Aug. 1, 1950 H. LAW 2,517,393

SWIMMING POOL SHIELD

Filed June 19, 1947

Fig. 1.

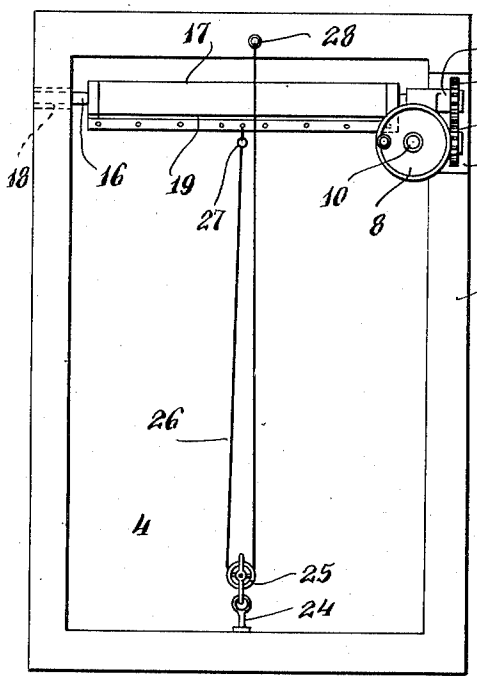


Fig. 2.

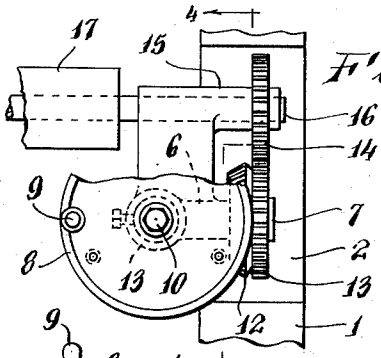


Fig. 4.

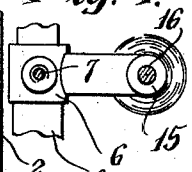


Fig. 3.

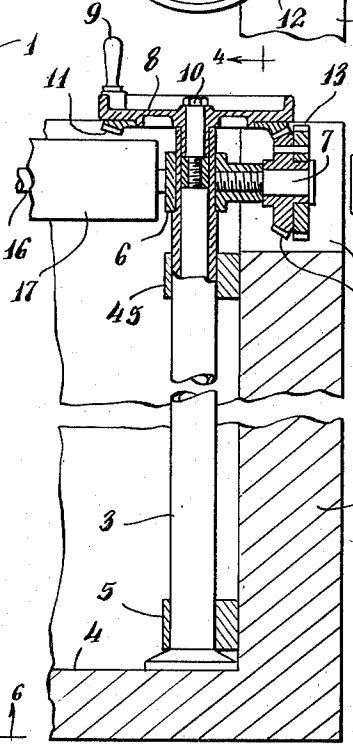


Fig. 5.

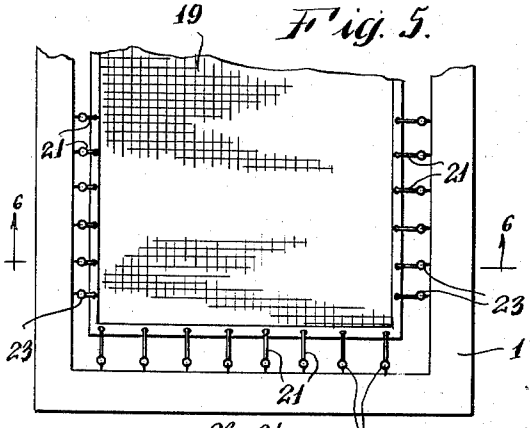


Fig. 7.

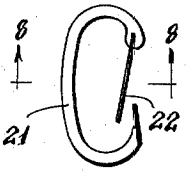


Fig. 6.

