

July 1, 1969

J. KOVACIK ET AL

3,452,880

DISPLAY STAND

Filed Aug. 30, 1966

Sheet 1 of 3

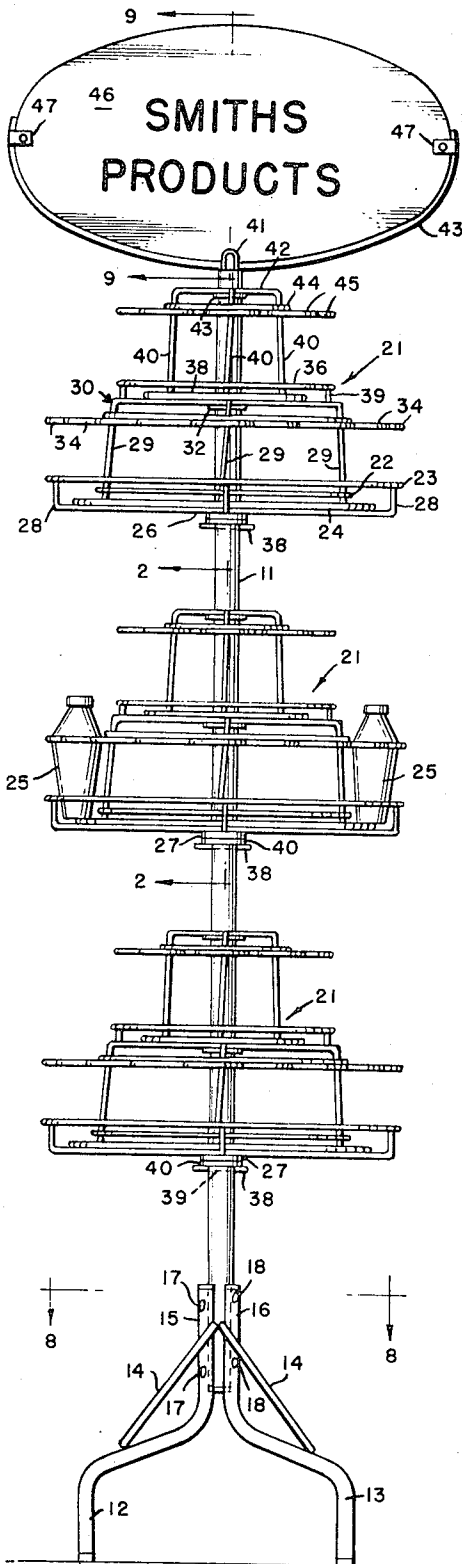


FIG. 1.

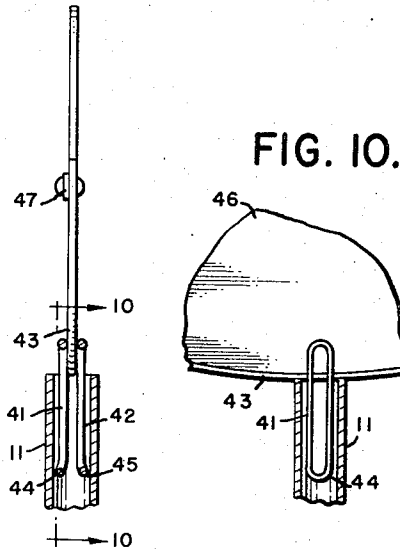


FIG. 9.

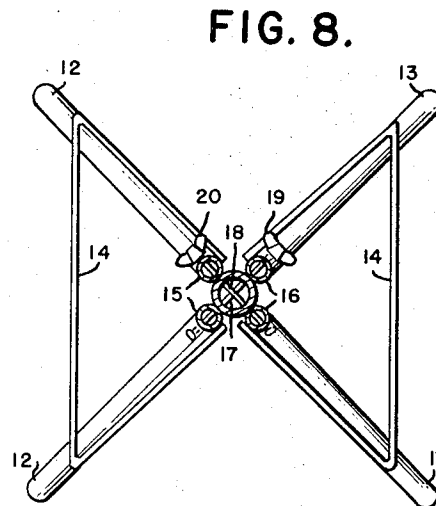


FIG. 8.

