

Dec. 5, 1933.

C. RUBENSTEIN

1,938,466

DISPLAY RACK

Filed July 5, 1932

Fig. 1

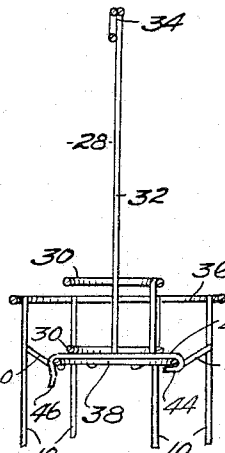
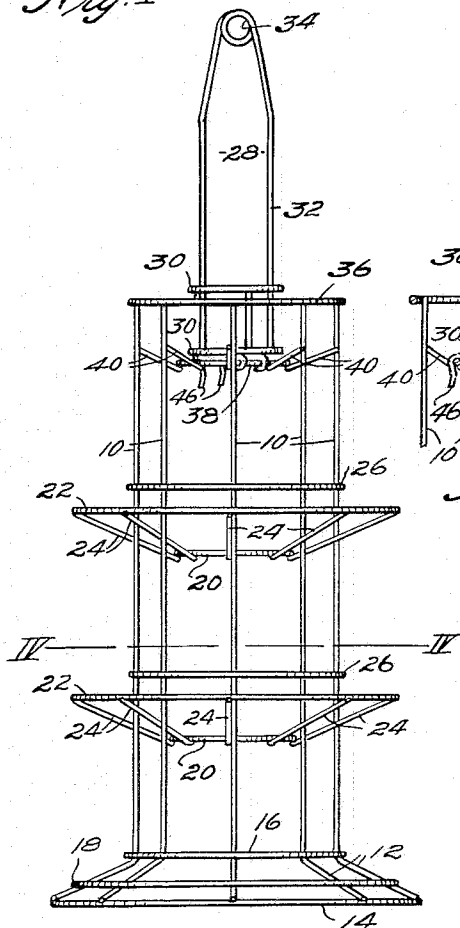


Fig. 3

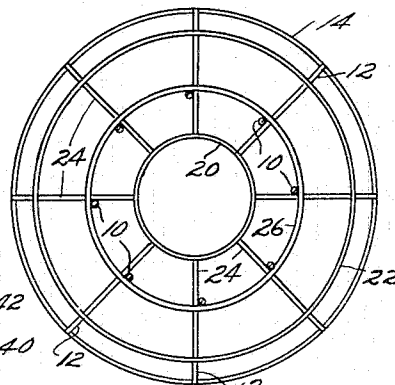


Fig. 4

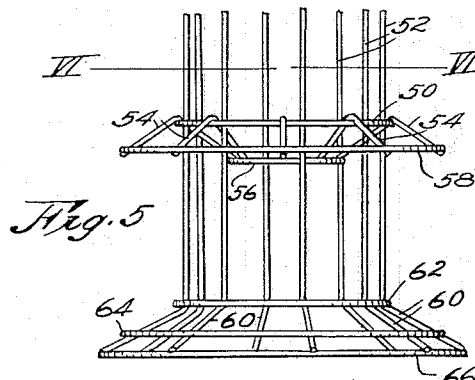


Fig. 5

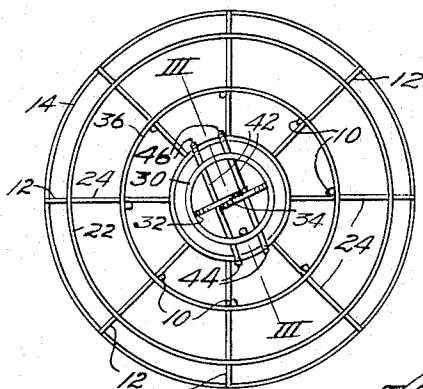


Fig. 2

Fig. 6

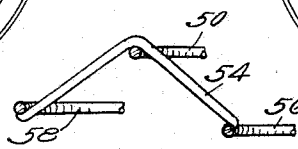
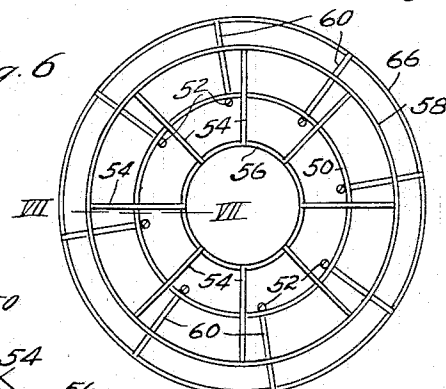


Fig. 7

INVENTOR,
Charles Rubenstein.
BY
Hovey & Hamilton,
ATTORNEYS.

UNITED STATES PATENT OFFICE

1,938,466

DISPLAY RACK

Charles Rubenstein, Kansas City, Mo., assignor
to Harry J. Rubenstein, Kansas City, Mo.