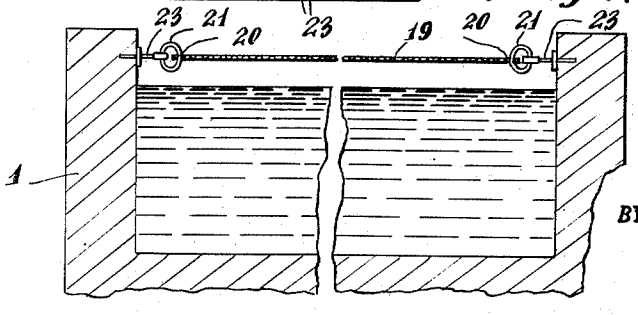
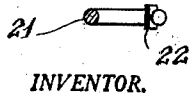


Fig. 8.



INVENTOR.

Hazel Law

BY Harry J. E. Mattler

Att.

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SWIMMING POOL SHIELD

Hazel Law, Los Angeles, Calif.

Application June 19, 1947, Serial No. 755,617

2 Claims. (Cl. 160—268)

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This invention relates to a swimming pool and like structure.

One chief object of this invention is to provide a shielding device which can be extended easily and quickly over the entire water surface of the pool in order to prevent the falling of children and animals into the pool while the latter is not in use and left unguarded, and also—as a secondary purpose—for preventing the falling of dust, soot or leaves into the pool as well as for shielding it against the influence of the sun, so that the water in the pool will remain clear and cool while the pool is not being used.

Another object of the present invention is the provision of a device of the character described which can be installed easily and inexpensively into any existing pool irrespective of its size and shape.

Still another object of the present invention is the provision of a device of the character described which can be operated easily by one person even if it is used on a fairly large pool and which can be expanded over the pool and attached to the edges of the pool without the use of any tools and without the application of any considerable amount of skill.

Yet a still further object of the present invention is the provision of a device of the character described which is simple in construction, consisting of only a few inexpensive parts that can be assembled and installed easily, but which is sturdy, durable, and well adapted to withstand the influence of the weather and of humidity as well as the rough useage to which devices of this type frequently are subjected.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In the accompanying drawings the preferred forms of the invention have been shown.

In said drawings:

Figure 1 is a top plan view of a preferred embodiment of the present invention as it appears when the pool is open;

Figure 2 is an enlarged fractional top plan view;

Figure 3 is an enlarged broken vertical sectional view at a corner of the pool showing the device partly in section.

Figure 4 is an enlarged sectional view of a detail on the line 4—4 of Figure 2, rotated 90° clockwise;

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Figure 5 is a fractional top plan view showing the pool covered;

Figure 6 is a cross-sectional view on the line 6—6 of Figure 5;

Figure 7 is a side elevation of another detail; and

Figure 8 is a cross-sectional view on the line 8—8 of Figure 7.

Similar reference characters refer to similar parts throughout the several views.

In the drawing the numeral 1 denotes the vertical walls and the numeral 4 denotes the bottom of a rectangular swimming pool. An upright stand 3 is placed in one corner section of the pool and is either secured to the bottom 4 by means of screws or in any other suitable manner and/or is laterally secured to one of the vertical walls 1 by means of brackets 5 and 45 (Fig. 3) or the like.

A hanger 6 is secured to the top portion of the stand 3 and is formed as a unit with a longitudinal bearing 15 in which a shaft 16 is rotatable. Another shaft 7 which carries a gear wheel 13 and a bevel wheel 12 is secured to the hanger 6, and the wheels 12 and 13 are connected to one another and are rotatable on the shaft 7. A gear wheel 14, which is in permanent engagement with the wheel 13, is secured to the shaft 16 at one side of the bearing 15, while a roller 17 is secured to the shaft 16 at the other side of the bearing 15. I prefer to provide in the upper portion of the wall 1 a small recess 2 into which extend the wheels 12, 13 and 14, thus making it possible to place the stand 3 as close as possible to the walls 1.

