ABSTRACT OF THE DISCLOSURE

An adjustable pool stabilizer and shock absorber is connected between the pool wall and a secure point. Adjustment of the stabilizer permits adjustment of the pool walls while the pool is full. Shock absorber means in the stabilizer permit the stabilizer to receive shocks without damaging the pool walls or the stabilizer.

BACKGROUND OF THE INVENTION

This invention is directed to the field of wall supports and adjustments for swimming pools. The subject matter includes a stabilizer-shock absorber connected between the wall of a swimming pool and a fixed point so that adjustment may be made to the pool wall while the pool is full. Shock absorber or resilient means are included with the stabilizer so that activity within the pool, which causes shock waves of water, will not damage the pool wall or stabilizer due to the shock-absorber action.

In the prior art, rigid supports are utilized to support the walls of swimming pools. For pools on the ground, above ground or in the ground, most of these pools whose walls bowed due to water pressure or bowed due to heaving of ground, due to frost or thawing of the ground, had to be emptied in order to adjust the walls because of the commonly used rigid supports. The present invention provides means for leveling and straightening of bowed walls without emptying the pool or without digging up the perimeter of the in-the-ground pool merely by turning the adjusting cap screw nut on the stabilizer arm.

SUMMARY OF THE INVENTION

In summary, the invention comprises a pool such as a swimming pool wherein adjustable stabilizer shock absorbers are placed around the periphery of the pool. Each stabilizer is connected to the pool wall at a fixed point and each stabilizer may be adjusted in length without disconnecting either end. In this manner bows in the pool wall may be removed while the pool is full.

The invention thus replaces rigid type fixed supports, that have no flexibility of adjustment, with easily adjustable stabilizing shock absorbers which allow adjustment of pool walls without the need to drain the pool.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a rectangular under-ground pool having a plurality of adjustable wall member support means.

FIG. 2 is a partial cross-sectional elevation view of a swimming pool showing a portion of the wall and an adjustable wall member support.

FIG. 3 is an elevation view of an adjustable wall member support.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The invention will now be described by reference to FIGS. 1–3 wherein like members are assigned like numerals.

The liquid 2 is contained by wall members 4 which are supported by adjustable wall member support means.

6. The members 6 are secured at one end to wall members 4 and at their other end to a fixed point 8.

In the preferred embodiment of the adjustable wall member support means 6, a nut and bolt type arrangement is utilized to adjust the length of the support means without disconnecting the ends of the support means. In this manner the walls 4 of the pool may be distorted to resist bowing due to pressure caused by the liquid within the pool.

By turning the nut 10, the degree of telescoping of the threaded portion 12 within the inner sleeve 14 is adjusted.

Activity within a pool often causes shock waves which are absorbed in the present invention by the action of the inner sleeve 14 pressing against the pin 16, block 18 and resilient member 20 so as to absorb temporary shock waves without damage to the pool walls or the support means 6. A temporary shock causes the inner sleeve 14 to telescope within the outer sleeve 22 as the resilient or yieldable shock absorber member 20 distorts to receive the shock.

The pin 24 aids in the assembly and dis-assembly of the support means and pin 16 rides in slot 26 under compressive shock conditions.

It is thus seen that an on-the-ground pool may utilize a plurality of adjustable wall member support means, the number of which is dependent upon the size and strength of the pool wall, to resist the bow of the walls due to liquid pressure from within the pool or to adjust the relative distance between the wall and the fixed point to which the other end of the adjustable wall member support means is secured. The ground fixed point in the preferred embodiment lies in an extension of the plane formed by the plane of the bottom of the pool, and constitutes the pivotal connection 8 of a pivot block 29 secured in the outer sleeve with a fixed ground bar 30 secured in fixed relation to the ground and to the bottom of said wall.

Adjustment of a nut 10 on each support means permits adjustment of the walls by relative longitudinal movement of said sleeves in opposite directions selectively to exert or relieve pressure on said walls without draining the pool.

The support means also acts as a shock-absorber to accept temporary shocks without damage to either the wall member 4 or the support means 6.

It should be understood that this invention is not limited to specific details of construction and arrangement thereof herein illustrated, and that changes and modifications may occur to one skilled in the art without departing from the spirit of the invention; the scope of the invention being set forth in the following claims.

What is claimed is:

1. A swimming pool at least one wall of which has adjustable wall support means including an inner sleeve telescopically associated with an outer sleeve one end of which is pivotally connected to a fixed ground bar, a screw having one end pivotally connected to said wall and having its other end portion screw-threaded and extending into said inner sleeve at one end thereof, a nut on said screw-threaded portion in abutting relation to said end of the inner sleeve providing for relative longitudinal movement of said sleeves in opposite directions selectively to exert or relieve pressure on said wall.

2. A swimming pool as defined in claim 1 with the addition of resilient means in said inner sleeve to yieldingly resist forces applied to said inner sleeve through said screw and nut.

3. A swimming pool as defined in claim 2, wherein there is a pivot block in the end of said outer sleeve pivotally connected to said fixed ground bar and said
resilient means comprises a resilient member one end of
which abuts said pivot block, and there is another block
fixed in said inner sleeve and abutting the other end of
said resilient member.

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U.S. Cl. X.R.

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