United States Patent

Gerring

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[45] Aug. 29, 1972

[54] **SWIMMING POOL CONSTRUCTION**

[72] Inventor: **Paul K. Gerring**, Williamsville, N.Y.

[73] Assignee: **Fanta Sea Swim Center, Inc.**, Clarence, N.Y.

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[52] **U.S. Cl.** **4/172.19,** 52/73, 52/615

[51] **Int. Cl.**.....**E04h 3/16,** E04h 3/18

[58] **Field of Search** 4/172.19, 172; 52/73, 615

[56] **References Cited**

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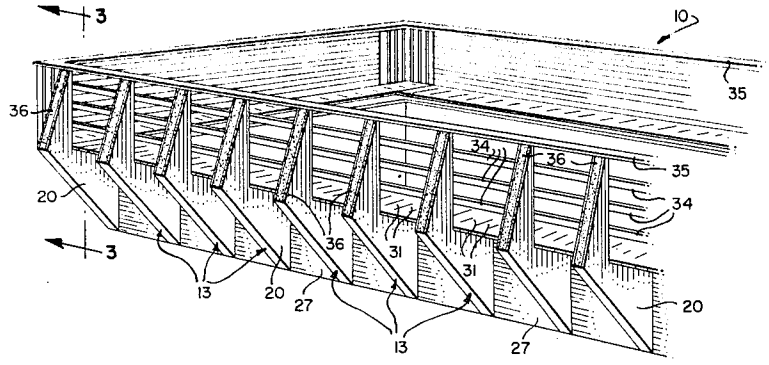
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Primary Examiner—Frederick L. Matteson
Assistant Examiner—Henry K. Artis
Attorney—Sommer, Weber & Gastel

[57] **ABSTRACT**

A swimming pool construction including upper and lower peripheral frameworks for supporting a plurality of spaced wall supporting ribs in spaced relationship about the rectangular periphery of a pool, with each of the ribs including a vertical wall supporting member and struts located between spaced plywood side panels including a vertical upper strut having a side for supporting a railing and an outwardly sloping strut, and a plastic cap overlying each of the outwardly sloping struts and the portions of the side panels adjacent thereto.

3 Claims, 10 Drawing Figures



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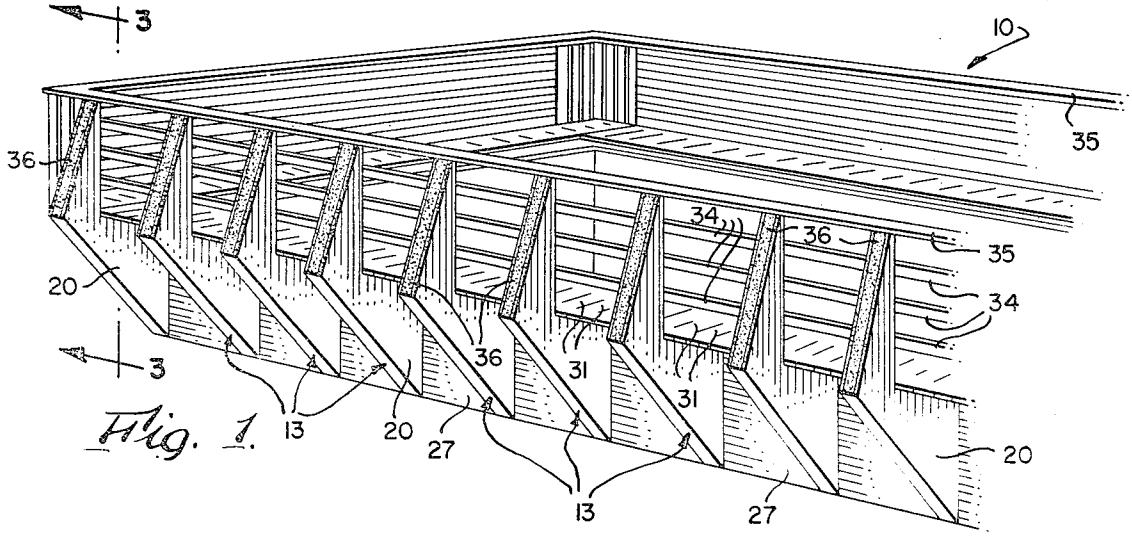


Fig. 1.