A bolt 10 is vertically extended into the stand 3, and a horizontal bevel wheel 8, whose teeth 10 are in engagement with the wheel 12, and which is provided with a handle 9, is rotatable thereon. A pliable shield 19, for instance a sheet of plastic material which is covered by, or made as a unit with, a wire mesh or the like, is wound upon the roller 17 and has one of its end portions secured thereto. If the shaft 16 and the roller 17 are moderately long, which is the case if the swimming pool is only a few feet wide, the bearing 15 will afford sufficient support for the shaft 16. However, if the parts 16 and 17 are of a considerable length, I prefer to extend the outer extremity of the shaft 16 into an additional bearing 18 (Fig. 1), which is mounted in a wall 1 opposite the recess 2.

The edges of the shield 19 are preferably rein-

forced and provided with eyelets 20 which are adapted for engaging any suitable fastening means at the upper inner sides of the walls 1. I prefer to use as fastening means oval open rings 21 of metal, which are secured to the walls 1 by means of bolts 23, and whose open portions are normally closed by resilient tongues 22 (Figs. 7 and 8). This arrangement facilitates a quick and effortless attaching of the edges of the expanded shield 19 to the walls 1.

In order to enable one person to expand the shield 19 over the pool and to rewind it upon the roller 17, I prefer to attach a pulley 25 by means of a lug 24 to a wall of the pool opposite to the roller 17, and to pass a rope 26 from a hook 27 at the free end portion of the shield 19 around the pulley 25 and back, to a hook 28 at the wall 1 which is opposite the lug 24.

For closing the open pool by means of the shield 19, the operator will turn the handle 9 and the wheel 8, and simultaneously will pull that portion of the rope 26 which runs toward the hook 28. In case of a comparatively small pool, a pulling of the rope 26 toward the hook 28 alone will be sufficient for unwinding the shield 19 from the roller 17. When the free end portion of the unwound shield 19 has reached the wall 1 to which the lug 24 is attached, the fasteners 21 are connected to the eyelets 20 in the manner illustrated in Figures 5 and 6.

For opening the closed pool, the fasteners 21 are disengaged from the eyelets 20 and then the wheel 8 is rotated, thereby the rope 26 being held tense, until the entire shield 19 is re-wound upon the roller 17; thereupon the free extremity of the rope 26 is fastened to the hook 28 (Fig. 1). Any suitable locking mechanism or a chain and padlock (not shown) engaging the handle 9 can be used on the mechanical parts 8, 12, 13 or 14 for preventing safely an unwanted un-winding of the shield 19 off the roller 17.

A box (not shown) or any other suitable cover can be used for covering the mechanical parts of the device, and the cover can be made entirely or partially removable for making the device accessible for operating it.

Since certain changes may be made in the above article and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which as a matter of language might be said to fall therebetween.

Having thus fully described my said invention, what I claim as new and desire to secure by Letters Patent is:

1. A swimming pool shield comprising a vertical stand placed in a corner of a swimming pool, a hanger secured to said stand, a transverse roller rotatably carried by said hanger, a flexible shield horizontally extended over the entire water surface of the pool and being windable upon said roller and provided with means for fastening its edges to the upper wall portions of the pool after it has been unwound from said roller, and a gear wheel having an upright handle being rotatably mounted upon the top portion of said stand and being geared to said roller, all substantially as described.

2. A swimming pool shield comprising a hanger, a transverse horizontal roller which is rotatably carried by a said hanger, an upright stand to which said hanger is secured being placed into a corner section of a swimming pool and resting at its lower end, upon the bottom of the pool, a flexible shield being extended over the entire water surface of the pool being wound upon said roller, a plurality of open ring members being provided on the edges of said shield and connectable to the upper wall portions of the pool after said shield has been unwound from said roller, and a gear wheel having a handle being rotatably mounted upon the top portion of said stand and being geared to said roller.

HAZEL LAW.

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