Aug. 30, 1966 A. PIROZZI 3,269,452

EXTRUDED COMBINATION DOOR OR WINDOW

Filed June 10, 1963

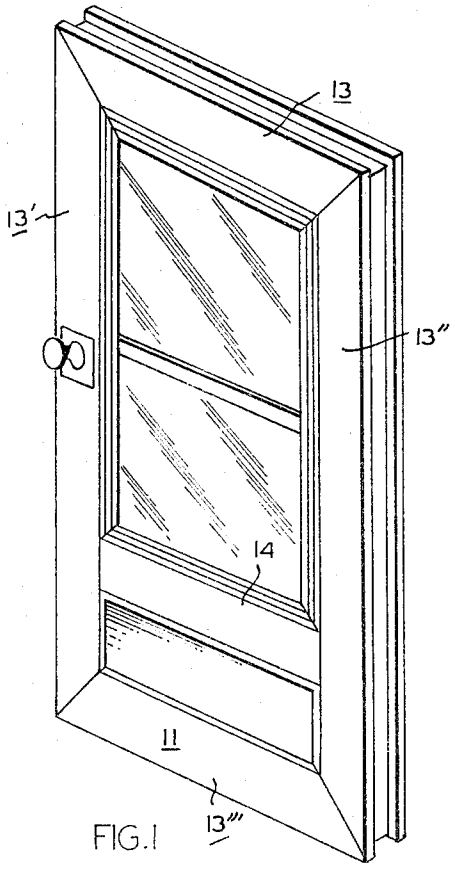


FIG. 1

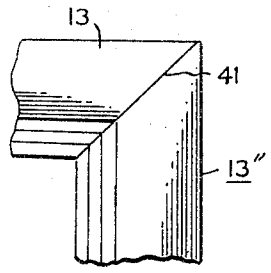


FIG. 4

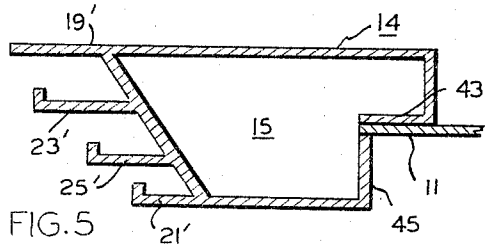


FIG. 5

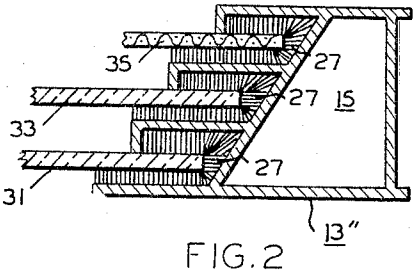


FIG. 2

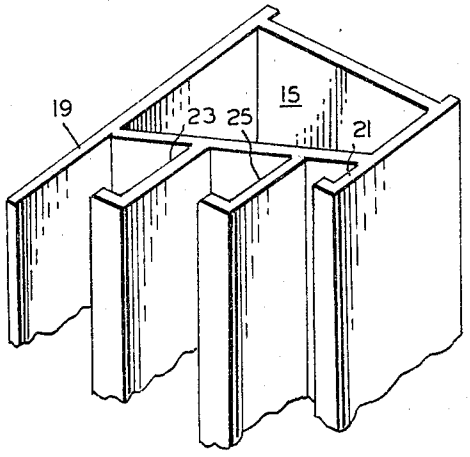


FIG. 3

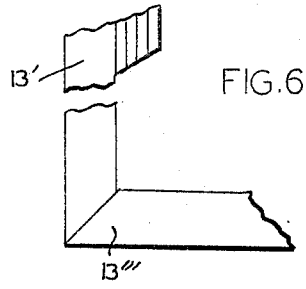


FIG. 6

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EXTRUDED COMBINATION DOOR OR WINDOW

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The present invention apertains to framing construction suitable for self-storing type combination all-weather doors and windows.

An important purpose of the invention is the provision of simplified structure admitting of the use of a common extrusion for the principal framing or construction thereof.

It is an object of the invention to permit a single extrusion to serve as the entire door or window perimeter structure, requiring only mitering in appropriate lengths for convenient and rapid assembly.

A further feature of the invention resides in the provision of such a construction incorporating triple tracks, for glass and screen removable inserts, in precise alinement as a part of the perimeter supporting structure and relative to the adjacent sections to be mitered together. The track and extruded body are both mitered and welded where mitered. The triple track preferably accommodates two glasses and a single screen for year-round storage, such that for winter use the glasses are extended to provide a weather-proof storm closure, or the like; and for summer use the glasses are retracted to overlying positions with the screen covering the opposite half, enabling free circulation through one half of the door or window area.

For commercial installation, a typical door construction may comprise simply the common extruded perimeter framing member with the glass and screen filling. However, for some commercial installations, as well as the usual household use, the door will include a lower kickplate with the window area being proportionately smaller. In such an arrangement, the common extrusion includes a section omitting the track or from which the track is removed, which forms the lower portion of the door to accommodate the kickplate. Also, the lower lateral track supporting structure may be suitably recessed and nicked to receive the kickplate, such supports preferably being formed in separate dies and appropriate length pieces included for assembly with the common extrusion, the only difference being the recessed area.

Thus, the principal objective of the present invention is the provision of a simplified combination door and window construction incorporating triple tracks for dual glasses and screen storage.

The foregoing construction will be more apparent from a detailed consideration of the accompanying drawing, wherein:

FIG. 1 is a view in perspective of a typical door incorporating the construction of one embodiment of the invention.

FIG. 2 is a view in section of the common perimeter extruded type channel shown including a dual glass and a single screen in its three tracks.

FIG. 3 is a view in perspective of a portion of the common channel as shown in section in FIG. 2.