Fig. 2.

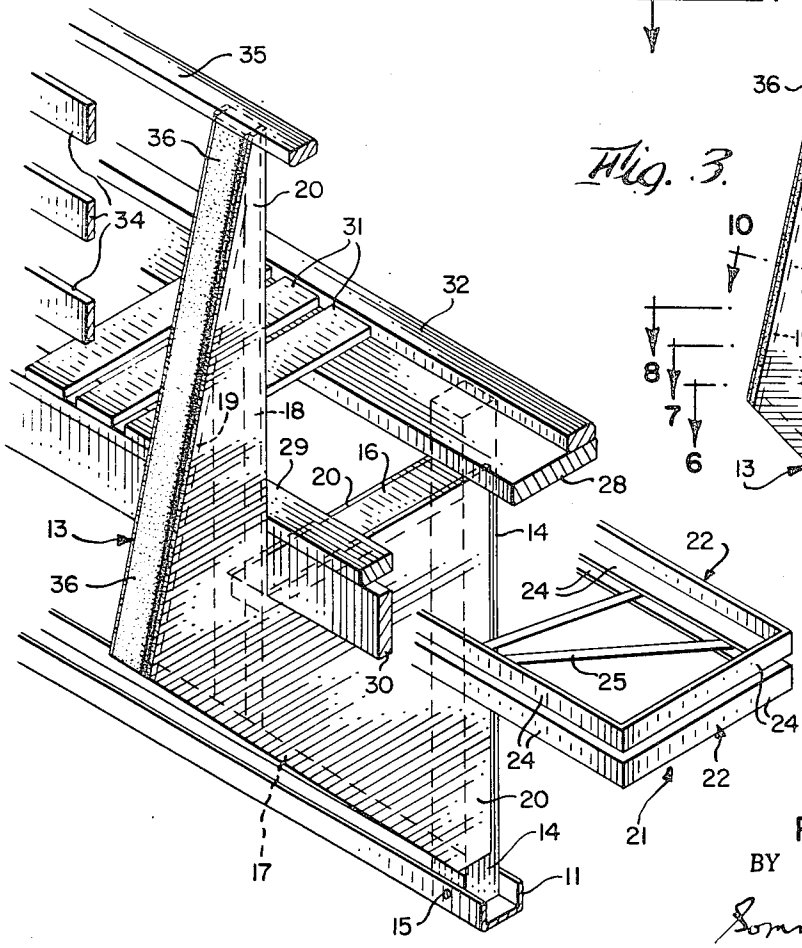
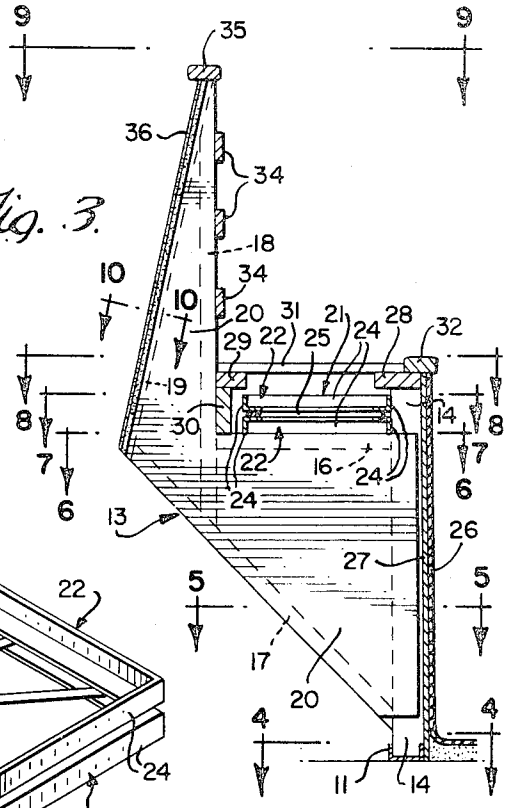


Fig. 3.



