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SKIPPING DEVICES

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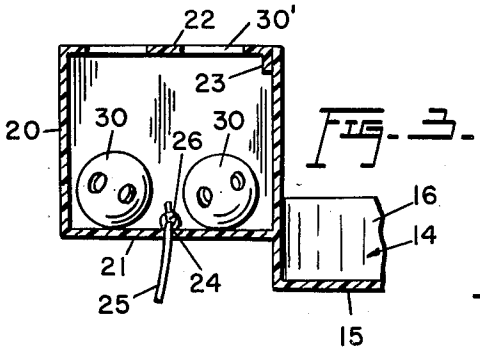


FIG. 3.

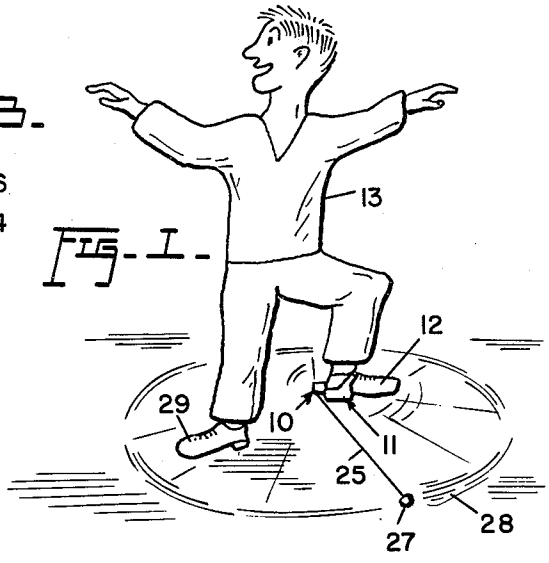


FIG. 1.

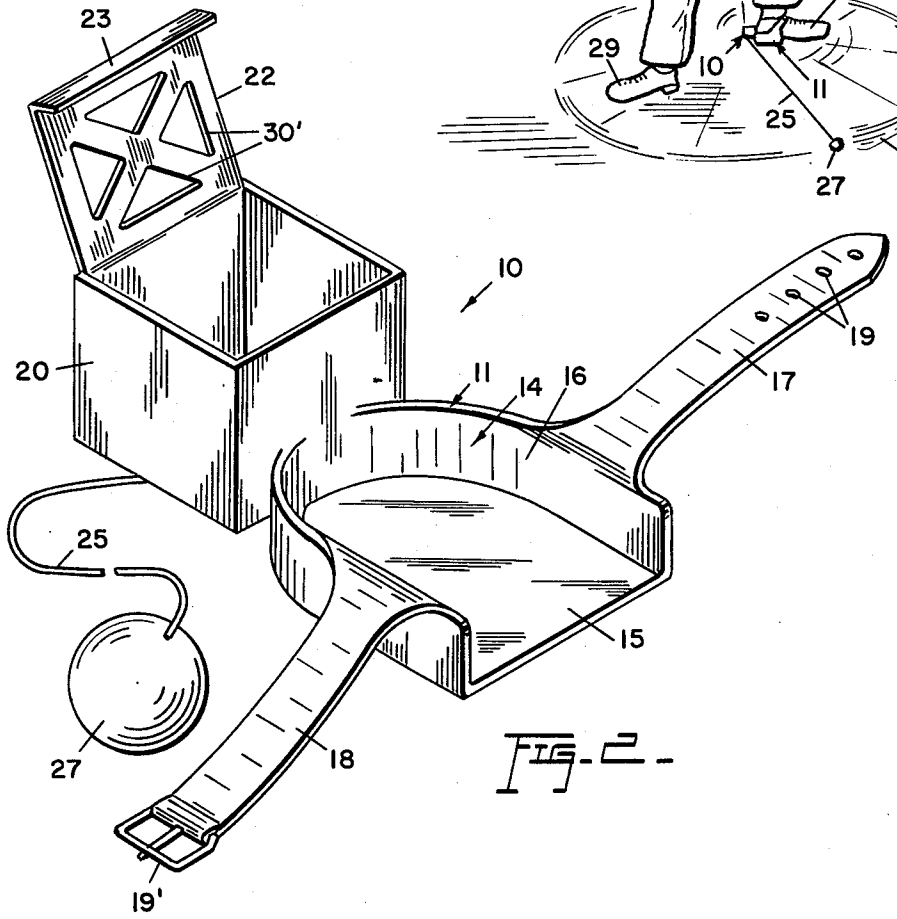


FIG. 2.

