

May 7, 1935.

O. T. JENSEN

2,000,332

TOY

Filed Oct. 8, 1934

2 Sheets-Sheet 1

FIG. 1

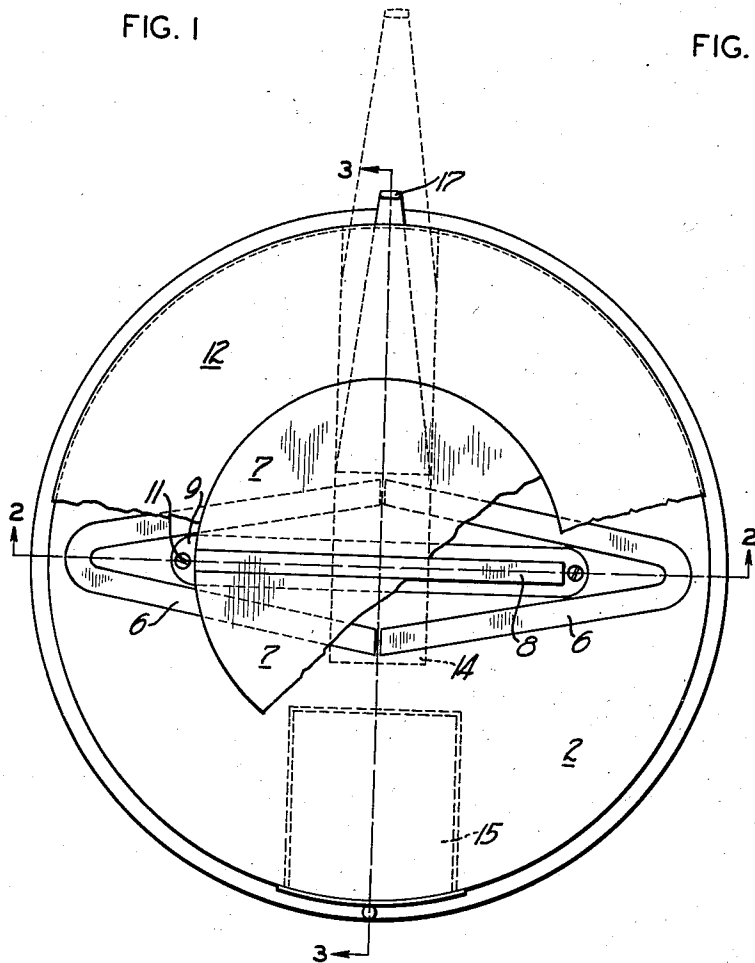


FIG. 3

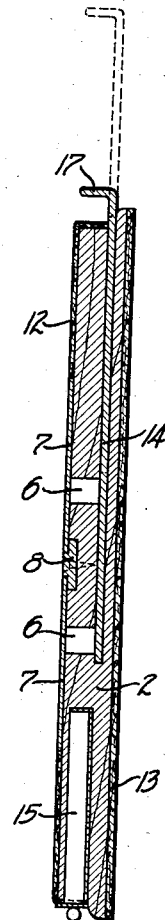
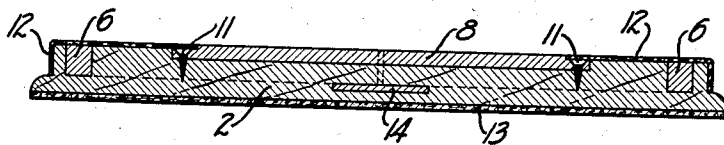


