April 29, 1930. J. G. BOYD 1,756,175

ILLUSORY TRAVEL SCOPE

Filed June 1, 1927 2 Sheets-Sheet 1

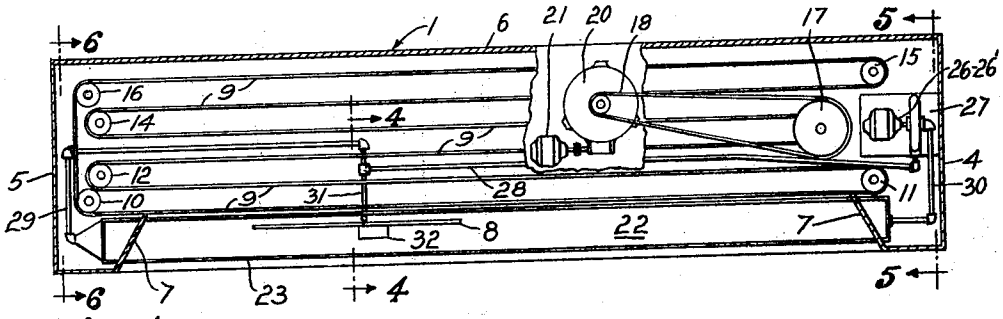


Fig. 1

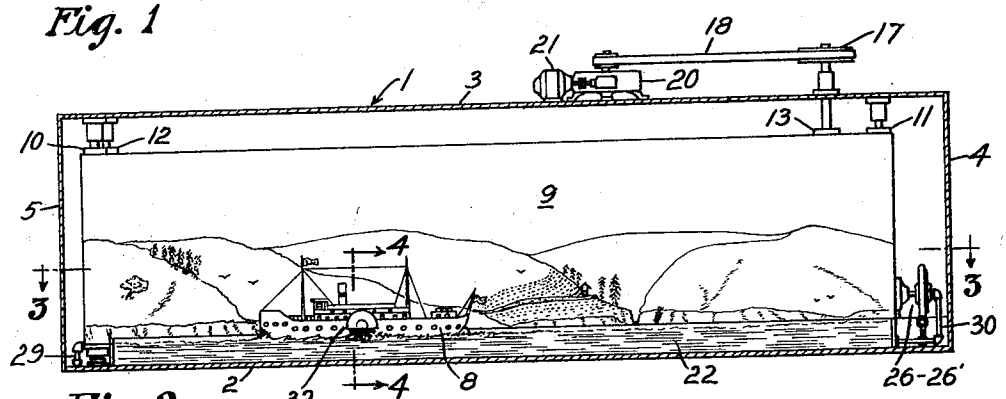


Fig. 2

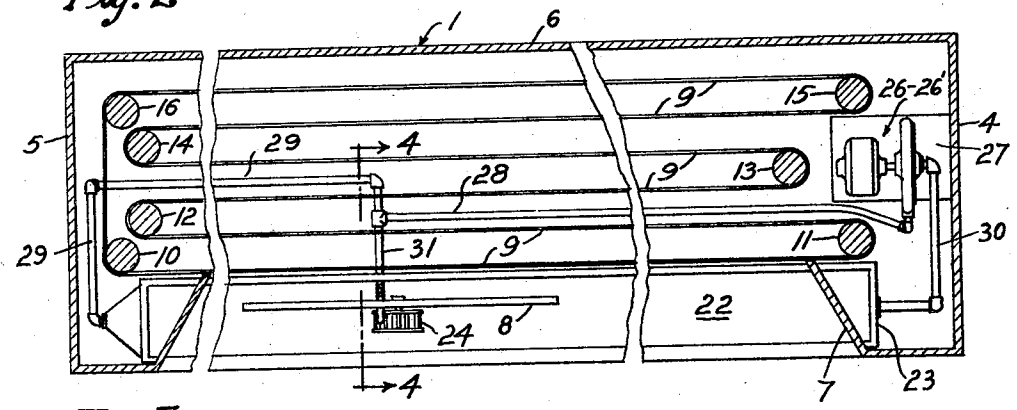


Fig. 3

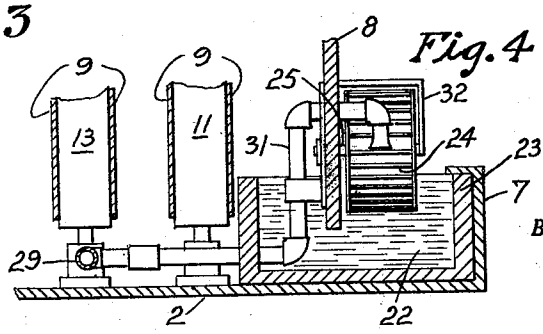


Fig. 4

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Fig. 5

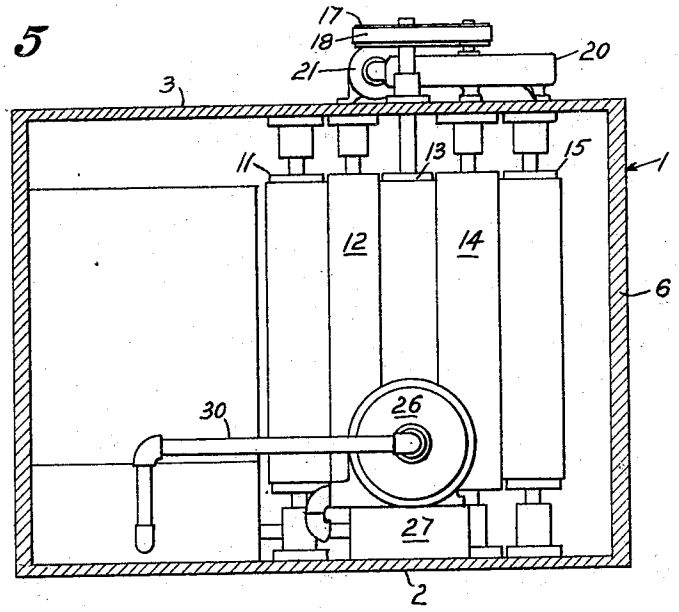
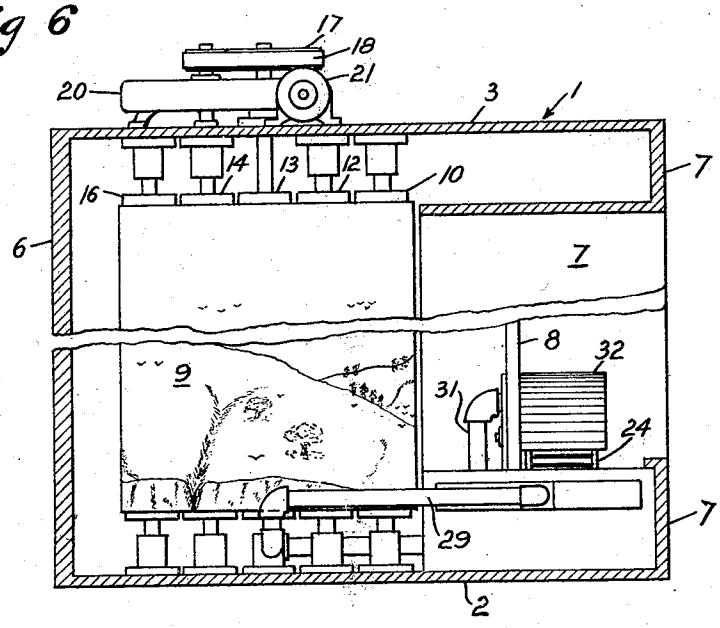


Fig 6



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UNITED STATES PATENT OFFICE

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ILLUSORY TRAVEL-SCOPE

Application filed June 1, 1927. Serial No. 195,607.

My invention relates primarily to advertising devices and especially to devices for advertising transportation service, and still more particularly to devices for advertising transportation by water. My invention is not limited exclusively to advertising however, and may be employed in a great many instances where the illusion of travel is to be projected.

It is an object of my invention to provide a device for compactly, realistically, and efficiently projecting the effect of travel, and it is a further object to provide the effect of travel by water, in such a device.

Other and ancillary objects of my invention will be suggested in the following description and in the use of the device of my invention. Certain of the objects or certain portions or combinations of the objects of my invention may be attained with the use of less than all its advantageous features, or with modifications within its purview. It is petitioned therefore, that my invention be limited only by the claims constituting its final determination.

Referring to the drawings:

Figure 1 is a plan view of the device of my invention with the major portion of its top cover broken away. Fig. 2 is a front elevation of the device with its front side completely removed. Fig. 3 is a mid-sectional and enlarged plan of the device, the plane of section being indicated by a line 3—3 in Fig. 2. Fig. 4 is a fragmentary enlarged detailed vertical transverse section of the device showing the paddle-wheel therein uncovered, the plane of section being indicated by lines 4—4 in Figs. 1, 2, and 3. Fig. 5 is an enlarged right-end elevation of the device of Fig. 1 with its right-end wall cut away, the incidence of the illustration being indicated by a line 5—5 of Fig. 1. Fig. 6 is a similar left-end elevation as indicated by a line 6—6 in Fig. 1.