FIG. 4 is an enlarged view of a mitered joint for the common extrusion.

FIG. 5 is a view in section of an extruded channel employed for accommodating a kickplate; and

FIG. 6 is a view of a detailed corner of the door of FIG. 1, to show construction in the absence of the triple track.

In FIG. 1 there is depicted a door construction which incorporates the present invention in the embodiment including a kickplate **11**.

The principal framing structure includes the common extrusion **13**, **13'** and **13''**.

In FIG. 2 there is illustrated a typical cross-sectional view of the extruded structure common to sections **13**, **13'** and **13''**. Considering both the section of FIG. 2 and the perspective of FIG. 3, it will be apparent that the common channel **13''** is made up of a hollow shell-like area **15** which lends supporting strength while decreasing the weight of suitable material, such as aluminum or magnesium, from which the common member **13''** is extruded. Formed integrally with the hollow channel section are the triple tracks lying respectively between the flange-like ribs **19** and **21** and intermediate ribs **23** and **25**. The overall channel configuration is, of course, strengthened by the flange-like extensions **19** and **21** and the intermediate ribs **23** and **25** are somewhat protected therebetween.

Felt **27** or suitable padding lines the ribs to provide weather-tight fitting for the glasses **31** and **33** and the screen **35**.

In the simplest type construction for a storm door or window, the common channel type extrusion **13''** would form the entire perimeter with the screen **35** and glasses **31** and **33** being supported in the triple tracks forming the inner edges of such a common framing member, with the sections thereof being suitable mitered together, as shown by the 45° typical miter **41** of FIG. 4. (It will be understood that mitering need not be done along 45° angles, but the structure admits of the employment of all conventional type mitered joints.) However, in the door construction depicted in FIG. 1, a kickplate **11** is added which adds to the cost of construction somewhat, because it preferably uses a separate extrusion in the form of the lateral framing member **14** shown in section in FIG. 5. The framing member is substantially the same as that depicted in FIG. 2 at **13''** including generally rectangular framing structure including the hollow **15'** with the flange-like edges **19'** and **21'** defining the outer track supporting structure and including identical inner track ribs **23'** and **25'**. The only difference is in the provision of the recess formed by moving boundary wall **43** of member **14** inwardly to provide a receiving area for the kickplate **11**. The other boundary forming wall **45** is preferably nicked or recessed to receive the upper edge of the kickplate **11**.

Also, when the kickplate **11** is incorporated in the structure, it is unnecessary that the tracks extend the full length of the members **13'** and **13''**. Thus, in FIG. 6 the tracks along the inner or righthand edge of member **13'** are shown discontinued or severed at the level corresponding to the tracks of the member **14** (FIG. 1) to permit the lateral member **14** and kickplate **11** to fit flush with the vertical framing sections **13'** and **13''**. The lower lateral framing channel **13'''** may be identical to the common extruded members **13**, **13'** and **13''**, without the tracks or with the tracks removed.

While the invention has been illustrated and described with respect to the more complicated embodiment thereof, as a door and kickplate, it will be understood that the principles obtaining are equally applicable to windows and doors wherein the common type extruded framing **13** extends about the perimeter to form the same without any kickplate **11** or lateral member **14**.

Other and further modifications of the invention will occur to those skilled in the art, and accordingly, it is not intended that the invention be limited by the particular showing and description herein, but rather by the scope of the appended claims, wherein:

What is claimed is:

1. A storm door comprising in combination a four section perimetral framing member cut from a common

extrusion and mitered together in box-like rectangular configuration; said framing member having four walls enclosing a hollow, one of said walls being inclined relative to the wall opposed thereto; said framing member including triple track forming flanges integral with the inclined wall, in spaced apart relation therealong and extending inwardly of the box-like configuration at least along a major portion of the member, said flanges having their outer ends substantially normal thereto to receive and retain weather stripping adjacent to each flange; said flanges being also mitered together; and a pair of glasses each approximately equal to one-half of the area enclosed by said member slidably disposed within adjacent tracks and a screening member of generally the same size as the glasses disposed within and slidable along another track.

2. Closure construction comprising in combination a plurality of segments of an extruded framing member; each segment having a box-like channel body including spaced apart guiding flanges along its inner edge; said channel having a tapered wall and said guiding flanges comprising a plurality of integrally formed ribs extending in substantially parallel relation along said wall and wherein at least certain of the ribs are contoured to retain weather stripping; said segments being secured together in open rectangular configuration along the periphery thereof to outline a closure; said ribs being disposed along the inner edges of the member and secured together along the inner periphery of the rectangular configuration; said ribs defining triple tracks adapted to receive glass and screening inserts for movement therealong; and a pair of glasses each approximately one-half the area enclosed by the configuration disposed within and slidable along a pair of said tracks, respectively; and a screening member of generally the same size as the glasses disposed within and slidable along a further track.

3. A storm door comprising in combination a multiple section perimetral framing member cut from a common extrusion and mitered together in box-like rectangular configuration; each section comprising a hollow box-like channel having at least one tapered wall; said framing member including along a major portion of its length and formed integrally with said wall triple track forming flanges extending inwardly of the configuration and precisely mated along two of the mitered joints; said ribs being spaced apart and contoured to receive and retain weather stripping filling at least a portion of each space between the ribs; a lateral section framing member of similar configuration as said member and including a recessed wall; said lateral member extending between opposite sides of the framing member at an intermediate position; a kickplate disposed within said rectangular configuration along the framing member where the triple track is absent and along said lateral framing member against said recessed wall; and a pair of glasses each approximately equal to one-half of the area enclosed by said tracks slidably disposed within a pair of tracks and a screening member of generally the same size as the glasses disposed within and slidable along a further track.

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