FIG. 2



INVENTOR
OTTO T. JENSEN
BY *Charles V. Evans*
HIS ATTORNEY

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FIG. 4

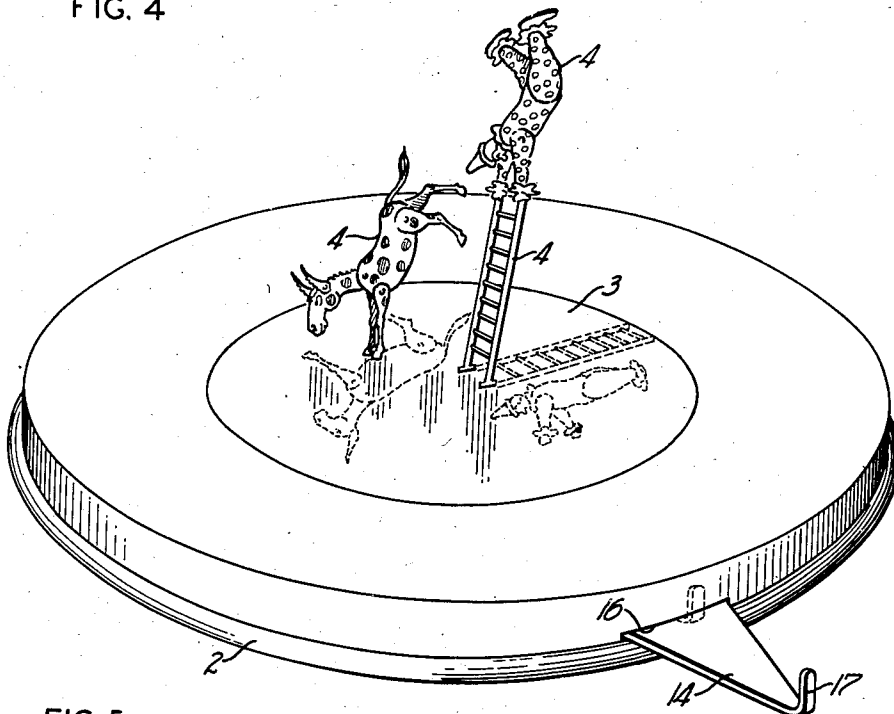
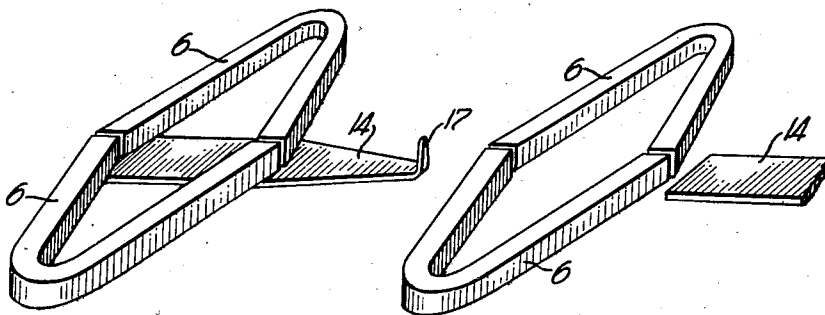


FIG. 5

FIG. 6



INVENTOR
OTTO T. JENSEN
BY *Charles J. Evans*
HIS ATTORNEY

UNITED STATES PATENT OFFICE

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TOY

Otto T. Jensen, Fresno, Calif.

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3 Claims. (Cl. 46—49)

My invention relates to amusement devices, and more particularly to a toy comprising playing objects associated with a playing surface.

It is among the objects of my invention to provide means, controlled by the player, for holding the playing objects in predetermined positions relative to the playing surface.

Another object of my invention includes the provision, in a toy of the character described, of playing objects shaped and proportioned to assume unbalanced positions relative to each other and to the playing surface.

Another object of my invention is to provide an attractive influence for holding such objects in their unbalanced positions.

A further object of my invention is to provide means for removing the attractive force to collapse the objects.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of my invention. It is to be understood that I do not limit myself to this disclosure of species of my invention, as I may adopt variant embodiments thereof within the scope of the claims.

Referring to the drawings:

Figure 1 is a plan view of the base of my improved toy, portions of the structure being broken away to illustrate the construction more clearly.

Figure 2 is a sectional view of the base taken in a plane along the line 2—2 of Figure 1; and

Figure 3 is a similar view taken along the line 3—3 of Figure 1.

Figure 4 is a perspective view of the toy embodying my invention, the inner position of the slidable operating bar and the collapsed positions of the playing objects being shown in dotted lines.

Figure 5 is a detail view showing the magnets and slide bar; and

Figure 6 is a similar view showing the slide bar in retracted position.

In terms of broad inclusion, the toy embodying my invention comprises a playing surface, a playing object of magnetic material overlying the playing surface, means for setting up a magnetic field in the surface to hold the playing object in a predetermined position, and means for removing the field. Preferably a plurality of playing objects are provided, shaped and proportioned to assume unbalanced positions relative to each other and to the surface. When the magnetic field is present the objects are held in their unbalanced positions, and upon removal

of the field the objects are permitted to collapse.

In greater detail, the toy embodying my invention comprises a base 2, preferably of a non-magnetic material, such as wood. As shown in Figure 4 the base is preferably of a generally flat circular shape, providing a playing surface 3. It is to be understood however that the shape of the base, as well as the material of which it is made, is subject to variation within wide limits.

