

W. E. COLLINS.
 PACKING AND DISPLAY RECEPTACLE.
 APPLICATION FILED MAY 7, 1909.

939,807.

Patented Nov. 9, 1909.

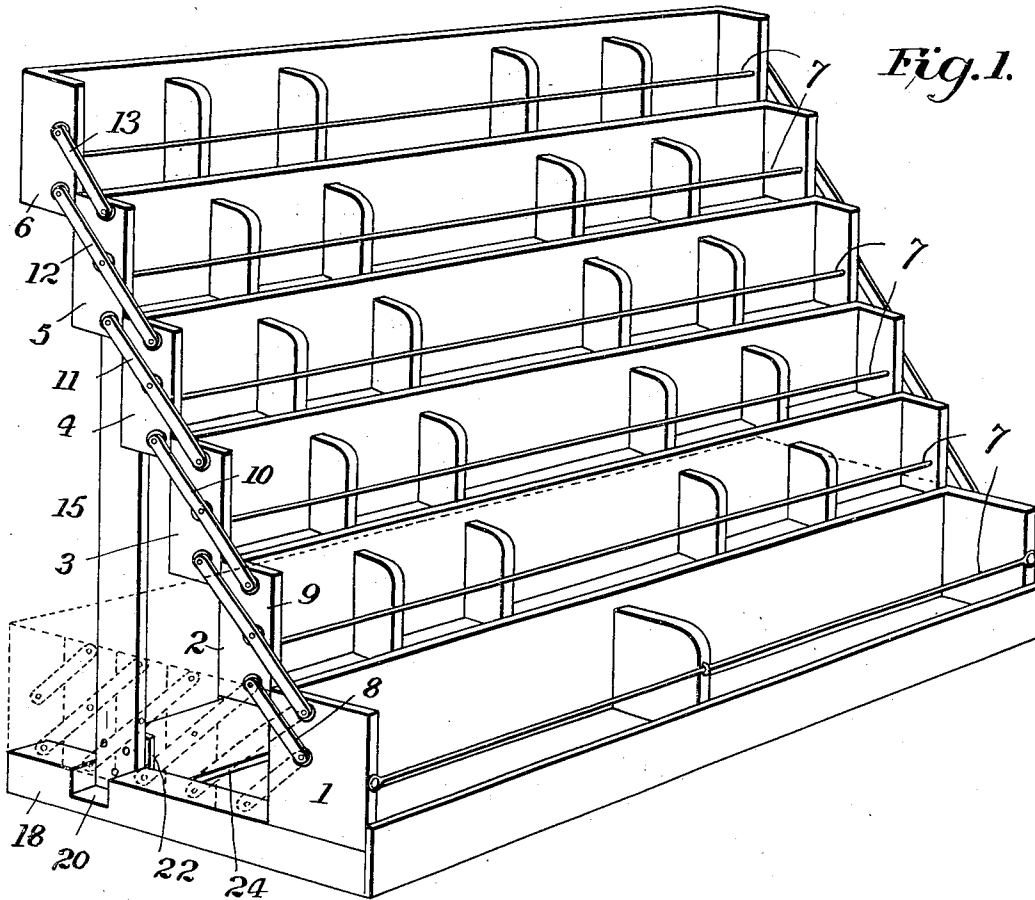


Fig. 2.

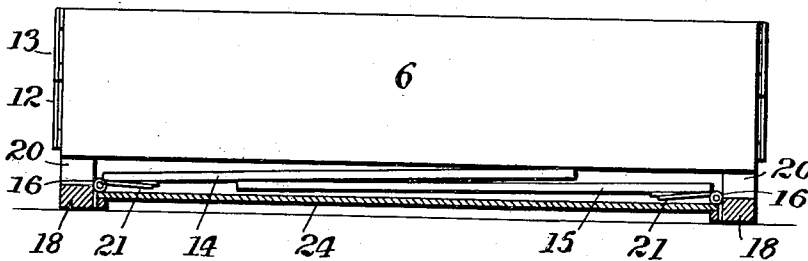
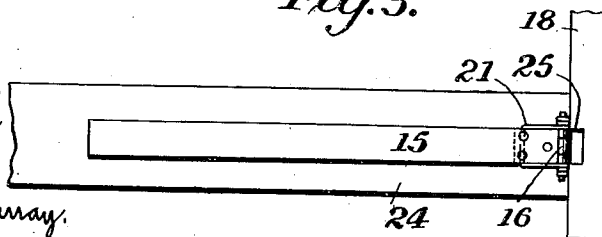


Fig. 3.

Witnesses
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PACKING AND DISPLAY RECEPTACLE.

939,807.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed May 7, 1909. Serial No. 494,572.

To all whom it may concern:

Be it known that I, WILLIAM E. COLLINS, a citizen of the United States, residing at Cambridge, in the county of Washington and State of New York, have invented certain new and useful Improvements in Packing and Display Receptacles, of which the following is a specification.

