Aug. 12, 1958 D. J. GERRITSEN 2,847,218

DIVING BOARD

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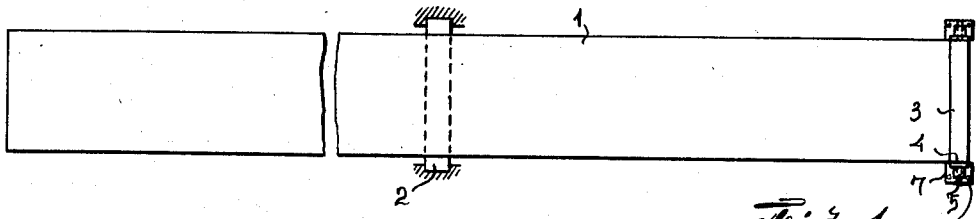


Fig. 1.

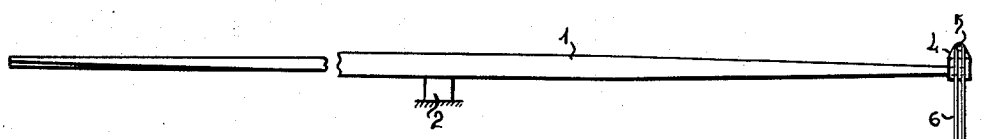


Fig. 2.

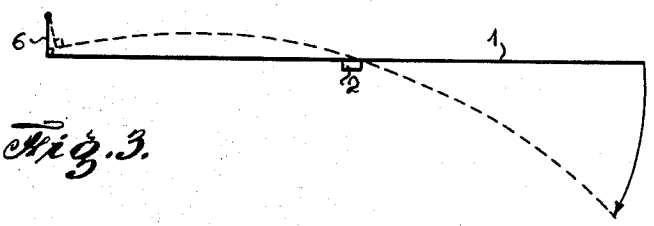


Fig. 3.

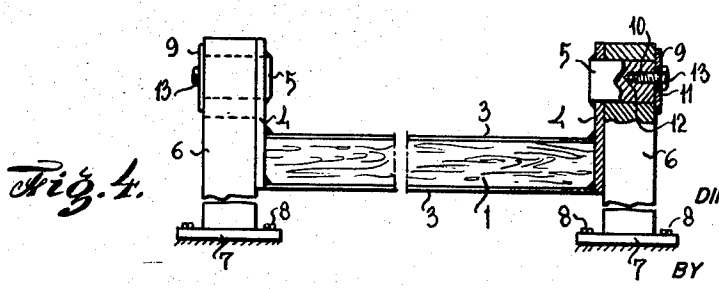


Fig. 4.

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DIVING BOARD

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2 Claims. (Cl. 272—66)

The present invention relates to an improved diving board for use in swimming pools. As a rule the rear end of such boards is either clamped in in a fixed support or is mounted for pivoting about a horizontal axis, the latter arrangement being preferred because in that case a higher degree of bending is obtained per unit of load when the diving board is in use.

In the case of pivotal attachment of the diving board at its rear end it has always been the practice to have the axis of the pivot extend in or somewhat beneath the plane of the board, which, however, results in the fact, that the board upon each bending operation performs a sliding movement with respect to the member supporting the diving board in a point intermediate its ends. This not only causes loss of energy, but particularly undue wear at this region.

The present invention has for its object to do away with the cause of this drawback, that is the occurrence of such sliding movement of the board with respect to the supporting member above referred to.

According to the invention, this object has been attained by arranging the pivotal axis of the rear end of the diving board above the plane of the board, thereby eliminating the rearward sliding movement of the board over the supporting member on account of it being compensated by a forward movement of the rear extremity of the diving board.

Accordingly the invention consists of a diving board comprising means for supporting said board intermediate its ends and having its rear end arranged for pivoting about a transverse axis extending in a plane above the general plane of the diving board.

The invention will be hereinafter further described with reference to the accompanying drawing, wherein

Fig. 1 is a plan view of a structural embodiment of a diving board according to the invention.