INVENTORS
JOSEPH KOVACIK
WILLIAM MOONEY

BY *Albert G. Kramer*

ATTORNEY

July 1, 1969

J. KOVACIK ETAL

3,452,880

DISPLAY STAND

Filed Aug. 30, 1966

Sheet 2 of 3

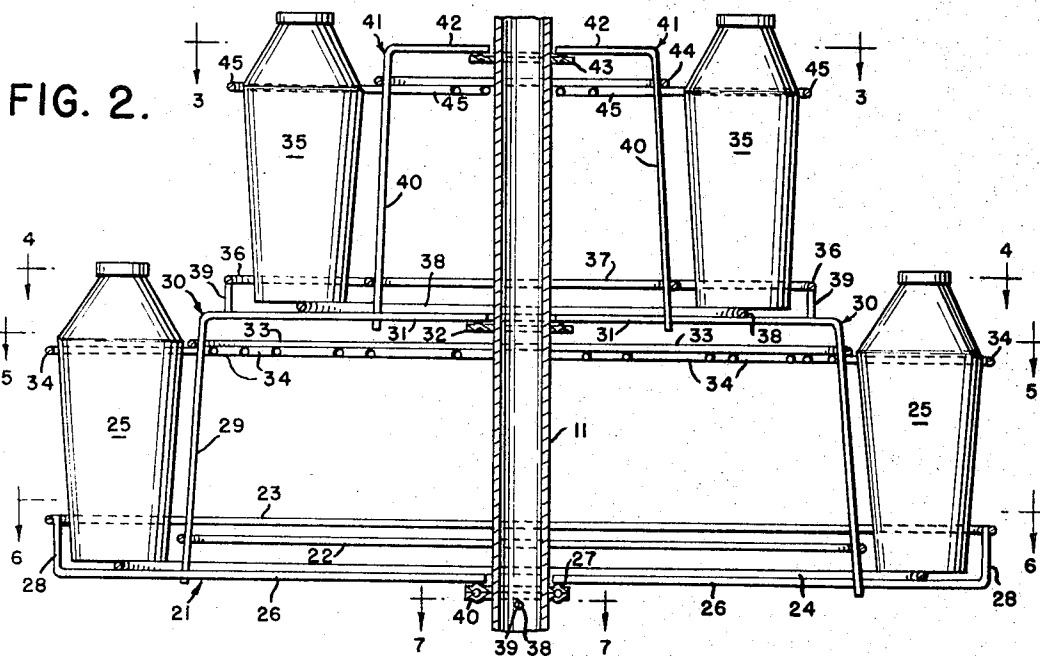


FIG. 3.

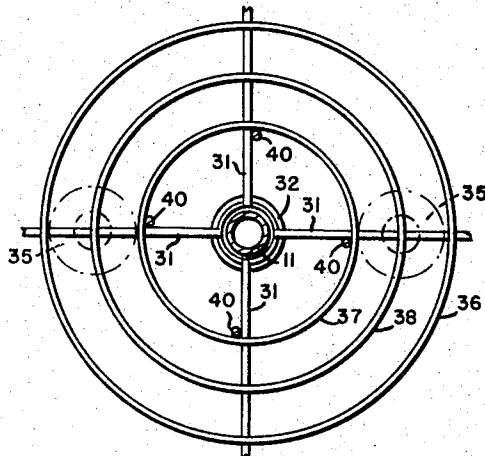
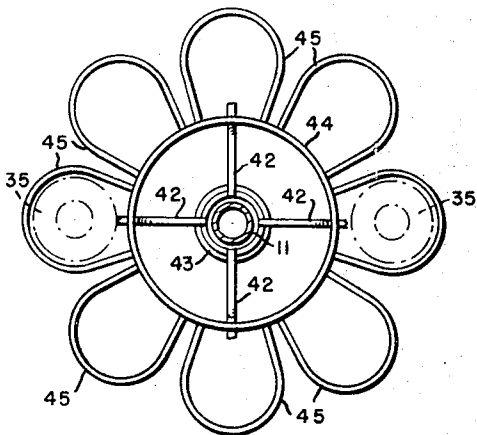


FIG. 4.

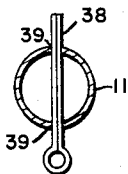


FIG. 7.