INVENTOR.
PAUL K. GERRING
BY
Sommer, Weber, & Gastel
ATTORNEYS

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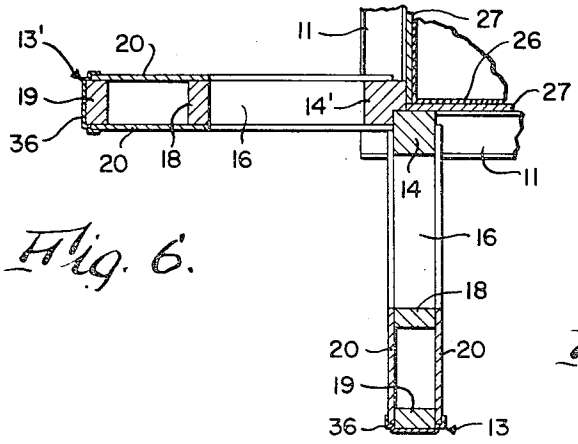


Fig. 6.

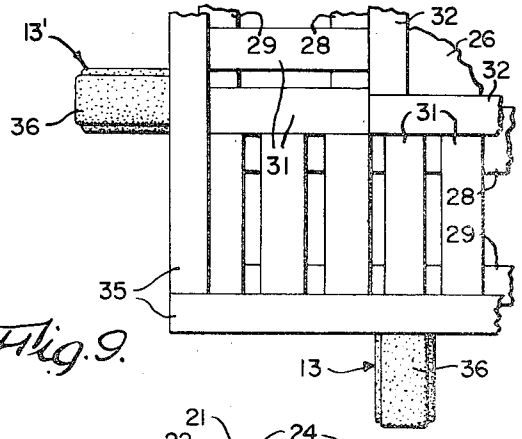


Fig. 9.

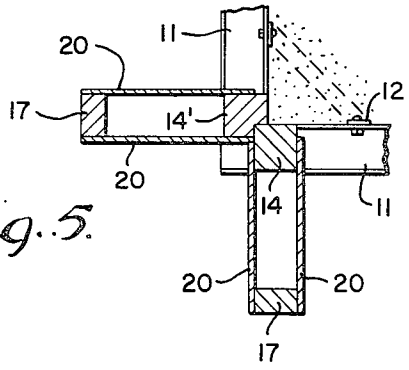


Fig. 5.

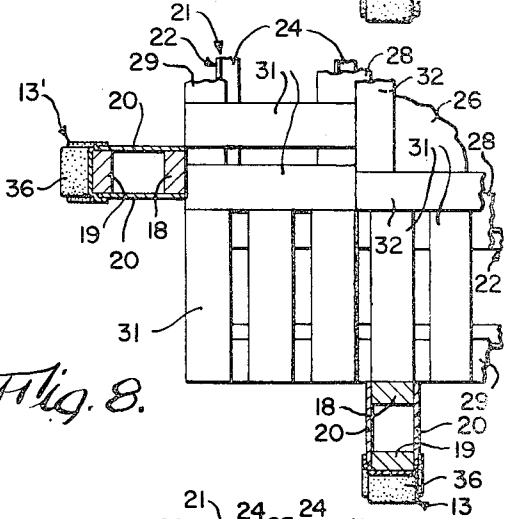


Fig. 8.

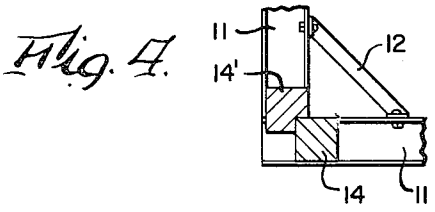


Fig. 4.

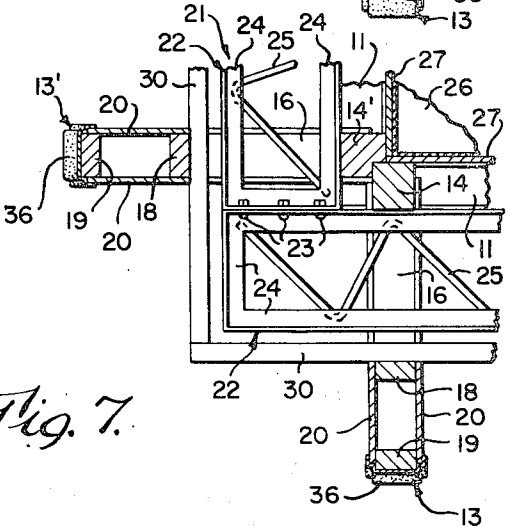


Fig. 7.

