Nov. 11, 1958 E. D. BARNES 2,859,880

DISPLAY RACK

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Fig. 1

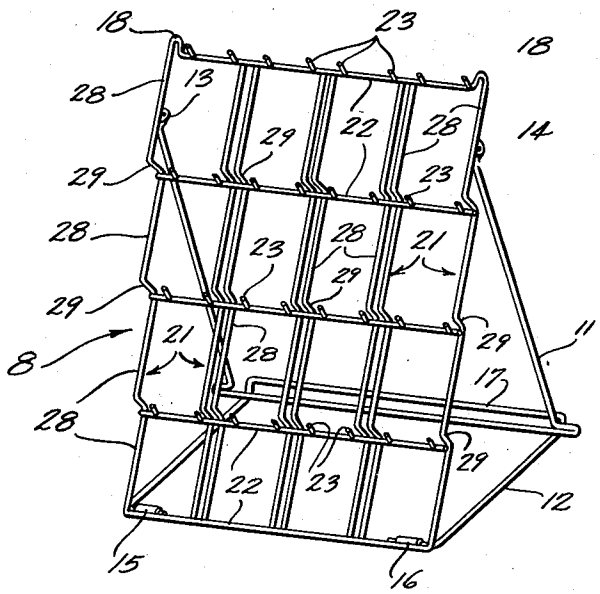


Fig. 3

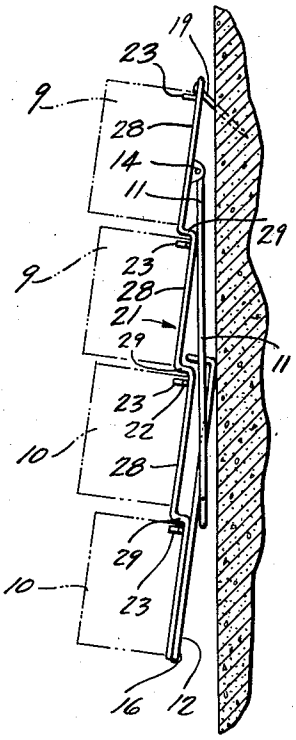


Fig. 2

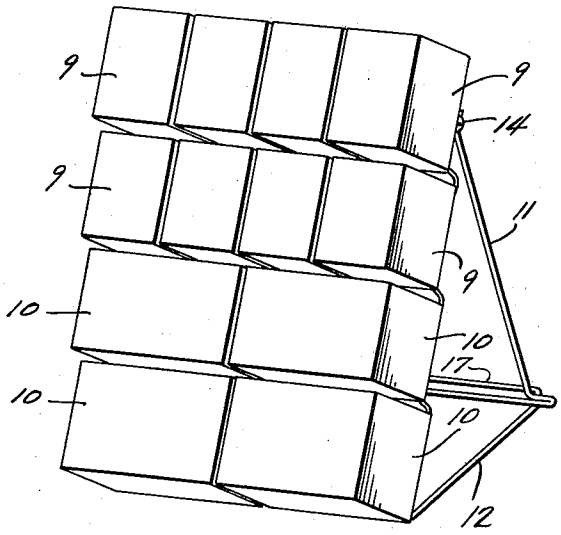
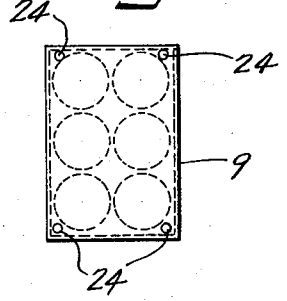


Fig. 4



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DISPLAY RACK

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1 Claim. (Cl. 211—106)

This invention relates generally to display racks and more particularly to an improved rack for displaying cartons of merchandise.

Producers of consumers' goods are constantly striving to obtain prominent display space for their products in the retail establishments which sell them, to bring these goods in view of the public. To this end, it is often the practice of the manufacturer to furnish the retailer with a display rack of one kind or another for displaying his merchandise. A disadvantage of this practice however, lies in the fact that the retailer usually finds such a rack convenient for displaying the merchandise of other manufacturers, and the producer who provided the rack does not enjoy its benefits.

It is therefore a general object of this invention to provide an improved display rack in which its utility is confined to the display of one particular brand of merchandise exclusively.

