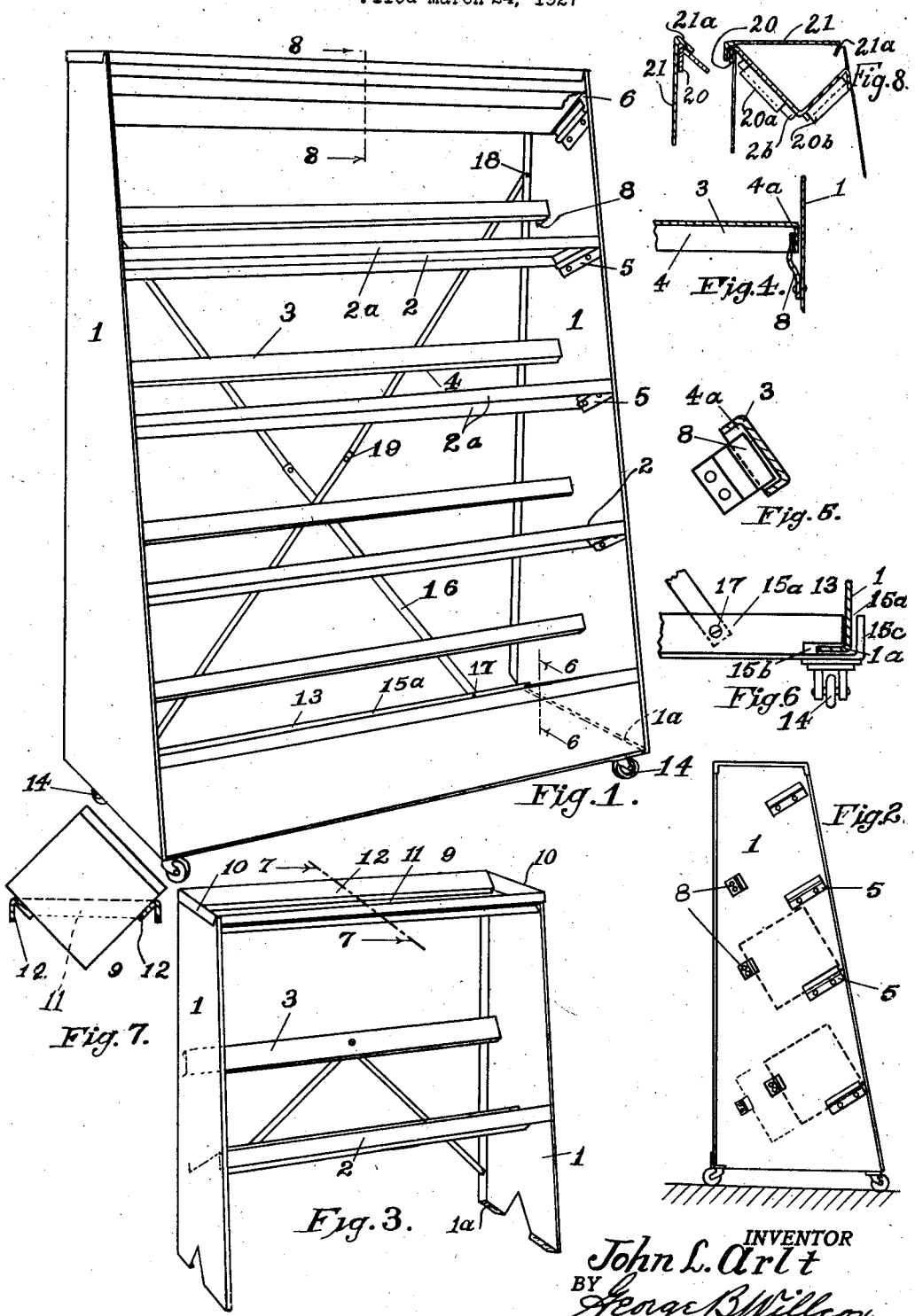


Jan. 29, 1929.

1,700,212

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DISPLAY RACK

Filed March 24, 1927



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DISPLAY RACK.

Application filed March 24, 1927. Serial No. 178,065.

This invention has for its object to produce an improved means for holding and displaying goods of different kinds in groups of obliquely arranged cases, boxes, cans or the like in such a way that they are readily accessible and observable.

An object of the invention is to provide a rack that can be easily and quickly assembled by a user without mechanical skill and that can be put together without the aid of special tools and with a minimum of small loose parts, such as bolts, etc. To that end the rack is so made that nearly all its parts can be assembled together by push-fitting certain flanges into engagement with certain co-operating spring clips. This method of assembly applies not only to the sides and shelves of the rack, but also to the completed rack and a rolling truck upon which the rack can be mounted when desired.

Another object of the invention is to provide a display rack of light weight, yet of great strength and rigidity, so as to enable it to support heavy weights if need be, and to withstand the strains to which such racks are subjected in ordinary use, such as being moved from place to place and being loaded and unloaded.

This construction also enables the rack to be produced in quantities, inexpensively and with a minimum waste of material. For that purpose its parts are so designed as to be capable of being easily formed up by using the shears and brakes which are a part of the ordinary commercial sheet metal works, rendering special dies and expensive tools unnecessary.

A further object of the invention is to produce a rack having all of the above characteristics, yet capable of being quickly knocked down for shipment in very compact form.

With the foregoing and certain other objects in view, which will appear later in the specifications, my invention comprises the devices described and claimed and the equivalents thereof.

