

[54] DOORFRAMES
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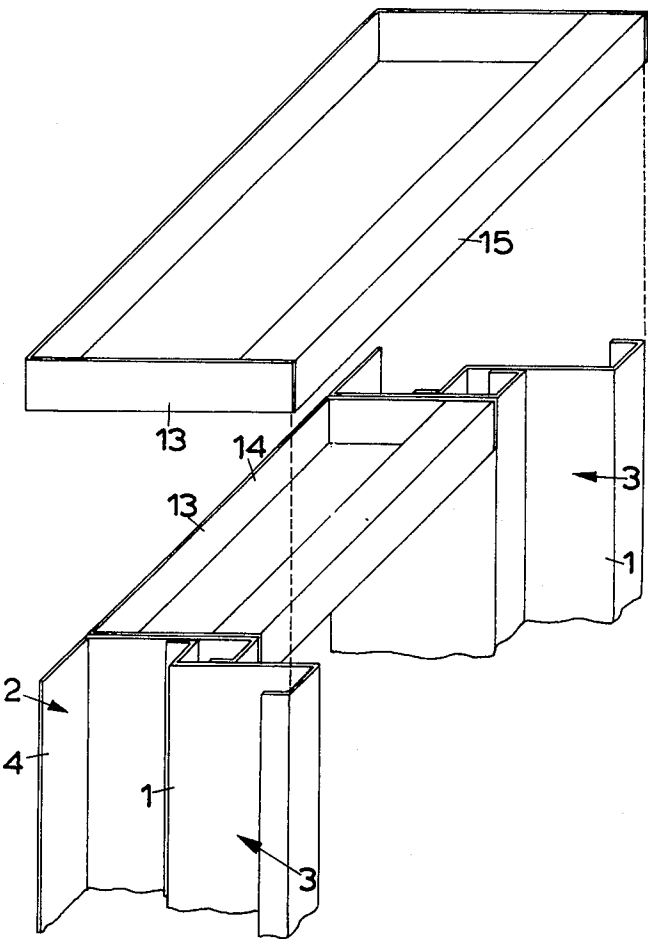
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Mosher

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[58] Field of Search 49/505; 52/212, 217

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[57] ABSTRACT
A doorframe or the like including a pair of stiles which are each composed of two elongated members transversely slidably adjustable to provide a variable width to the stiles and thus the doorframe.

5 Claims, 2 Drawing Figures



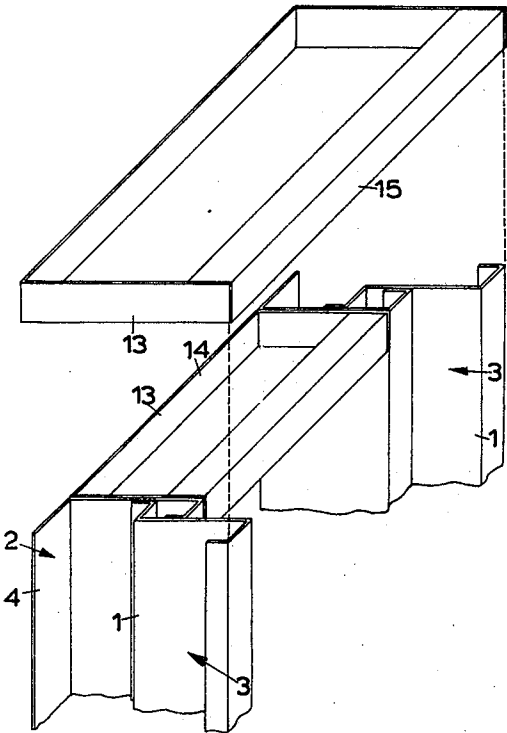


FIG. 1

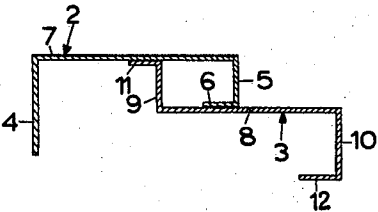


FIG. 2

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DOORFRAMES

This invention relates to doorframes and more particularly, but not necessarily, to doorframes of the type used to define the entrance to a lift.

Owing to inaccuracies in building, the shaft of a lift is usually off the vertical at least to some extent. For this reason, it has been the practice to manufacture the doorframes after site measurements of the shaft have been taken, or to manufacture frames larger than the required size. Further, when the frames are installed relative to the lift guide rails, the shaft wall often has to be cut to a suitable thickness or filler pieces have to be inserted between the frame and the shaft wall.

It is the object of this invention to provide a doorframe which will enable the installation of a lift entrance to be facilitated with consequent reduction in the costs of installation.

According to this invention there is provided a stile of a doorframe comprising two elongated members transversely slidably adjustable to provide variable width to the stile.

The invention also provides a doorframe having a pair of stiles as above defined.

