

July 16, 1968

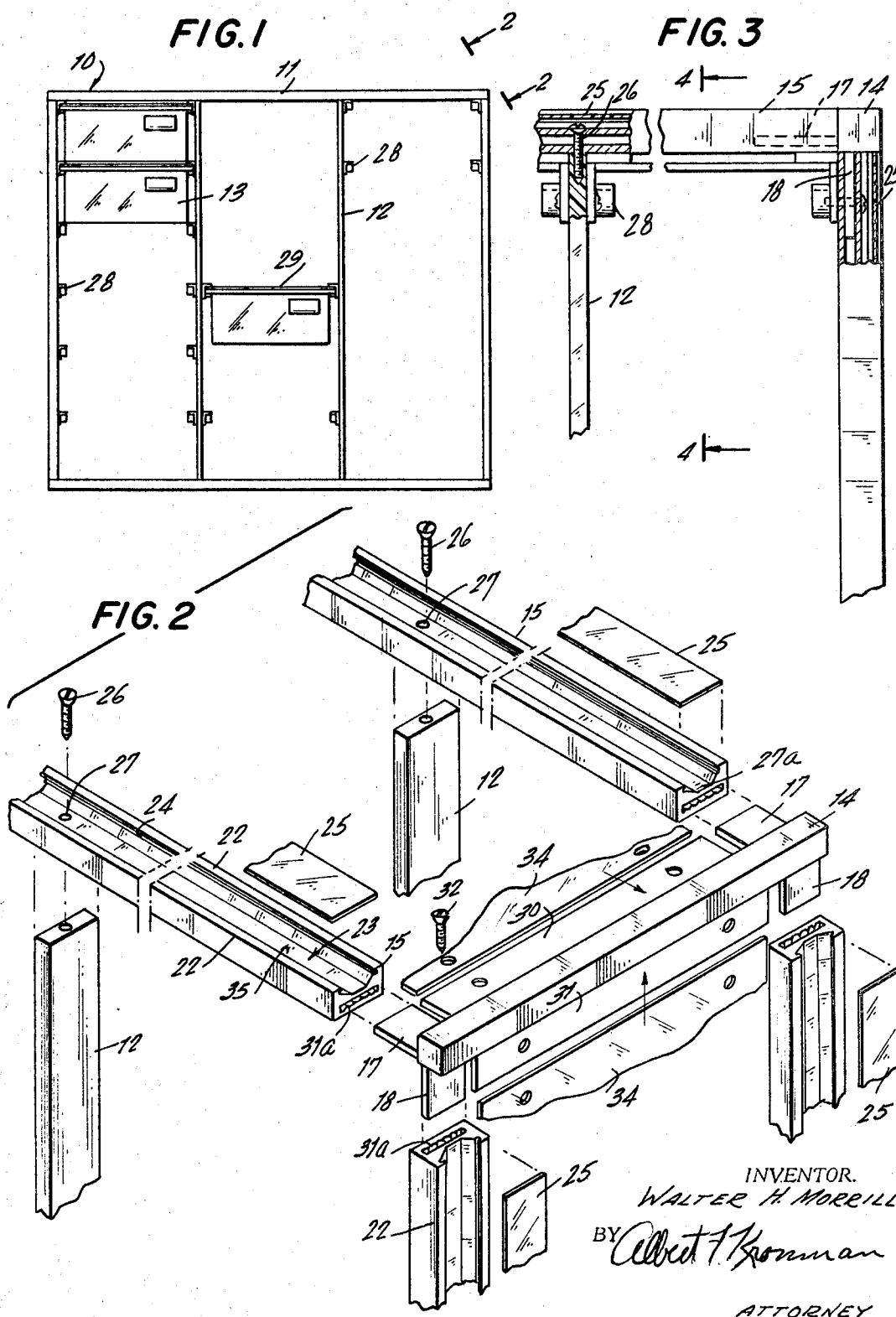
W. H. MORRILL

3,393,031

FREE STANDING STORAGE AND DISPLAY RACK

Filed Feb. 17, 1967

2 Sheets-Sheet 1



July 16, 1968

W. H. MORRILL

3,393,031

