

[54] **FRAME FOR HANGING FOLDERS IN FILE CABINETS**

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[51] **Int. Cl.**..... **A47b 63/00**

[58] **Field of Search**.... 312/183, 184; 211/177, 184; 220/22-22.6, 8

[56]

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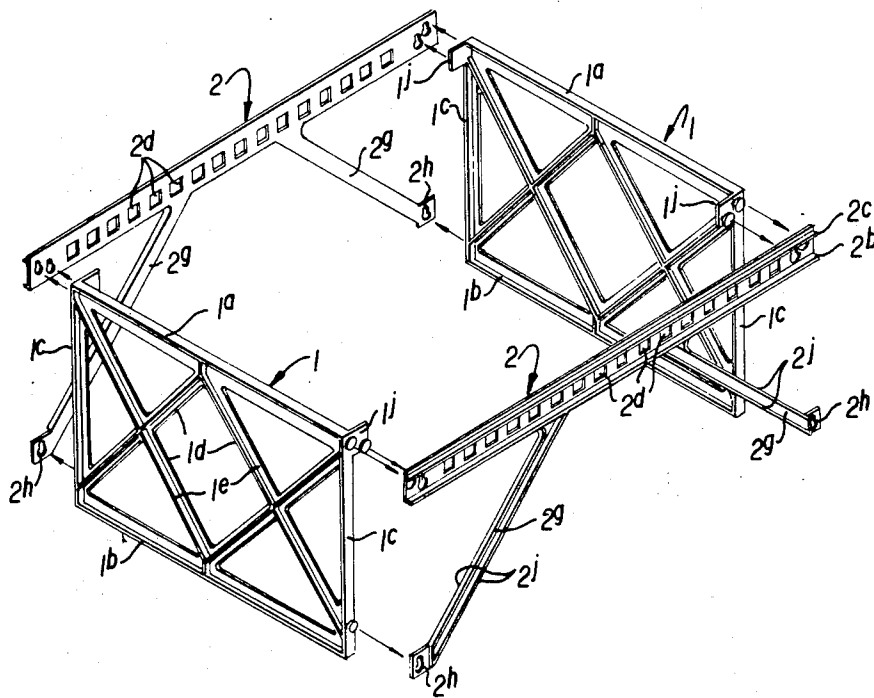
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**ABSTRACT**

The frame for hanging folders in filing cabinet drawers includes a pair of spaced plastic end panels adapted to be positioned within the front and rear of the drawer. A pair of plastic side rails having a series of spaced holes therein for receiving the rods of hanging folders extend between the upper portions of the end panels at opposite sides thereof, the side rails having downwardly and outwardly diverging intergral struts terminating opposite the lower side portions of the end panels. And quick detachable means are provided for removably connecting the overlapping ends of said side rails and struts to the end panels respectively.

