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SWIMMING POOL STRUCTURE

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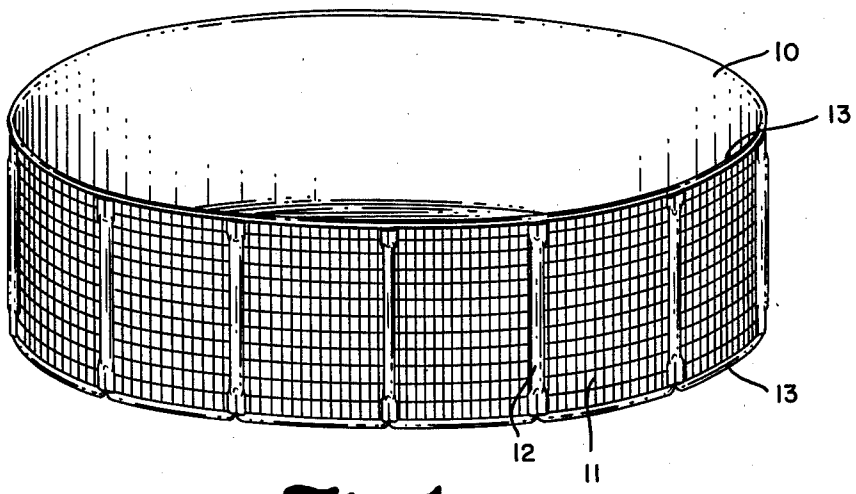


Fig. 1

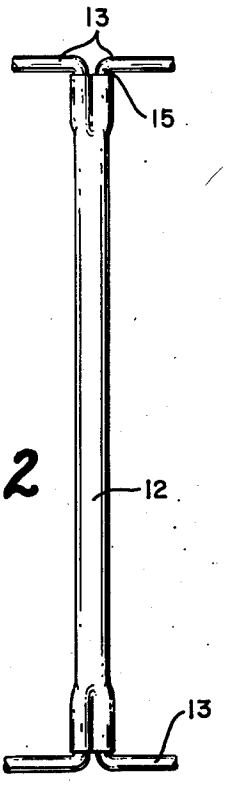


Fig. 2

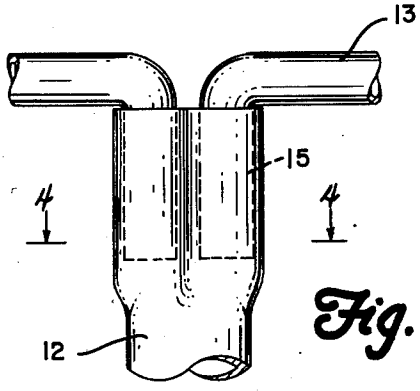


Fig. 3

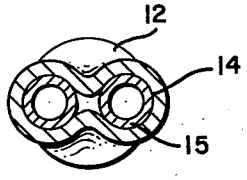


Fig. 4

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SWIMMING POOL STRUCTURE

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4 Claims. (Cl. 4—172)

This invention relates to swimming pools and an object is to produce a new and improved swimming pool structure, which has a flexible fabric body forming the bottom and side walls of the pool and an encompassing frame work of knock-down type, so that it can be compacted for shipment or storage, the framework being exceedingly sturdy, effectively to withstand the hydraulic pressures normal to a relatively large swimming pool, but of sufficient flexibility to accommodate abrupt increases in pressure caused, for example, by the wave-like motion or surging of water from one side of the pool to the other, as well as increased pressures due to splashing and the like.

Another object is to produce a relatively large size portable swimming pool assembly which has the novel features of construction, arrangement and assembly hereinafter described.

Other objects and advantages of the invention will hereinafter appear, and for purposes of illustration but not of limitation, an embodiment of the invention is shown on the accompanying drawings in which

Figure 1 is a top perspective view of the swimming pool structure;

Figure 2 is an enlarged view of one of the vertical posts and showing the portions of the top and bottom rails attached thereto;

Figure 3 is an enlarged fragmentary elevation of one end of a vertical post and showing the rails attached thereto; and

Figure 4 is a transverse sectional view on the line 4—4 of Figure 3.

