

**Aug. 27, 1957**

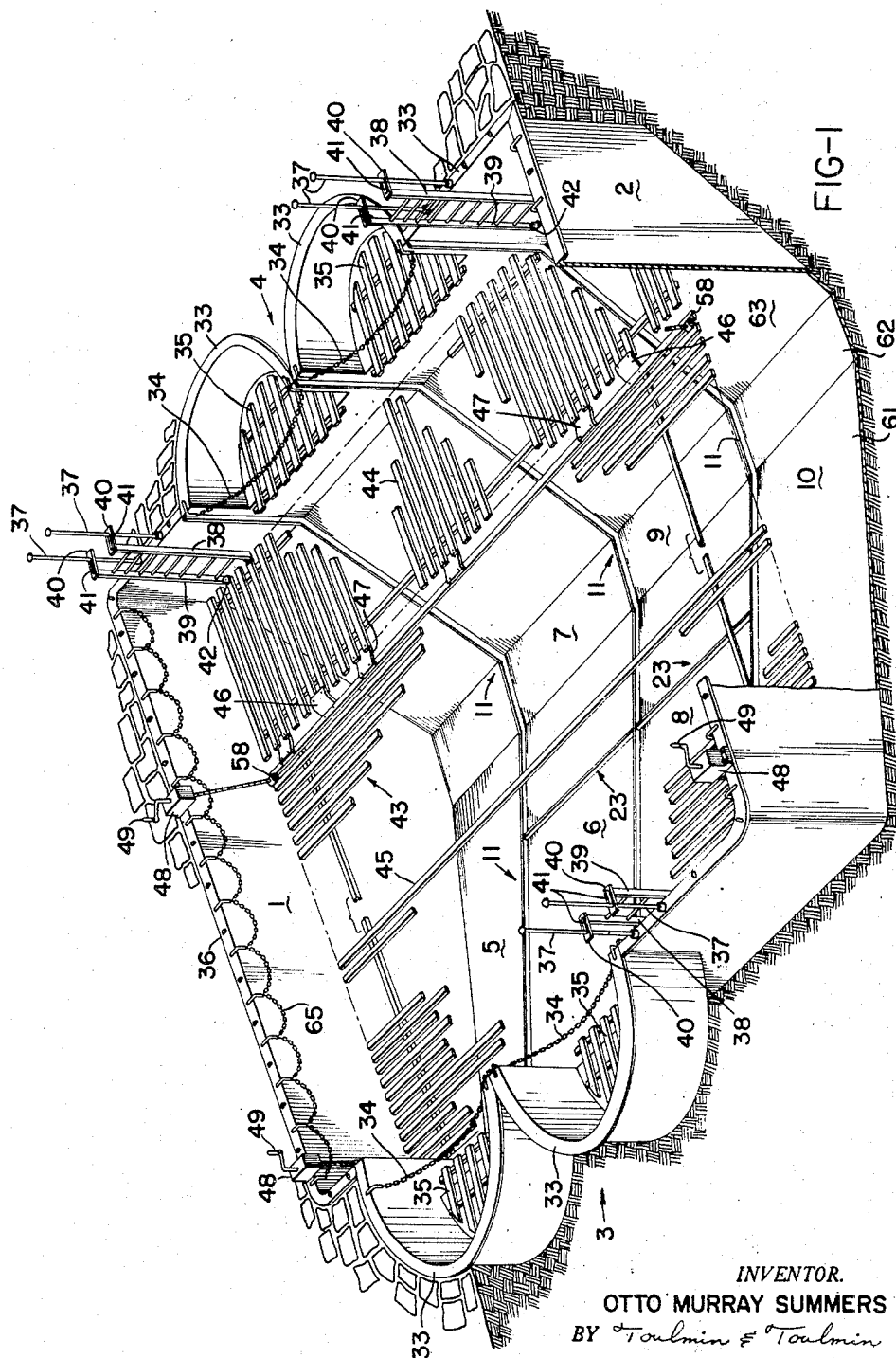
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**2,803,835**