**3 Claims, 7 Drawing Figures**



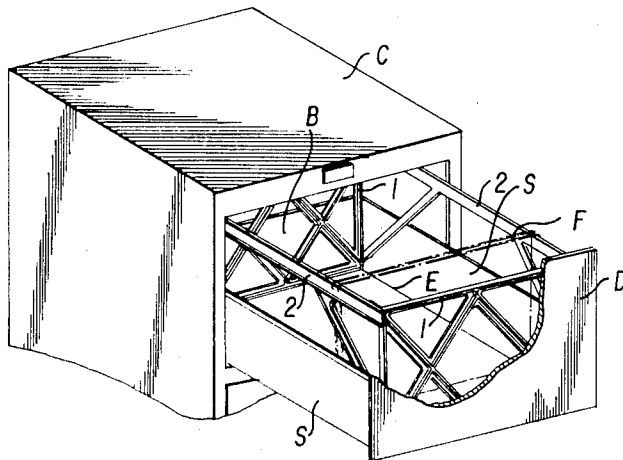


FIG. 1

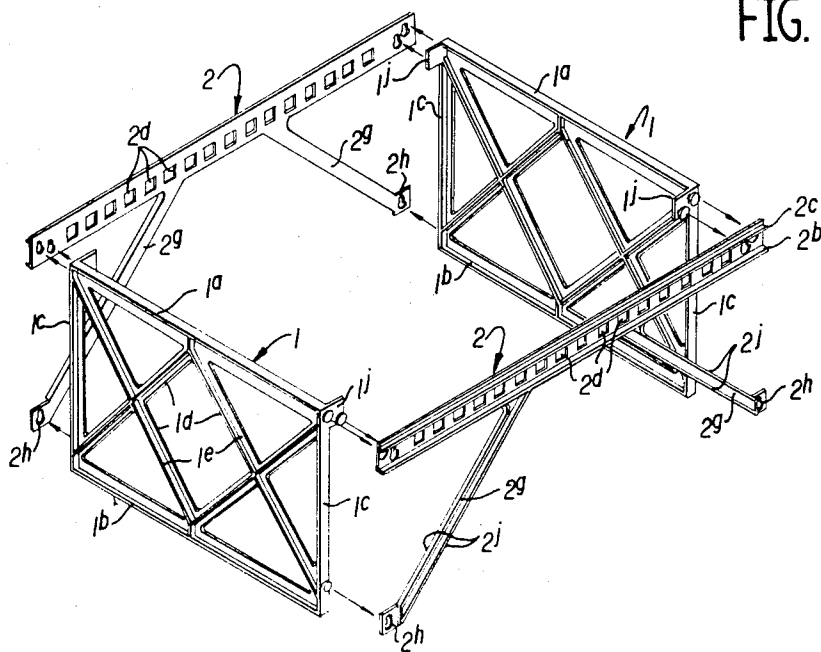


FIG. 2

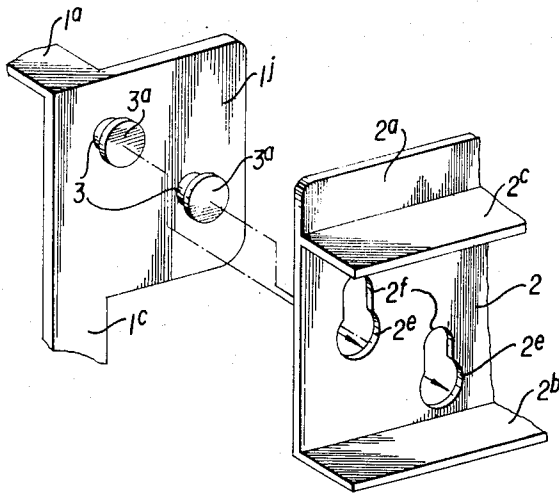


FIG. 3

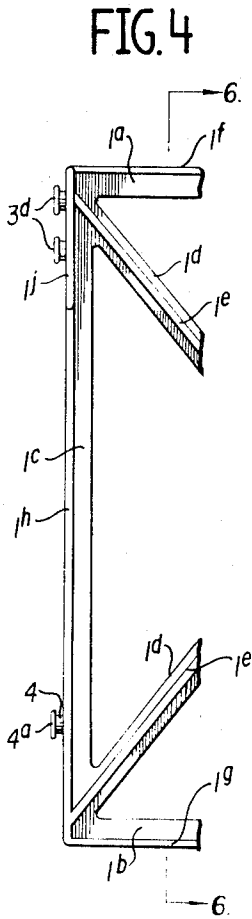


FIG. 4

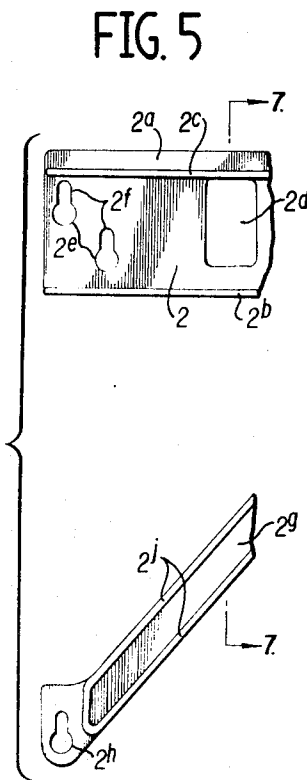


FIG. 5

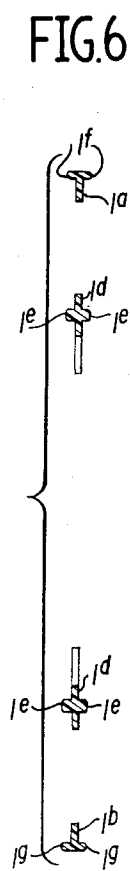


FIG. 6

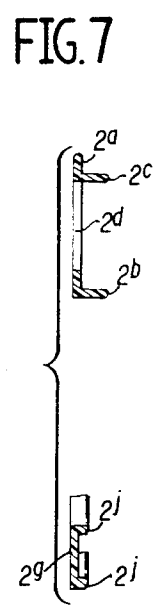


FIG. 7

## FRAME FOR HANGING FOLDERS IN FILE CABINETS

### DESCRIPTION OF INVENTION

Our invention is a novel improvement in rack frames for hanging folders in filing cabinet drawers, and the principal object of the invention is to provide a rack frame made of plastic having end panels and side rails molded of plastic of size to suit the dimensions of the filing cabinet drawer, the end panels and side rails carrying interengaging quick detachable means for locking the parts together without requiring the use of screws or other extraneous fasteners.

