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J. BLACKBURN

1,866,697

TOY

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FIG. 1.

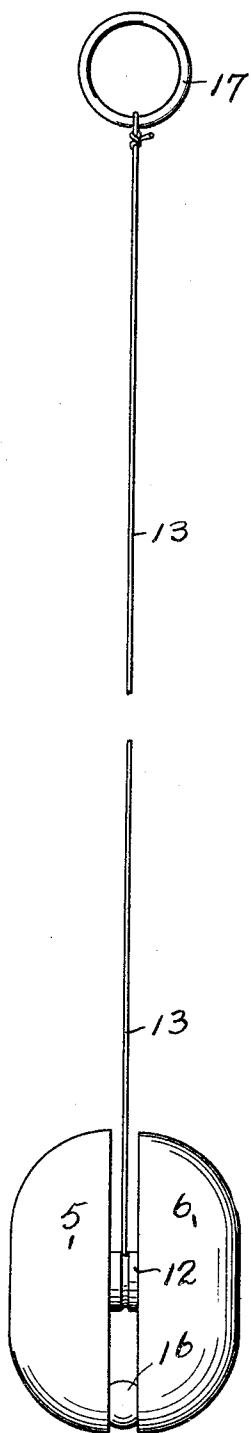


FIG. 2.

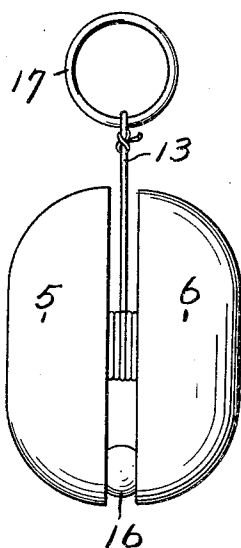


FIG. 3.

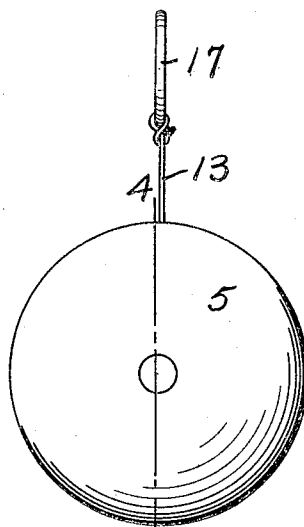
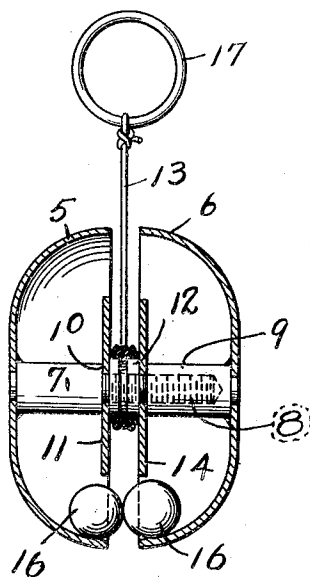


FIG. 4.



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TOY

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My invention relates to improvements in toys, and has for its primary object a toy which is provided with a flexible member so that the same when manipulated will rotate in one direction and by reason of the inertia gathered up by its rotation in that direction rewind the flexible member so that it can be readily rotated in an opposite direction, the toy being so arranged that during its rotation a sound will be emitted therefrom.

A further object is to construct a toy composed of two hollow vibrating sounding members which are detachably and rigidly secured together in spaced apart position and with a flexible member located between the sounding members, the device being so arranged that the sounding members can be rotated simultaneously in alternate directions and emit a sound during said rotation.

In the drawing:

Fig. 1 is an edge view of my device showing the same at rest with parts broken away;

Fig. 2 is a similar view showing the flexible member rolled up;

Fig. 3 is a side elevation of the same; and

Fig. 4 is a vertical cross section taken on the line 4—4 of Fig. 3.

In the construction of my device I employ a pair of members 5 and 6, which are preferably formed of metal known as bell metal. The member 5 has secured thereto a stud 7 which is provided with a screw threaded end 8. The screw threaded end 8 is adapted to be secured in a screw threaded sleeve 9 carried by the member 6. It will be noted that the stud 7 is of larger diameter than the screw threaded portion 8 so as to provide a shoulder 10 against which a disk 11 will contact.

Placed over the screw threaded portion 8 of the stud 7 is a drum 12 to which is secured one end of a flexible member 13, this flexible member preferably being a non elastic cord although, if desired, other flexible members may be used.

The drum 12 is loosely mounted on the screw threaded portion 8 and abutting the drum 12 is a disk 14 so that when the members 5 and 6 are secured together the shoulder 10 formed on the stud 7 and the shoulder

formed by the sleeve 9 will clamp the disk 11, the drum 12, and the disk 14 tightly together and make a rigid connection so that as the flexible member 13 is unwound from the drum 12 not only will the drum 12 be rotated but the disks 11 and 14, and also the members 5 and 6, will be simultaneously rotated.

Within the members 5 and 6 are located members 16 which may be in the form of spheres as illustrated in the drawing or they may be provided with indentations or roughened surfaces. The free end of the flexible member 13 is provided with a ring 17 which can be readily slipped over a finger of the operator.

In operating my toy, it is first necessary to wind the flexible member 13 around the drum 12. This is done, of course, after the device has been assembled. The ring 17 is then slipped over the finger of the operator and the members 6 and 7 released so that they will descend by gravity. Then just before the end of the flexible member is reached an upward pull is given on the flexible member, which increases the rotation of the descending member, or members 5 and 6, giving them additional speed so that when the end of the flexible member is reached the momentum imparted to the members 5 and 6 will cause them to continue to rotate and wind up the flexible member on the drum, the amount of winding being predetermined by the speed of rotation of the members 5 and 6. During this time the spheres or ringing members 16 will roll on the inside of the members 5 and 6, placing them in vibration, and causing the device to emit a sound.

Of course, if desired, the portion composed of the members 5 and 6 and the carrying parts can be manually projected in any direction so that the unwinding of the flexible member will increase the speed of rotation of the members 5 and 6. This speed of rotation can also be increased by the quickness at which a pulling movement is imparted to the flexible member so that in this way the device can be projected from the hand of the operator and return thereto in the same manner as if an elastic had been used

instead of the flexible member 13, it being understood, of course, that the flexible member 13 is nonelastic. In this way I have evolved a toy which can be readily operated from the hand in a manner similar to a return ball and which toy, during its manipulation, will emit sounds. This may be either a ringing sound, which will occur where vibrating members are used, or the device may be so constructed by reason of slight modifications, as to emit other sounds.

It will also be noted from my construction that the members 16 may be termed as freely floating, in that they are free to move in any direction and that the disks 11 and 14 located on opposite sides of the drum 12 keep the winding of the flexible member 13 limited to the drum. In other words, the member 13 while winding up cannot pass beyond the limits set by the disks 11 and 14.

Having fully described my invention, what I claim is:—

A toy of the kind described, comprising a pair of concavo-convex members, an axle element projecting inwardly from each of said members, one of said axle elements being detachably connectable with the other to secure said members together in spaced apart position and whereby both of said members may be rotated together in unison, a drum carried by one of said axle elements within said pair of members, a pair of substantially parallel disks carried by said axle elements and having their periphery spaced from said concavo-convex members, a flexible member adapted to suspend said toy and secured at one end to said drum and adapted to be wound thereon between said disks for imparting a rotary movement to said members, and means carried by said pair of members to roll about the inner periphery thereof to cause a sound when the toy is rotated.

In testimony whereof I have affixed my signature.

JASPER BLACKBURN.