Feb. 7, 1967 R. A. WOLFE 3,302,949

TOY WATERWAY

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Fig. 1.

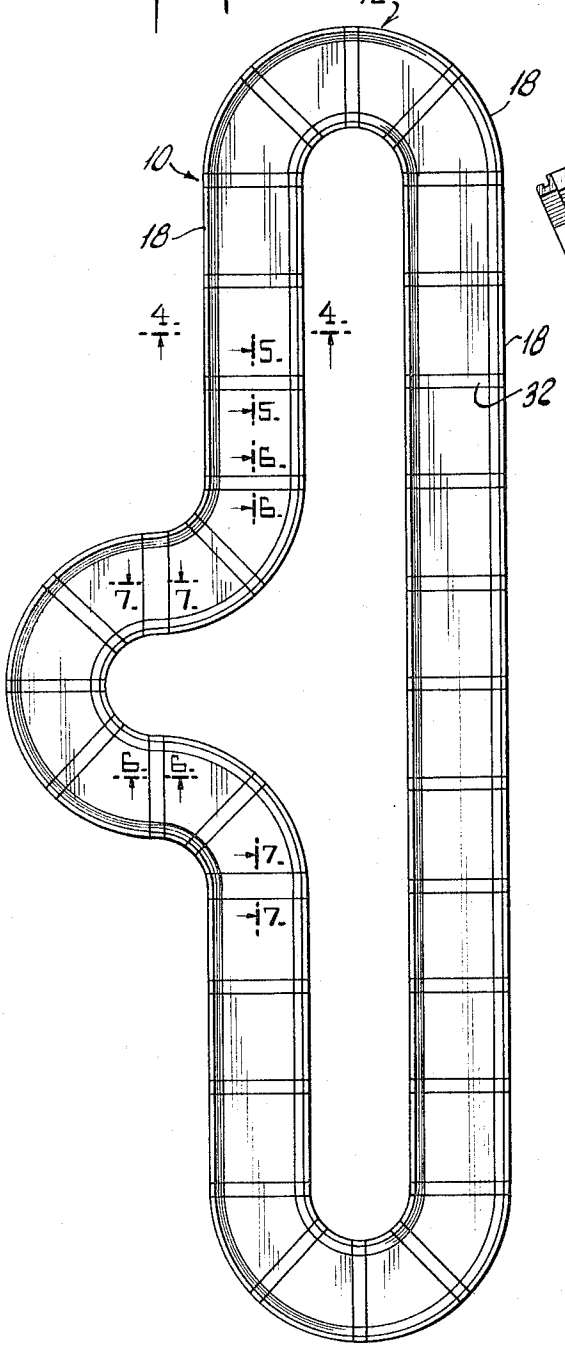


Fig. 3.

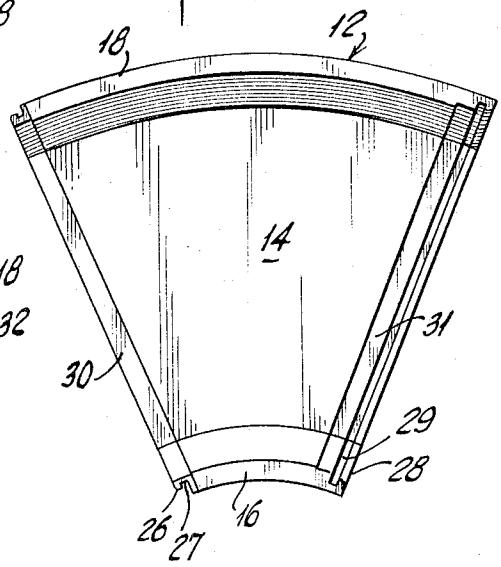
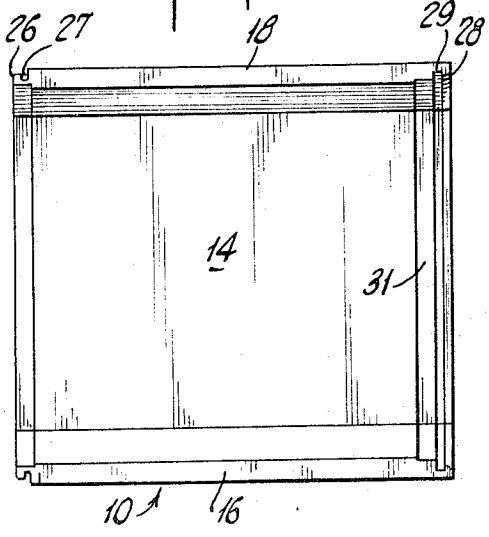


Fig. 2.



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Fig. 4.

