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W. H. JACKSON.

TOY.

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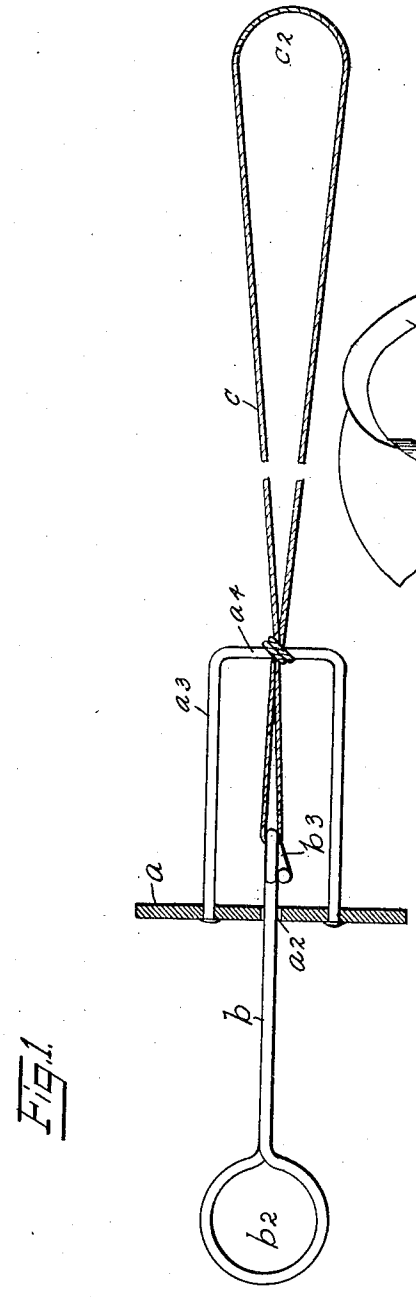

Fig. 1.

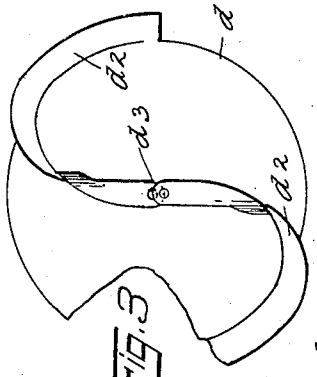

Fig. 3.

Fig. 2.

WITNESSES

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TOY.

No. 849,619. Specification of Letters Patent. Patented April 9, 1907.

Application filed December 31, 1906. Serial No. 350,138.

To all whom it may concern:

Be it known that I, WILLIAM H. JACKSON, a citizen of the United States, and residing at Columbia, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Toys, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to toys, and particularly to what are known as "torsion-wheels;" and the object thereof is to provide an improved device of this class which is so constructed that if the string or cord breaks the wheel will not be thrown off and strike or injure the operator or strike or injure a near-by object.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a side view of the preferred form of my improved torsion-wheel, the wheel being in section; Fig. 2, a side view showing a modification, and Fig. 3 a view at right angles to that of Fig. 2 and looking in the direction of the arrow *x*.

In the practice of my invention, reference being made to the construction shown in Fig. 1, I provide a disk or wheel *a*, having a central aperture a^2, through which is passed a rod *b*, provided at one end with a ring b^2, through which in practice a thumb or one finger is passed. The other end of the rod *b* is provided with a ring or eye b^3, and the disk or wheel *a* is provided with a yoke a^3, the side arms of which are secured in said disk or wheel *a*, preferably in a diametric line, and the end of the rod *b* which passes through the disk or wheel *a* and is provided with the ring or eye b^3 extends into the yoke a^3, and said rod *b* is freely movable through said disk or wheel and the latter is free to turn on said rod. I also provide a cord *c*, which is double in the form of construction shown and which is connected with the ring or eye b^3 and also with the cross-head portion a^4 of the yoke a^3, the last connection being preferably made by tying the double cord around the cross-head portion of the yoke a^3.

In practice a thumb or finger is passed through the outer end of the double cord *c* at c^2 and another thumb or finger through the ring b^2 of the rod *b*, and the device is manipulated in the same manner as other devices of this class by whirling the disk or wheel *a* by means of the cord *c* until said cord is slightly twisted and then gently and alternately pulling and relaxing said cord, and this operation will cause the disk or wheel *a* to rapidly revolve in opposite directions. The placing of the string or cord under tension so as to start the device is done by passing the thumb of one hand through the ring or eye b^2 and turning the disk or wheel *a* with one finger until the cord *c* is twisted or placed under tension, when the disk or wheel *a* may be rapidly revolved in opposite directions by gently pulling and relaxing the cord *c*.

If at any time during the operation of this device the cord *c* breaks, the disk or wheel *a* will remain on the rod b^3 and is not thrown off, as is customary with other devices of this class.

In the construction shown in Figs. 2 and 3 I employ a disk or wheel *d*, stamped from sheet metal and the perimeter of which is provided at opposite sides with arms d^2, which are curved out and the ends of which are overlapped, as shown at d^3, and provided with a transverse aperture through which the cord *c* is passed, and the cord *c* is connected with the ring or eye b^3 in the same manner as with the construction shown in Fig. 1 and passed through the aperture in the ends of the arm d^2 and preferably knotted on both sides of said arms, as shown at c^3. The operation of this form of construction will be the same as of that shown in Fig. 1; but the device constructed as shown and described in Figs. 2 and 3 will be much less expensive than that shown in Fig. 1.

My invention is not limited to any particular form of the wheels or disks *a* and *d* nor to any particular means of connecting the arms d^2 with the wheel or disk *d* or the yoke-shaped member a^3 with the wheel or disk *a*, and these features of construction may be varied to any desired extent; but it will be seen that the arms d^2 of the wheel or disk *d* form a yoke which operates practically in the same manner as the yoke a^3 of the wheel or disk *a*.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A device of the class described, comprising a disk or wheel provided with a central aperture and at one side of which is a yoke-shaped projecting member which extends laterally

therefrom, a rod passed loosely through said aperture and movable therein and the end of which within said yoke-shaped member is provided with a cord-attaching device and the other end with a handle, and a cord connected with the end of said rod within said yoke-shaped member and also connected with the cross-head portion of said yoke-shaped member.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 28th day of December, 1906.

WILLIAM H. JACKSON.

Witnesses:
C. E. MULREANY,
ALBERT W. GIBBS.