INVENTORS
JOSEPH KOVACIK
WILLIAM MOONEY

BY *Albert G. Kramer*
ATTORNEY

July 1, 1969

J. KOVACIK ET AL

3,452,880

DISPLAY STAND

Filed Aug. 30, 1966

Sheet 3 of 3

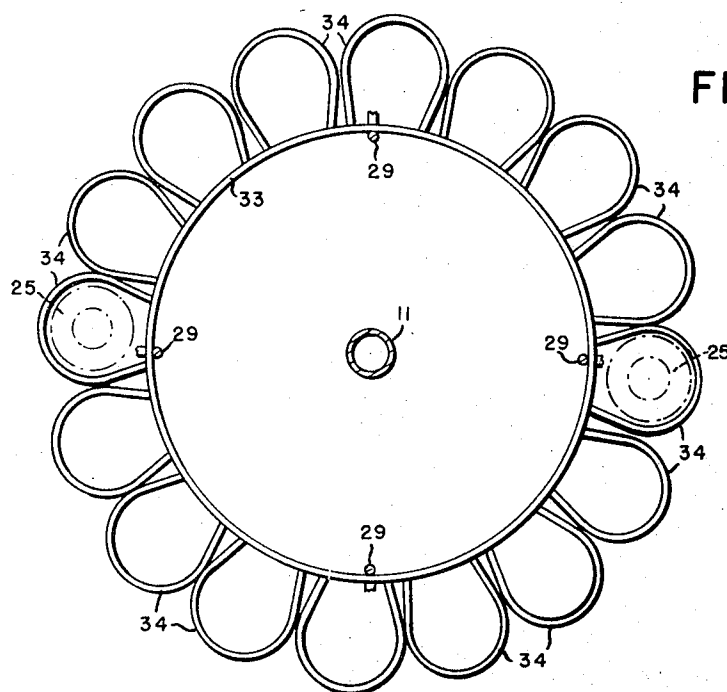


FIG. 5.

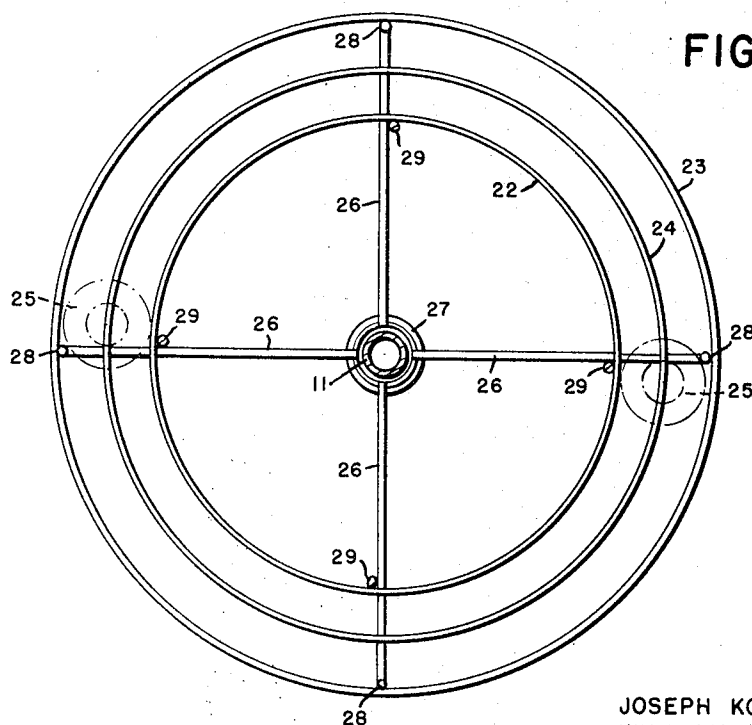


FIG. 6.

INVENTORS

JOSEPH KOVACIK
WILLIAM MOONEY

BY

Albert G. Kramer

ATTORNEY

1

2

3,452,880

DISPLAY STAND

Joseph Kovacik and William Mooney, New York, N.Y.,
assignors to Wide Range Industries, Inc., New York,
N.Y., a corporation of New York

Filed Aug. 30, 1966, Ser. No. 576,064

Int. Cl. A47b 73/00, 3/14

U.S. Cl. 211—77

3 Claims

ABSTRACT OF THE DISCLOSURE

A display stand adapted to display items such as bottles and cans, is provided of a wire construction. The stand comprises a vertical post supported on foot members and a plurality of rack units each independently rotatable on the post. Each unit comprises an annular channel formed of three hoops which support the base of the articles. Wire loops are disposed above the channels to engage each article separately and apart from all the others to prevent disarrangement of the display on removal of some of the bottles such as when a selection for purchase or examination is made and also to permit quick checking of inventory and preparing replenishment orders.