SWIMMING POOL

Filed Nov 23, 1955

2 Sheets-Sheet 1



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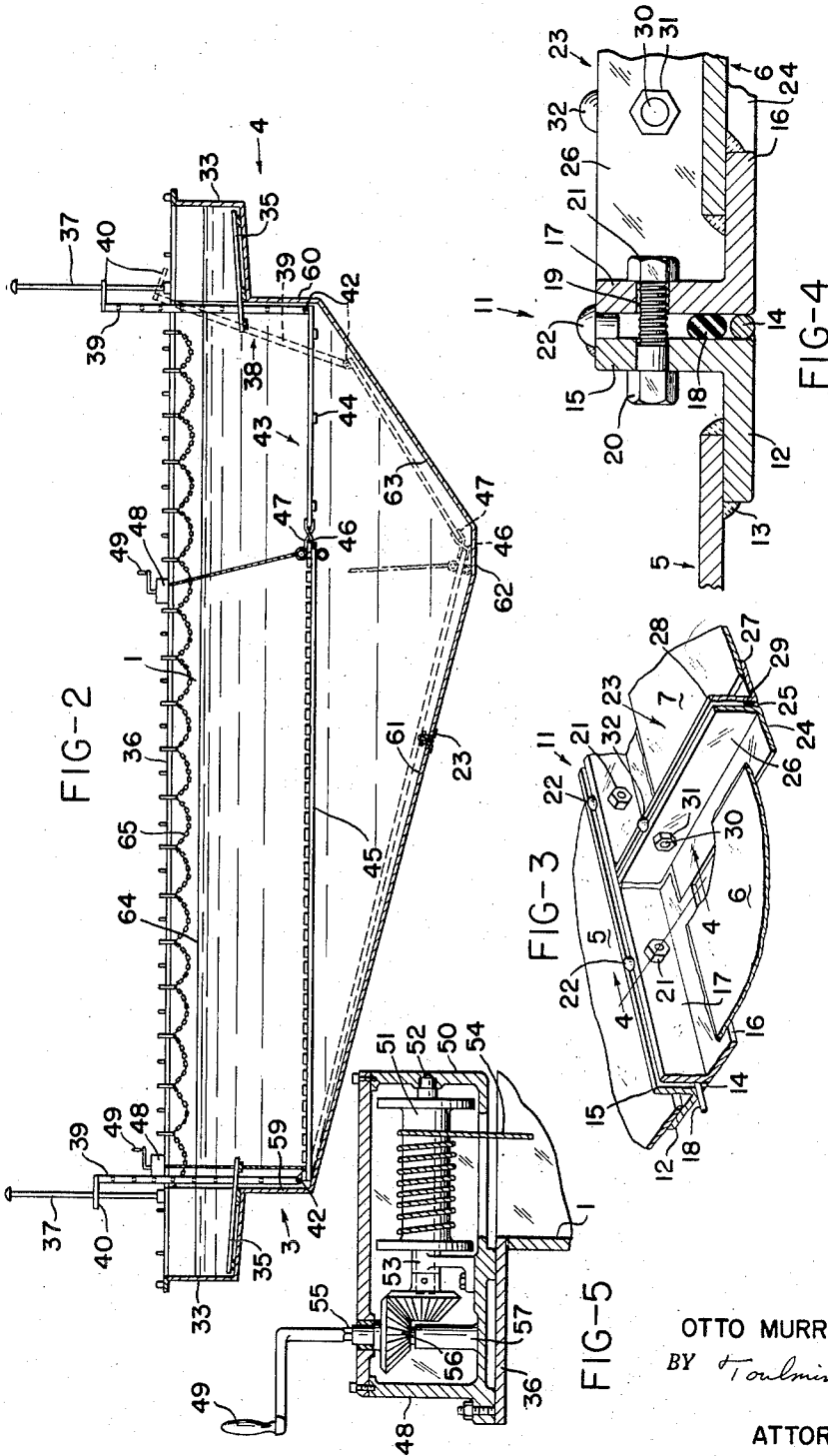
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## SWIMMING POOL

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2 Claims. (Cl. 4—172)

My present invention relates to swimming pools.

A primary object of the invention is to describe a novel constructional arrangement of a swimming pool which is formed of sections secured together in water-tight relation. The sections are so provided that simple but efficient water-tight seals are readily effected in the structure.

A further object of the invention is to describe a novel arrangement of a safety platform for a swimming pool, which safety platform is positionable near the surface of the water or at the bottom floor of the pool as desired. In the raised position the platform provides a positive safety feature for young children. In the lowered position the platform is out of the way for adult swimming and diving, and further the lowered platform extends over the water-tight sealing means of the pool.

