

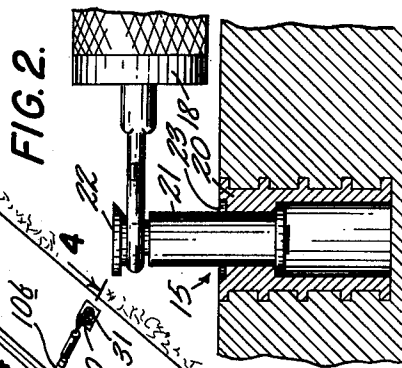
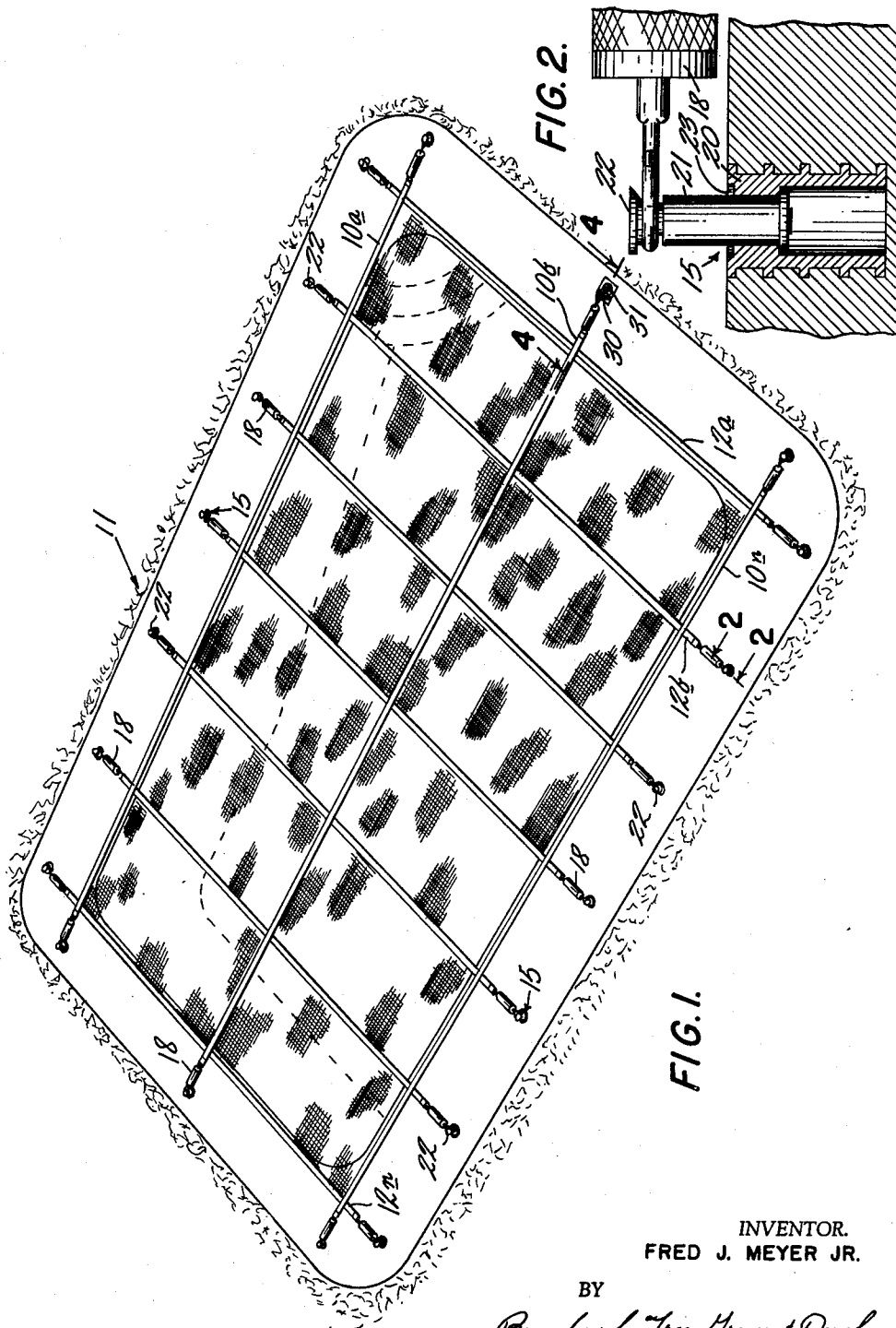
Nov. 8, 1960

