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H. V. D. STEWART
 DEVICE FOR SUPPORTING A FLEXIBLE VACUUMING
 HOSE IN A SWIMMING POOL
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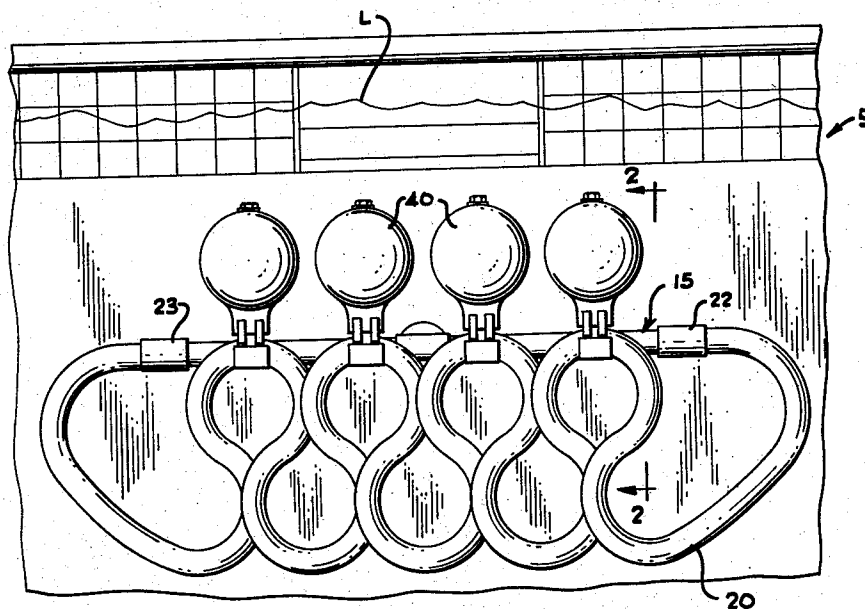


Fig. 1

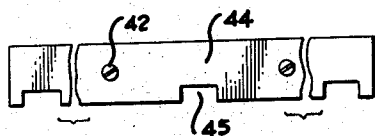


Fig. 5

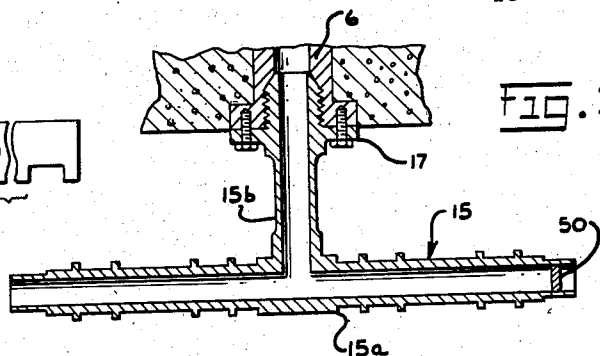


Fig. 3

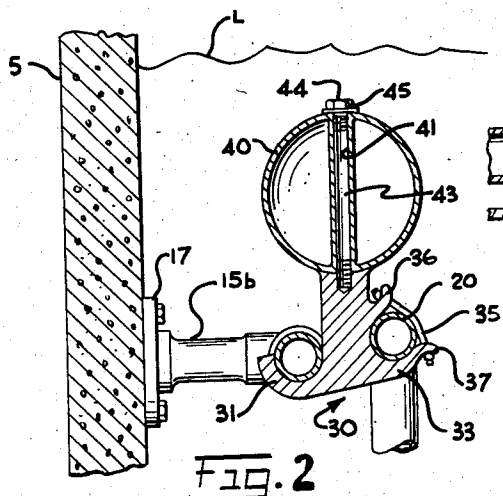


Fig. 2

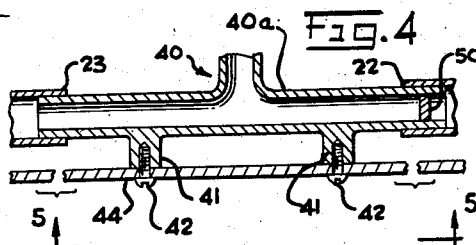


Fig. 4

INVENTOR.
 HERMAN V. D. STEWART

BY *Martin Grohman*

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DEVICE FOR SUPPORTING A FLEXIBLE VACUUMING HOSE IN A SWIMMING POOL

Herman V. D. Stewart, Glendale, Calif.