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SKIPPING DEVICES

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This invention relates to new and useful improvements in amusement and exercising devices, and in particular, the principal object of the invention is to provide a novel skipping device.

While so-called skipping ropes and similar devices are well known in the art, both in the form where the rope is manipulated by the user or by some external mechanical means while the user skips over the rope with both feet, the present invention provides a novel arrangement wherein the rope is attached to and manipulated by one foot of the user who skips over the rope with the other foot.

More specifically, the invention contemplates the provision of attachment means which are adapted to be secured to one foot of the user, an elongated flexible tethering element or rope which is connected at one end thereof to the attachment means, and a weight provided at the other end of the rope, so that when a gyratory movement is imparted to the attachment means by the foot with which the same are associated, the weight is orbited around the attachment means while being tethered thereto by the rope, and the user must skip over the rope with the other foot in order that orbiting of the weight may continue.

Manifestly, the skipping device of the invention is of such nature that amusement as well as physical exercise may be derived from the use thereof, and the invention is well adapted to serve as a novelty toy.

Another feature of the invention resides in providing the attachment means with a receptacle containing sound producing means such as bells, which become actuated when movement to the attachment means is imparted by the foot of the user. Moreover, the receptacle affords a convenient storage compartment for the associated skipping rope and weight, when the device is not in use.

Other advantages of the invention reside in its simple construction and in its adaptability to convenient and very economical manufacture.

With the foregoing more important object and features in view and such other objects and features as may become apparent as this specification proceeds, the invention will be understood from the following description taken in conjunction with the accompanying drawings, wherein like characters of reference are used to designate like parts, and wherein:

FIGURE 1 is a perspective view showing the skipping device of the invention in use;

FIGURE 2 is an enlarged perspective view of the device per se; and

FIGURE 3 is a fragmentary vertical sectional view of the device with the receptacle cover closed.

Referring now to the accompanying drawings in detail, the skipping device of the invention is designated generally by the reference numeral 10 and embodies in its construction attachment means 11 which are adapted to be secured to one foot, for example, the left foot 12 of the user indicated at 13. The attachment means 11 may be secured to any suitable or convenient portion of the user's foot 12, but preferably, the attachment means comprise a heel receiving member in the form of a socket 14 which is adapted to receive the heel of the user's shoe, the socket having a bottom 15 which underlies the shoe heel, and an upstanding marginal flange 16 at the sides and back of the bottom, as will be clearly apparent. The socket 14 is removably attached to the user's foot by a pair of straps 17, 18 which extend from the flange 16 at the opposite sides of the socket. One of the straps, for example, the

strap 17 is provided with a row of apertures 19 for adjustable coaction with a conventional buckle 19' provided on the other strap 18, the straps being extended over the foot and buckled together in an obvious manner so as to retain the heel socket 14 in position.

A receptacle 20 is carried by the rear portion of the heel socket flange 16 and includes a bottom 21 which is preferably spaced above the bottom 15 of the heel socket, as is best shown in FIGURE 3. The receptacle 20 also includes an openable cover 22 with a lip 23 which snap-fits into the receptacle to retain the cover in its closed position. It may be explained at this point that the entire device, thus far described, is preferably molded in one piece from flexible plastic material, including an integral connection of the straps 17, 18 and of the receptacle 20 to the flange 16 of the heel socket, and an integral connection of the cover 22 to the receptacle, so that separate hinge means for the cover need not be provided.

The bottom 21 of the receptacle 20 is formed with an aperture 24 through which is passed one end of an elongated, flexible tethering element which may be also referred to as a skipping rope or cord 25, the same being prevented from withdrawing from the aperture 24 by suitable means, as by a knot 26 formed at the end thereof. The other or outside end of the element or rope 25 carries a suitable weight, as for example, a ball 27.