F. J. MEYER, JR
SWIMMING POOL COVER

2,958,872

Filed March 31, 1958

2 Sheets-Sheet 1



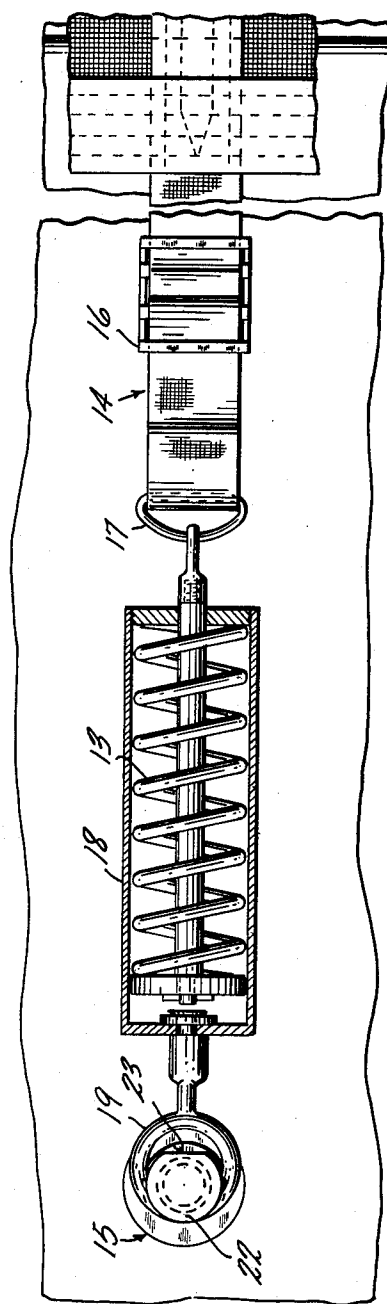
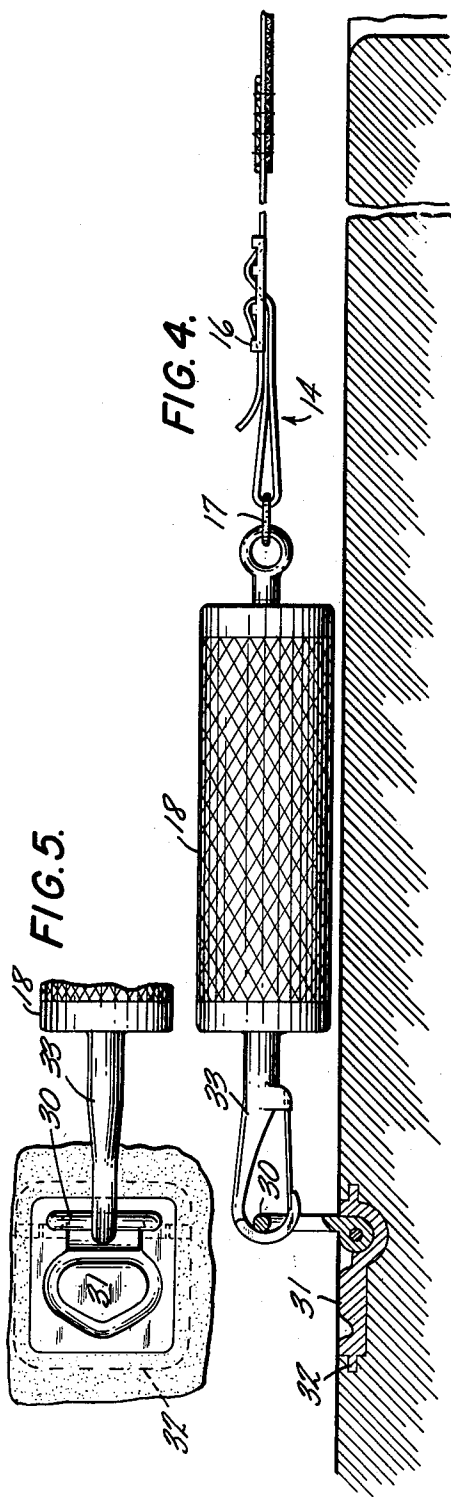
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SWIMMING POOL COVER

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4 Claims. (Cl. 4—172)

This invention relates to swimming pool covers.