Another object of the invention is to provide an improved display rack for displaying merchandise in its original cartons.

Another object is to provide an improved display rack which will carry a variety of sizes of cartons containing the merchandise of one manufacturer, but will not be suitable for supporting the merchanidise of other manufacturers.

Another object is to provide an improved display rack adaptable for setting on a floor, to serve as a floor rack, or for suspending on a wall to function as a wall rack.

A further object is to provide an improved display rack of sturdy but simple and inexpensive construction.

According to this invention cartons containing merchandise are provided with a plurality of perforations in their bottom panel. The cartons are suspended by means of these perforations on a rack which comprises an upright gridiron-like framework having pegs extending approximately normal thereto. The pegs are spaced in conformance with the spacing of the perforations in the cartons so that they may be inserted therein to support the carton. The upright members of the framework are shaped in such a manner as to shield the upper surfaces of the pegs, to preclude their serving as a shelf for setting other types of merchandise on top of them. The framework is provided with a pair of hinged brackets adapted to support it in an upright position on a floor or base, which may be folded against the framework, to permit it to be hung from suitable supports on a wall.

The foregoing and other objects of the invention which will become more fully apparent from the following detailed description, may be achieved through embodiment of the invention in an apparatus such as the exemplifying device depicted in and herein described in connection with the accompanying drawings, in which:

Figure 1 is a perspective view of the display rack alone, without the cartons which it supports;

Figure 2 is a perspective view of the display rack with the merchandise carrying cartons in position;

Figure 3 is a view in side elevation of the rack shown in Figure 2, with its supporting brackets folded in, and the rack hung on a wall; and

Figure 4 is a bottom view of one of the cartons displayed on the rack, depicting the locations of the perforations utilized for suspending it.

Referring now more particularly to the drawings and specifically to Figure 1 thereof, wherein the display rack is shown set up for resting on a floor or other base. The rack comprises essentially a framework, generally denoted by the numeral **8**, on which a plurality of cartons or containers **9** and **10** are supported as shown in Figure 2.

When the rack is utilized for a floor display, or the like, the framework **8** is supported in an upright position by a pair of hinged brackets **11** and **12**. The bracket **11** is pivotally attached to the upper portion of the framework **8** by a pair of hinges **13** and **14**, which serve to permit the bracket to be swung into juxtaposition with the framework **8** as shown in Figure 3, or outwardly as illustrated in Figure 1.

In like manner, the bracket **12** is pivotally secured to the bottom member of the framework **8** by a pair of hinges **15** and **16**. The hinged connection of the bracket **12** to the framework **8** serves to enable the bracket to be swung inwardly against the framework when not in use, as depicted in Figure 3. When it is functioning as a support for the framework **8**, it is swung outwardly, at an angle, as shown in Figure 1. Outward movement of the bracket **11** is limited by an abutment **17** formed on the bracket **12**, by bending upwardly its side opposite the hinges **15** and **16**. The bottom member of the bracket **11** is caused to bear against the abutment **17** to limit its outward movement and thus form a sturdy support for the framework **8**, and the merchandise displayed thereon.

When the display rack is to serve as a wall rack, the bracket **11** is swung downwardly into a position against the framework **8** and the bracket **12** is swung upwardly against its cooperating bracket **11** as illustrated in Figure 3. The framework **8** is provided with a pair of loops **18** on its top side which may be placed over a pair of supports **19**, secured to a wall for suspending the rack. Thus, the rack may be conveniently set in an upright position or it may be suspended from suitable supports on a wall.

The framework **8** is comprised of a series of parallely disposed upstanding members **21** which support the cartons **9** and **10**. The members **21** in the illustrated embodiment are formed of metal rods although other structural forms and materials may be utilized. The members **21** are secured by welding or other suitable means, to a plurality of horizontally disposed ties **22**, to form the gridiron-like framework **8**, as clearly shown in Figure 1.

