A combined bottle top attachment and toy is formed as a hollow cup having a cylindrical recess adapted, when the cup is upside down on the top of a bottle, to fit snugly around a crown cap closure on a soft drink bottle or the like, at which time a bore of greater diameter extending away from the cup bottom rests firmly against the neck of the bottle. Each cup has a pair of tongue and groove formations arranged on diameters at right angles to each other with the tongue at one end of the diameter and the groove at the other end and adapted to snugly fit into formations of like character on another cup. These tongue and groove formations extend radially outwardly from the cup surface at its greater diameter and are parallel to the axis of the cup, so that a plurality of the cups may be joined endlessly to each other along either or both of the diameters. Projections extend axially outwardly from the bottom of the cup on the same diameters as the tongue and groove formations and separate wheels can be snapped into these axial projections so that each cup forms a small cart. Preferably, the entire structure is integrally molded from plastic or the like.
BOTTLE TOP ATTACHMENT AND TOY

An object of the present invention is to provide a unitary cup which may be attached firmly to the top of a soft drink bottle by pushing the cup upside down over the sealing cap of the bottle so that the cup is held firmly on the top of the bottle. An empty space is provided between the bottle cap and the bottom of the cup when the two are assembled and some prize may be contained in this compartment so that the child receives a premium upon purchasing a bottle of the drink.

Another object of the invention is to provide tongue and groove formations along one or more diameters of the cup and parallel to the axis of the cup so that a plurality of the cups may be connected in line by connection of the tongue of one cup into the groove of another cup.

Another object of the invention is to provide a quick manner of attaching a pair of wheels to the bottom of each cup, if desired, so that each cup becomes a cart.

Other objects and advantages of this invention will be apparent from the accompanying specification and drawings and the essential features thereof will be set forth in the appended claims.

In the drawings,

FIG. 1 is a side elevation of the cup of this invention in position with its bottom upward;

FIG. 2 is a plan view taken at the upper end of FIG. 1;

FIG. 3 is a transverse sectional view taken along the line 3--3 of FIG. 2 with the top of a soft drink bottle entered into the recess of the cup;

FIG. 4 shows two of the cups of FIG. 1 joined together by tongue and groove formations;

FIG. 5 is a plan view taken from the top of FIG. 4 to show how four of the cups may be joined together by the tongue and groove formations;

FIG. 6 is a side elevational view of three of the cups, right side up, and with a pair of wheels attached to the bottom of each cup;

FIG. 7 is an end view taken from the right-hand end of FIG. 6; while

FIG. 8 is a view similar to FIG. 7 drawn in a manner to show clearly the wheel construction.

Referring now to FIGS. 1, 2 and 3, the cup of this invention has a portion 10a of smaller diameter and a bottom 10b enclosing a recess 11 which, with the parts in the position of FIG. 3, may be used to house a premium or other articles when a soft drink is sold with the cup of this invention in place. Farther from the bottom, the cup enlarges to a greater diameter 10c which provides a radially inwardly extending shoulder 10d between the larger bore 12 and the recess 11. The inside diameter of the recess 11 is so chosen that it forms a tight fit on the crown cap 13 commonly used to seal the top of soft drink bottles. This diameter is approximately seven-eighths of an inch.

Tongue and groove formations are provided so that a plurality of the cups may be secured together as shown in FIGS. 4, 5 and 6. As best shown in FIG. 2, a groove formation 14 extends radially outwardly from the surface of larger diameter 10c, and diametrically opposite this a tongue formation 15 extends radially outwardly. Preferably, but not necessarily, the tongue and groove are formed of dovetail section. In any case, the tongue fits snugly into its coacting groove. The tongue and groove formations are integral with the cup and are parallel to the axis of the cup.

Preferably a second set of tongue and groove formations is provided on the cup on a diameter at right angles to that extending between the structure 14, 15. This is shown as a groove formation 14' and a tongue formation 15' diametrically opposite in FIG. 2.

It results from this formation that a plurality of cups may be joined endlessly to each other along either or both of the two diameters mentioned. For instance, two of the cups 10 may be joined diametrically in line as shown in FIG. 4 or four of them may be joined together as shown in FIG. 5, two of them being in line in a diameter in one direction and two of them being in line along a diameter at right angles to the first direction.