The increased number of swimming pools being installed in residential areas today has crystallized the need for protective covers to prevent trash and debris from entering the pool and to protect animals and people from accidental immersion. Covers heretofore known have been bulky, difficult to install and, in general, unattractive in appearance.

Accordingly, a principal object of the present invention is to provide a new and improved swimming pool cover.

Another object of the invention is to provide a swimming pool cover which is lightweight yet strong and durable.

Still another object of the invention is to provide a swimming pool cover which is easily positioned to span a swimming pool.

A further object of the invention is to provide a swimming pool cover which is attractive in appearance, economical to produce, and effective for the purpose intended.

Generally, a swimming pool cover according to the present invention is characterized by stringers spaced apart in a desired arrangement and a screen material attached to span the areas between the stringers. The cover is adaptable for placement across a swimming pool by suitable means such as, for example, hooks resiliently attached to the cover at intervals around the periphery.

A representative embodiment of the invention from which the above and other features and objects thereof will be readily understood is described below, having reference to the accompanying drawings in which:

Figure 1 is a view in perspective showing a cover in position across a swimming pool, the cover being constructed according to the invention;

Fig. 2 is a view in elevation, partly in section, taken along the line 2—2 in Figure 1;

Figure 3 is a plan view partially in section of Figure 2, and showing a portion of the cover shown in Figure 1;

Figure 4 is a view in elevation, partly in section, taken along the line 4—4 in Figure 1; and

Figure 5 is a plan view of a portion of Figure 4.

Referring now to an illustrative embodiment of the invention with particular reference to Figure 1, two groups of stringers 10a, 10b . . . 10n and 12a, 12b . . . 12n are arranged perpendicular to each other to span a pool 11. Each stringer in these two groups has ends which extend over the edge of the pool for attaching the cover in place. The areas between these stringers are spanned by suitable screen material which is attached to adjacent stringers, preferably by stitching. By this arrangement, the stringers provide safety lines across the pool and, also, provide additional strength to the screen material.

To illustrate one form of anchoring means for the cover, reference is made to Figures 2 and 3 of the drawings which show a coil spring 13 attached to an end 14 of one stringer and hooked over a disappearing

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type anchor 15. The end 14 of the stringer is provided with a double bar buckle 16 to form a loop in the stringer end. A ring 17 is held by the loop to form a means for attaching the spring 13. It is preferred that the spring 13 be of the compression type as shown particularly in Figure 3 to prevent accidental stretching beyond its elastic limit. Also, the spring is preferably of brass or other suitable, nonrusting material and may or may not be enclosed in a knurled housing 18, as desired. At the end of the housing 18 furthestmost from the strap end 14, a ring 19 is attached to fit with an anchor. To attach the ring 19, the knurled housing 18 is grasped with the hand and pulled until the ring 19 is in place. When a spring is used without a housing 18, a suitable means such as a buttonhook may be used to pull the ring 19 over the anchor.

Of course, any suitable type of anchor may be used and any number of anchors may be permanently located about the periphery of a pool for anchoring the cover in place. In Figure 2 there is shown the disappearing type of anchor 15 formed of a housing 20 having a plunger 21 which, when not in use, drops down so that the upper end 22 fits in a recess 23 to be flush with the surface of the pool edge. This type of anchor permits the housing 20 to be placed in the concrete frame of the pool at the time the pool is constructed. A portion of the end 22 is chamfered to permit the insertion of an object to raise the plunger 21 from the recess 23.

Another form of anchor is shown in Figures 4 and 5 of the drawings. A ring 30 with a housing 31 having a flange 32 buried in the frame of the pool is formed to be flush with the frame surface when not in use. By raising the ring 30 and by providing a safety snap 33 on one end of the spring 13, a convenient means is provided for attaching the swimming pool cover of the invention.