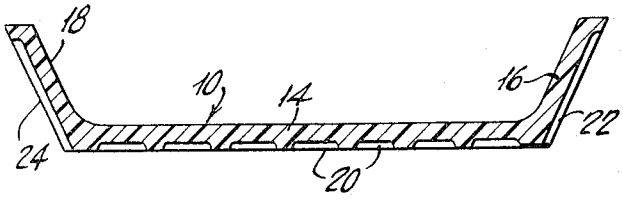


Fig. 5.

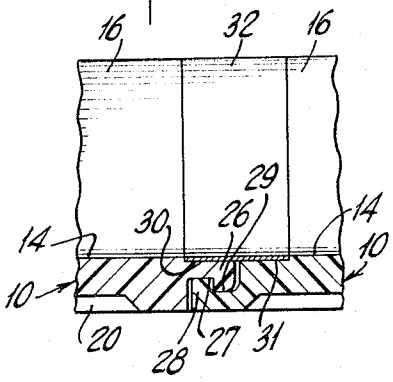


Fig. 6.

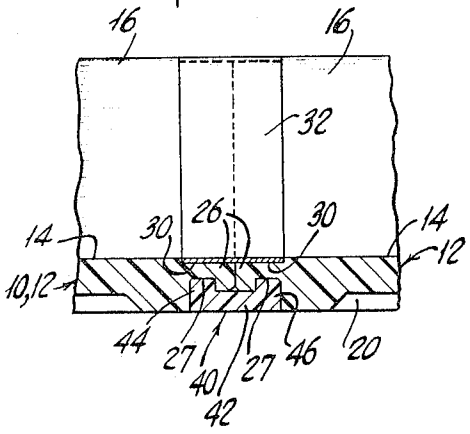
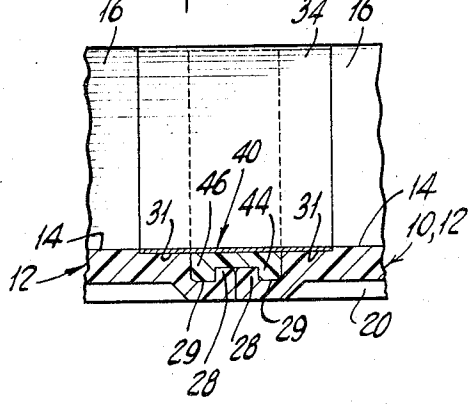


Fig. 7.



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TOY WATERWAY

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4 Claims. (Cl. 272—32)

This invention relates to articles of play in general, and, in particular, to a knock-down type of waterway which may be readily assembled on a playground or the like and used by young children as a water channel in which they may ride in a suitable toy boat or the like.

The main object of this invention is to provide a unique article of play, particularly appealing to very young children.

A more specific object of the invention is to provide a simplified construction enabling the fabrication of a waterway in which young children can ride in small boats which they themselves control.

It is a further object of the invention to provide a waterway of the type described, the shape of which may be varied with ease.

In the following specification and claims, the term "waterway" is intended to include a prefabricated endless channel to be filled with water. It is not necessary that the waterway be wide enough to accommodate a toy boat of sufficient size to hold a child, and the present invention would have utility as a small waterway in which miniature boats alone are propelled.

According to the invention, the waterway comprises a plurality of separable trough-shaped sections, the ends of each section including an integrally formed mating portion for mechanically securing adjacent sections together. The waterway may include all curved sections, or both curved and straight sections, the curved sections being formed so that the waterway can be curved in either direction. After the waterway has been mechanically assembled, the junctions of the various sections are sealed by means of a water-tight adhesive tape or the like, whereby the fabricated channel may be filled with water without fear of leakage.

The manner in which the above and other objects of the invention are accomplished is more fully explained below with reference to the following drawings wherein;

FIG. 1 is a top view of the assembled waterway;

FIG. 2 is a top view of a straight section of the invention;

FIG. 3 is a top view of a curved section according to the invention;

FIG. 4 is a side sectional view along the line 4—4 of FIG. 1;

FIG. 5 is a view of the junction of two sections along the line 5—5 of FIG. 1;

FIG. 6 is a sectional view of the junction along line 6—6 of FIG. 1; and

FIG. 7 is a sectional view of the junction along line 7—7 of FIG. 1.

In FIG. 1, the assembled waterway is shown as an endless channel comprising a plurality of straight sections **10** and curved sections **12**, made of a conventional plastic material. Referring to FIG. 4, each of the sections **10** and **12** is trough-shaped in cross section and includes a base **14** from which integral diverging walls **16** and **18** extend. The base may include bottom recesses **20**, rectangular in shape, and longitudinal side recesses **22** and **24** for structural rigidity and purposes of design.

