Oct. 14, 1952 C. METZ 2,613,476

CAPTIVE HOOP TOY

Filed June 24, 1950

FIG. 1.

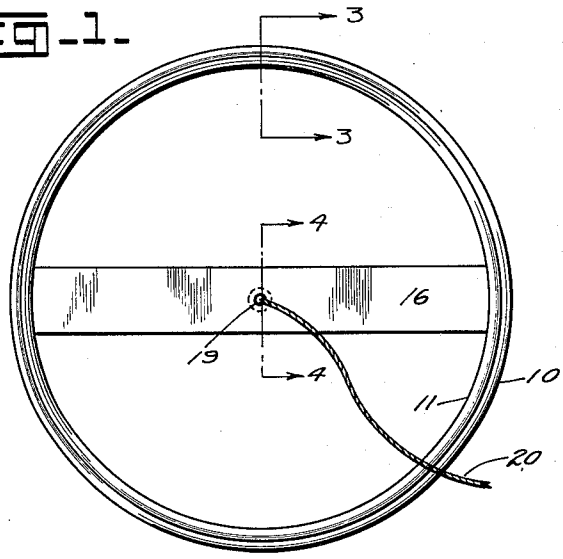


FIG. 2.

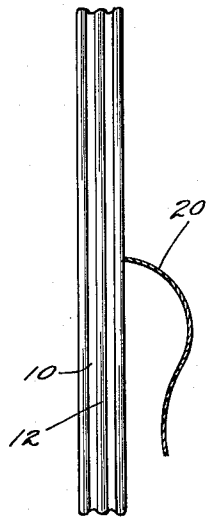


FIG. 3.

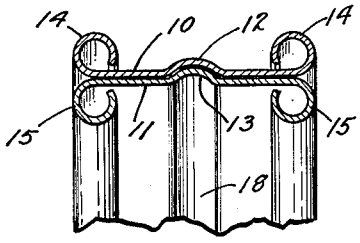


FIG. 4.

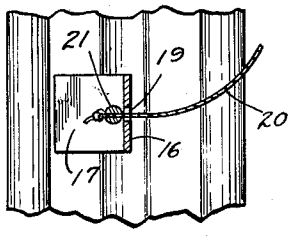
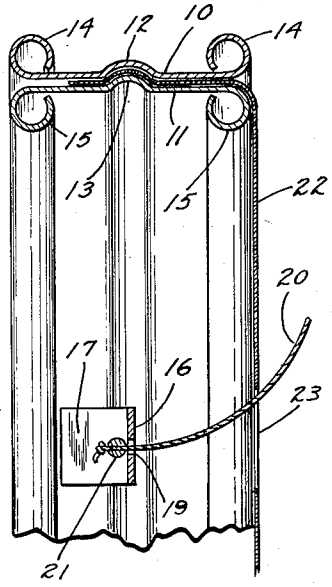


FIG. 5.



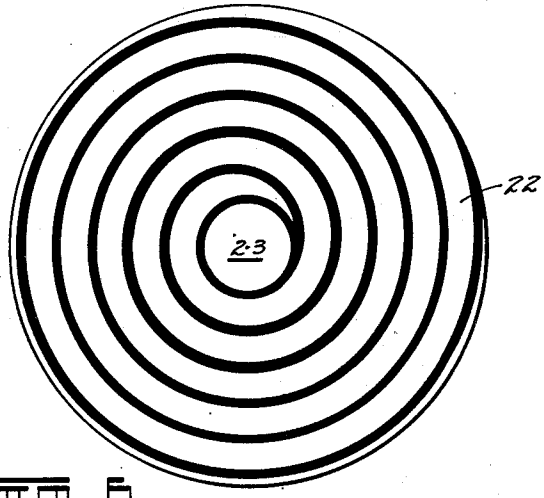


FIG. 6.

INVENTOR.
Charles Metz.
BY W. B. Harpman
ATTORNEY.

Patented Oct. 14, 1952

2,613,476

UNITED STATES PATENT OFFICE

2,613,476

CAPTIVE HOOP TOY

Charles Metz, Youngstown, Ohio

Application June 24, 1950, Serial No. 170,095

4 Claims. (Cl. 46—220)

1

This invention relates to a toy and more particularly to a toy comprising a captive hoop which may be rolled through the manipulation of an attached cord or the like.

The principal object of the invention is the provision of an attractive captive hoop toy.

A further object of the invention is the provision of a captive hoop toy which may be inexpensively formed of available materials.

A still further object of the invention is the provision of a toy of the class described so formed that interchangeable discs of suitable material can be applied to the hoop and retained thereby.

A still further object of the invention is the provision of a captive hoop toy, the rim construction of which is resilient to provide a bouncing action on the part of the toy when rolled.

The captive hoop toy disclosed herein comprises an improvement in the art of captive hoops or discs which are supplied with a cord or string by which the toy may be manipulated so that it runs in a circle either about the operator or at one side or in front and is responsive in its rolling action and direction of such rolling action to the will of the operator through the manipulation of the controlling string or cord. Toys of this general nature have been known in the art but have not met with particular commercial success due to their lack of flexibility which made them difficult to handle.