As previously mentioned, it is preferred that the material of which the spring and the associated equipment is made be rustproof, such as brass. The material forming the safety lines, to which the springs are attached, is preferably one-inch strips of Government Specification Type III, although it is understood that strips of other material having the desired strength may be used. The screen material is also preferably rustproof and may be formed of open mesh fabric containing glass fiber such as Fiberglas screen manufactured by the Owens-Corning Fiberglas Corporation and having a weight of four pounds per 100 square feet. Also, in the preferred embodiment of the swimming pool cover, the open mesh fabric screen is stitched to the safety lines with Orlon thread, using four rows of stitching for each strap. Of course, staples, grommets, rivets, etc. may be used but they will not provide an attachment of a strength equal to that obtained by stitching.

A swimming pool cover formed of the above material will have a dead weight of approximately five pounds per 100 square feet and is readily foldable for easy storage. For a standard size pool having dimensions 20 by 40 feet, the rectangles formed by the stringers or safety lines, in the preferred embodiment, measure approximately 6 to 10 feet. Of course, the stringers may be arranged in other configurations, such as placing the stringers to form designs or even letters of the alphabet. Further, the stringers and/or the screen material may be of various selected colors to present ornamental effects. Also, the stringer ends may be attached to these designs at various points to provide the means for anchoring the cover across a pool. For example, a rod can be placed between several stringer ends and a single spring element attached to the rod to fasten several stringers to a single anchor.

The screen material is effective in trapping trash and other debris which otherwise would enter the pool and,

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also, permits a substantially lighter weight cover compared with those using such materials as canvas and the like. In addition, this screen material open mesh fabric permits sun rays to pass through and heat the water in the pool, which is a feature unique with this type of construction. During the winter when the pool is normally drained, the cover would be in place to span the opening of the pool. In northern areas where snow accumulates, upon melting it passes through the screening and does not form puddles as is the case with covers theretofore known.

It is contemplated that with a swimming pool cover of this structural arrangement the dimensions will be approximately one foot over the size of the pool. The ends of the safety lines are preferably extended sufficiently to permit the forming of the loop and fastening to the double bar buckle. A swimming pool cover of this construction competes commercially with other types of known swimming pool covers which do not have the advantages provided by the present cover. The covers can be made and stocked in sizes to fit so-called "standard" pools, but the covers of the invention may be made to fit any specially-designed pool without presenting any greater structural problems.

The exact configuration illustrated is regarded as the optimum but some of the desirable results inherent in this disclosure may be obtained by various slight modifications including some departure in the exact configuration shown.

I claim:

1. A swimming pool cover comprising a plurality of spaced apart flexible stringers of sufficient length to span a swimming pool, an open mesh fabric material attached between predetermined ones of the stringers, spring means attached to opposite ends of each stringer to support the cover resiliently across the swimming pool, and hook means connected to each spring means to attach the cover across a swimming pool.

2. A swimming pool cover comprising a plurality of

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flexible stringers spaced according to a desired pattern over an area sufficient to span a selected swimming pool, a rust-resistant open mesh fabric material sewed to the stringers to span the area between the stringers, spring means attached adjacent the ends of selected stringers, and hook means attached to each spring means to anchor the cover in position across a swimming pool.

3. A swimming pool cover comprising a first plurality of flexible stringers, a second plurality of flexible stringers arranged substantially perpendicular to the first plurality of stringers to form substantially rectangular patterns of sufficient area to span a swimming pool, an open mesh fabric material sewed to the stringers to span the area between the stringers, compression spring means attached adjacent the ends of selected stringers, and means connected with each compression spring means to anchor the cover in position across a swimming pool.

4. A swimming pool cover comprising a first plurality of flexible stringers arranged to span a swimming pool in one direction, a second plurality of flexible stringers arranged at an angle with the first plurality of flexible stringers to span the swimming pool in another direction, an open mesh fabric material containing glass fibers spanning the areas between the stringers, the screen material being sewed to the stringers, a compression-type spring attached to the ends of each respective flexible stringer, and means associated with each compression-type spring to anchor the cover in position across the swimming pool.

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