In the interest of simplicity and clarity the embodiment of the invention particularly described hereinafter is illustrated as provided with hand operated winches for the positioning of the platform; however, power operated winches may also be employed for raising the platform from the pool bottom to adjacent the water surface, usually within about six inches of the top.

Another object of the invention is the provision in conjunction with a swimming pool and safety platform of a swinging ladder mounted between the platform and pool for movement with the platform.

Yet another object of the invention is the provision of a novel pool structure having sections which form the complete pool and which sections are so arranged that shipment in sections is facilitated.

The invention will be more fully understood by reference to the following detailed description and accompanying drawings wherein:

Figure 1 is a perspective view of the swimming pool having the safety platform positioned, and shown with portions broken away for sake of clarity;

Figure 2 is a longitudinal elevational view partly in section illustrating the relationship of the pool to the safety platform and ladder;

Figure 3 is a fragmentary view in perspective illustrating the water-tight seal of the swimming pool;

Figure 4 is a fragmentary view taken on line 4—4 of Figure 3; and

Figure 5 is a view illustrating a winch mechanism useful in the raising and lowering of the safety platform of invention.

Referring to the drawings more particularly there is shown in Figure 1 a swimming pool having side walls designated generally at 1, 2 and end walls designated generally at 3, 4. As shown in Figure 1 the wall 2 is partially cut away in order that the interior construction of the pool may be clearly visible.

The pool is formed of six sections designated by the numerals 5, 6, 7, 8, 9 and 10. Sections 5 and 10 form the outer sections of the pool while the combination of sections 6, 7 and the combination of sections 8, 9 form the central sections of the pool.

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The pool sections are shipped in knocked-down fashion and assembled on a desired location readily with the formation of water-tight sealing joints indicated generally at 11 in Figure 1 and shown more specifically in Figures 3 and 4.

Referring first to Figure 4 the sealing joint 11 comprises angles and the base of one angle indicated at 12 is secured to the under surface of section 5 at 13 as by weld. The angle base 12 has welded thereto at 14 a spacer rod 15 which, as shown in Figure 4, is at the foot of the upstanding flange 15 of the angle. The second angle of the sealing joint 11 comprises the base 16 suitably secured to the section 6 on the under surface thereof and an upstanding flange 17 extends upwardly from the base 16. For effecting a water-tight joint between the sections 5 and 6 there is provided at 18 a resilient water impermeable sealing member of rubber, neoprene or other suitable compressible material.

The flanges 15 and 17 are apertured and a threaded bolt 19 having nuts 20 and 21 thereon is passed through the apertures and draws the flanges 15 and 17 together to compress the sealing member 18 in the assembly of the pool.

Suitably also there is provided as at 22 brads welded to one of the flanges and which assist retaining the flanges 15 and 17 in spaced relation. Spacer rod 14 in the assembly of the pool limits the compression of the water-tight sealing member 18 and serves as a guide when the section 6 carrying the base 16 is brought up to the base 12 for positioning.

The sealing joints 11 are shown in Figure 1 to extend longitudinally of the pool and up the sides of the pool above the normal water line of the pool. As will be noted from Figure 1 three such longitudinal joints extend the complete lengths of the sections of the pool.

As already stated the central portions of the pool are formed by a combination of sections 6, 7, 8 and 9, and for the securing of these sections together transverse seals 23 are provided. These sealing joints are similar to the sealing joints 11, and the angle iron base of joint 23 is shown most clearly at 24 in Figure 3, the spacer rod being indicated at 25 and one upstanding flange being shown at 26.

The mating angle iron base is shown at 27 and the upstanding flange thereof is indicated at 28; threaded bolts for drawing the flanges 26 and 28 together being indicated at 30; and one of the nuts being shown at 31. Brads 32 serve the corresponding function in the transverse joints as the brads 22 in the longitudinal joints.

It is particularly to be noted that the angle iron bases need not be secured to the bottom face of the sections forming the pool, but may suitably be secured to the upper face if so desired.

Referring again to Figure 1 the center sections at their ends, as indicated at 33, are provided with submarine safety seats and safety chains 34; wood slat cushions 35 cover the seats. Preferably all metal components which contact the water of the pool are of stainless steel.

The pool is provided at 36 with an upper flange and secured to this flange in any suitable manner, as by welding, are upstanding guide rods 37. Ladders 38 having side supports 39 are provided at the pool ends, as shown in Figure 1. The supports 39 are flanged outwardly at 40 and the flanges 40 are provided with slots 41 for the reception therethrough in sliding relation of the upstanding guide rods 37.

