Aug. 7, 1945. H. D. ELWOOD 2,381,810

FIRE ESCAPE CHUTE SUPPORT

Filed July 21, 1943

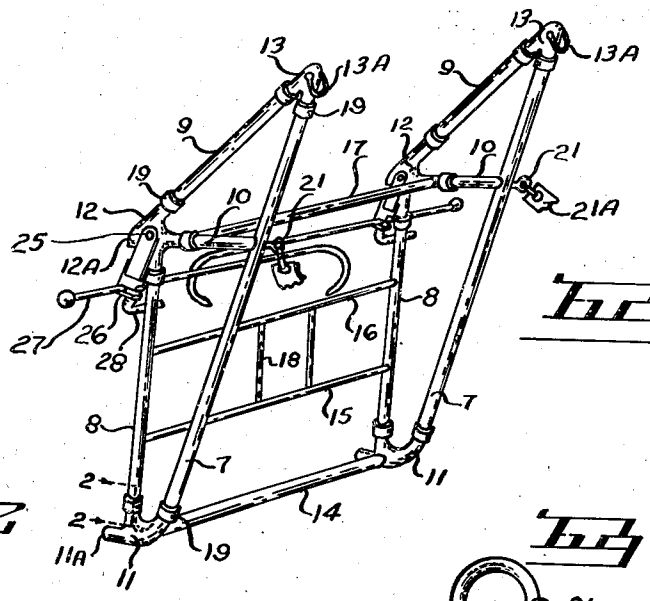


Fig 1

Fig 2

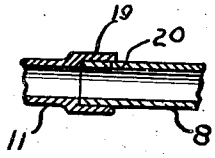


Fig 3

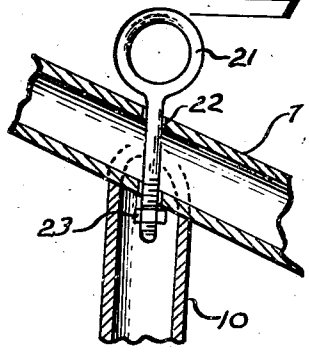
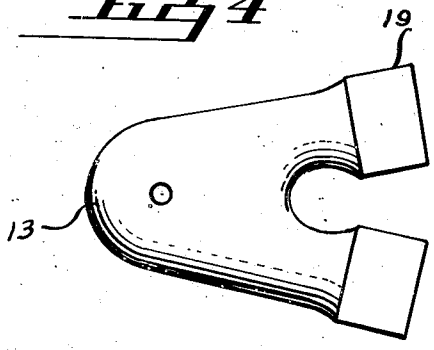


Fig 4



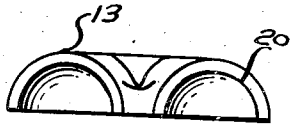


Fig 5

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FIRE ESCAPE CHUTE SUPPORT

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10 Claims. (Cl. 227—39)

This invention relates to fire escape apparatus and particularly to supports or mountings for flexible chutes.

An object of the present invention is to generally improve chute supports or terminal frames and the method of constructing the same. In Patent 2,297,544 I disclose a terminal frame or support constructed of a plurality of hollow steel tubes welded to one another. In this application I disclose a terminal frame or support, which has the same general characteristics as the one previously disclosed, but a support which is much more economical to manufacture and simpler to assemble, and one which is comparatively stronger in construction.

In the improved device herein disclosed, I use hollow tubing as previously described, but instead of welding the tubular sections direct to one another, I interpose pre-formed connecting members at the principal joints. This method of construction permits me to use stock with straight cut ends and eliminates the use of saddle joints. This method of construction also enables me to employ ordinary labor in assembling the frames instead of highly skilled welders. This reduces the time required to assemble a frame and at the same time produces a frame which has much greater structural strength.

The foregoing objects and advantages and others will become more apparent as the description proceeds, reference being made from time to time to the accompanying drawing forming a part of this disclosure, in which drawing:

Fig. 1 is a perspective view of a terminal frame or support for a flexible chute embodying my invention.

