Aug. 31, 1965 P. H. LUPOLI 3,203,066

FASTENING MEANS FOR A SWIMMING POOL COVER

Filed June 7, 1963

FIG. 1.

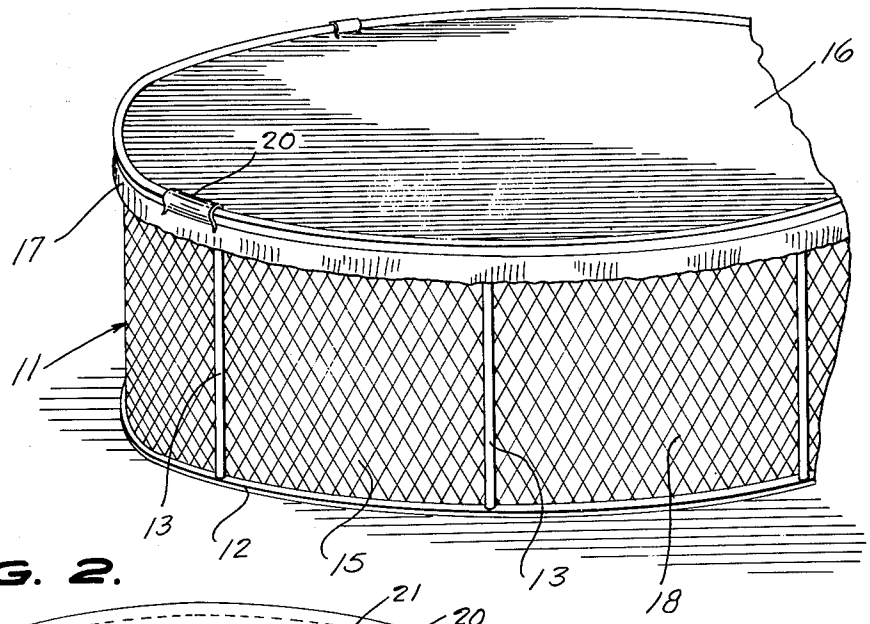


FIG. 2.

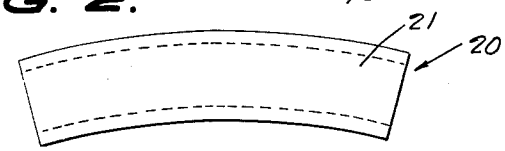


FIG. 3.

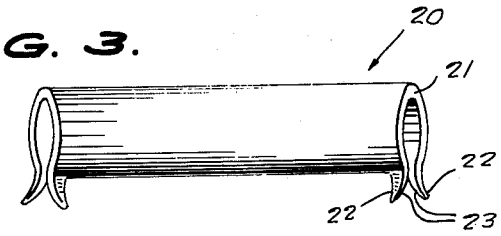


FIG. 4.

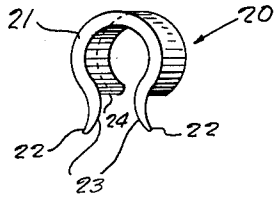
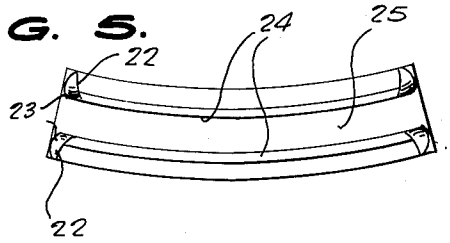


FIG. 5.



INVENTOR
PAUL H. LUPOLI,

BY

McMorrow, Berman + Davidson
ATTORNEYS

United States Patent Office 3,203,066 Patented Aug. 31, 1965

3,203,066

FASTENING MEANS FOR A SWIMMING POOL COVER

Paul Harry Lupoli, 78—27 90th Ave., Woodhaven 21, N.Y.

Filed June 7, 1963, Ser. No. 286,378
3 Claims. (Cl. 24—257)

This invention relates to portable swimming pools, and more particularly to improved clip means for fastening the cover of a pool in place so as to prevent the cover from blowing off.

A main object of the invention is to provide a novel and improved fastening means for a swimming pool cover, the fastening means being simple in construction, being easy to install, and resiliently clamping the marginal portions of the cover to the top rail of the swimming pool so as to prevent the cover from blowing off.

A further object of the invention is to provide an improved fastening means for securing the flexible cover of a swimming pool on the top rail thereof, the fastening means being inexpensive to fabricate, being durable in construction, being easy to manipulate, and being shaped so that it conforms with the arcuate curvature of the top rail of the swimming pool, insuring that the cover will be clamped in a substantially continuous manner along the entire length of the fastening means.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

FIGURE 1 is a fragmentary perspective view showing a portable swimming pool having a cover clamped thereon by means of improved clips constructed in accordance with the present invention.

FIGURE 2 is an enlarged top plan view of one of the cover clamping clips employed in FIGURE 1.

FIGURE 3 is a side elevational view of the clamping clip of FIGURE 2.

FIGURE 4 is an end view of the clamping clip of FIGURES 2 and 3.

FIGURE 5 is a bottom plan view of the clamping clip of FIGURES 2, 3 and 4.

