April 20, 1937. E. R. ERICKSON 2,077,829

STRUCTURE FOR DISPLAY FIXTURES AND THE LIKE

Filed July 6, 1936

Fig. 3.

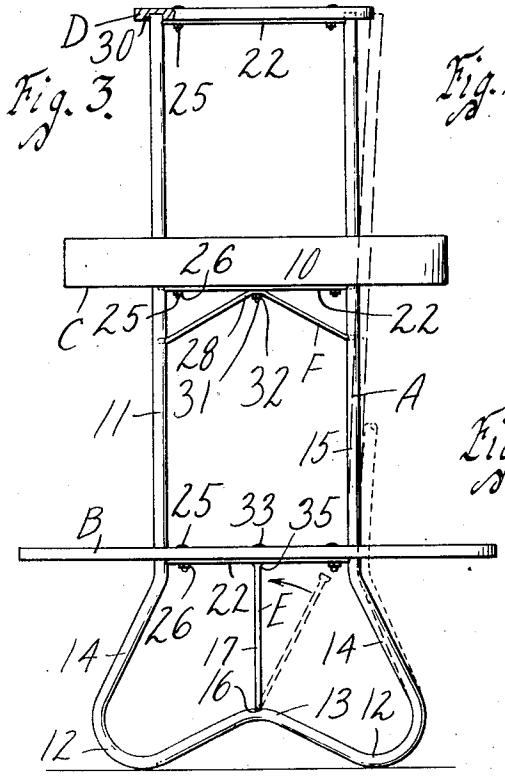


Fig. 1.

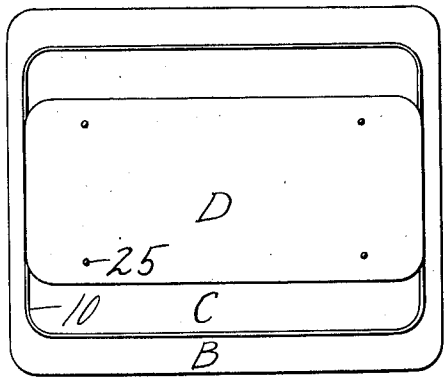


Fig. 2.

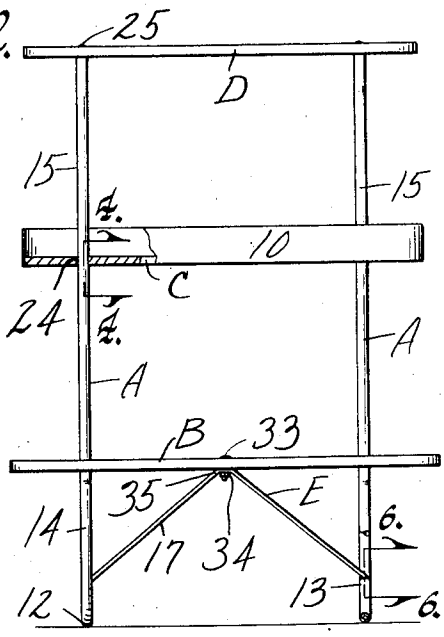


Fig. 4.

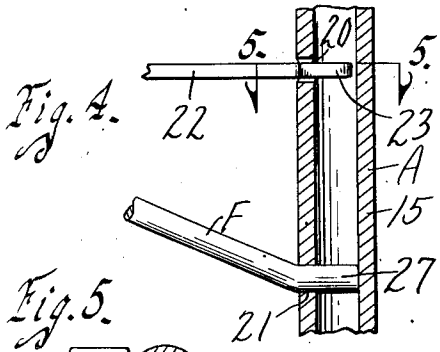


Fig. 5.

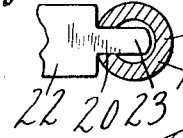
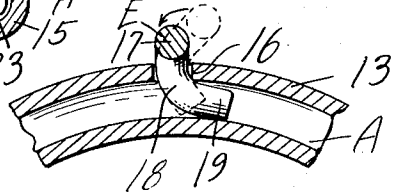


Fig. 6.