Application July 5, 1932. Serial No. 620,864

6 Claims. (Cl. 211—74)

This invention relates to display racks, and particularly that type of support which is formed of wire having parts for engaging a container whereby the same is securely held in position so that it may be easily removed therefrom, yet will be disposed in a place where it is displayed to the best advantage, and the primary object of this invention is to provide such a rack, that not only is cheap to manufacture, but embodies unique and novel features and combination of parts which renders the same exceptionally strong and durable without sacrificing the desirable pleasing appearance of the rack.

One of the important aims of the instant invention is the contemplation of a display rack for bottles, cans, jars and similar containers, all of which may be placed upon the rack to form spaced-apart groups of annularly arranged cartons, each of the cartons of the group being angled so that the top thereof lies closer to the vertical center of the rack than the base.

Another object of this invention is to provide a wire display rack having a unique based formed integrally with the upright portions of the rack, and extending beyond any parts thereof lying above said base.

A still further object of the invention is the provision of a novel removable bracket carried at the top of the display rack in such a manner that it may be removed therefrom and nested therewith when the rack is shipped or otherwise handled.

Minor objects of the invention, including the improvements relating to a number of series of grouped, concentric rings forming the carton-supporting members of the rack, and the relation of said rings with respect to each other and the vertical uprights of the rack, will appear during the course of the following specification, referring to the accompanying drawing, wherein:

Figure 1 is a side elevation of a rack embodying the preferred form of this invention.

Fig. 2 is a top plan view of the same.

Fig. 3 is a fragmentary, vertical section through the upper portion of the rack, taken on line III—III of Fig. 2.

Fig. 4 is a horizontal, cross-section through the rack, taken on line IV—IV of Fig. 1.

Fig. 5 is a fragmentary, side elevation, illustrating a rack embodying a modified form of the invention.

Fig. 6 is a horizontal, cross-section through the rack shown in Fig. 5, and,

Fig. 7 is an enlarged, fragmentary, detailed, sectional view showing one of the structural fea-

tures of the modified form, and taken on line VII—VII of Fig. 6.

In referring to the component parts of a rack built in accordance with this invention, like reference numerals will be used to designate similar parts throughout the several views, and the numeral 10 indicates a plurality of vertical standards arranged in a circle and each having the lower portion thereof angled outwardly to form a foot 12 which terminates at a ring 14 to form a suitable stable base for the entire rack. At the point of turn, which may also be defined as the zone of connection between standard 10 and foot 12, there is positioned a ring 16, which is welded or otherwise rigidly secured to each of standards 10. An intermediate ring 18 further lends to the symmetry and strength of the base of this novel rack, and is disposed in a position intermediate rings 14 and 16. It is desirable always to secure ring 14 to the free ends of feet 12 so that the ring lies therebelow to form a smooth bearing face upon which the rack sits. Through this construction just set down a very stable foundation work is formed for the entire display rack and any weight it may be called upon to support.

This rack may be made any height and when the height is increased, any number of concentric ring groups may be built onto standards 10 for the purpose of holding bottles, cans, jars, or the like. In the instance shown, there are two complete groups of concentric rings, and as mentioned, a series of these grouped rings is supported by standards 10. Each series of the grouped concentric rings includes a plurality of continuous, annular members disposed in different horizontal planes. There are preferably three such members in the preferred embodiment of this invention, and ring 20 of smallest diameter is circumscribed by the plurality of vertical standards 10. This ring 20 is disposed below the remaining rings and is attached to the member of largest diameter 22 by a number of straight arms 24, one of which is adjacent each standard 10 and rigidly affixed thereto intermediate its ends. Intermediate ring or annular member 26 is in direct engagement with all of standards 10 and is preferably welded securely thereto. Thus each group consists of three rings, one of which directly engages standards 10 and is higher than the other two rings. Members 22 and 26 circumscribe the plurality of standards 10 and the former is spaced apart therefrom by arms 24.

When constructing a rack for a particular type bottle or jar, the distance between the series of grouped rings may be varied to suit the dimen-

sions of said container. In case the rack illustrated in Fig. 1 is called upon to carry a number of bottles not here shown, the same are held in an inclined position with the bottom thereof resting upon member 22, while lower member 26 engages the side of the bottle above the bottom, and as these members so engage the bottle, its neck projects upwardly between members 22 and 26 of the series of grouped rings next above so that the neck, immediately adjacent its top, lies against member 26 of said upper series.

In case the rack is used to support cans or jars, members 22 and 26 engage bottom and side respectively thereof, as above mentioned, and two adjoining, spaced-apart standards 10 engage points on the upper annular periphery of the can as it leans inwardly thereagainst.

