

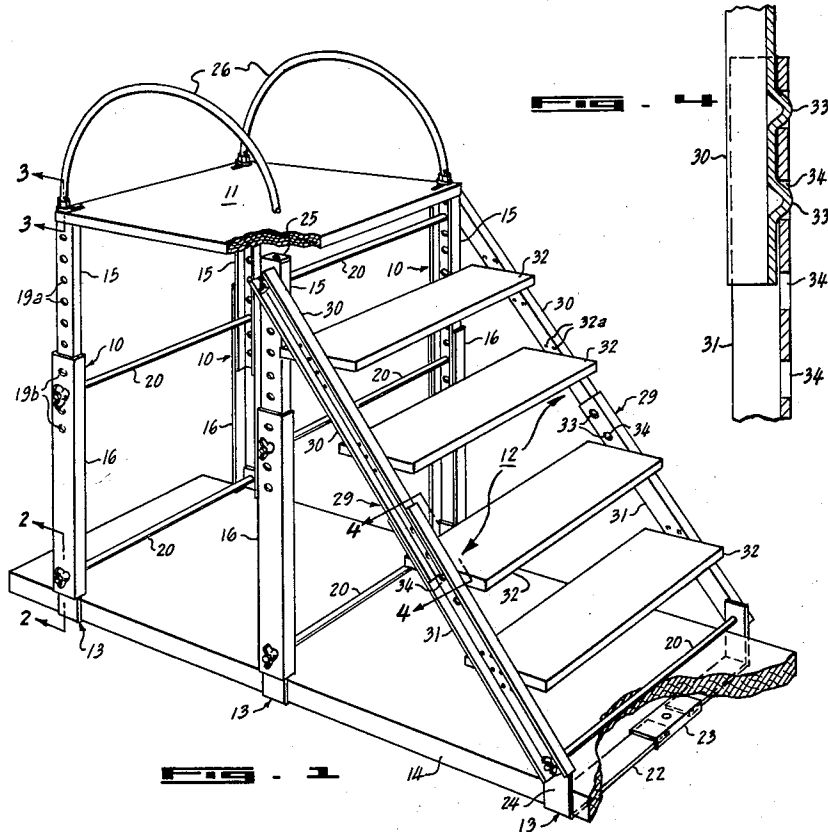
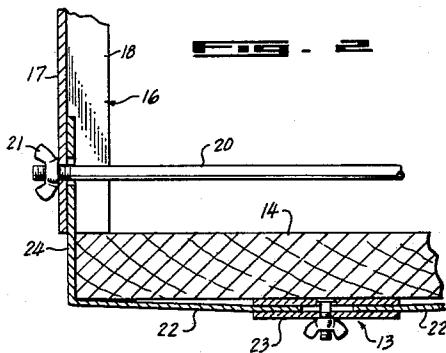
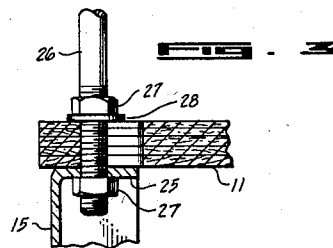
June 4, 1963

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3,092,383

ADJUSTABLE PLATFORM FOR DIVING BOARD

Filed April 4, 1960



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3,092,383

ADJUSTABLE PLATFORM FOR DIVING BOARD

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Filed Apr. 4, 1960, Ser. No. 19,842

7 Claims. (Cl. 272-66)

This invention relates to platform structures and more particularly involves a vertically adjustable platform that is adapted for being mounted upon a diving board.

It is one object of this invention to provide a platform structure that may be mounted upon a diving board and adjusted vertically to give greater or less altitude for executing platform dives.

A second object is to provide a platform that is adapted for being adjustably mounted anywhere along the length of a diving board. Thus, the platform may be positioned at the end of a diving board and used as a diving platform; it also may be located intermediate the ends of the board and used as a stationary jumping-off platform, and by jumping from the platform onto the end of the board, a powerful spring may be obtained for executing dives.

Another object of this invention is to provide an adjustable platform that may be quickly and easily erected upon a diving board or the like, said erection requiring a minimum of effort, yet providing a strong, dependable platform structure.

A further object is to provide a vertically adjustable platform having an extensible bracing means which can be adjusted for various platform elevations.

It is another object of this invention to provide in combination, a diving board and a vertically adjustable platform comprising a plurality of first support members, adjustable clamping means for fastening respective first members in the vertical at various positions upon said board, a plurality of second support members, means for adjustably connecting said second members to said first members in axial alignment therewith and thereby providing support extensions that may be vertically adjusted, and a diving platform mounted upon the vertically projected ends of said second members.

Other objects and advantages of this invention will become apparent in view of the following detailed description and the drawings.