Means may be provided as shown to convert the cup into a small cart. To this end at least two projections 16 (four being shown) are provided integral with the cup and extending in an axial direction away from the bottom of the cup near the peripheral edge thereof. Two of these projections lie at opposite ends of a diameter B of the cup at right angles to the diameter A between the tongue and groove formations 14 and 15, while the other two projections are on a diameter at right angles thereto. Each of these projections has a central groove 16a extending inwardly from the distal end of the projection, the same being formed preferably as a portion of a circle and narrower at 16b at the entrance to the groove so that a small wheel may be snapped into the groove and held therein. Each of two wheels is a separate structure as best seen in FIG. 8. Preferably the wheel structure is a single molding comprising a wheel 17 and a retainer 18 which is a collar of smaller diameter than the wheel and are spaced apart on a common shaft 19 by a spacing approximately equal to the thickness of one of the projections 16. Part of the wheel comprises outstanding collar 17a which holds the wheel away from the projections 16 so that it will turn more easily. The shaft 19 is of such a diameter that it will snap into one of the grooves 16a and will be held therein by the interlocked projections 16b at the open mouth of the groove. Two of these wheels could be stored in the compartment 11 in the position of the parts in FIG. 3.

A suggested use of a plurality of these cups as a toy is shown in FIGS. 6 and 7 where a plurality of the cups 10, each having a pair of wheels 17 attached at the bottom are connected together and 20 and 21 by the tongue and groove formations 14, 15 and 14', 15' so as to form a train which may be pulled along the floor by a string attached to one end of the train.

Referring to FIGS. 1 and 2, an additional structure is shown comprising four short pins 22 integral with the bottom and extending upwardly therefrom, each pin being midway between a pair of the projections 16. These pins are adapted to cooperate with a building block of the type shown in my copending patent application Ser. No. 173,723, filed Aug. 20, 1971, showing a very small building block having recesses in the bottom adapted to fit over the pins 22 in the position of FIG. 1 so as to build up a structure thereon.

In use of this device, it is applied to a bottle 23 in the position of FIG. 3 with the cup upside down and with the inside diameter of the recess 11 tightly fitting the bottle cap 13 and with a pair of wheels 17 or other
premums in the recess 11. At such time the shoulder 10 engages against the neck of the bottle when the cup is firmly pushed downwardly.

In one embodiment of this invention, the cup as shown and described is made as an integral molding out of plastic and each of the wheels 17 with attached parts 18 and 19 is made of an integral molding of similar plastic.

What is claimed is:

1. A bottle top attachment comprising a hollow cup having a cylindrical recess nearer the cup bottom and a bore of greater diameter spaced longitudinally from the bottom and providing a radially inwardly extending shoulder spaced longitudinally from said bottom where said bore meets said recess, and the diameter of said recess being of a size to fit snugly around a crown cap closure on a soft drink bottle or the like and said shoulder then in a position to rest against the neck of the bottle and to hold said cup bottom spaced from said crown cap, the interior of said recess being unobstructed to permit a premium or the like to be stored between said crown cap and said cup bottom.

2. An attachment as defined in claim 1, wherein said cup has two outside cylindrical surfaces, one surface of a greater outside diameter in the zone of said bore than the outside diameter of the other surface in the zone of said recess, coacting tongue and groove formations integral with said cup extending radially outwardly from said cup surface of said greater diameter and parallel to the axis of said cup, and said tongue formation being diametrically opposite said groove formation, whereby two of said cups may be joined together with their axes parallel by connecting said tongue and groove formations.

3. An attachment as defined in claim 2, wherein said tongue and groove formations are dovetail in section.

4. An attachment as defined in claim 2, including two projections integral with said cup and extending in an axial direction away from the bottom of said cup near the peripheral edge thereof opposite each other on a diameter at right angles to the diameter between said tongue and groove formations, there being a central groove in each of said projections extending inwardly from its distal end and narrower at its outer end, and two wheel structures each comprising a wheel and a wheel retainer spaced on a common shaft by the radial thickness of said projections, said shaft of a diameter to snap into said central groove and to be retained therein.

5. An attachment as defined in claim 2, including two of said tongue formations and two of said groove formations, one tongue formation and one groove formation being respectively at opposite ends of one diameter of said cup, the other tongue and groove formations being respectively at opposite ends of another diameter of said cup at right angles to said one diameter, and any of said tongues being snugly received in any of said grooves, whereby said cups may be joined endlessly to each other along either or both of said diameters.