A further novel feature of this rack lies in the removable bracket 28 which comprises a number of relatively small, horizontally disposed, spaced-apart rings 30, which in turn support an arch 32 having a spring coil 34 at the uppermost portion thereof for the reception of a price card or the like. Rings 30 and bracket 32 are of such a diameter and height respectively as to receive a bottle or can like the ones held by the body of the rack. This bracket 28 projects a considerable distance above the uppermost ring 36, carried by standards 10, and it is desirable to remove bracket 28 and extend it downwardly or otherwise nest the same with the rack so that it will not be broken off during shipment. To permit this function, and also to allow the selective use or non-use of bracket 28, the same is designed to be removably affixed to the rack through the medium of ring 38 of relatively small diameter that is held in place below the top of standards 10 by arms 40, one of which extends inwardly from each standard 10 respectively. Lowermost ring 30 carries a pair of resilient arms 42 welded to said ring and projecting therebeyond so that hook and finger 44 and 46 respectively might engage ring 38, as illustrated in Fig. 3. A slight outward and upward pressure on fingers 46 will readily allow bracket 28 to be raised so that hook 44 will disengage ring 38.

It is obvious that upper ring 36 and members 26 of the series of grouped rings are of the same diameter as ring 16 and that intermediate ring 18 is of a diameter equal to the diameter of rings 22. All of the rings and annular members hereinbefore mentioned are concentric and an exceptionally strong and symmetrical rack is produced.

The modified form of the invention shown in Figs. 5, 6 and 7 is substantially the same as the preferred form just described, with the exception that ring 50, carried directly by standards 52, acts as a hanger for the bent arms 54 which extend from annular member 56 of smallest diameter, and which is circumscribed by standards 52, to annular member 58, of greatest diameter, which surrounds all of standards 52 in spaced relation thereto. Out-turned feet 60 and rings 62, 64, and 66 form a base similar to that of the preferred form and there are any number of grouped concentric rings 50, 56 and 58 located in spaced-apart relation throughout the height of standards 52.

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

1. In a display rack of the character described, a plurality of vertical standards arranged in a circle; a series of spaced-apart, grouped rings supported by said standards, each of said series

having a plurality of continuous, annular, concentric members disposed in different horizontal planes, one of said rings of each group being in direct engagement with all of said standards and a plurality of radial, inclined arms joining the innermost and outermost concentric members and holding the same in spaced relation to said vertical standards.

2. In a display rack of the character described, a plurality of vertical standards arranged in a circle; and a series of spaced-apart, grouped rings supported by said standards, each of said series having a plurality of continuous, annular concentric members of different diameters disposed in different horizontal planes, the annular member of smallest diameter being circumscribed by the plurality of vertical standards, the member of greatest diameter circumscribing said standards and spaced therefrom, an arm joining each of said standards respectively and said members of greatest and smallest diameters, and a member in direct engagement with all of said standards.

3. In a display rack of the character described, a plurality of vertical standards arranged in a circle; and a series of spaced-apart, grouped rings supported by said standards, each of said series having a plurality of continuous, annular concentric members of different diameters disposed in different horizontal planes, the annular member of smallest diameter being circumscribed by the plurality of vertical standards, the member of greatest diameter circumscribing said standards and spaced therefrom, an arm joining each of said standards respectively and said members of greatest and smallest diameters, and a member in direct engagement with all of said standards, the member of smallest diameter being the lowest of each group respectively, and the member in direct engagement with said standards being the highest of each group respectively.

4. In a display rack of the character described, a plurality of vertical standards arranged in a circle; and a series of spaced-apart, grouped rings supported by said standards, each of said series having a plurality of continuous, annular, concentric members of different diameters disposed in different horizontal planes, the annular member of smallest diameter being circumscribed by the plurality of vertical standards, the member of greatest diameter circumscribing said standards and spaced therefrom, an arm joining each of said standards respectively and said members of greatest and smallest diameters, and a member in direct engagement with all of said standards, each of said arms being straight and radiating from the center of said concentric members.

5. In a display rack of the character described, a plurality of vertical standards arranged in a circle; and a series of spaced-apart, grouped rings supported by said standards, each of said series having a plurality of continuous, annular, concentric members of different diameters disposed in different horizontal planes, the annular member of smallest diameter being circumscribed by the plurality of vertical standards, the member of greatest diameter circumscribing said standards and spaced therefrom, and a plurality of radially extending arms joining said member of smallest diameter and the member of greatest diameter, each of said arms being bent to engage all of said annular members.

6. In a display rack of the character described, a plurality of vertical standards arranged in a circle; and a series of spaced-apart, grouped

rings supported by said standards, each of said series having a plurality of continuous, annular, concentric members of different diameters disposed in different horizontal planes, the annular member of smallest diameter being circumscribed by the plurality of vertical standards, the member of greatest diameter circumscribing said standards and spaced therefrom, and a plurality of radially extending arms joining said member of smallest diameter and the member of greatest diameter, each of said arms being bent to engage all of said annular members, the bent arms having one end at the innermost member and the other end thereof at the outermost member.

CHARLES RUBENSTEIN.

10	85
15	90
20	95
25	100
30	105
35	110
40	115
45	120
50	125
55	130
60	135
65	140
70	145
75	150