In the accompanying drawings one form of the display rack of the invention is shown in Fig. 1 in perspective view, broken away in part.

Fig. 2 is a plan view of the inner face of one of the side members.

Fig. 3 is a perspective view of a modified form of rack embodying the invention.

Figs. 4 and 5 are part sectional detail views of the shelf and bar support clips.

Fig. 6 is a fragmentary detail view of the slip joint connection taken on line 6—6, Fig. 1, by which the base frame or truck is removably fastened to the side members of the rack.

Fig. 7 is a diagrammatic cross sectional view on line 7—7 of Fig. 3.

Fig. 8 is a sectional detail on line 8—8 of Fig. 1.

The details of the structure as shown in the drawings disclose a display case comprising two flanged sheet metal side members 1, 1 removably secured together by a longitudinal shelf 2, the latter having its front and back edges 2^a and its ends 2^b flanged out of the plane of the shelf face. Each shelf 2 has a guiding and supporting bar or cross stay 3 having similarly flanged edges 4 and flanged ends 4^a. The bar is spaced above the shelf.

The shelf 2 is releasably connected to the side members 1, 1, by means of spring clip members 5 that are fixed by riveting or otherwise to the side members. Each shelf has a downwardly projecting flange 6 at its end adapted to be received between the lip of the spring clip 5 and the flat face of the side member.

Similarly the cross stay 3 has its ends downwardly flanged to engage with clip members 8 on the side members 1, 1.

The rack may be made with only one shelf 2, as shown in Fig. 3, or with a plurality of shelves, as in Fig. 1. The rack is preferably provided with the top piece 9, Fig. 3, in the general shape of a rectangular frame having downwardly projecting flanges 10 at its ends to receive the top edges of the side members 1, 1. The top piece may be formed with an opening 11, the side walls 12 that form the boundaries of the opening being inclined downwardly, as shown in Figs. 3 and 7, so that the top piece itself forms means for supporting, in an inclined position, articles to be displayed.

If the rack is desired to be portable I mount it on a base frame 13 having casters 14 thereon, and to facilitate assembling I provide an interlocking slip joint construction by which the base frame can be quickly attached to and removed from the rack proper. A detail of such a joint is shown in Fig. 6, which is an enlarged sectional detail on line 6—6 of Fig. 1, the construction being as follows:

The bottom edge of each side member 1 is formed with an inwardly projecting flange 1^a, and the angle iron 15^a which forms the back member of the truck 13 is formed with a longitudinal saw kerf or slit 15^b to receive the flange 1^a, the horizontal leg 15^c being bent up at its end, as shown. Thus the back member 15^a of the truck frame can be attached to the rack by merely sliding the truck horizontally until the flange 1^a enters the L-shaped slot 15^d formed, as above described in the back member 15^a.

Diagonal braces 16 are hinged, as at 17, to the members 15^a and are fastened, as at 18, by bolts or otherwise, to the back flanges of side members 1, 1. For compactness in shipping the braces 16 are hinged intermediate their ends, as at 19, so as to fold upon the base frame when not in use.

The canisters or other articles to be displayed can be arranged in offset relation, as shown by the dotted lines in Fig. 2, or by placing the clips 5, 8 at any other desired inclination. The fronts of the containers may be given a greater or less degree of offset, or may be arranged with their faces all in the same plane, as may be desired.

Various modifications in details of construction may be made to suit individual conditions, and different kinds of goods to be displayed, without departing from my invention as set forth in the claims. For example, the shape of the shelf may be modified as shown in Fig. 8, where the shelf is trough-shaped and flanged downwardly at its back edge 20. Each side of the shelf trough is supported by a spring clip 20^a, 20^b. If the top shelf, for example, is not needed, a flat cover 21 is used. When the top shelf is needed the cover 21 can be removed and hung by its front flange 21^a from the back edge 20 of the shelf, as shown at the left in Fig. 8.

I have described the invention as embodied in a rack for displaying merchandise, although it has many other uses, such, for example, as a portable book case used as a desk convenience by attorneys and others for temporarily holding reference books and papers.

Having thus described my invention, what

I claim and desire to secure by Letters Patent is:

1. A display rack comprising spaced side members connected by a top piece having end flanges adapted to releasably interlock with the upper edges of said side members and having a central canister-receiving opening extending lengthwise, the longitudinal boundary walls of the opening inclined downwardly for positioning canisters in tilted position, a series of supporting bars and a separate series of shelves independent of said bars, said shelves and bars removably mounted in pairs one above the other on said side members, a base frame made up of members of L-shaped section, and having casters thereon, and also having interlocking slip joints adapted to releasably secure said base frame and side members together, and diagonal braces hinged to said base frame and secured to the back upright edges of said side members.

2. A rack of the character described comprising a pair of side members, a series of supporting bars and a separate series of shelves removably mounted in pairs on said side members, a base frame having casters, and having slip joint members adapted to releasably secure said base frame and said rack together.

3. A display rack structure as set forth in claim 2 and having diagonal braces secured to and extending across the back of the rack, said braces hinged between their ends to fold upon each other and upon the base frame, for the purposes set forth.

4. A display rack comprising spaced side members, shelves and cross stays, said side members connected by a top piece having end flanges adapted to relatively interlock with the top edges of the side members and having a central opening for receiving canisters extending lengthwise, the side walls that form the front and back boundaries of the canister opening in said top inclined downwardly and inwardly for holding canisters in tilted position.

In testimony whereof, I affix my signature.
JOHN L. ARLT.