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8 Claims. (Cl. 137—356)

This invention has to do with the art of cleaning swimming pools, and relates more particularly to a device for holding a flexible vacuuming hose in position submerged in a swimming pool when the hose is not in use, but which will elevate and support the hose on the surface of the pool when it is desired to use it.

As is well known, swimming pools frequently have to be cleaned, which cleaning is usually done by means of a vacuum device, a long flexible hose being connected to the vacuum device and used to vacuum clean the bottom and other parts of the pool. Such a length of hose usually has floats attached to it, which floats render it impracticable to coil the hose about a reel for storage or use, and it requires a great deal of time to remove the floats for mounting the hose on a reel when not in use and to reinstall the floats on the hose when it is desired to use it. It is also highly inconvenient to disconnect the hose from the vacuum device for storage and then to reconnect it for use, since with each reconnection, care must be taken to allow water to displace all air in the hose as the hose is gradually submerged. Air in the vacuuming system greatly reduces the efficiency of the vacuuming process.

It is an object of my present invention to overcome those difficulties by providing novel means for supporting a float-carrying hose in position submerged below the water level of the pool when the hose is not being used, and which enables the hose to be quickly released and floated to the pool surface when ready for use.

It is a further object to provide, in such a device, means for preventing air from entering the hose during storage, so that no air-removing process is required before pool vacuuming may be commenced.

It is a further object to provide, in such a device, means for increasing the life of a hose by keeping it submerged in water, thereby preventing temperature changes resulting from exposure to the elements.

It is a still further object to provide, in such a device, means for maintaining the hose connected to the vacuum device while the hose is being stored.

In the ensuing description, by reference to the accompanying drawings, I shall describe in detail the best mode which I have thus far conceived for carrying my invention into practice, although I wish it understood that the drawings are to be regarded merely as illustrative of the invention in a presently preferred embodiment, and it will be understood that various changes and modifications may be made without departing from the invention in its intended spirit and scope.

In the drawings:

Fig. 1 is an elevational view showing my device mounted on a side wall of a swimming pool;

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1;

Fig. 3 is an enlarged sectional view showing the anchoring member;

Fig. 4 is a reduced sectional view of a modification, and

Fig. 5 is a view taken on line 5—5 of Fig. 4.

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Referring now to the drawing, the numeral 5 generally designates a side wall of a conventional swimming pool, said wall having embedded and fixed therein a fitting 6 which communicates with a conventional vacuum cleaning device, not shown. Preferably, the fitting 6 is substantially below the water level L of the pool so that it may be used as a support for the anchor member generally denoted by the numeral 15. The anchor member 15 is in the form of a T-shaped, tubular, rigid conduit having a cross leg 15a one of whose ends is open, and a central leg 15b connected into the fitting 6 by a connector fitting 17.

The flexible vacuuming hose 20 carries elastic sleeves 22, 23 at its ends, so that the sleeves may be resiliently applied on the ends of leg 15a of the anchor member.

Secured to the hose, in the manner to be described, and at points spaced apart longitudinally thereof, I provide an appropriate number of brackets 30 (the number depending on the length of the hose), each of which has a hook portion 31 projecting laterally towards the anchor member, each hook portion opening upwardly so that it may be releasably engaged beneath the anchor member. Also, each of the brackets 30 has an oppositely disposed lateral projection 33 which is also somewhat in the shape of a hook to engage beneath the hose 20, the hose being secured thereto as by a suitable length of cord, or the like, 35 whose knotted ends are engaged by portions 36, 37 of the bracket to retain the hose on the bracket.

Each of the floats 40 has a diametrically extending opening or passageway 41 through which bracket pin 43 is extended, the top end 44 of the pin being preferably threaded to receive a retaining nut 45.

The anchor member 15 is positioned sufficiently below the water surface L to retain the hose, brackets and floats submerged below the water surface, so that they will be out of the way and out of view when not in use.