Heretofore such rack frames have usually been made of metal, and the side rails have had to be cut to fit the different sizes of cabinet drawers; also heretofore screws have been provided to fasten the side rails to the end panels. Such operation takes valuable time and such racks have heretofore been expensive because of the high cost of steel as well as the weight involved in shipping.

According to our invention the racks can be molded directly from plastic and can be assembled by an office girl to fit the various cabinet drawers by merely placing the side rails into the desired keyhole slots to secure the parts of the rack together either prior to or after placing the same into the cabinet drawer. Thus we have provided a rack which is inexpensive to make, is light in weight and is easy to assemble.

Another object of the invention is to provide a rack of the above type in which the parts are held together without requiring any force to assemble. All that is necessary is to simply align the larger portions of the keyhole slots on the side rails over lugs on the end panels, and then slightly press down on the side rails, so that the side rails are securely locked into place in the slots and cannot become separate from the panels once the frame is loaded with hanging folders.

A further object is to provide a rack frame of the above type in which both the end panels and side rails are given added strength due to the I-beam design on both.

We will explain the invention with reference to the accompanying drawings, which illustrate one practical embodiment thereof, to enable others familiar with the art to adopt and use the same; and will summarize in the claims the novel features of construction, and novel combinations of parts, for which protection is desired.

In said drawings:

FIG. 1 is a front perspective view of a filing cabinet with its upper drawer open and showing our novel rack frame inserted in place therein, and showing in dot-and-dash lines one hanging folder supported by the rack frame.

FIG. 2 is an enlarged front perspective and exploded view showing the parts of the rack frame separated and detached from the drawer.

FIG. 3 is an enlarged perspective and exploded end view showing the quick detachable means for connecting the upper corners of the end panels and side rails.

FIG. 4 is an enlarged side elevation of an end portion of one end panel.

FIG. 5 is an enlarged side elevation of an end portion of one side rail.

FIG. 6 is a vertical section on the line 6—6, FIG. 4.

FIG. 7 is a vertical section on the line 7—7, FIG. 5.

As shown, the cabinet C, FIG. 1, has an open drawer provided with a front wall D, a bottom wall E, side walls S, also a back wall B, in the customary manner.

Within the open drawer is placed our novel rack frame for hanging folders in the drawer, the same consisting of two identical end panels 1, one of which is disposed immediately behind the front wall D, the other panel 1 being disposed adjacent the rear wall B thereof, the end panels 1 being rigidly maintained in fixed relation within the drawer by means of side panels 2 which are identical with each other and are connected to the sides of the end panels 1 respectively by quick-detachable means which eliminates the use of screws or other extraneous fasteners.

The end panels 1, as shown, are preferably molded of plastic material such as styrene or other suitable plastic, and the same may readily be molded in sizes to suit any size drawer. Each end panel 1 comprises an open rectangular frame having a top member 1a, bottom member 1b, and side members 1c. In order to strengthen the open frame 1 we provide a grille consisting of a series of cross-braces 1d within the open frame 1, two pairs of such cross-braces being shown in FIG. 2. In order to strengthen the cross-braces 1d the same are provided with opposed ribs 1e extending throughout their lengths whereby the said cross-braces will be prevented from undue flexing under the load applied to the end panels 1. The top members 1a and the bottom members 1b and side member 1c of the end panels 1 are provided with opposed flanges on their outer ends, thus giving same a T-shaped cross-section as shown in FIG. 6, the flanges in the top member 1a being numbered 1f, the flanges on the bottom member 1b being numbered 1g, and the flanges on the side member 1c being numbered 1h, as shown in FIGS. 4 and 6.

Each side member 1c of the end panels 1 carries at its upper end a plate portion 1j, which carries a pair of spaced staggered lugs 3, shown more particularly in FIG. 3, the lugs 3 being of length to conform with the thickness of the side rails 2 and each lug carrying on its outer end a flat head 3a of circular shape for the purpose hereinafter described. The side member 1c of the end panels also carry adjacent their lower ends a single lug 4, shown more particularly in FIG. 4, similar to lugs 3 carrying an enlarged circular head 4a, for the purpose hereinafter described.

As shown, the front and rear panels 1 are identical with the exception that the plate portions 1j of both panels extend toward each other in the plane of the side panels 2.