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Patented Apr. 20, 1937 2,077,829

UNITED STATES PATENT OFFICE

2,077,829

STRUCTURE FOR DISPLAY FIXTURES AND THE LIKE

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Application July 6, 1936, Serial No. 89,112

5 Claims. (Cl. 211—148)

The object of my invention is to provide a suitable and efficient mechanical structure for display fixtures and other articles of furniture to which the structure may be adapted.

More particularly, it is my purpose to provide a very efficient supporting structure, whereby one or more flat members, such as shelves or the like, may be conveniently assembled and supported in a complete rack.

Another object is to provide such a supporting structure having parts which may be quickly and easily assembled in connection with such flat members to form a strong and rigid structure.

More particularly in this connection, it is my object to provide a combination of one or more such flat members with preferably a plurality of supporting devices, each comprising a somewhat resilient tube bent at its center to form what may be a base, with side portions inclined inwardly and upwardly and with parts extending upwardly from such inclined portions through or into holes in the flat member or members, the upright parts being provided with suitable holes, and to provide supporting bars with their ends received in such holes. Such a device may have its upright parts sprung away from each other for the installation of the bars, and the flat members may then be slid down on the upright members to the bars, by which they are then supported.

Another object is to provide in connection with such a device, supporting elements having the form of an inverted V, the central part of which supports the top member and the ends of which are projected into holes in the spaced upright members.

Still another purpose is to provide such a supporting device of the kind which can be employed in pairs, the central lower part of each supporting structure, preferably having an up-curved part. Where a flat member is mounted on the upright portions of a pair of such supports, a substantially V-shaped member can be arranged below the flat member to support the ends of the V-shaped member, being extended into holes with the central parts of the supporting devices.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my structure for bread racks and the like, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which:

Figure 1 is a top or plan view of a structure embodying my invention, embodied in the form of a bread rack.

Figure 2 is a front elevation of the same, parts being broken away and parts being shown in section.

Figure 3 is an end elevation of the same shown on a larger scale.

Figure 4 is a detail, sectional view taken on the line 4—4 of Figure 2.

Figure 5 is a detail, sectional view taken on the line 5—5 of Figure 4; and

Figure 6 is a detail, sectional view taken on the line 6—6 of Figure 2.

In the accompanying drawing, I have shown my invention as embodied in the form of a bread rack, having the two spaced supporting members A, on which are mounted the three shelves B, C and D. The shelves B and D are simply preferably flat laminated boards and the shelf C is like the shelves B and D, except that C has a metal upright wall indicated generally at 10.

In the particular design under consideration, the shelf D is slightly shorter than the shelf C and the shelf B is slightly longer than the shelf C, while the shelf C is of less width than the shelf B and the shelf D is still narrower. Thus the shelf D can be nested in the shelf C, for packing and transportation.

The support A is made of a length of hollow tubing which is somewhat resilient, which is indicated generally at 11. The length of tubing 11 is bent at the center to form a base, having spaced portions 12 adapted to rest on the floor, and an upwardly bent central portion 13 connecting them.

The base has the side members 14 inclined inwardly and upwardly and the two parts 15 bent upwardly from the inclined parts 14 and there normally parallel with each other.

The portions 13 have holes 16 in their upper walls midway between the portions 12.

A member E preferably in the form of a rod is bent substantially in the form of an inverted V with a flat apex with its ends bent horizontally as at 18 and then laterally as at 19 to project into the holes 16.

At proper locations depending on the location and number of the flat shelf-like members, the inner adjacent faces of the upright parts 15 are provided with opposite pairs of holes 20. Sometimes and where desired, I provide below a pair of holes 20 another somewhat similar pair of opposite holes 21.

For further supporting the shelf-like portions, I provide cross bars 22, which preferably have

reduced ends 23 for insertion into the holes 20.

One of the advantages of a structure of the kind herein described lies in the convenience with which the parts may be assembled together into a completed rack.

In such assembly, the bent portions 19 and 18 and one end of a member 17 of the rod E are inserted into a hole 16 of one of the supports A. The corresponding bent portions of the opposite member 17 of the rod E are then inserted into the hole 16 of another support A.

Then if the bar 22 is to be used, the upright parts 15 are sprung apart to permit the ends 23 of the bar 22 to be received in an opposite pair of holes 20.