This invention relates to stands and it is more particularly concerned with a display stand adapted for products such as bottles, cans and other objects to be displayed, such as in merchandising articles, informational programs, or otherwise.

An object of the invention is the provision of such a stand which can serve as a display center for a large group of articles, such as various beverages.

Another object of the invention is the provision of such a display stand in which the articles can be displayed at various elevations in tiers so as to minimize space, such as in a retail store, and yet be handy to shoppers, for example.

A still further object is the provision of means whereby a person in a position adjacent the stand can easily rotate each tier group independently of the other groups so as to bring the entire display of a tier group under his scrutiny while remaining in a particular position. Hence, blind areas are avoided, such as when the display stand is positioned adjacent a wall or in a corner of a room.

A still further object is the provision of such a stand which can be provided in a knockdown form, then shipped to a destination, and readily assembled by a person of only ordinary skill.

These objects and still further objects, advantages and features of the invention will be apparent from the description which follows in conjunction with the accompanying drawing to which reference is made in the description.

In the drawing:

FIG. 1 is an elevational view of an embodiment of the invention.

FIG. 2 is a vertical sectional view along the line 2—2 of FIG. 1 on a larger scale.

FIGS. 3, 4, 5, 6 and 7 are sectional views along the lines 3—3, 4—4, 5—5, 6—6 and 7—7, respectively, of FIG. 2 on different scales.

FIG. 8 is a sectional view along the line 8—8 of FIG. 1 on a larger scale.

FIG. 9 is a sectional view along the line 9—9 of FIG. 1 on a larger scale.

FIG. 10 is a sectional view of a fragmentary portion generally along the line 10—10 of FIG. 9.

Referring to the drawing with more particularity, the embodiment illustrated comprises a vertical tubular post 11 supported in an upright position by two pairs of legs

12, 12 and 13, 13. Each pair of legs is provided as a unit and held together by a wire brace 14 welded to the legs. The upper vertical shanks 15 and 16 of the units are adapted to lie along the post 11 and to be removably secured thereto by bolts 17 and 18 which pass through apertures of the shanks and apertures of the post in a conventional manner. The bolts are held in position by wing nuts 19 and 20.

The post 11 is adapted to rotatably carry a group of circular tray units 21 adapted to support a particular type of object to be displayed. In the embodiment illustrated the tray units are adapted to support bottles of a particular size. These units each comprise a wire or rod structure having an annular base channel formed of a group of horizontal wire hoops, including an inner hoop 22, an outer hoop 23 and a median hoop 24. The median hoop 24 is at a level below the hoops 22 and 23 and it acts as a bottom support for the bottles 25. The hoops 22 and 23 comprise lateral rails of the channel between which the bottom parts of the bottles 25 are normally disposed.

The hoops are connected together by means of radial rods 26 welded to a center hub ring 27 and to the bottom of the hoop 24. The outer ends of the rods 26 have flanges 28 which are welded to the outer hoop 23.

The inner hoop 22 is welded to the vertical arms 29 of rods 30. The lower ends of the arms 29 are welded to the radial rods 26 respectively. The rods 30 each comprise a horizontal arm 31 which extends inwardly to a second center hub ring 32 to which the inner end of the arm 31 is welded.

A hoop 33 is disposed on the outer sides of the vertical arms 29 just below the horizontal arm 31 and it is secured thereto by welding.

A series of horizontal wire loops 34 are circumferentially disposed on and secured to the hoop 33. These loops serve as holders for the upper part of the bottles 25.

The horizontal arm 31 also serves to support a superstructure for a second but smaller tier of bottles 35. This superstructure comprises a smaller annular channel formed of a group of hoops, including an outer hoop 36, an inner hoop 37 and a median hoop 38.

