The invention relates generally to amusement apparatus and is more particularly, but not exclusively, concerned with therapeutic devices for use in the rehabilitation of partially incapacitated patients.

The invention, in inter alia, connected with amusement apparatus of the kind having an extended support surface provided with one or more seatings e.g., depressions, to receive balls. In use of the apparatus, it is shaken so that the balls leave their seatings and it is then held so that the support is approximately horizontal. The apparatus is then tilted or rocked to return the balls to their seatings.

The invention provides, in one of its aspects, a device for use with apparatus of the kind referred to above, comprising a table or platform on which the amusement apparatus can be mounted, support means therefor such that when the table or platform is supported thereby it can be tilted or rocked, and means for enabling the table or platform to be manually tilted or rocked about the support means.

Preferably the support means comprise a vertically displaceable bridge-shaped frame and the platform or table is supported centrally in the length of the cross piece of the frame.

Conveniently the table or platform is carried at one end of a lever which is universally pivoted to the support means intermediate its length, the other end of the lever affording the aforesaid means for enabling the table or platform to be manually tilted or rocked about the support means.

Two embodiments of the invention will now be described by way of example with reference to the accompanying drawings. In the drawings:

FIGURE 1 is a perspective view of a device of the invention;

FIGURE 2 is a perspective view of a puzzle for use with a device of the invention; and

FIGURE 3 is a perspective view of another device of the invention.

Referring now to the drawings, in FIGURE 1 the device of the invention includes support means comprising a frame made from metal rod about ½ inch in diameter. The frame comprises two side stands 14 of inverted V shape and a bridge rod 15 interconnected at the upper ends of the side stands. The upper ends of the two rods 16 of each side stand fit tightly into downwardly directed sockets formed in two rigid corner pieces 17 and the ends of the bridge rod 15 fit tightly into two opposed sockets in the corner pieces. Centrally in its length the bridge rod 15 is bent to form a V-shaped notch or recess 18. The lower ends of the side stand rods 16 are each provided with a foot piece 19 which may conveniently be provided as a plastic, wooden or other ball. The side stand rods 16 and bridge rod 15 can be detached from the corner pieces 17 to facilitate storage or packing of the frame.

A platform 21 is provided by a rectangular sheet of transparent ‘Perspex’ about 1/32 inch thick. A short length of a rectangular sectional plastic bar 22 is adhesively secured to the underside of the platform 21 to project from one end thereof. The free end of the bar 22 is bored to provide a socket for one end of an operating rod 23. This rod 23 has a central hook part. One free end of the hook is out-turned, to engage in the socket in the plastic bar 22. The hook part of the operating rod hooks into the notch or recess 18 in the bridge rod 15. The free end of the operating rod is provided with a knob 24 or other means to facilitate it being held. Small pieces 25 of plastic material are adhesively secured to the ends and sides of the platform 21 to assist location of “puzzles” on the platform.

In this example the amusement apparatus is of the kind referred to above, and comprises a multiplicity of so-called “puzzles.” Each puzzle 26 (see FIG. 2) comprises a shallow rectangular casing formed by a backing sheet 27 of transparent “perspex,” an opaque plastic bead 28 adhesively secured to the backing sheet 27 to extend continuously around the periphery thereof and a cover sheet 20 of the same size and material as the backing sheet 27 adhesively secured to the plastic bead 28. The inner face of the backing sheet 27 is provided with seatings to receive balls 31. In one type of puzzle these seatings are formed by U-shaped wire inserts 30 secured to the backing sheet.

In one example as shown in FIGURE 2 a coloured picture will be secured to the backing sheet and the seatings will correspond to features of the picture. Thus, when, as shown, the picture includes an animal, seatings 32 may be provided to represent the eyes of the animal. The puzzles may be grouped in series according to the age of the people intended to use them. Thus, one series for children may comprise successive pictures of a ball, a fish and a cat, the cat playing with the ball and the fish swimming in a pool. A series for adults, and for example, for display or amusement purposes in a shop, may comprise pictures illustrating the goods sold or the service supplied by the shop. Thus, a hairdressing establishment may have a series illustrating hair styles. Conveniently, such a picture would include, for example, an ear ring, which provides a seating for a ball.

The pictures may be stuck to the backing sheet or they may be painted on the backing sheet or they may be built up on the backing sheet from coloured paper or plastic.

In this latter case the raised edges of the picture hinder the balls from reaching their seatings and tend to make the puzzle more difficult to complete.

The picture may represent an insect, for example a butterfly.

In use of the foregoing device, the support frame is assembled and placed on a suitable support. The operating rod 23 is then hooked on to the bridge rod 15 and a puzzle placed on the platform 21. The knob 24 on the end of the operating rod 23 is then held in the hand and manipulated in an attempt to make the balls 31 enter the seatings 32.

The foregoing device and puzzles are particularly intended for use by bed-ridden patients who are forced to lie on their backs. In such instances the frame stands 14 can be placed on the bed clothes so that the bridge rod 15 rests on the patient’s chest and the platform 21 extends towards the patient’s face. If then a puzzle 26 is placed on the platform 21, the patient can view the seatings 32 and balls 31 upwardly through the platform 21 and the backing sheet 27 of the puzzle 26. The patient can then manipulate the operating rod 23 to make the balls 31 enter the seatings 32.

It is possible for the device to be manipulated by the feet where, for instance, the user’s arms or hands are incapacitated. In this case as shown in FIGURE 3 the operating rod 33 is shorter than the operating rod 23 of the preceding embodiment, is substantially straight —other than the hook part and is attached to the centre of a foot rest 34. Two steadying rods 35 extend from the ends of the foot rest 34 and lie under the bridge rod 15 to prevent the platform 21 from rolling too far about the axis of the operating rod. As the device
will normally be operated from a wheel chair or other seat, the side stands will be shorter than those used in the preceding embodiment. Further the platform need not be transparent.

The platform may also be large enough to hold two puzzles.

1. An amusement apparatus for operation by an operator lying on his back, comprising:

(a) a bridge-shaped frame having a bridge member and a stand at each end for bridging the operator;

(b) a lever carried on the bridge member and universally pivotally mounted thereon, said lever having one end extending towards the face of the operator;

(c) a puzzle device mounted on said end of the lever, said puzzle device having parts relatively movable on tilting the device and having transparent upper and lower surfaces so that movement of the parts may be viewed from below the device; and

(d) means at the other end of the lever for operating the same.

2. An amusement apparatus according to claim 1 wherein a transparent platform is mounted at said end of the lever extending toward the operator's face and the puzzle device is mounted on the platform.

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