As shown, the side rails 2 are identical in shape and are adapted to span the distance between the front and rear panels 1, as indicated in FIG. 2. The side panels are molded from plastic material and comprise a strip 2a having a longitudinal flange 2b at its lower edge and a second longitudinal flange 2c spaced from the upper edge of the strip 2a, as shown in FIG. 3. In said strip 2 extending from substantially one end to the other are a series of rectangular holes 2d evenly spaced apart for the purpose hereinafter described. The holes 2d are disposed in the side rails 2 intermediate the flanges 2b and 2c, as shown in FIGS. 5 and 7.

At each of the side rails 2 are a pair of spaced keyhole slots having a substantially circular lower end 2e of size slightly larger than the heads 3a of the studs 3 on the panels 1, the upper portions of the holes being

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narrowed elongated slots 2f, FIG. 2, of slightly larger width than the diameters of the studs 3.

Adjacent each end of the side rails 2 are diagonal braces 2g, said braces 2g being disposed downwardly and diverging outwardly in the plane of the side rails 2, and terminating adjacent the headed studs 4 adjacent the lower ends of the end panels 1, as shown in FIG. 2, the lower outer ends of the braces 2g each containing a keyhole slot 2h similar in all respects to the keyhole slots 2e, 2f previously described.

Preferably the outer faces of the struts 2g are provided with upper and lower flanges 2j, as shown in FIGS. 5 and 7, in order to stiffen same against flexing.

By the above construction the end panels 1 and side rails 2 can be readily assembled either in the filing cabinet drawer or out of the drawer for placement therein, by disposing the end panels 1 in proper spaced relation according to the size of the cabinet drawer, as shown in FIG. 1. Thereafter the side rails 2 are placed in the position shown in FIG. 2 and the side rails then positioned against the side members 1c of the end panels 1 so that the larger circular portions 2e of the keyhole slots will permit the heads 3a-4a of the studs 3 and 4 to pass therethrough, whereupon the side rails may be easily manually depressed slightly to bring the narrowed portions of the keyhole slots over the studs 3 and 4 and the side rails will be securely clamped by a quick-detachable means to the sides of the end panels 1 so that the horizontal rods of the hanging folders F may be inserted through any of the selected opposed pairs of holes 2d in the side rails 2 to hang the hanging folders therefrom in the usual manner.

By using our quick-detachable keyhole means for connecting the side rails to the end panels no force is required to assemble the same in or out of the drawer. All this is required is to simply align the large portion 2e of the keyholes with the heads 3a-4a of the lugs 3-4 and to press the side rails 2 against the end panels 1, and thereafter to slightly press the side rails 2 downwardly on the lugs 3 and 4, thereby locking the side rails and end panels together so that the parts cannot be disassembled, particularly when loaded with hanging folders F.

We claim:

1. A frame for hanging folders in filing cabinet draw-

ers, comprising a pair of spaced end panels adapted to be positioned within the front and rear of said drawers; a pair of side rails having a series of spaced holes therein for receiving the customary support rods of said hanging folders, said side rails extending between the upper portions of said end panels at opposite sides thereof respectively, said side rails having downwardly and outwardly diverging integral struts terminating opposite the lower portions of the end panels; and quick detachable means for removably connecting the overlapping ends of said side rails and struts to said end panels respectively; said side rails comprising strips in which the said series of holes are arranged, longitudinal flanges on said strips disposed above and below said series of holes, said struts extending from points adjacent the centers of the strips and being disposed in the plane of said strips; and the edges of said struts being flanged; said quick detachable means comprising integral studs on the outer sides of the end panels adjacent their upper and lower ends, said studs having integral enlarged circular heads on their outer ends spaced from the sides of the end panels a distance substantially equal to the thickness of the side rails, and the ends of the side rails and struts having keyhole slots therein in which the lower circular portions thereof are adapted for the passage there-through of said circular heads, and upper narrowed slot portions adapted to receive therein the said studs when the side rails are subsequently slightly depressed after assembly with the end panels; said upper portions of the end panels having enlarged plate portions lying in the planes of the side rails, and said enlarged portions each carrying a pair of said offset headed studs adapted to be engaged in a pair of correspondingly arranged keyhole slots in the ends of the side rails.

2. In a frame as set forth in claim 1, said end panels comprising open rectangular frames each having a top member, a bottom member, and side members; said top and bottom members being interconnected by a grille consisting of integral cross members.

3. In a frame as set forth in claim 2, said top member, bottom member, and side members being T-shaped in cross-section, and said cross-members having opposed flanges on the sides thereof.

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