When the device is placed in use, the attachment means 11 are secured to one foot of the user, for example the foot 12, by applying the socket 14 to the heel and fastening the straps 17, 18, as will be readily understood. The user then lifts the foot 12 off the ground and moves the same in a gyratory fashion, thus causing the ball 27 to swing outwardly by centrifugal force and to revolve or orbit around the foot attachment while being tethered by the element or rope 25, the orbiting movement of the ball being indicated at 28 in FIGURE 1. It is significant to note that the rope 25 is of such length that the orbit of the ball 27 encompasses the other foot 29 of the user, so that each time the ball in its orbit comes in the proximity of the other foot, the user must skip or jump with the other foot 29 over the ball tethering element or rope 25, in order that the orbiting of the ball may continue. It will be appreciated that although the ball is kept in its orbit by centrifugal force resulting from gyration of the attachment means 11 by the foot 12, the gravitational force which also acts on the ball causes the skipping rope to slant downwardly in a radially outward direction, so that the rope does not become obstructed by the heel socket 14 even when the bottom 15 of the socket is disposed below the bottom 21 of the receptacle 20 to which the rope is connected. The primary reason for disposing the bottom 21 of the receptacle above the bottom 15 of the heel socket is to permit at least a partial orbiting movement of the ball, around the sides and back of the foot, while the foot 12 is resting on the ground in order to enable the other foot 29 to skip over the rope. However, the device may be used in a alternative manner by keeping the foot 12 off the ground at all times and skipping over the rope with the other foot 29, so that both feet of the user are off the ground at the time when the rope skipping action is performed.

The receptacle 20 preferably contains sound producing means, such as one or more bells 30 which become agitated and actuated by the movement of the foot 12 and thus enhance the amusing nature of the device. Moreover, it will be apparent that the skipping rope 25 as well as the ball 27 may be conveniently stored in the receptacle 20, when the device is not in use. The receptacle cover 22 is preferably provided with suitable openings 30' so that the sound of the bells 30 may be easily heard.

While in the foregoing there has been described and shown the preferred embodiment of the invention, various

modifications may become apparent to those skilled in the art to which the invention relates. Accordingly, it is not desired to limit the invention to this disclosure and various modifications and equivalents may be resorted to, falling within the spirit and scope of the invention as claimed.

What is claimed as new is:

1. A skipping device comprising in combination, attachment means including non-elastic adjustable straps adapted to be secured to one foot of a user, an elongated flexible tethering element connected at one end thereof to said attachment means, and a weight provided at the other end of said element, said element being sufficiently long whereby a gyratory movement imparted to said attachment means by said one foot of the user may orbit said weight around the attachment means while being tethered by said element and whereby the user must skip over said tethering element with the other foot in order for the orbiting of said weight to continue.

2. The device as defined in claim 1 wherein said attachment means also include an attachment member having said one end of said element connected thereto, said straps being provided on said member for removably attaching the same to the foot of a user.

3. The device as defined in claim 1 wherein said attachment means also include a attachment member having a bottom portion adapted to underlie a user's foot, said straps being provided on said member for removably attaching the same to the foot, said tethering element being connected to said attachment member at a point spaced above said bottom portion thereof.

4. The device as defined in claim 1 wherein said attachment means also include a heel receiving socket, said straps being provided on said socket for removably attaching the same to the foot of a user.

5. The device as defined in claim 1 wherein said attachment means also include a heel receiving socket having a bottom adapted to underlie the heel, said straps being provided on said socket for removably attaching the same to the foot, and means provided exteriorly on the socket above the bottom thereof for connecting said element thereto.

6. A skipping device comprising in combination, attachment means including adjustable straps adapted to be secured to one foot of a user, a receptacle carried by said attachment means, an elongated flexible tethering element connected at one end thereof to the bottom of said receptacle, and a weight provided at the other end of said element, said element being sufficiently long whereby a gyratory movement imparted to said attachment means by said one foot of the user may orbit said weight around said receptacle while being tethered by said element and whereby the user must skip over said tethering element with the other foot in order for the orbiting of said weight to continue, and means in said receptacle for producing noise in response to movement imparted to said attachment means.

7. The device as defined in claim 6 wherein said attachment means also include an attachment member having a bottom portion adapted to underlie a user's foot, the bottom of said receptacle being spaced above said bottom portion of said attachment member.

8. The device as defined in claim 6 wherein said attachment means also include a heel receiving socket having a bottom adapted to underlie the heel, said straps being provided on said socket for removably and adjustably attaching the same to the foot.

9. The device as defined in claim 8 wherein the bottom of said receptacle is spaced above said bottom of said socket.

10. The device as defined in claim 6 wherein said receptacle is provided with means for receiving said tethering element and said weight when not in use.

11. A skipping device comprising in combination a heel conforming and receiving socket, means for attaching said socket to the heel of one foot of a user, an elongated tethering element connected at one end thereof to said socket, and a weight provided at the other end of said element, said element being sufficiently long whereby a gyratory movement imparted to said socket by said one foot of the user may orbit said weight around the socket while being tethered by said element and whereby the user must skip over said tethering element with the other foot in order for the orbiting of said weight to continue.

12. The device as defined in claim 11 together with means for connecting said one end of said tethering element to said socket at a point offset horizontally from and spaced above the bottom of the socket.

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