the sash frames are made to fit the grooves formed by depressing the metal in the frames and they too are made hollow and provided with grooves for the reception of the glass. The glass, in turn, is held in position by a removable metal strip, screws being employed to hold the strip in position while the parting strips made of metal and of channel formation are placed in position and held in position by screw bolts in such a manner that they may be slid outwardly and inwardly to permit the removal of the upper and lower sashes when so desired.

Referring to the drawings, the side frames are denoted by 1 and 2, and the bottom frame or sill by 3. These frames may be connected by mitering the frames at the corners and soldering the parts or otherwise interlocking them. The side frame 1 for instance, may be formed of a strip of sheet metal crimped or swaged into the form shown in cross section in Fig. 3 with a shoulder 6 for engaging the outer face of the upper sash, with a depression 7 for the reception of a parting strip 8, a second depression 9 for a parting strip 10 and after

being turned outwardly to form the inner facing 11 may have its edge 12 interlocked with the edge 13 of a side strip 14, the opposite edge of said strip 14 being in turn interlocked at 15 with the edge 16 of the frame 1, the latter being turned back from its outer face 17 to form a notch or recess for the reception of the building material in which the window frame is to be set. In a similar manner, the frame 2 is crimped, depressed and interlocked to form the frame on the opposite side of the window and the sill and top frame (not shown) may be crimped, projected and depressed to form seats for the sash and ledges to prevent the rain and wind from beating in underneath the bottom of the lower sash or over the top of the upper. The hollow side frames 1 and 2 form spaces for the reception of the window weights not shown.

For the purpose of mounting the parting strips 8 and 10 in such a manner that they may be removed or rather moved backwardly or inwardly out of the way to permit the window sash to be removed from the window frame, I provide a diaphragm 22 within the frame 1, the opposite edges of the diaphragm being firmly united to the frame 1, as, for example, by screws 23, 24, the side diaphragm 22 forming a support for pieces 25, 26, which may be soldered to the face of the diaphragm and in which screws 27, 28, are swiveled, the said screws passing through the frame 1 opposite the window sash where they are provided with heads 29, 30, fixed thereon for rotating the screws. These screws 27, 28, pass through and register with screw threaded holes in the heads 31, 32, of pins 33, 34, the latter passing from front to rear through the walls of the channel parting strips 8 and 10 and also through slots 35, 36, and 37, 38, in the frame 1, the said slots being of sufficient length to permit the pins 33, 34, to move bodily together with the parting strips toward the diaphragm 22 out of the way of the sash or away from the diaphragm 22 into the position shown in full lines, Fig. 1, to hold the sash in position.

The sash for the reception of the glass is formed of sheet metal crimped into shape to form sockets for the reception of the glass, the sash at one end of the glass, denoted by 39, being provided with a depression 40 U-shaped in cross section to fit the edge of the glass 41 while the sash 42 at

the opposite side is provided with a recess 43 normally open on its inner side to receive the glass and closed to hold the glass in position by means of a hollow strip of metal 5 44 which overlaps the edge of the glass and also passes by the edge of the glass into contact with the face of the recess 43, the said strip 44 being held in position by a screw 45 screwed into the wall of the recess 43 with its head flush with the inner face of the 10 strip 44. In like manner, the glass 46 of the lower sash is held in position in the hollow metallic sash 47, 48, by means of a removable strip 49.

15 In the event an inner protecting window is required, as, for example, in extremely cold weather, it may be set up after the manner of storm doors with glass 59 extending from the top to the bottom, the door 20 frame 60 being made of sheet metal, crimped or swaged into proper shape in cross section to receive the glass and hinged to the frames 1 and 2 of the window, the two doors

meeting, as shown in Fig. 1, where the sash 61 on the one is provided with a rounded 25 face 62 to enter a curved depression 63 in the opposite sash 64.

What I claim is:—

The combination with the side frame of a window provided with a recess for the re- 30 ception of a parting strip, the walls of the recess being provided with slots, of a parting strip movable outwardly and inwardly in said recess, pins extending from front to rear through the parting strip and slots, and 35 screws swiveled in the frame and engaged with the heads of the pins for operating the parting strips.

In testimony, that I claim the foregoing as my invention, I have signed my name in 40 presence of two witnesses, this 18th day of October 1907.

FLOREAN I. FISCHER.

Witnesses:

F. GEORGE BARRY,
HENRY THIEME.