Referring to FIGS. 2 and 3, the left hand side of each section includes an integrally formed lip **26** extending downwardly from the entire exterior periphery of the section. Additionally, the outer surface of each section includes a peripheral curved slot **27** adjacent lip **26** to form an exterior hook portion. The right hand side

of the section is formed in a complementary manner, and includes a lip **28** extending upwardly from the interior portion of the section, and an adjacent interior slot **29** opening into the interior of the waterway. The edges of the sections may be recessed slightly at **30** and **31** for purposes described below. The curved sections **12** illustrated in FIG. 3 include identical fastener portions and are therefore numbered in the identical fashion as the straight section of FIG. 2.

As shown in FIG. 5, when interconnecting two of the straight sections **10**, the complementary fastener portions are placed together so that the lip **26** of a first section is inserted into slot **29** of an adjacent section, while the lip **28** of the adjacent section is inserted into the slot **27** of the first section. To waterproof the seal, an adhesive tape **32** is placed over the junction of the two sections within the respective recesses **30** and **31** which lie side by side. Numerous commercially available adhesive tapes provide a sufficiently waterproof seal to be used for this purpose.

In securing two curved sections or a straight section to a curved section to complete the waterway, three situations may arise. Referring to FIGS. 2 and 3, if the right hand section of curved section **12** is to be connected to the left hand side of straight section **10**, the junction is the same as that described above and illustrated in FIG. 5. This holds true as long as the waterway continues to curve in the same direction or straight sections are added.

However, when it is desired to curve the waterway in the opposite direction by joining the left hand side of curved section **12** to the left hand side of straight section **10** (or a curved section **12**), an additional member is necessary to complete the junction. This additional element is shown as a bracket **40**, having the same trough shape as the individual sections illustrated in FIG. 4, and including a base **42** from which two perpendicular arms **44** and **46** extend. As shown in FIG. 6, when two sections are joined in this manner, the adjacent lips **26** abut against each other. To mechanically secure the two sections, bracket **40** is inserted around the lips **26** so that arms **44** and **46** extend upwardly into the respective slots **27**. The bracket **40** is so shaped that when it is in place, its lower surface is flush with the lowest point of the sections on which the waterway rests. In this case, the sealing tape **32** fits into the adjacent recesses **30** of the respective sections.

The other possibility, illustrated in FIG. 7, occurs when it is desired to unite the right hand side of curved section **12** with the right hand side of a section **10** or **12**. In this case, the upwardly extending lips **28** are placed in an abutting relationship and it is necessary to invert the bracket **40** so that arms **44** and **46** extend into the slots **29** of the respective sections. The dimensions of the mating portions of the sections and the bracket **40** are such that the upper portion of bracket **40**, i.e. the outer surface of base **42**, is flush with the recessed portions **31**. Since the recesses **31** are separated by the bracket **40**, it is necessary to use a tape section **34** of sufficient width to accommodate the recesses **31** and the width of the bracket.

In each of the illustrated junctions, the adjacent sections are tightly held for mechanical rigidity with the securing means serving as a tongue in groove seal to inhibit leakage if the tape should loosen or otherwise fail. The individual sections permit the user to construct many differently shaped waterways of any desired size. The device is easy to construct and unlikely to produce problems of leakage. Disassembly requires no more than the simple removal of the tapes **32** or **34** after the water has been removed. Thereafter, the individual sections may be conveniently separated and stored.

Although a preferred embodiment of the invention has

been shown and described, the invention is not so limited and should only be defined by the following claims.

What I claim is:

1. A toy waterway comprising a plurality of individual trough-shaped sections interfitted at adjacent ends thereof forming an endless waterway and including means for water-sealing the joints formed at said interfitted adjacent ends, each said trough-shaped section having identical first ends and identical second ends, said ends comprising means for interconnecting said sections, said first end of each section comprising an outwardly facing channel extending substantially from the top of one side of said scetion down said one side across the bottom of said section and up the other side substantially to the top thereof, said second end comprising an inwardly facing channel substantially co-extensive with said channel of said first end, the outer legs of the channels of said first ends of at least some of said sections being received within said channels of said second ends of others of said sections, the outer legs of the channels of said second ends of at least some of said sections being received within said channels of said first ends of others of said sections.

2. The toy waterway of claim 1, wherein at least some of said sections are curved in horizontal planes and at least some of said curved sections curve in opposite directions from others of said curved sections and wherein said second ends of said sections which curve in opposite directions are juxtaposed in abutting relationship

with the outer legs of others of said sections along the outer legs of the respective channels thereof and means are provided for retaining said juxtaposed ends in a tight-fitted relationship.

3. A toy waterway as claimed in claim 1 wherein said means for water-sealing comprises adhesive tape placed over the junction formed between adjacent sections.

4. A toy waterway as claimed in claim 3, wherein the edges of said sections are recessed to receive therein said adhesive tape.

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