

A. KAPLAN

BOWLING BALL AND SHOES CARRIER

FIG. 1

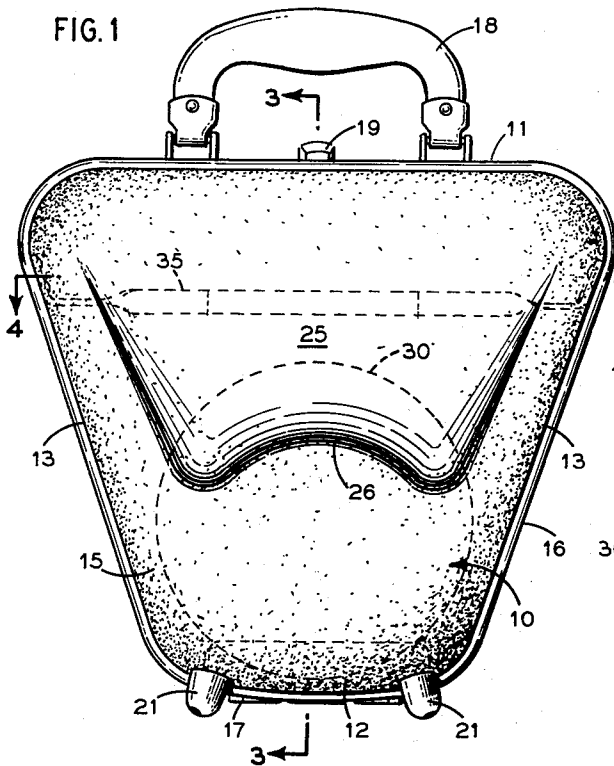


FIG.2

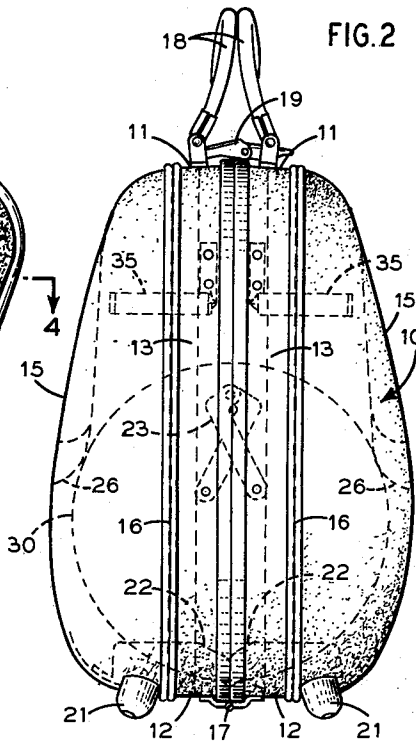


FIG. 3

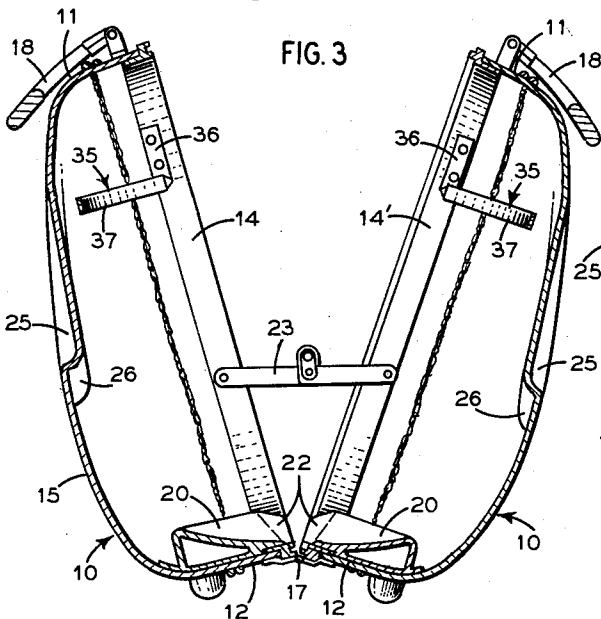
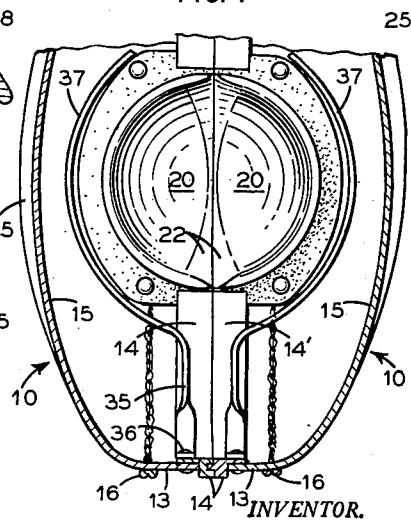


FIG. 4



BY *Blum, Moscovitz,
Friedman & Blum*

ATTORNEYS

1

2,991,859

BOWLING BALL AND SHOES CARRIER

Arnold Kaplan, 57 Southgate Road, Valley Stream, N.Y.
Filed Nov. 6, 1959, Ser. No. 851,357
2 Claims. (Cl. 190-48)

This invention relates to carriers for bowling balls and, more particularly, to a novel self-supporting rigid case or carrier for such balls having improved means for firmly maintaining the ball against movement within the carrier and incorporating novel means for supporting a pair of bowling shoes therein.