The illustrated embodiment of the invention comprises a portable swimming pool structure having a body **10** of waterproofed canvas or other suitable flexible material providing a bottom wall and a surrounding upright circular side wall. Such a body provides a relatively large pool. For example, the pool body may have a diameter of the order of twenty feet and a height of three feet. Manifestly a body of those dimensions is capable of holding a large gallonage of water exerting appreciable hydraulic pressures on the side walls. Such pressures will vary due to the surging of the water from one side to the other, splashing and the movement of people within the pool. Consequently it is important properly and efficiently to brace the side walls of the body **10**.

As shown, the side walls are surrounded by a wire mesh fence **11** consisting of relatively closely spaced vertical and horizontal wires. The fencing extends from the bottom wall of the body **10** to the upper edge portion of the side walls of the body and the side walls of the body bear intimately against the fencing throughout.

The fencing is reinforced and held in position by an outer supporting frame which consists of a series of equidistantly spaced vertical posts **12** which are interconnected at their top and bottom ends by horizontal rails **13**.

Each post **12** is of rigid steel tubing, the major portion of the length of each post being tubular but the upper and lower ends are swaged or otherwise formed to provide a pair of parallel vertically disposed cylindrical sockets **14** into which the down-turned or up-turned, as the case may be, ends **15** of the horizontal rails **13** loosely extend. The opposite ends **15** of each rail **13** are turned at substantially right angles as shown and can slip into the socket of the adjacent post, the fit being relatively loose so that the several rails **13** can rock relative to the post, thereby providing a flexible yielding joint and permitting one portion of the pool framework to give or flex relative to another portion, depending upon the hydraulic pressures to which the particular section of the side wall is subjected. Thus the several posts in effect float and can rock outwardly or inwardly according to the pressure on the contiguous side wall of the pool body.

It will be understood that the free edge portion of the side walls of the tank body **10** are wrapped around the top rails **13** in any suitable manner.

From the above, it will be manifest that we have produced an exceedingly simple pool structure but one which will effectively withstand exceedingly high water pressures normal to the use of a swimming pool. The flexible framework provides, as above indicated, a substantially floating bulwark which will yield to a limited extent and sufficient to accommodate itself to relatively abrupt increased pressure and thereby obviating liability of breakage. Manifestly the pool can be erected or dismantled in a relatively short period of time and the structure is such that it can be compacted satisfactorily for both storage and shipment.

Numerous changes in details of construction, arrangement and choice of materials may be effected without departing from the spirit of the invention, especially as defined in the appended claims.

What we claim is:

1. A swimming pool structure comprising a pool body of flexible sheet material having a bottom wall and upstanding side walls of closed configuration, wire fencing on the outside of and engaging the side walls, and a frame work on the outside of and backing up said fencing, said frame work including a series of vertical posts, rails interconnecting adjacent posts, and a pivotal connection between the end of each rail and the adjacent post, said wire fencing comprising a wire mesh fabric substantially the same size and configuration as the upstanding side walls of the pool body and being in generally flat engagement therewith.

2. A swimming pool structure comprising a pool body of flexible sheet material having a bottom wall and upstanding side walls of closed configuration, wire fencing on the outside of and engaging the side walls, and an articulated frame work backing up said fencing and consisting of vertical and horizontal members hingedly connected together, said wire fencing comprising a wire mesh fabric substantially the same size and configuration as the upstanding side walls of the pool body and being in generally flat engagement therewith.

3. A swimming pool structure comprising a pool body of flexible sheet material having a bottom wall and upstanding side walls of closed configuration, wire fencing on the outside of and engaging the side walls, and a floating frame work backing up said fencing and having a series of laterally spaced vertical posts, rails connecting the upper and lower ends respectively of adjacent posts, and a hinge connection between the ends of each rail and the respective posts, said wire fencing comprising a wire mesh fabric substantially the same size and configuration as the upstanding side walls of the pool body and being in generally flat engagement therewith.

4. A swimming pool structure comprising a pool body of flexible sheet material having a bottom wall and upstanding side walls of closed configuration, wire fencing on the outside of and engaging the side walls, and a frame work backing up said fencing and having a series of laterally spaced vertical posts having twin sockets at the upper and lower ends thereof, and a series of rails having downturned ends fitting said sockets respectively thereby to enable the rails to hinge relatively to the posts and to enable one portion of the frame work to flex relative to another portion, said wire fencing comprising a wire mesh fabric substantially the same size and configuration as the upstanding side walls of the pool body and being in generally flat engagement therewith.

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