The outer hoop 36 is supported by vertical struts 39 welded to the horizontal arms 31. The median hoop 38 is supported directly on the arms 31 and secured thereto by welding. The inner hoop 37 is welded to the vertical arms 40 of rods 41, the lower ends of the arms 40 being welded to the corresponding horizontal arms 31.

The upper ends of the rods 41 are bent to form horizontal arms 42 which extend inwardly to a hub ring 43 to which they are welded.

An upper hoop 44 is welded to the outer sides of the vertical arms 40 just below the horizontal arms 42. To the hoop 44 a series of wire loops 45 are welded as holders for the upper ends of the second tier of bottles 35. The median hoop 38 comprises the bottom support for these bottles and the hoops 36 and 37 comprise lateral rails of the smaller annular channel between which the bottom parts of the bottles 35 are normally disposed.

The horizontal center hub rings are all vertically aligned and are provided with aligned apertures to fit the post 11 and to rotate thereon.

Each rotatable unit is held at a specific elevation by means of bearing pins 38 or by any other suitable or conventional means, engaging radial apertures 39 of the post. To facilitate rotation of the units on the pins 38 a washer 40 may be inserted between the pins and each of the said center rings.

The upper end of post 11 is hollow and open and it is adapted to receive a pair of vertically elongated loops 41 and 42 welded to either side of a hoop 43 at the bottom thereof. The lower ends 44 and 45 of the loops 41 and 42,

3

respectively, are outwardly flared. These loops are mounted to coact so that resilient pressure is applied by the ends 44 and 45 against the inner wall of the post 11 when they are disposed therein. The hoop 43 is adapted to contain a sign 46 which may advertise or contain indicia relative to the articles displayed. The sign is held in place on the hoop 43 by conventional brackets 47.

From the description above it will be understood that the invention is adapted to support a number of large groups of items in a relatively small space and each group can be rotated as a unit relative to a fixed position so that a viewer can observe the entire display or choose items from it by simply remaining in a given position adjacent the device and rotating the tray units or any of them.

The loop members 34 and 45 hold the bottles in a fixed position and prevent disarrangement on removal of some bottles of a group such as when selected for purchase or close examination. This also permits quick checking of inventory and refilling of orders. The loop members may be provided for any subset of the group of bottles, i.e., one, two, three, etc.

We claim:

1. A display stand comprising a vertical post having a foot support, a plurality of tiers of rack units, each rack unit being rotatably mounted on the post independently of each other, said unit comprising means for supporting collectively the lower ends of a group of articles to be displayed in a selected group relation, means to support the upper ends of the articles individually, said unit comprising an annular channel for supporting the lower ends of a group of articles in circumferential relation and a series of loops above the channel for holding the upper ends of each article individually in a fixed position relative to other articles of the group, said unit also comprising separate annular channels and a separate series of loops delineating each channel.

2. A display stand as defined by claim 1 in which the channels are disposed in vertically spaced relation.

4

3. A display stand comprising a vertical post having a foot support a plurality of tiers of rack units, each rack unit being rotatably mounted on the post independently of each other, said unit comprising means for supporting collectively the lower ends of a group of articles to be displayed in a selected group relation, means to support the upper ends of the articles individually, each rack unit comprising hoop rings and means for rotatably supporting the rings on the post at a predetermined elevation, each rack unit also comprising a set of relatively larger hoops and a set of relatively smaller hoops concentric with the larger hoops, the smaller hoops being superimposed on and connected to the larger hoops, each set of hoops being arranged to form an annular channel for the reception of the bottoms of articles to be displayed, and a series of loops above each channel for holding the upper ends of each article individually in a fixed position relative to other articles.

References Cited

UNITED STATES PATENTS

516,454	3/1894	Sherman et al.	312—135
2,032,156	2/1936	Stoddard	220—19
2,883,063	4/1959	Baren	211—78
1,728,512	9/1929	Sharp	211—77
2,065,845	12/1936	Weaver	211—181 X
2,071,290	2/1937	Scriba	211—131 X

FOREIGN PATENTS

5,159	4/1896	Great Britain.
-------	--------	----------------

ROY D. FRAZIER, *Primary Examiner*.

FRANK DOMOTOR, *Assistant Examiner*.

U.S. Cl. X.R.

211—78, 129, 131, 163