Referring now particularly to Figure 2 it will be noted that the lower end of the ladder 38 is hinged or suitably pivotally mounted at 42 to a horizontally extending platform indicated generally by the numeral 43 and divided longitudinally into platform parts 44 and 45. A plural-

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ity of hinged members 46 and 47, also shown in Figure 1, unite the platform parts 44 and 45.

The platform 43 shown in solid line in Figure 2 is supported in the horizontal position and utilized as a safety platform for children when swimming. Most suitably this platform is formed of wooden slats, preferably of redwood or Douglas fir, suitably impregnated with a preservative to prevent bacterial growth, such as "Penta" wood preservative and similar substances.

Referring now to Figure 1 there are provided around the flange 36 of the pool a plurality of winch mechanisms 48 having handles 49, the structural arrangement of which is more clearly shown in Figure 5.

Referring to Figure 5 the mechanism 48 includes a casing 50 having a spool 51 journaled therein at 52 and 53, and a suitable chain or rope element 54 is secured around the spool 51.

The numeral 55 indicates a square drive shaft for the receipt of the handle 49 which is suitably removable from the drive shaft when not in use. Gearing 56 secured on the drive shaft, which is also journaled in the casing 50, is mounted on a spindle 57 for raising and lowering of the chain or rope 54. The remote ends of the chain 54, as shown most clearly in Figure 1, are secured at 58 to the platform 43, and thus the platform may be raised or lowered by actuation of the chain 54 through the handle 49.

The pool bottom, as most clearly noted in Figure 2, is of generally V-shape and includes end wall portions 59, 60 and bottom wall portions 61, 62 and 63. The wall portions 61 and 63 taper downwardly to the central portion 62 from the end wall portions 59 and 60.

In the lowered position of the platform 43 for adult swimming the platform parts 44 and 45 assume the position shown in dotted line in Figure 2 and are in a substantially generally V-shape conforming to the shape of the bottom of the pool and cover the sealing joints 11 and 23.

When the parts 44 and 45 are hingedly lowered downwardly the ladder 38 swingingly moves to an inclined position as shown in dotted line in Figure 2, the hinge 42 moving away from the end wall and flanges 40 of the ladder 38 swinging downwardly in sliding relation with the rods 37. Thus the ladder both provides for convenient access to the pool and serves as a swinging support for the platform when the ladder is adjusted.

The normal water line of the pool is indicated at 64 in Figure 2 and the platform 43 is adapted to extend upwardly above the water line to prevent the entry of leaves and similar material to the pool when the pool is not in use. The platform 43, should leaves or settlings reach the bottom of the pool, prevents stirring up of the

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same by bathers, and continuous circulation of the water of the pool insures that such settlings will have opportunity to be drawn out of the pool. Thus, agitation of the water does not put the settlings back into suspension in the pool, and this contributes materially to the cleanliness of the water.

Safety chain 65 is suitably provided around the pool adjacent to the water line, as shown in Figure 2.

The outer pool section 5 which includes the side wall 1 is wider at end 4 than at end 3 and the wall 1 is somewhat shorter than wall 2 of section 10. The outer pool section 10 is substantially rectangular and the ends thereof are wider than the narrowed end of section 5 to permit section 5 to be nested within section 10 for shipping.

It will be understood that this invention is susceptible to modification in order to adapt it to different usages and conditions and accordingly, it is desired to comprehend such modifications within this invention as may fall within the scope of the appended claims.

I claim:

1. In a swimming pool construction, a bottom floor of the pool which tapers from the pool ends downwardly towards a central portion of the pool, a platform, adapted to be raised and lowered in the pool and in a raised position extending substantially horizontally over the bottom floor from end to end of the pool, said platform being hinged intermediate its ends and in a lowered position tapering downwardly from its ends towards said central portion of the pool in substantial parallelism with the bottom floor, and ladder means forming a swinging connection between an end of the platform and an adjacent end of the pool for movement of the ladder means with respect to the platform and the said adjacent end of the pool in the positioning of the platform.

2. The combination with a swimming pool having an upper portion thereof at substantially ground level and a movable safety platform in the swimming pool below ground level of a ladder extending from the safety platform to above the ground level, the ladder being limitedly movable with respect to the platform and ground-level.

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