Fig. 2 is a fragmentary section on the line 2—2 of Fig. 1.

Fig. 3 is a fragmentary section illustrating the manner in which the carrying eyebolt is secured.

Fig. 4 is a plan view of a stamping comprising one-half of a connecting member.

Fig. 5 is an end view of the stamping shown in Fig. 4.

Referring now more particularly to the drawing it will be understood that in the embodiment herein disclosed, the terminal frame has two sides, each of which comprises a front strut 7, back struts 8 and 9, cross member 10, and intermediate telescoping members 11, 12, and 13, all of which are formed and secured together as hereinafter described. The two sides are connected together by a plurality of horizontal tie members 14, 15, 16, and 17. The tie members 15 and 16 are preferably reinforced by vertical members 18. It will be noted that the telescoping member 11 is provided with an extension 11*a* which forms a foot which is intended to ride against the outside wall of the building when the device is in use. The telescoping member 12 is also provided with an extension 12*a*, which overhangs the strut 8 to form a bearing member which rests on top of the window ledge when the device is in use. With this construction and arrangement it will be seen, as previous disclosed, that practically all of the weight of the device is carried on the bearing member 12*a*, and the foot 11*a* when the device is in use. Each of the connecting members 11, 12, and 13, is preferably formed by stamping out two matched sections (Figs. 4 and 5), and welding them together to form the respective members. Each of the members 11, 12, and 13, is formed with a flared portion 19, which form sockets 20 (Fig. 5), into which the ends of the struts 7, 8, 9, and 10 are adapted to telescope. The struts and the connecting members are then welded together and finished in any suitable manner.

Eyebolts 21 are extended through holes 22, formed in the front struts 7, and are provided with nuts 23, which are welded in position before the struts are assembled. The eyebolts 21 are adapted to secure the carrying strap 21*a* to the frame. The connecting members 13, are provided with rings 13*a* to which the flexible chute (not shown) is attached.

The device is provided with the same stabilizing mechanism as disclosed in the patent referred to hereinabove.

This stabilizing mechanism comprises U-shaped brackets 24, which are bolted as at 25, to the connecting members 12. The bracket 24 is provided with a bearing clamp 26, hooked rod 27, and handle 28, which function as disclosed in the patent hereinabove referred to.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. In a device of the character described, the combination of two end members secured together by a plurality of tie members, each of said end members consisting of a substantially vertical strut, a short angular strut, a long angular strut, telescoping members connecting the respective ends of said long strut to one end of said vertical strut and to one end of said short angular strut, and a telescoping member connecting the other end of said vertical strut to the other end of said short angular strut.

2. The combination defined in claim 1, in which there is a cross member extending from

said last named telescoping member to said long strut.

3. The combination defined in claim 1, in which there is a cross member extending from said last named telescoping member to said long strut, and at least two of said telescoping members are provided with bearing members.

4. The combination defined in claim 1, in which each of said telescoping members is made of a pair of stampings welded together, and said telescoping members are secured to said strut by welding.

5. The combination defined in claim 1, including universally movable anchoring means secured to said last named telescoping member.

6. The combination defined in claim 1, including universally movable anchoring means secured to said last named telescoping member, and chute carrying means secured to one of said other telescoping members.

7. The combination defined in claim 1, in which each of said telescoping members is made with at least two sockets adapted to engage the ends of said struts.

8. A terminal frame for a flexible chute comprising two end members adapted to be supported at an angle against a wall, said end members being secured together by a plurality of transverse tie members, each of said end members consisting of a plurality of tubular struts secured together by intermediate telescoping members to substantially form a trapezoid.

9. The combination defined in claim 8, in which two of the telescoping members of each said end member are provided with bearing elements, and at least one of the telescoping members of each end member is provided with means to secure the device to a building.

10. The combination defined in claim 8, in which one of the telescoping members of each end member is provided with means to support a flexible chute.

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