My invention relates to packing and display receptacles, the object being to supply a simple, compact, and easily operated packing and display apparatus, whereby, with but comparatively little effort, the receptacle may be opened in such a manner as to at once display the contents of the several different compartments or trays.

In the particular form of my invention illustrated in the drawings, I have shown the same as applied to a compartment receptacle for holding small articles or packages, and it is particularly designed as a receptacle for seed packages. I have made special provision for strongly bracing the rack in its extended position with the trays or sections arranged in stepped relation and for transmitting the weight of the overhanging sections directly to the base member. These and other objects will be apparent from the following description taken in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of the display rack in open or extended position, and showing in dotted lines the arrangement of the trays when the rack is in closed or collapsed position; Fig. 2 is a rear elevation of the rack in collapsed position, and showing the automatically operating supporting means in inoperative or folded position; and Fig. 3 is a plan view of a modified form of supporting means.

In the form shown in Figs. 1 and 2, the relatively movable shelves or trays of the display rack are designated 1, 2, 3, 4, 5, and 6, each of which may be divided into suitably spaced compartments as desired. Each rack is preferably constructed with a substantially open face, although a bottom ledge may serve in conjunction with wires to retain the articles in position.

When collapsed or folded to facilitate transportation, as when it is desirable or necessary to pack the rack in a storage box or case or to place one display rack upon another, the sections are in alignment and

form a compact rectangular structure. When it is desired to display the goods on all of the trays, the rear trays or sections are raised from the position shown in dotted lines to the position shown in full lines in Fig. 1.

In order that the sections of the rack when extended shall preserve the stepped arrangement and shall maintain the parallel relation during the folding operation, the sections are connected in the manner shown upon either end by means of links 8 to 13, inclusive, the intermediate links being pivoted centrally to one section and to the lower and upper corners respectively of the adjacent sections.

One of the especial features of my invention resides in the manner of supporting the overhanging sections of the rack when they are in extended position. For this purpose, I provide supports 14, 15, hinged at 16 to the end pieces 18 of the base. When the rack is extended as shown in Fig. 1, the section 5 rests upon the top of the supports 14, 15 which also brace the sides of the section 4, the lower ends of the supports resting firmly upon the base members 18 within the notched or cut-away portions 20.

In order that the supports 14, 15, may be automatically thrown into position as the rack-sections are raised into extended position, I preferably provide springs 21 at the hinges, which normally tend to force the supports into vertical position. For the purpose of relieving the strain upon the hinges and insuring the proper position of the supports, I arrange the wings of the hinges to project upon either side of the supports and to engage the base member 18 upon either side of the notches 20 as shown at 22. When the rack is in the folded or collapsed position, the supports will lie over one another above the cross-piece 24 of the base, as shown in Fig. 2.

Instead of cutting notches entirely across the base member 18, I may cut a recess 25 as shown in Fig. 3, so that the support, when in vertical position, will be braced against the walls thereof.

The operation of extending or folding my display rack will be understood from the foregoing description. In order to extend the rack, it is merely necessary to raise the rear section until the supports 14, 15 extend into vertical position under the section 5.

In this position the sections or trays are securely braced together and rigidly supported by means of the supports. To lower the rack, the supports are first folded into the position shown in Fig. 2, and the sections then permitted to assume the collapsed position; the action of the links causing the sections to be drawn closely together side by side. It will be observed that access may be had to the contents of each compartment both in the folded and in the extended position and that the face of the packages in the compartments of the front section may be seen at all times.

My invention provides a display receptacle which may be quickly changed from closed or folded position to open or extended position in which the trays are in stepped arrangement, and with provision for strongly bracing the overhanging trays and producing a very rigid structure.

Changes may be made in the structural details without departing from the spirit of my invention.

I claim:—

1. A display rack or receptacle, comprising a base and a plurality of sections or trays, connecting links at the ends of said trays adapted to hold the trays in progressively stepped order when the trays are being moved into extended position and to permit said trays to stand side by side when they are in lowered position, supports pivotally secured to the base and arranged to

swing outwardly to brace and support the overhanging sections when in extended position, means for automatically moving the supports into engagement with the trays when they are raised into extended position, and means for bracing the supports against lateral stress.

2. A display rack or receptacle, comprising a plurality of sections or trays, means for maintaining the sections parallel while being moved into stepped relation and when in alinement side by side, supports adapted to move under one section and bear against the bottom thereof and against the side of the adjacent section, and means to brace the supports against lateral stress.

3. A display rack or receptacle, comprising a plurality of sections or trays, means for maintaining the sections parallel while being moved into stepped relation and when in alinement side by side, supports adapted to move under one section and bear against the bottom thereof and against the side of the adjacent section, means to brace the supports against lateral stress, and means for automatically moving the supports into operative position when the sections are placed in stepped relation.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM E. COLLINS.

Witnesses:

JEROME B. RICE, Jr.,
MARY C. ATWOOD.