In the drawings, forming a part of this application, and in which like parts are designated by like reference numerals throughout the same,

FIG. 1 is a perspective view of one embodiment of this invention in adjustable platform structures;

FIG. 2 is a vertical section taken on lines 2-2 of FIG. 1 showing the means for clamping vertical support channels to a diving board;

FIG. 3 is a vertical section taken on lines 3-3 of FIG. 1 showing means for interconnecting a platform and hand rail to vertical support members; and

FIG. 4 is a longitudinal section of the bracing channel members taken on lines 4-4 of FIG. 1.

In general, the platform structure shown in FIG. 1 is comprised of vertically adjustable support members 10, a platform 11, an extensible bracing means 12 and clamping means 13 for adjustably fastening the support members and bracing means to a diving board 14.

The support members 10 are each formed of an inner channel member 15 and an overlapping outer channel member 16, said inner and outer channel members having characteristic web and flange portions 17 and 18, respectively. Each pair of complementary overlapping channel members 15 and 16 is provided with a series of spaced annular slots 19a and 19b respectively, along adjacent web portions. The slot openings are located such that one or more slots in channel 15 will be mu-

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tually aligned with one or more slots in channel 16 for various positions of channel member overlap; and the slot openings thus provided are sufficiently large to receive a removable connecting rod 20 therethrough. It will be apparent, then, that the length of support members 10 can be adjusted by sliding the inner channels 15 relative to their outer channels 16 to a desired length and inserting a connecting rod through aligned slot openings. Since four support members 10 are mounted in pairs on opposite sides of board 14, a single connecting rod may be utilized for each oppositely spaced pair of supports, said connecting rods being held in place and tying the pairs of members together by means of winged nuts 21.

Channel members 16 are anchored to the side edges of board 14 by adjustable clamping devices 13, such as illustrated in FIG. 2. The clamping devices include a pair of clamping plates 22 which extend laterally from a releasable clamping sleeve 23. Each clamping plate 22 is bent upwardly at an angle of approximately 90° thereby forming a bracket 24 for engaging the side of board 14. A slot opening is provided near the upwardly extended end of each bracket and is located for being positionally aligned with a slot opening in the web 17 of each channel member 16, whereby a connecting rod 20 can be inserted through aligned slot openings as shown.

In mounting the vertical supports 10 to a particular board width, the clamping devices are initially adjusted by spacing the distance between opposite clamping plate brackets to the width of the board. Channel members 16 are then positioned on opposite sides of the board in pairs, each channel having its web portion 17 overhanging the side edge of the board. An adjusted clamping device is next placed underneath the board with the upwardly extended brackets 24 located between the board and the overhanging web portions 17 of respective channel members. Finally, with a connecting rod 20 inserted through aligned slotted openings of opposite channel members 16 and brackets 24, a wing nut 21 is tightened upon the threaded end of said rod, thereby drawing the channel members 16 into solid engagement with brackets 24 and causing the brackets to clamp upon board 14.

A platform 11 formed of water-proof plywood is secured to the upper flanged ends 25 of channel members 15 in the manner more particularly shown in FIG. 3. Arcuate hand rails 26 have threaded linear end portions which extend through holes provided in the platform and the flanged ends 25. Each end of the rails is fastened with a pair of binding nuts 27, which threadedly engage the rails on either side of the platform and a flanged end 25. Where wood materials are used in forming the platform, it is desirable to provide a washer 28 to prevent tearing and destruction of the wood fibers.

The adjustable platform support is braced by means of an extensible ladder structure 12 comprising a pair of parallel channel braces 29, each brace including an inner channel member 30 and an outer channel member 31, said braces being interconnected by a plurality of steps 32. The steps may be fastened to the channel by means of bolts or screws inserted through slot openings 32a, and since the length of the braces is intended to be adjustable it is desirable that extra slot openings 32a be provided in the channel members to accommodate a rearrangement or modified spacing of the steps.

The channel members 30 are connected to oppositely disposed channel members 15 with a connecting rod 20 and wing nut 21 in the manner illustrated, and a clamping device 13 is employed for securing channel members 31 to board 14. Channel members 30 and 31 are provided

respectively with serrations 33 and openings 34 in the web portions thereof for adjustably interconnecting their overlapping ends, such a structure being most clearly shown in FIG. 4. Serrations 33 are spaced apart a distance equal to the spacing between the centers of openings 34, and the base dimension of each serration is approximately equal to the size of each opening. If the channels are moved laterally away from each other, then the serrations 33 will be removed from certain of the openings 34, thereby enabling the channel members to be longitudinally adjusted until the serrations mate with other openings. Since the channels are positioned laterally apart with respect to the other by means of steps 32, either channels 30 or channels 31 can be moved laterally away from the other by removal of those respective step members which interconnect the channels. But with the steps of each pair of spaced channels (30 and 31) in place, the overlapping ends of a member 30 and a member 31 form a rigid but extensible brace 29.