FREE STANDING STORAGE AND DISPLAY RACK

Filed Feb. 17, 1967

2 Sheets-Sheet 1

FIG. 4

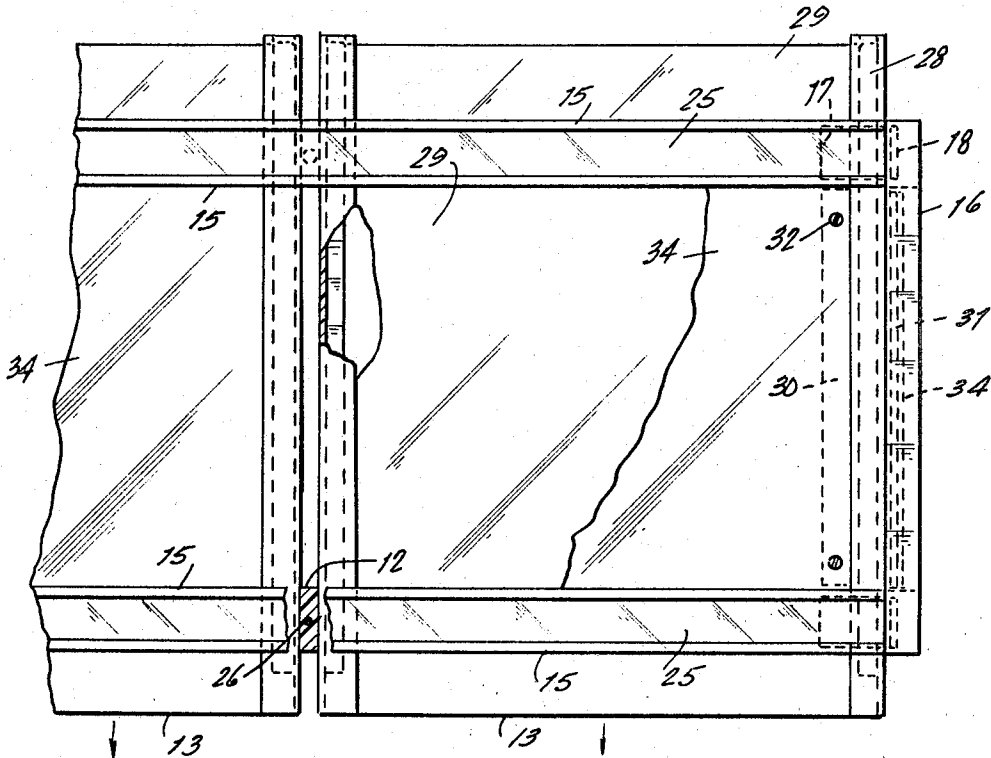
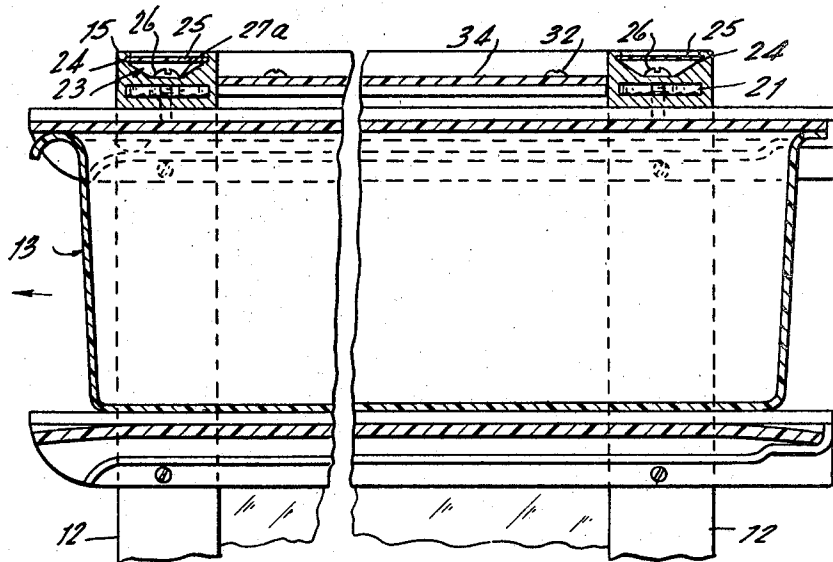


FIG. 5

INVENTOR.
WALTER H. MORRILL
BY *Albert F. Korman*
ATTORNEY.