Suitable playing objects 4 are provided to overlie the playing surface 3. As shown, these objects may be shaped and proportioned so that they are capable of assuming unbalanced positions relative to each other and to the playing surface. I have found that the jointed figures provide interesting and amusing playing objects. It is understood however that other types of playing objects may be employed. For example, a good deal of amusement may be had with building blocks or other miniature structural pieces. These playing objects are of a magnetic material, such as iron, and if desired may be provided with a decorative coating of suitable material, such as paint.

Means are provided for setting up a magnetic field in the playing surface 3 to hold the objects 4 in a predetermined position. As best shown in Figures 1 to 3, this is accomplished by imbedding a pair of permanent horseshoe magnets 6 in the base 2. The magnets are arranged with like poles opposing and slightly spaced. A pair of spaced surface plates 7 are mounted on the base to overlie the magnets. These plates are of a magnetic material, such as iron, and may conveniently be semi-circular in shape. As clearly shown in Figure 1, one of the plates 7 is in contact with and overlies one of the pairs of opposing magnetic poles, and the other plate overlies the other pair of poles.

By this arrangement the plates 7 are magnetized, and exert an attractive influence on the playing objects 4 so that the latter are held in unbalanced positions relative to each other and to the playing surface, as illustrated by the objects in solid lines in Figure 4. Since the surface of the plates 7 provide the playing surface 3, the spacing between the plates is preferably filled with a non-magnetic material to provide a continuous playing surface. As best shown in Figures 1 to 3, this may be accomplished by a strip 8 interposed between the plates 7 and provided with a flange portion 9 whereby the strip may be secured to the base, as by the screws 11.

The non-magnetic strip 8 is preferably of metal so that the plates 7 may be secured to it, as by welding. By this arrangement the plates 7 as well as the magnets 6 are held in position by the screws 11. A sheet of felt 12 having a thickness substantially equal to that of the plates 7 is preferably glued over the top of the base 2 to provide a smooth surface. If desired this felt may be extended downwardly over the sides of the base, as shown in Figures 2 and 3. A felt sheet 13 is preferably provided over the bottom of the base to protect the surface upon which the toy is placed.

Means are provided for demagnetizing the plates 7 to remove the attractive force on the playing objects 4. By removing the magnetic field from the playing surface 3 such objects which are being held in an unbalanced position, as shown in Figure 4, will collapse upon the base. The collapsed objects may readily be removed from the playing surface and are ready to be repositioned upon the playing surface when the magnetic field is again set up. For the purpose of demagnetizing the plates 7 a bar 14 of suitable magnetic material, such as iron, is preferably provided for bridging the poles of the magnets 6. This bar is slidably mounted on the base in a suitable groove 16 extending under the magnets 6. An upturned portion 17 on the projecting end of the bar 14 provides a suitable handle.

In its inner position the bar 14 contacts the poles of the magnets 6 to provide a direct path for the magnetic flux. Under these conditions the plates 7 become substantially demagnetized and the playing objects 4 collapse upon the playing surface. When it is desired to set up a magnetic field in the playing surface the bar 14 is withdrawn to the position shown in Figures 4 and 6. Under these conditions the plates 7 are magnetized and the playing objects 4 may be set up in predetermined positions.

If desired a drawer 15 may be provided in the

base 2, which drawer may provide a receptacle for the playing objects.

I claim:

1. A toy comprising a base, a plate of magnetic material on the base to provide a playing surface, a playing object of magnetic material overlying said surface, means comprising a permanent magnet in the base for magnetizing said plate to hold the object in a predetermined position relative to the playing surface, and means comprising a bar of magnetic material for bridging the poles of said magnet for controlling the magnetization of said plate.

2. A toy comprising a base, a pair of spaced plates of magnetic material on the base to provide a playing surface, a strip of non-magnetic material interposed between said plates with its upper face flush with the playing surface, a playing object of magnetic material overlying said surface, means in the base and comprising a horseshoe magnet arranged with one pole adjacent one plate and the other pole adjacent the other plate for magnetizing said plates to hold the playing object in a predetermined position relative to said playing surface, and means comprising a bar of magnetic material movably mounted on the base for bridging said poles to demagnetize the plates.

3. A toy comprising a base, a pair of spaced plates of magnetic material on the base to provide a playing surface, a playing object of magnetic material overlying said surface, a pair of horseshoe magnets arranged in the base with like poles opposed, one pair of the opposing poles being positioned adjacent one of said plates and the other pair being positioned adjacent the other plate for magnetizing the plates to hold the playing object in a predetermined position relative to the playing surface, and a bar of magnetic material slidably mounted on the base for bridging said poles to demagnetize the plates.

OTTO T. JENSEN.