Known carriers for bowling balls are usually made of flexible material such as a woven fabric. One type is simply a bag arranged to receive the ball and having a close fit therewith, this bag having one or a pair of carrying handles. More elaborate carriers, while still made of flexible material such as woven fabric, are provided with a relatively rigid seat for the ball, and sometimes these carriers are provided with additional pockets or the like for carrying a pair of bowling shoes.

However, known bowling ball carriers are characterized by their generally shapeless appearance and the possibility of damage to the ball if the carrier is struck against something or if something strikes the carrier. While the flexible material of the carrier will, to some extent, cushion a blow, nevertheless it frequently happens that a ball in one of these flexible material carriers has its surface scored or marked. This, of course, is disadvantageous from the standpoint of accuracy, as scores or other marks on the surface of the ball will tend to deflect the latter as it is thrown down the alley.

In accordance with the present invention, a novel bowling ball and bowling shoe carrier is provided which is made of rigid self-supporting plastic material and designed to the ball therein against movement in any direction. In addition, the carrier is provided with novel rack means for supporting a pair of bowling shoes above the ball.

More specifically, the carrier comprises a pair of mating casing sections each including an outwardly convex main wall bounded by a peripheral rim forming top, bottom and side margins for the casing section. The casing sections are hinged together at their bottom margins and each of these bottom margins carries one-half of a relatively rigid spherically concave seat for a bowling ball. In addition, the main wall of each section is off-set inwardly, above the hinged edge, to provide a formation which, in the closed position of the carrier, substantially touches the surface of the ball to confine the latter against movement. Such confinement is further enhanced by the shape of the carrier, whose side margins converge from the top margin toward the bottom margin so that the side margins are in relatively close relation to the sides of the bowling ball and thus limit shifting parallel to the main walls of the casing section.

The carrier has a height substantially in excess of the diameter of the usual bowling ball thus providing space above a ball in the carrier. This space is utilized for carrying of a pair of bowling shoes and, for this purpose, a pair of metal braces are provided each of which interconnects and braces the side margins of a section above the bowling ball. Each brace comprises a metal strip which, intermediate of its ends, is off-set outwardly in a curve toward the main wall of the associated section so as to provide clearance for the bowling ball supported on the seat, and to permit ready removal of the ball when the carrier is opened. The outwardly off-set arcuate intermediate portions of the braces have the further function of providing racks having adequate supporting surfaces for a pair of bowling shoes in the carrier.

For an understanding of the invention principles, ref-

2

erence is made to the following description of a typical embodiment thereof as illustrated in the accompanying drawings. In the drawings:

FIG. 1 is a front elevation view of a bowling ball carrier embodying the invention;

FIG. 2 is an end elevation view of the carrier;

FIG. 3 is a vertical sectional view of the carrier, taken on the line 3-3 of FIG. 1 and showing the carrier partly open; and

FIG. 4 is a horizontal sectional view of the carrier, taken on the line 4-4 of FIG. 1.

Referring to the drawing, the bowling ball and shoe carrier of the invention is illustrated as comprising a pair of mating casing sections 10, 10 molded of a relatively rigid and self-supporting plastic composition material such as used in the manufacture of luggage. In front elevation, each casing section 10, 10 has the general appearance of an inverted trapezoid with rounded corners. Each casing section includes an outwardly convex main wall 15 bounded by a peripheral rim forming top and bottom margins 11 and 12, respectively, and side margins 13, 13. A metal reinforcing channel 14 is engaged over the margin of each casing section, and a decorative strip may be stitched around the margins of each casing section, as indicated at 16.

The sections 10, 10 are hinged together by hinge means 17 interconnecting the bottom margins 12. The top margin 11 of each section may also be provided with a suitable handle 18, and the carrier is held with its sections in closed condition by means of latch means indicated at 19.

Each bottom margin 12 supports one-half of a relatively rigid hemispherically concave bowling ball seat 20 molded from a suitable rigid and self-supporting plastic material. Each half seat 20 is secured to the corresponding margin 12 by rivets which also secure support feet 21 to the bottom margin 12. The half seats 20 mate with each other, when the carrier is closed, to form a complete seat for the ball, and the diametrically extending edge of each half seat 20 may be bevelled downwardly as indicated at 22. The degree of opening of the two casing sections is limited by a hinged link 23, shown particularly in FIGS. 2 and 3 as connected to the channel rims 14 and 14'.