1

3,393,031 FREE STANDING STORAGE AND DISPLAY RACK

Walter H. Morrill, Rosedale, N.Y., assignor to Merchandise Presentation, Inc., Bronx, N.Y., a corporation of New York

Filed Feb. 17, 1967, Ser. No. 616,804

1 Claim. (Cl. 312—270)

ABSTRACT OF THE DISCLOSURE

A free standing storage and display rack having transverse links and keep extending outwardly of the links to slide into hollow rail members to define a frame. A plurality of spaced vertical members are carried by the frame and support a plurality of drawer members therebetween.

Background of the invention

In Patent No. 2,763,526 issued to Seymour C. Falek, Sept. 18, 1956, there is disclosed a drawer tray made of transparent material for the storage and display of merchandise. The drawers are carried between spaced upstanding support members. However, such support members require the construction of specialized structures for each installation with an attendant increase in cost.

Accordingly, it is an object of the present invention to provide a storage and display rack assembly of easily assembled prefabricated elements.

Another object of the present invention is to provide a free standing storage and display rack offering the minimum amount of obstruction to the display of the merchandise carried therein.

Still another object of the present invention is to provide an extremely light, rigid, free standing storage and display rack made of a minimum number of standard parts.

An object of the present invention is to provide a highly decorative display and storage rack.

A feature of the present invention is its unitary keyed corner members, for locking the frame together.

Another feature of the present invention is its hollow frame member to receive the keys and upright tray supports.

Still another feature of the present invention is the provision of channel shaped portions on the frame members to receive decorative strips.

The invention consists of the construction, combination and arrangement of parts, as herein illustrated, described and claimed.

Description of the drawings

In the accompanying drawings, forming a part hereof is illustrated one form of embodiment of the invention, and in which:

FIGURE 1 is a view in front elevation of a complete storage and display rack made in accordance with the present invention with certain of the drawer trays omitted.

FIGURE 2 is a fragmentary exploded view taken on line 2—2 in FIGURE 1 somewhat enlarged.

FIGURE 3 is a view in front elevation partially broken away of the parts shown in FIGURE 2.

FIGURE 4 is a cross sectional view taken on line 4—4 in FIGURE 3 looking in the direction of the arrows.

FIGURE 5 is a fragmentary top plan view of the rack shown in FIGURE 1 on an enlarged scale.

Summary of the invention

The invention broadly consists of a rack made of four transverse link members located at each corner, keys extended from each end of the transverse link members in

2

planes normal to each other, elongated hollow rail members within which the keys are received to form a peripheral frame, spaced vertical support members connected at each end between the top and bottom of the peripheral frame, and drawer trays carried between the spaced vertical supports.

Description of preferred embodiment

Referring to the drawings, and particularly to FIGURES 1, 2 and 3, 10 indicates a storage and display rack assembly formed of a peripheral frame 11, spaced vertical members 12 secured to the frame 10 and a plurality of drawer trays 13 carried between the vertical members 12.

The peripheral frame 11, as best shown in FIGURES 2 and 3, is formed by means of a short link member 14 and elongated hollow rail members 15. Each of the links 14 consists of a rectangular bar 16 having two keys 17, 18 and two flat webs 30, 31, extending outwardly thereof. The bar 16, webs 30, 31, and keys 17, 18 are preferably integral and of solid metal stock. The webs 30, 31, and keys 17, 18 are disposed in planes normal to each other and are preferably rectangular in shape. The keys 17, 18 are also disposed normal to the plane of the surface of the link bar 16 from which they extend. The keys 17, 18 are spaced from the inside edge 19 of the bar 14 a distance equal to the thickness of the inner wall 20 of the rail members 15.