The complete installation of the portable and adjustable platform described is as follows:

Channel members 16 are placed upon board 14 in pairs, said pairs being positioned on opposite sides of the board with the web portions 17 of each channel overhanging the respective side edge of said board. An adjusted clamp device 13 is placed underneath the board with the brackets 24 disposed between the board and the web portions of a pair of channel members. A connecting rod 20 is then inserted through the aligned openings of the channel members 16 and brackets 24, and the assembly is clamped to the board by tightening a wing nut 21 upon the connecting rod. Another clamping device is attached to the second pair of channel members 16 in the same manner described.

With the platform 11 secured to flanges 25 of channel members 15, the latter are slidably inserted into members 16 and adjusted to a particular length, whereupon connecting rods 20 are inserted through mated and aligned openings in the channels 15 and 16, and wing nuts 21 are applied.

Bracing structure 12 is generally erected, channel members 30 and 31 being overlapped to a proportionate degree as were members 15 and 16, thereby permitting commensurate adjustments of the extensible channel braces 29 should the lengths of supports 10 be altered. Channel members 30 are then connected to channel members 15 and channel members 31 are clamped to board 14 with a clamping brace 13.

The platform structure is now prepared for use, but should a different platform height be desired it is only necessary to remove the connecting rods 20 from between slot openings 19a and 19b and the steps 32 from between the pair of spaced members 30. After serrations 33 are removed from openings 34, members 15 are then capable of being selectively adjusted relative to members 16 into a new position of slot opening alignment, and secured by reinserting rods 20. The length of braces 29 will be automatically extended or shortened by positioning the platform to a new height, and the braces 29 are then rigidified by repositioning serrations 33 into newly aligned openings and refastening steps 32.

It is also possible to move the platform structure to a new position along the board by simply releasing clamps 13. This is accomplished simply by removal of wing nuts 21 from the connecting rods 20 which clamp brackets 24 to the board. Providing the board is of uniform width, the entire structure may be slid along the board to a new position and the wing nuts 21 reapplied.

While a preferred form of this invention is shown and described, it is to be understood that various changes and substitutions of parts may be made without departing from the spirit of this invention or the scope of the attached claims, and each of such changes or substitutions is contemplated.

Having thus described my invention what I claim and desire to secure by Letters Patent is:

1. In combination, a diving board and a vertically adjustable platform comprising a plurality of first support members, adjustable clamping means fastening respective first members in the vertical at various positions upon said board, a plurality of second support members, means for adjustably connecting said second members to said first members in axial alignment therewith and thereby providing support extensions that may be vertically adjusted, and a diving platform mounted upon the upward projected ends of said second members.

2. In combination, a diving board and a vertically adjustable platform comprising a plurality of first support members, adjustable clamping means fastening respective first members in the vertical at various positions upon said board, a plurality of second support members, means for adjustably connecting said second members to said first members in axial alignment therewith and thereby providing support extensions that may be vertically adjusted, a platform mounted upon the upward projected ends of said second members, and a detachable bracing means interconnecting said board and at least one second member.

3. In combination, a diving board and a vertically adjustable platform comprising a plurality of first support members vertically disposed upon the top surface of said board and along the side edges thereof, clamping brackets spanning the underside of said board and having detachable means interconnecting first support members disposed along opposite side edges of said board whereby said interconnected support members may be vertically clamped to said board, a plurality of second support members, means for adjustably connecting said second members to said first members in axial alignment therewith and thereby providing support extensions that may be vertically adjusted, a platform mounted upon the upward projected ends of said second members, and a detachable bracing means interconnecting said board and at least one second member.

4. In combination, a diving board and a vertically adjustable platform comprising a plurality of first channel members vertically disposed upon the top surface of said board and along the side edges thereof, said channel members having their web portions overhanging the edges of said board and flange portions supported upon the upper surface of said board, clamping brackets spanning the underside of said board and having vertical flanges at either end, said flanges being adapted for fitting into channel members on opposite sides of said board between member web portions and the board, detachable means for fastening said flanges to said members, a plurality of second support members, means for adjustably connecting said second members to said first members in axial alignment therewith and thereby providing support extensions that may be vertically adjusted, a platform mounted upon the upward projected ends of said second members, and a detachable bracing means interconnecting said board and at least one second member.

5. In combination, a diving board and a vertically adjustable platform comprising a plurality of first support members vertically disposed upon the top surface of said board and along the side edges thereof, clamping brackets spanning the underside of said board and having detachable means interconnecting first support members disposed along opposite side edges of said board whereby said interconnected support members may be vertically clamped to said board, a plurality of second support members, means for adjustably connecting said second members to said first members in axial alignment therewith and thereby providing support extensions that may be vertically adjusted, a platform mounted upon the upward projected ends of said second members, and an extensibly adjustable bracing means for interconnecting said board and

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at least one second member, said bracing means including a clamping device for engaging said board.

6. In combination, a diving board and a vertically adjustable platform comprising a plurality of supports including vertically adjustable members, means for adjustably clamping such supports at various positions longitudinally along said board, and a diving platform mounted upon said vertically adjustable members.

7. A combination of claim 6 and further including an extensible ladder structure interconnecting said diving board and at least one of said supports.

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