Each main wall 15 of a casing section has a portion off-set inwardly, as at 25, to form a recess which increases in depth toward the bottom of the casing section. The lower edge 26 of this recess is arcuate and, extends inwardly a sufficient extent so that, in the closed condition of the carrier, this arcuate lower edge 26 of the recess 25 lies along and substantially touches the surface of a bowling ball 30 supported on the seats 20-20, as best seen in FIG. 2. Consequently, the ball 30 is restrained against both lateral and longitudinal movement relative to the casing sections when the carrier is closed. Such limitation of lateral and longitudinal movement of the ball is further assisted by the close approach of the lower portions of the casing section walls and margins to the ball in the closed condition of the carrier.

It will be noted that the height of the carrier is substantially in excess of the diameter of ball 30. The wider upper portion of the bag therefore may be used readily for storing a pair of bowling shoes. For this purpose, each casing section has a metal strap 35 forming a rack or support for a bowling shoe. Each strap 35 has upwardly bent ends 36 secured to the metal rim 14 at each end of the strap. Between its ends 36, each strip 35 is twisted so as to lie in a plane substantially parallel to the open face of the associated section, and is bent out of the line joining the ends 36 to form circular off-sets 37, as best seen in FIG. 4.

3

The straps 35 have two functions. One of these functions is to internally brace the associated casing sections, and the other function is to serve as racks or supports for bowling shoes. The support function is facilitated by the circular or arcuate central off-set 37. In addition, these circular off-sets permit easy removal of ball 30 from the casing section when the latter is opened, without any interference by the cross bars 35. It will be noted that the radius of curvature of off-set sections 37 is substantially greater than that of the bowling ball seats 20, 20. Furthermore, the ball 30 can be removed from the carrier without removing shoes from their support on the rack bars 35, as will be readily apparent from an inspection of FIG. 3 or FIG. 4.

While a specific embodiment of the invention has been described in detail to illustrate the application of the invention principles, it will be understood that the invention may be embodied otherwise without departing from such principles.

What is claimed is:

1. A bowling ball carrier comprising, in combination, a pair of mating casing sections of relatively rigid self-supporting plastic composition material, each section comprising a fixed outwardly convex main wall bounded by a peripheral rim forming top, bottom and side margins, the bottom margins having rectilinear and juxtaposed opposed edges; and hinge means interconnecting the opposed edges of the bottom margins of said casing sections; each bottom margin having secured on its inner surface one-half of a spherically concave seat for a bowling ball, each concave seat having a diametrically extending inner edge and each inner edge terminating at and extending in substantially coplanar relation with the edge of its associated bottom margin; the one-half seats mating with their diametrically extending inner edges abutting each other, in the closed condition of said carrier, to form a substantially continuous spherically concave seat having a substantially circular periphery; each main wall having inwardly projecting integral formations intermediate its

4

top and bottom margins arranged to substantially engage the upper surface of a bowling ball on said seat, in the closed condition of the carrier, to substantially confine shifting of the ball during transportation of said carrier.

2. A bowling ball carrier comprising, in combination, a pair of mating casing sections of relatively rigid self-supporting plastic composition material, each section comprising an outwardly convex main wall bounded by a peripheral rim forming top, bottom and side margins; and hinge means interconnecting the bottom and side margins of said casing sections; each bottom margin having secured on its inner surface one-half of a spherically concave seat for a bowling ball, and the one-half seats mating, in the closed condition of said carrier, to complete a spherically concave seat; each main wall having an inwardly extending recess intermediate its upper and lower margins and extending for the major part of the width of the wall, said recess increasing in depth downwardly from the upper portion of the main wall toward the lower margin thereof and terminating in an arcuate lower edge having a radius of curvature substantially equal to that of a bowling ball and arranged, in the closed condition of the carrier, to extend along and in substantial contact with the surface of a bowling ball seated on said hemispherically concave seat.

References Cited in the file of this patent

UNITED STATES PATENTS

D. 125,988	Anderson	Mar. 18, 1941
30 1,024,536	Taylor	Apr. 30, 1912
2,302,802	Roberts	Nov. 24, 1942
2,351,673	Erikson	June 20, 1944
2,617,012	Nestley	Nov. 4, 1952
2,754,870	Glantz et al.	July 17, 1956
35 2,768,720	Nelson	Oct. 30, 1956
2,872,029	Cart	Feb. 3, 1959
2,922,453	Le Gaff	Jan. 26, 1960
2,945,582	Abraham et al.	July 19, 1960