The rail members 15 are formed of aluminum or some relatively soft material, as by extrusion, with an elongated rectangular axial opening 21 which is of a size and shape to receive one of the keys 17, 18. One wall of the opening 21 is provided with upstanding tooth members 31a in the form of elongated ridges. The keys 17, 18, are carefully machined to fit within the openings 21 in a manner which will deform the teeth 31 so as to provide a tight fit despite differences in manufacturing tolerances in the keys 17, 18. By reason of the spaced relationship between the keys and the inner edge 19 of the bar 16, the rail members 15 when slipped upon the keys 17, 18, form a sharp 90° inner corner, as best shown in FIGURE 2.

It will be apparent that the rail members can be extruded in any convenient lengths and cut off as needed to accommodate any desired frame size. The rail members 15 are also formed with spaced outwardly extending walls 22 which provide a channel shaped configuration 35 with the outer wall 23 of the rail member 15. The outwardly extending walls 22 are longitudinally recessed on their inner faces to form continuous grooves 24.

The grooves 24 serve to receive and anchor a strip of some flexible material such as a plastic insert 25. The plastic insert may be of any desired color to lend decorative interest to the frame. The bottom of the channel 35 is somewhat V shaped as shown at 27a to facilitate the insertion of the plastic insert 25.

The vertical members 12 are secured at their tops and bottoms in spaced parallel relationship between the rail members 15 as shown in FIGURE 1. The distance between vertical members 12 will be governed by the size of the drawer trays 13 to be carried thereby. A series of horizontally disposed track members 28 are attached in spaced parallel relationship to the front and rear vertical members 12 to receive the drawer trays 13. A top 29 is carried between the track members 28, as best shown in FIGURES 4 and 5, to cover the drawer trays 13. The drawer trays are slidably received by the track members 28 and are preferably made of some transparent plastic material so as to display the merchandise carried therein.

The combination of the vertical members 12, the tops 29, and track members 28, provide an internal cross-bracing for the entire structure which renders it extremely stable despite the individual lightness of the components

3

forming the entire assembly. The rail members 15 with their integral keys 17, 18, permit the frame to be snapped together without the requirement of a large variety of tools and by relatively unskilled workmen.

Further bracing and ornamentation can be added to the assembly by securing top and side panels 34 to the webs 30, 31, by means of screws 32. The panels 34 can be made of wood, colored metal, plastic or the like.

From the foregoing it will be apparent that there has been provided a display device capable of easy assembly, and which can be adapted to a large number of sizes and special requirements. The elements comprising the assembly interchangeable and can be put together by workmen using nothing more than a screwdriver.

Having thus fully described the invention, what is claimed as new and desired to be secured by Letters Patent of the United States, is:

1. A storage and display rack comprising spaced transverse link members, keys extending from said links integral with said links and normally disposed with respect to each other, said keys being inwardly spaced from the

4

inner edge of the links in the assembled position, elongated webs between said keys and lying in the same plane as the keys, elongated hollow rail members receiving the said keys and interconnecting opposed links, spaced parallel vertical members secured between the rail members, and a plurality of drawer trays slidably carried by the vertical members.

References Cited

UNITED STATES PATENTS

2,927,339	3/1960	Grunwald	52—717	X
3,044,656	7/1962	Combs et al.		
3,083,797	4/1963	Wergin	287—189.36	
3,181,923	5/1965	Guillon et al.	312—263	X
3,218,097	11/1965	Bowers et al.	287—126	X
3,222,117	12/1965	Schwartz	211—126	X
3,224,823	12/1965	Schulze	312—257	X
3,290,082	12/1966	Fritsch	52—716	X
3,332,730	7/1967	Rubin et al.	211—126	X

JAMES T. McCALL, *Primary Examiner.*