Fig. 2 is a side elevational view thereof, whilst

Fig. 3 diagrammatically shows the effect of the particular arrangement of the pivotal axis of the diving board upon the board being bent under a load acting in or near its freely projecting forward end, so as the weight or the impact of the person using the board.

Fig. 4 shows at an enlarged scale a rear end view of the board, the supporting member being omitted.

Referring to Figures 1 and 2, the numeral **1** represents the actual diving board, usually having a width of say 50 cm., an overall length of say 480 cm. and a maximum thickness of say 6.5 cm. the lower side of the board gradually tapering towards its extremities to a thickness of about 3 cm.

Intermediate its two ends, the diving board **1** is supported by a transverse member **2** preferably of rubber extending beneath the board and mounted in suitable supports (not shown) on either side of the board.

As shown on an enlarged scale in Fig. 4 the rear end of the board **1** is secured between two spaced strips **3** formed integrally with two upstanding lugs **4** each provided near its upper end with a trunnion **5** outwardly extending from said lug and mounted for rocking movement in a fixed upright **6** such uprights being arranged on either side of the board upon a suitable support (not shown) by means of flanges **7** at their lower ends and bolts **8**. To prevent lateral displacement of the board with respect to said stands **6**, each trunnion **5** is provided with a flange or disc **9** detachably secured to the

outer end face of said trunnion or by a screw **10** passing through an opening **11** in said flange and engaging a screw-threaded bore **12** centrally formed in said trunnion, such screw having a head **13** engaging the outer face of the flange.

From this description it will be realized, that according to the invention the rear end of the diving board is arranged for pivotal movement about a transverse axis located above the plane of the board the distance from such axis to the upper face of the board being for instance about 3–7 cm. and preferably 5 cm. in the case of a board having a width of about 50 cm. as assumed above.

The effect of this novel arrangement of the pivotal axis of the rear end of the diving board is diagrammatically shown in Fig. 3, the essential parts being indicated with the same reference characters as in the remaining figures.

From this diagrammatic figure it can be clearly ascertained that any time the board **1** is bent about the support **2** as a fulcrum (dotted lines), the rear extremity of the board is moved forward by reason of the lugs **4** rocking about the axes of the trunnions **5**, to thereby compensate any rearward movement of the board with respect to the point of engagement with the support **2**, so that at this point no sliding movement and therefore no additional wear will occur.

It will be understood, that the invention is not limited to the particular construction or dimensions of the diving board and its associated parts as above described and illustrated in the accompanying drawing and that such details may be varied in many respects without departing from the scope of the appended claims.

What I claim is:

1. A resilient diving board attached at its rear end by means of a linkage, having its axis loosely supported at the mid-section of the board by means of a fulcrum, said board being characterized by the fact that the change of length between said fulcrum and the rear end of the board as caused by the deflection of the board is compensated for by a forward motion of the rear end of the board by the provision of a pair of parallel upstanding lugs, provided on the board and outwardly projecting trunnions mounted on said lugs in a line above the general plane of the board, said trunnions being pivotally supported by a stationary structure at the rear end of the board, said stationary structure comprising uprights arranged on either side of the diving board adjacent the rear thereof and having said trunnions mounted adjacent said uprights and with the rear end of said board pivotally suspended therefrom.

2. A resilient diving board attached at its rear end by means of a linkage, having its axis loosely supported at the mid-section of the board by means of a fulcrum, said board being characterized by the fact that the change of length between said fulcrum and the rear end of the board as caused by the deflection of the board is compensated for by a forward motion of the rear end of the board by the provision of a pair of parallel upstanding lugs, provided on the board and outwardly projecting trunnions mounted on said lugs in line above the general plane of the board, a stationary structure comprising rigid uprights arranged on either side of the diving board adjacent the rear end thereof, said trunnions being pivotally mounted in said uprights with the rear end of the board pivotally suspended therefrom by means of said lugs.

References Cited in the file of this patent

UNITED STATES PATENTS

1,640,150	Henry et al.	Aug. 23, 1927
1,639,323	Albach	Aug. 16, 1927
2,649,304	Ulanovsky	Aug. 18, 1953