When not in use, the hose 20 may be arranged to loops on the anchor member as shown in Fig. 1, and the sleeves 22, 23 are mounted on the ends of the anchor member when the hose is not in use so as to prevent water from entering the hose. Preferably, one end of the hose always remains connected to the anchor member by its sleeve so that when it is desired to use the hose, it is only necessary to disconnect the other sleeve from the other end of the anchor member and attach it to a conventional vacuuming head, not shown.

Thus, it will be seen that when the hose is not in use, it may be buoyantly retained submerged by engaging the hooked portions 31 of the brackets beneath the anchor member, the floats functioning to maintain the hooked portions 31 in engagement with the anchoring member. However, when it is desired to use the hose, it is only necessary to manually push downwardly on the floats or brackets to disengage said hooked portions from the anchor member, after which the buoyancy of the floats will lift the hose and brackets to the water surface and maintain them just below the surface while the hose is in use. Then, one of the ends of the hose is disconnected from the closed end of the anchor member and a conventional vacuuming head may be attached to the said end of the hose. One end of the anchor member leg 15a of the anchor member is permanently closed or sealed by means of a plug 50, so that when the vacuum apparatus is turned on, it will exert a vacuum in the hose.

In the embodiment of Figs. 4 and 5, the parts are as before described, except that the anchor member 15 has been modified. In those figures, the anchor member, designated 40, has its crossleg 40a relatively short and said leg has a pair of longitudinally spaced bosses 41 to which are secured, as by screws 42, a rectangular anchor strip 44 which has longitudinally spaced, downwardly

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opening notches 45 in which the hooked portions 31 of the brackets 30 may be engaged.

I claim:

1. A device for supporting a flexible vacuum cleaning hose in a swimming pool, comprising, in combination a swimming pool, a flexible hose carrying float members at points spaced apart longitudinally thereof, a plurality of brackets secured to said hose at points spaced apart longitudinally of said hose, an elongated bracket anchoring member having means supporting said member on a side wall of said swimming pool in position below the water level therein; each of said brackets having a laterally projecting portion releasably engageable with the underside of said anchoring member in a manner to be urged into engagement with said anchoring member by virtue of the buoyancy of said floats, whereby, when said brackets are manually disengaged from said anchoring member, said floats will raise said hose to and support it upon the water surface of said pool.

2. The device of claim 1 wherein said laterally projecting portion of each of said brackets is of hook shape.

3. The device of claim 1 wherein said respective floats are attached to said respective brackets.

4. The device of claim 1 wherein each of said brackets has a second laterally projecting portion opposite the first mentioned laterally projecting portion and includes means for securing said hose to said second laterally projecting portion.

5. The device of claim 1 wherein said anchor member is tubular, wherein said hose has its respective ends releasably secured to the respective ends of said anchor member in water-tight engagement and in communication therewith, wherein said means for securing said anchor member in the swimming pool includes a rigid tubular

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member communicating at one end with said anchor member between the ends of the latter and is adapted at its other end to be secured to a vacuum conduit secured to the side wall of said pool and which additionally includes means sealing the other end of said anchor member.

6. In a device for supporting a float-carrying length of flexible hose in position submerged beneath the water surface of a swimming pool, a bracket having an upright portion, having an anchor engaging portion projecting laterally from said upright portion and having means for securing said bracket to said hose, and an anchor member adapted to be releasably engaged by said anchor engaging portion and having means for retaining it in position submerged in a pool.

7. A device for supporting a flexible vacuum cleaning hose in a swimming pool below the water surface therein, comprising a length of flexible hose carrying float members spaced apart longitudinally thereof, a plurality of brackets secured to said hose at points spaced apart longitudinally thereof, a bracket anchoring member including a tubular portion connected at its ends to the ends of said hose, an anchor strip secured to said tubular portion, means for securing said tubular portion to a side wall of said pool below the water surface therein, each of said brackets having an extension portion releasably engageable with the bottom edge portion of said anchor strip, and means for placing said tubular portion in communication with a vacuum inducing device.

8. The device of claim 7 wherein said anchor strip has longitudinally spaced notches in its bottom edge for receiving said respective extension portions of said brackets.

No references cited.