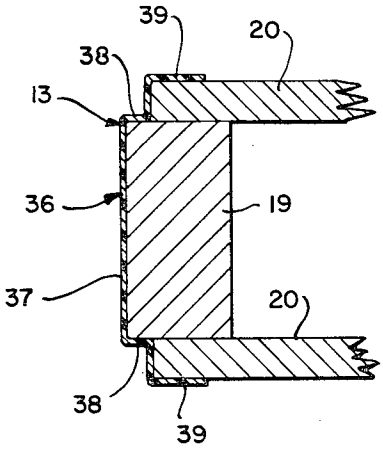


Fig. 10.

INVENTOR.
PAUL K. GERRING
BY
Sommer, Weber, & Vastel
ATTORNEYS

SWIMMING POOL CONSTRUCTION

The present invention relates to an improved swimming pool construction of the type having a plurality of wall supporting ribs which support the swimming pool wall.

It is the primary object of the present invention to provide an improved swimming pool construction which is built to endure the elements so as to provide long life to the pool. Other objects and attendant advantages of the present invention will readily be perceived hereafter.

The improved swimming pool construction of the present invention includes a lower peripheral rectangular framework, an upper peripheral rectangular framework, a plurality of spaced vertically extending ribs each comprising a plurality of internal struts including a vertical wall supporting member and a first vertical upper strut having a side for supporting a railing and a second upper outwardly sloping strut all affixed between spaced plywood side panels, means affixing the rib members to said upper and lower peripheral frameworks, wall means affixed to the main wall supporting members, and a plastic cap overlying each of said outwardly sloping struts.

The various aspects of the present invention will be more fully understood when the following portions of the specification are read in conjunction with the accompanying drawings wherein:

FIG. 1 is a fragmentary perspective view of a swimming pool including the improved construction of the present invention;

FIG. 2 is a fragmentary perspective view of the rib structure and showing its relationship to certain other components of the pool;

FIG. 3 is a view of the rib structure taken substantially along line 3—3 of FIG. 1 and showing a rib structure and associated portions of the swimming pool in side elevation;

FIG. 4 is a cross sectional view taken substantially along line 4—4 of FIG. 3 and showing the manner in which the lower portions of a rib fits into the bottom channel frame member;

FIG. 5 is a view taken substantially along line 5—5 of FIG. 3 and showing the relationship between the plywood faces and the wall supporting members and the struts of the ribs;

FIG. 6 is a view taken substantially along line 6—6 of FIG. 3 and further showing the construction of the ribs;

FIG. 7 is a view taken substantially along line 7—7 of FIG. 3 and showing the manner in which the upper frame members are joined relative to each other and their orientation relative to the ribs at corners of the pool;

FIG. 8 is a view taken substantially along line 8—8 of FIG. 3 and showing the manner in which the deck is located relative to the remainder of the pool;

FIG. 9 is a view taken substantially along line 9—9 of FIG. 3 and showing a portion of the deck and the associated railing in plan; and

FIG. 10 is a fragmentary cross sectional view taken substantially along line 10—10 of FIG. 3 and showing the manner in which the plastic cap covers the outer sloping side of the upper portion of the rib.

The improved swimming pool 10 of the present invention includes a rectangular framework of lower channels 11 placed on the ground with their open sides upwardly for defining the outer periphery of the lower portion of the pool. The channels 11 on each side of the pool are joined to each other of their corners by metal braces 12 which are bolted between adjacent channels. The corners of adjacent channels 11 may also be bolted at their juncture with bolts, not shown. Channels 11 receive ribs 13 at spaced locations around the four sides of the pool. In this respect each rib includes a vertical main wall supporting member or post or strut 14 which is in the nature of a wooden 4 × 4 and which has a lower portion which is received in channel 11. Holes 15 are placed at spaced locations in channel 11 for aiding in the aligning of posts 14 and for receiving fastening members for tacking the posts to the channel.