The members 15 when released from strain will assume their normal upright positions.

The flat shelf-like portions B and C have holes 24 extending vertically through them to receive the upright parts 15.

The flat shelf member B is then slid onto the members 15 from the top until it drops to and rests upon a pair of bars 22 and the central flat apex of the member E.

The bars 22 may be further rigidly fastened to the shelf B by means of bolts 25 and nuts 26 if desired.

For installing the shelf C, I may use another member F also in the form of an inverted V with a somewhat flattened apex made of a rod, having its ends 27 horizontal.

The members 15 are sprung apart to permit the ends 27 to be inserted in opposite holes 21. They are then again sprung apart for the installation of another bar 22.

The shelf C is then slipped over the tops of the members 15 and allowed to slide down until it rests on its bars 22.

The flat apex of the member F indicated at 28 supports a bar 22 and the shelf C.

The bars 22 for the shelf C may be connected with the shelf C for a more rigid structure by means of bolts 25 and nuts 26, such as have been described.

Where a top shelf, such as D, is used, I preferably provide counterbore holes 30 in the under side thereof to receive the upper ends of the members 15.

Before installing the shelf D, the upper ends of the members 15 are sprung apart to permit the installation of bars 22 already described, and then the shelf D is installed on the member 15, and their upper ends received in its socket-like holes 20.

The bar 22 for the shelf D may be fastened to it by bolts and nuts as already explained in connection with the description of the other shelves.

It will be seen from the foregoing that there is thus produced a very strong rigid rack or the like with one or more shelves as may be desired, each firmly supported on the upright portions 15.

I preferably use a bolt 31 and a nut 32 to fasten the apex of each member F to its adjacent bar 22 and to the shelf C. Likewise I preferably use a bolt 33 and nut 34 to fasten the central flat apex of the member E indicated at 35 to the shelf B.

It will be understood that this structure may be varied in a considerable number of ways for adaptation to various kinds of furniture, and it is my purpose to cover by my claims any modifications in structure herein illustrated, which may be reasonably included within their scope and within the scope of my invention.

I claim as my invention:

1. In a device of the kind described, supports comprising a pair of tubes of somewhat resilient material, each having its central part bent to form a base with side members inclined upwardly, and having normally parallel parts extending upwardly from the inclined members, and capable of being sprung apart, said upright parts having holes in their adjacent walls, and bars having reduced ends projecting into said holes, which bars may be thus installed by first springing the upright parts of each support apart and then permitting them to return to normal with the bars in place, and a flat member having holes receiving the upright parts, said flat member resting on the bars.

2. In a device of the kind described, a flat member having vertical holes extending through it, a pair of supports, each comprising a somewhat resilient tube having its lower central part bent to form a base with side members inclined upwardly and inwardly and having parts extending upwardly from the inclined member and through said holes, said upright parts having opposite holes in their adjacent walls, spaced below the flat member, and inverted substantially V-shaped elements having their ends projected into the respective holes in the upright members and their central parts in supporting relation to the flat member.

3. In a device of the kind described, a flat member having vertical holes extending through it, a pair of supports, each comprising a somewhat resilient tube having its lower central part bent to form a base with side members inclined upwardly and through said holes, said upright parts having opposite pairs of holes below the flat member, bars under the flat member, each having its ends received in one pair of holes, and inverted substantially V-shaped elements each having its ends projected into the holes in the upright members and its central part in supporting relation to the bar.

4. In a device of the class described, a flat member having holes countersunk in its under side, a pair of supports, each comprising a somewhat resilient tube having its lower central part bent to form a base with side members inclined upwardly, and into said holes, said upright parts having opposite holes in their adjacent walls just below the flat member, and bars in supporting position below the flat member, each having its ends projected into holes in the upright members.

5. In a device of the kind described, a pair of spaced supports, each comprising a somewhat resilient tube bent to form a base with side members inclined upwardly and inwardly and with parts extending upwardly from said inclined side members, a shelf having holes through which said upright parts are extended, the central parts of the bases having holes in their upper parts, and a member substantially in the form of an inverted V, having a flat, central apex and having out-turned ends terminating in laterally inclined portions projecting through the holes in the bases, said shelf being supported on said apex.

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