Further features of the invention provide for the top rail of the frame to be adjustable in length to accommodate different sizes of openings.

A preferred embodiment of the invention will be described below by way of example only, reference being made to the accompanying drawings in which:

FIG. 1 is an oblique projection of a doorframe; and

FIG. 2 is a typical cross-sectional view through one of the stiles of the doorframe.

In this embodiment of the invention a doorframe is to be used for defining door openings through the lift shaft walls of a building.

The components of the doorframes are preferably made from a sheet metal strip. The latter is cold rolled to the desired shape before being cut to different sizes depending on the size of the doorframe. A typical cross-section of the doorframe is shown in FIG. 2 where a stile 1 of a doorframe is constituted by two elongated members 2 and 3 in accordance with the invention.

One member which defines the innermost surface of the stile in use and is therefore called the inner member 2 is channel shaped and has one flange 4 forming one end of the frame. The other flange 5 is smaller and is inwardly lipped as indicated at 6. The web 7 of the channel-shaped member 2 is to face inwardly of the doorframe.

The other or outer member 3 comprises in cross-section a web 8 with a flange 9, 10 at each end thereof. One flange 9 is outwardly lipped as indicated by numeral 11 whilst the other flange 10 is inwardly lipped as indicated by numeral 12.

For use the two members are juxtaposed as shown in FIG. 2 to form a stile 1. The lip 6 of the channel-shaped member 2 is to abut the web 8 of the other member 3, whereas the lip 11 of the said other member 3 is to abut the web 7 of the channel-shaped member 2. The flanges 5 and 9 of the two members are dimensioned such that the two webs 7 and 8 thereof are parallel when the members are thus relatively positioned.

The distance between the two outer flanges 4 and 10 of the frame can therefore be varied by merely trans-

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versely sliding one member over the other in a direction parallel to their webs 7 and 8.

Once the desired width of the frame, being the distance between the outer flanges 4 and 10, is determined, the two members are secured to each other. A hole through the web 8 of the said other member 3 and through the lip 6 of the channel-shaped member 2 and self-tapping screws through the holes, was found to be sufficient to retain the two members together.

The top rail 13 of the doorframe is preferably made to the same cross-section as the stiles 1 and is conveniently cut from the same cold rolled strips of sheet metal. Again two members 14 and 15 constitute the top rail 13 thus making the top rail 13 adjustable in the same way as the stiles.

The top rail 13 is secured at the upper end of the stiles and between the stiles by means of fasteners. It is considered that grinding the cut ends of the top rail and abutting them against the stiles will provide a neater appearance than if the top rail is welded.

It will be appreciated that with such an adjustable doorframe, there will be no delay in the installation of the doorframes after a lift shaft has been built. The adjustable doorframe will allow compensation of discrepancies in the shaft wall and in the distance between the lift guide rails and the door opening. The cutting of walls or the use of filler pieces is therefore generally obviated.

It is considered that although the cost of such frames will be increased since these frames consist of basically two frames one over the other, the reduced cost in labour and inconvenience in installation will warrant their use.

Further, the frames are particularly well suited for use as knock-down frames which are easy to store and transport. Also, the invention is not confined to this particular application and may be used as ordinary doorframes to accommodate different wall thicknesses. In this latter case the frame may be installed after plastering and the step on the inner side of the frame may act as the rebate thereof for the door.

To accommodate doors of different widths, the top rail may be assembled from a plurality of equal lengths. End spacers will allow for a doorframe of any desired width to be built.

The doorframe above described need not be manufactured by cold rolling the strip of sheet metal but may optionally be manufactured by the conventional bending of individual strips of sheet metal.

What I claim as new and desire to secure by Letters Patent is:

1. A stile of a door frame comprising:
 - a first elongated member having a first web portion,
 - a second elongated member having a second web portion,
 - said first and second members being transversely and slidably adjustable to provide variable width to the stile,
 - said first elongated member being channel-shaped in cross-section and comprising said first web portion and a pair of first flanges extending from said web portion adjacent each longitudinal edge thereof, one of said first flanges having an inwardly extending lip portion abutting and connected to said second web portion, and
 - said second elongated member comprising said second web portion and a pair of second flanges ex-

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tending from said web portion adjacent each longitudinal edge thereof, one of said second flanges extending from one side of said second web portion and the other of said second flanges extending from the other side of said second web portion, one of said second flanges having a lip portion abutting said first web portion.

2. A stile as claimed in claim 1 in which the lip portion of said one flange of the second elongated member is outwardly lipped such that the web portions of the first and second elongated members extend substan-

tially parallel.

3. A stile as claimed in claim 2 in which the other flange of the second elongated member is inwardly lipped.

4. A doorframe including a pair of stiles as claimed in claim 1.

5. A doorframe as claimed in claim 4 in which a top rail is provided for the doorframe and comprises elongated members similar to the first and second members of the stiles.

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