Each rib 13 also includes lower struts 16 and 17. In addition, struts 18 and 19 are provided at the upper portion of the rib 13. Struts 16, 17, 18 and 19 are wooden 2 × 4's. The various struts and post are suitably secured to each other by means of fasteners such as nails to define the configuration shown in FIG. 3. Suitably cut plywood panels 20 of the configuration shown in side elevation in FIG. 3 are nailed or stapled to the form produced by post 14 and struts 16, 17, 18 and 19. The plywood side panels in conjunction with the struts and the post give great strength to the rib.

Each of the above described ribs 13 are identical to each other except for one rib such as 13', FIG. 6, located at each of the four corners of the pool. Rib 13' is identical in all respects to rib 13 except that post 14' is cut away at its corner (FIG. 6) to receive the corner of an adjacent post 14 in complementary mating relationship.

The upper portions of ribs 13 are secured to each other by an upper peripheral rectangular frame 21 consisting of elongated metal frame members 22 (FIG. 7) which are bolted together by bolts 23 at the corners of the pool. Frame members 22 essentially include angles 24 oriented relative to each other as shown in FIGS. 3 and 7 and which are welded to a rod 25 which is of a sawtooth form and extends between opposed sides of the angle members. The frame members 22 rest on struts 16 of ribs 13 and are suitably secured thereto,as by nailing. In addition, the portions of frame members 22 adjacent posts 14 are secured thereto. It can thus be seen that the lower frame member consisting of channels 11 and upper frame 21 stabilize the pool against the outward pressure produced by the water within plastic liner 26 which bears against plywood wall panels 27 which are secured to posts 14, as by nailing.

Wood beams 28 and 29 extend around the upper periphery of the pool. Beam 28 is secured to the tops of posts 14, as by nailing, and beam 29 is secured to beam 30 which rests on and is secured to struts 16. Slats 31 are attached at spaced locations to beams 28 and 29 to provide a walkway and an elongated member 32 is secured to beam 28 and provides a curb at the edge of the pool.

The upper portions of rib members 13 have slats 34 secured to struts 18, as by nailing, to provide a rectangular fence around the walkway. An upper railing 35 is secured to the uppermost portion of ribs 13.

As can best be seen from FIGS. 3 and 10, a plastic cap 36 overlies the upper sides of struts 19 which define the outwardly sloping portions of rib members 13. Each cap 36 protects the joints between each strut

19 and their associated panels 20 against the entry of water from rain or other precipitation, thereby preventing the warping and premature aging which would otherwise be experienced. Each plastic cap 36 includes an upper portion 37 which overlies strut 19, suitably contoured intermediate portions 38 which follow the contour produced at the joint between panels 20 and strut 19, and portions 39 which overlie side panels 20 for a short distance. Suitable nails or staples may be passed through portions 39 to secure cap member 36 in position.

What is claimed is:

1. A swimming pool construction comprising a lower peripheral framework, an upper peripheral framework, a plurality of spaced vertically extending ribs each comprising a plurality of internal strut means including a vertical wall supporting member and a first vertical upper strut having an upper portion and a first side for supporting fence rails and a second side on the opposite side from said first side, a second vertical upper strut having an upper portion located in contiguous relationship to said upper portion of said second side of said first vertical upper strut, said second vertical upper strut sloping outwardly and downwardly in a direction away from said second side of said first vertical strut, said internal strut means being affixed between spaced side panels, means affixing said rib members to said upper and lower peripheral frameworks, wall means affixed to said main wall supporting members, and cap means overlying each of said second vertical outwardly sloping struts.

2. A swimming pool construction as set forth in claim 1 wherein said cap means also overlies the portions of said spaced side panels adjacent said second vertical upper strut.

3. A swimming pool construction as set forth in claim 2 wherein said second vertical strut includes an outer surface and wherein said side panels stop short of said outer surface and wherein said cap means is fabricated from plastic and is of a configuration to follow the contour of the joint between said second strut and said side panels.

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