The present invention discloses a captive hoop toy which, due to its construction, operates with a resilient bouncing and rolling action which is particularly attractive and this same construction enables the formation of the toy from very thin inexpensive strip material so that it may be produced and sold at a relatively low cost. Additionally, toys of this nature as heretofore known in the art presented an unchanging appearance which was unattractive whereas the toy disclosed herein provides for the substitution of various colored and designed panels at the pleasure of the operator.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being the intention to cover all changes and modifications of the example of the invention herein chosen for purposes of the disclosure, which do not constitute departures from the spirit and scope of the invention.

The invention is illustrated in the accompanying drawing, wherein:

2

Figure 1 is a plan view of the captive hoop toy.

Figure 2 is a side view.

Figure 3 is an enlarged vertical section taken on line 3—3 of Figure 1.

Figure 4 is an enlarged vertical section taken on line 4—4 of Figure 1.

Figure 5 is an enlarged vertical sectional view of the toy showing a replaceable paper disc installed therein.

Figure 6 is a plan view of the paper disc shown installed in the toy in Figure 5.

By referring to the drawings and Figures 1 and 2 in particular it will be seen that a captive hoop toy has been disclosed which comprises a pair of rims 10 and 11, the rim 10 being of slightly greater diameter than the rim 11 and held in normal position thereabout by an annular groove 12 formed in the inner wall of the rim 10. The annular groove 12 corresponds in size and shape with an annular rib 13 formed on the outer surface of the rim 11.

The peripheral edges of the rims 10 and 11 are rolled as indicated by the numerals 14—14 and 15—15, respectively, and as best illustrated in Figure 3 of the drawings. The registering groove and rib formations 12 and 13 on the rims 10 and 11, respectively, are preferably arranged so that the majority of the body members of the rims 10 and 11 are spaced slightly with respect to one another. This construction results in a resiliency in the composite rim forming the captive hoop toy which enables it to be rolled with a bouncing or irregular pattern which is particularly attractive.

In order that the hoop comprising the rims 10 and 11 may be rolled by an operator, a transverse body member 16 is positioned across the area defined by the rim 11 and the ends of the body member 16 are outturned as at 17 and secured to the rim 11 by suitable attachment thereto. Such attachment may comprise the formation of the outturned ends 17 of the body member 16 to frictionally engage and register with a groove 18 formed on the innermost surface of the rim 11 and which in reality is the back bowed wall of the rib 13 formed on the outermost surface of the rim 11. This construction is best illustrated in Figures 4 and 5 of the drawings.

It will be observed by referring again to Figures 1, 2 and 4 of the drawings that the transverse body member 16 has an opening 19 midway between the ends thereof and that a section of string of cord 20 is positioned therethrough and one end thereof secured in position in the opening 19 by a bead 21 which is attached to the cord or string 20 as best shown in Figure 4 of the draw-

ings. The bead 21 forms a friction bearing and facilitates the rotation of the captive hoop toy through manipulation of the cord or string 20, the opposite end of which is held in the hand of the operator.

It will thus be seen that the captive hoop toy as herein disclosed forms an attractive, inexpensive and inherently resilient structure which may be caused to spin and bounce at the pleasure of the operator. It will occur to those skilled in the art that the transverse body member 16 may be supplied with miniature propellers or whirl-a-gigs and the like to ornament the same.

In order that the captive hoop toy may be changed in appearance, a plurality of interchangeable discs of suitable material such as paper, as illustrated in Figures 5 and 6 of the drawings and indicated by the numerals 22, are preferably supplied with the toy, the discs being adapted to be secured between the rims 10 and 11, as shown in Figure 5 of the drawings, so that the disc 22 proper is stretched across the circumference of the rim 11 and held thereby by the engagement thereon of the rim 10. The disc 22 is provided with an enlarged opening 23 centrally thereof through which the cord or string 20 passes.

As disclosed in Figure 6 of the drawings, the disc 22 may have a desirable printed pattern thereon which will enhance the attractiveness of the toy. Additionally, the toy may be personalized by the use of a disc carrying the initials or name of the operator.

It will thus be seen that the captive hoop toy disclosed herein meets the several objects of the invention.

Having thus described my invention, what I claim is:

1. A captive hoop toy comprising a two-part rim, an outermost annular portion of which is normally telescopically engaged over an innermost annular portion and retained by frictional engagement therebetween, said outermost and innermost annular portions having their peripheral edges cross sectionally rolled in oppositely disposed directions, a transverse body member secured to the innermost annular portion and extending thereacross, an opening in the said body member midway between its ends and a string rotatably positioned in said opening and forming means by which said captive hoop toy may be manipulated.

2. The structure defined in claim 1 and including a deformable disc of extremely thin material positioned across the area of the innermost annular portion and having its peripheral edges clamped between the said innermost and outermost annular portion.

3. The structure set forth in claim 1 and including an annular rib in each of said annular portions of said two part rim, said annular ribs located midway between the edges of said annular portions and registering one in the other to increase the frictional engagement between said annular portions.

4. The structure set forth in claim 1 and including an annular rib in each of said annular portions of said two part rim, said annular ribs located midway between the edges of said annular portions and registering one in the other, a deformable disc positioned across the area of the innermost annular portion and having its peripheral edges clamped between said annular ribs in said innermost and outermost annular portions.

CHARLES METZ.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
608,855	Hefley	Aug. 9, 1898
1,955,330	Hiers et al.	Apr. 17, 1934
2,232,244	Kiefer	Feb. 18, 1941
2,521,331	Biggs	Sept. 5, 1950

FOREIGN PATENTS

Number	Country	Date
225,898	Germany	Sept. 23, 1910