Referring to the drawings, **11** generally designates a conventional portable swimming pool of the type including a frame which may be generally circular, or may be otherwise arcuately shaped, the frame having a bottom supporting portion **12** of rigid tubing, a plurality of vertical rigid post members **13**, and a top frame member of the same shape as the bottom member **12**, of rigid tubing, and rigidly connected thereto by the spaced vertical post members **13**. Secured in a conventional manner within the enclosure defined by the frame is a continuous sheet of plastic material, designated at **15**, which is fastened to the top frame member in a conventional manner and which depends into the frame, defining the main swimming pool receptacle.

It will be understood that when in normal use, the swimming pool is substantially filled with water, and it is usually desirable to cover the pool so that foreign material or small animals will not fall into the pool. Thus, a cover **16** of suitable flexible material, such as flexible plastic sheet material is provided, the cover being of sufficient size to overlie the swimming pool **11** with its marginal portions extending over the arcuately curved continuous top frame element of the pool, in the manner generally illustrated in FIGURE 1. Thus, in FIGURE 1, the marginal portion of the cover **16** is shown at **17** and depends downwardly for a short distance from the top of the swimming pool frame. As will be further shown in FIGURE 1, the swimming pool includes as a conventional part of its structure the wire mesh wall **18** which

reinforces the portions of the swimming pool spaced between the vertical posts **13**. The marginal portion **17** of the cover **16** is adapted to extend adjacent the upper portion of the various wire mesh panels **18**.

Designated generally at **20** is a fastening clip adapted to secure the marginal portions of the cover **16** on the top frame member of the swimming pool. The clip member **20** comprises an elongated channel-shaped body of flexible material, such as flexible molded plastic material, the body being generally circular in cross sectional shape and being designated at **21**. The elongated body **21** is arcuately curved to conform with the arcuate curvature of the top rail of the swimming pool and is sufficiently flexible so that it can be slipped over said top rail to clamp the marginal portion of the cover **16** thereto.

To facilitate the installation of the clips **20**, and also to facilitate their removal, the clips are integrally formed with respective pairs of divergent depending guide lugs **22, 22** on their opposed end corner portions, the guide lugs **22** being outwardly concave so as to define opposing inner convex clamping surfaces **23, 23** merging with the arcuately curved, substantially parallel longitudinal edge portions **24, 24** of the body **21**. As shown in FIGURE 5, said edge portions **24** define therebetween a relatively narrow passage **25** which is normally of much smaller width than the diameter of the arcuately curved top frame member of the swimming pool, but may be widened because of the flexibility of the body **21** to allow the clip to slip over the top rail of the swimming pool frame and over the marginal portion of the cover **16** engaged thereon. The downwardly divergent lugs **22, 22** are slidably engageable on the cover margin and top rail of the swimming pool frame when downward pressure is exerted on the clip to cause the space between the edges **24** to be widened to allow the clip to slip onto the rail.

As will be readily apparent, since the clips **20** are arcuately curved to conform with the arcuate curvature of the top rail of the swimming pool frame, the clips engage continuously on the marginal portions of the swimming pool cover **16** for substantially the entire length of the clips, thus distributing their clamping pressure in a manner such that they will not damage or deform the material of the cover while at the same time will hold the cover securely on the top rail of the swimming pool frame.

A suitable number of clips **20** is employed, the spacing between the clips being small enough so that the cover will not be readily caught by the wind.

To remove the clips, it is merely necessary to exert outward force on the pairs of lugs **22, 22**, allowing the clips to be lifted off the top rail of the swimming pool frame, thus releasing the marginal portions **17** of the cover and allowing the cover to be easily removed.

As previously mentioned, the clips **20** may be made of any suitable strong flexible material, such as molded plastic material, or metal alloy having substantial resiliency.

While a specific embodiment of an improved fastening means for releasably securing a cover on a portable swimming pool has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. A pool cover holding clip comprising an elongated, arcuately curved channel-shaped resilient body, and respective divergent pairs of depending guide lugs on the opposed end corner portions of said body, said pairs of

lugs being outwardly-concave so as to define opposing inner convex clamping surfaces.

2. A pool cover holding clip comprising an elongated channel-shaped body of flexible material, said body having a generally circular cross sectional shape and being arcuately curved in a longitudinal direction, and respectively pairs of divergent depending guide lugs on the opposed end corner portions of said body.

3. A pool cover holding clip comprising an elongated channel-shaped body of flexible material, said body having a generally circular cross sectional shape and being arcuately curved in a longitudinal direction, and respective pairs of divergent depending guide lugs on the opposite end corner portions of said body, said pairs of lugs being outwardly concave so as to define opposing inner convex clamping surfaces.

References Cited by the Examiner

UNITED STATES PATENTS

1,390,766	9/21	Cunningham.	
1,711,730	5/29	Gibson	24—257
1,815,774	7/31	Heard	24—259
1,901,166	3/33	Jordan	24—257
2,127,827	8/38	Meyer	24—259
2,146,190	2/39	Luke	24—256
2,533,539	12/50	Vivian.	
2,870,454	1/59	Schippert et al.	4—172
2,898,607	8/59	McGuire	4—172
2,963,761	12/60	Haydock	24—257

FOREIGN PATENTS

551,247	2/43	Great Britain.

WILLIAM FELDMAN, *Primary Examiner.*

SAMUEL B. ROTHBERG, DONLEY J. STOCKING, *Examiners.*