Extending outwardly from each of the horizontal ties **22**, except the bottom one, are a plurality of pegs **23**. These pegs are rigidly fixed to the ties **22** and are disposed approximately normal thereto, being spaced thereon in conformance with the spacing of perforations or apertures **24** in the bottom panel of the cartons **9** and **10**, as depicted in Figure 4. The cartons are held in position on the framework **8**, by inserting the pegs **23** into the perforations **24** to thereby suspend the cartons on the rack. It will be noted that the carton **9** shown in Figure 4 is provided with the perforations **24** on both ends of its bottom panel for the sake of convenience, so that it may be suspended from either end.

Considerable importance is attached to the longitudinal configuration of the upright members **21**, in the present invention, to preserve the exclusiveness of the display rack to a particular brand of merchandise. As most clearly seen in the side view of Figure 3, each of the upright

members 21 is formed to present a series of inclined bearing surfaces 28, upon which the bottom panels of the cartons 9 and 10 rest, as they are suspended from the pegs 23.

The inclined bearing surfaces 28 of each upright member 21, are disposed in separate planes, but parallel to each other, and are located in the same plane with the inclined bearing surfaces 28 in the same row of the other upright members 21. Thus, the bearing surfaces 28 in the top row of the framework 8 are all in the same plane, and in like manner, the bearing surfaces 28 of the several upright members 21 comprising the second row, are all in the same plane.

The adjacent bearing surfaces 28 of each upright member 21 are connected together by a connector 29. One of the connectors 29 extends backwardly, at approximately ninety degrees, from the lower end of each of the bearing surfaces 28 except the bottom ones, and is secured to the upper end of the succeeding lower bearing surface 28. As shown in the drawings the upright members 21 are bent to shape so that the bearing surfaces 28 are integral with their cooperating connectors 29, but other forms of construction may be used, without departing from the spirit and scope of the present invention.

The connectors 29 are of approximately the same length as the pegs 23 so that the pegs extend outwardly very little, if any, beyond the plane of the adjacent upper bearing surface 28. The pegs 23 are located directly beneath the connector, providing only sufficient clearance for the portion of the carton between the perforation 24 and its edge. With this arrangement, the row of bearing surfaces 28, directly above a row of pegs 23, serves as a barrier to protect the upper surfaces of the pegs, so that they cannot be used as a shelf for supporting merchandise not intended to be displayed on the rack.

The upright members 21 cooperate in pairs, four pairs being shown in the illustrated embodiment. Each pair is spaced apart a distance slightly less than the width of the smallest carton that it is to support so that the cooperating pair of upright members 21 will support an upright row of cartons. Larger cartons of proportionate size are supported across two or more pairs of upright members 21, to make the rack available for a variety of sizes of cartons, as may be required for the particular type of merchandise to be displayed thereon.

For example, the cartons 9 in the drawings are shown as containing six cans of canned goods, while the cartons 10 are designed to contain 12 cans. The cartons 10 are of the same depth as the cartons 9 but twice as long, and their bottom panels are provided with four of the perforations 24 on each end, spaced to conform to the spacing of the perforations 24 on the cartons 9 as shown in Figure 4. Although only two sizes of cartons are shown in the drawings, a greater variety of sizes may be provided to conform to the particular requirements.

From the foregoing detailed description of a practical working embodiment of the invention, it is apparent that there has been provided a useful and convenient display rack adapted to display a single brand of merchandise exclusively.

Although but a single embodiment of the invention has been set forth in considerable detail to constitute a full disclosure, it is to be understood that persons skilled in the art may utilize the novel principles here taught in apparatus differing in construction from the particular device herein described, without departing from the spirit and scope of the invention, as defined in the subjoined claim.

The principles of the invention having now been fully explained in connection with the foregoing description of embodying structure, I hereby claim as my invention:

In a rack for displaying merchandise, a plurality of upright members rigidly secured by means of ties in spaced relationship to form a framework, a plurality of horizontal rows of pegs mounted on said ties to extend outwardly therefrom, the pegs of each row being disposed in spaced relationship, said upright members comprising a plurality of inclined bearing surfaces disposed one above the other and a connector secured to the lower end of each of said inclined bearing surfaces to extend backwardly therefrom and attach the upper end of the succeeding lower inclined bearing surface of the same upright member, said connectors being located directly above a row of said pegs, whereby said connectors in cooperation with said inclined bearing surfaces serve as a barrier to prevent the resting of thick articles on top of said pegs but do not preclude suspending articles on said framework from said pegs.

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