The device of my invention is termed a travel-illusion-scope because of its ability to convey the illusion of travel. The travel-scope is housed in a substantially rectangular box 1 of wood, metal, or other suitable material, formed by a bottom wall 2, top wall 3, right-end wall 4, left-end wall 5, back wall 6, and blackened bordering panel 7 forming an open-front wall.

A miniature representation of a vehicle, in this case a boat, is painted on a boat-shaped board 8 suspended vertically in the foreground or front part of the box 1. The background is painted on a long endless screen 9 carried over a plurality of vertical rollers 10, 11, 12, 13, 14, 15, and 16, at opposite ends of the box 1, and which are journaled in the bottom and top walls of the box.

Means are provided for driving the screen 9 backwards to give the illusion of forward motion to the boat. One of the rollers 13 has a long shaft extending up through the top wall of the box and terminating in a belt pulley 17 driven by a belt 18 from a speed-reducing gear 20 connected to an electric motor 21 supported on top of the box 1.

The foreground is formed by a body of water 22 in an open-topped water tank 23 extending longitudinally of the box 1 beneath the boat 8 so that the bottom of the boat is immersed in water to give a realistic representation.

A paddle-wheel 24, is supported in appropriate position on the boat 8 by a paddle-wheel shaft 25 (see Fig. 4). The wheel 24 may be rotated on the shaft by an endless conveyor-type belt or rollers in the tank 23, or by gearing from in back of the boat 8. Special means of particular aptness are however, provided for rotating the paddle wheel, and this preferred means will now be described.

A motor-driven centrifugal pump unit 26—26′ is mounted on a block 27 on the base of the box 1 at the right-hand end thereof, and has its outlet connected through pipes 28, 29, into the left-hand end of the water tank 23. The pump draws its water supply from the right-hand end of the water tank through a pipe 30. Thus a current of water is set up from left to right in the water tank, and this current is effective to rotate the paddle-wheel. A small by-pass 31 in the pressure pipe 28, extends out through the boat 8 and terminates above the paddle wheel 24 and under the paddle-wheel cover 32. A

fine stream of water is discharged against the paddle wheel to speed its motion and to produce a realistic spray therefrom.

The current of water set up by the pump produces two other valuable effects. The agitation simulates the waves in an ocean or ripples in a lake or river, and may be determined at will by the character of opening at the outlet of the pipe 30. The current of water moving from front to rear of the boat, completes the illusion of boat motion so perfectly that the eye is attracted and held by the illusory effect.

While designed primarily as an advertising device for vividly portraying all the effects of travel by water, the device of my invention is more broadly applicable; one specific suggestion of another application being that it be employed in enlarged form as a setting for motion picture scenes. The applicability to producing the effect of travel by air is obvious; it being then necessary to use a blower to circulate the air instead of a pump to circulate water.

Having described only one embodiment, I claim as my invention:

1. In an illusory-travel-scope, a tank, a body of liquid in said tank, a representation of a boat fixedly disposed to extend from said liquid, a rotatable paddle-wheel for the boat, and means for moving the body of liquid along said boat and against said paddle-wheel for effecting a rotation of the wheel to thereby produce the illusion of boat motion.

2. In an illusory-travel-scope, a tank, a body of liquid in said tank, a representation of a boat fixed in said liquid, a rotatable paddle-wheel for the boat, and means for circulating said liquid against said paddle-wheel to effect the rotation thereof.

3. In a device of the class described, a body of liquid, a representation of a water borne object of travel fixed in said liquid, a rotatable propelling means for the object, and means for circulating said liquid along the boat and against the propelling means for operating the latter to thereby produce the illusion of boat motion produced by said means.

4. In a device of the class described, a miniature representation of a fluid borne object of travel fixedly disposed in the appropriate fluid therefor and arranged to be viewed from an external point at a side thereof, a movable panoramic background therefor, means for moving said background, a fluid operable propeller on said representation, and means for imparting motion to said fluid to operate said propeller for cooperation with said panorama to indicate self-propulsion of said representation.

In testimony whereof, I affix my signature.

JOHN G. BOYD.