

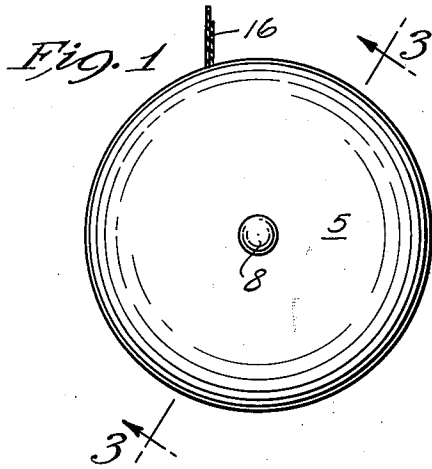
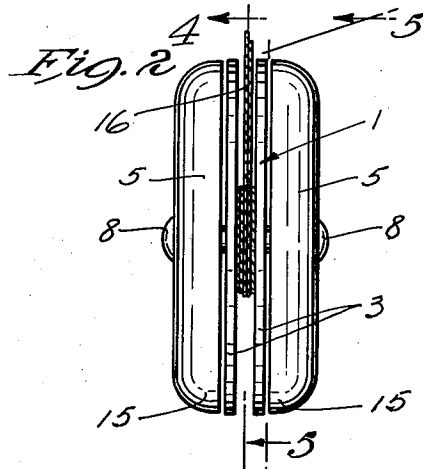
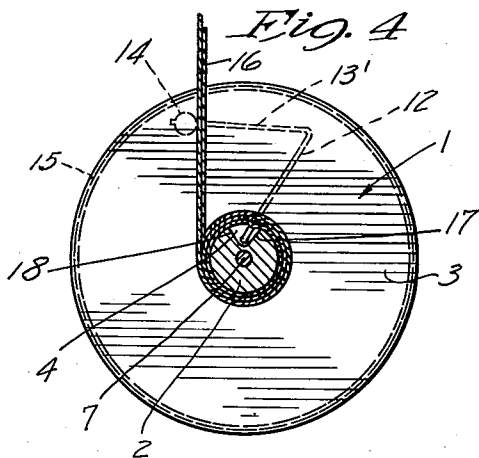
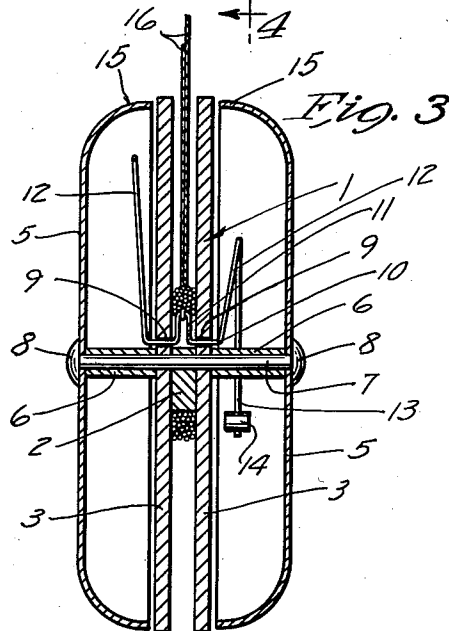
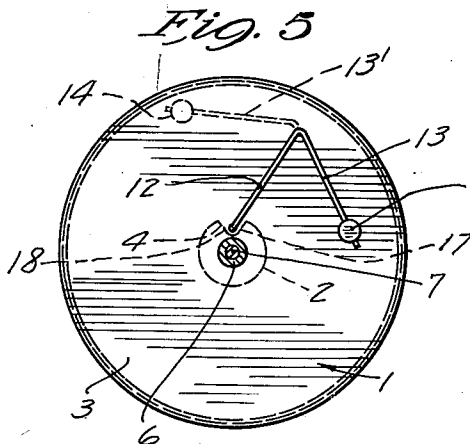
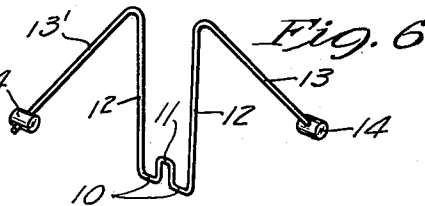
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2,591,954

SPINNING SOUNDING TOY

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SPINNING SOUNDING TOY

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3 Claims. (Cl. 46—61)

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My invention relates generally to toys and, more specifically, to a toy of the type commonly referred to as a "yo-yo".

The primary object of my invention is the provision of a device of the class described which will afford the user a higher degree of amusement than any device of this character heretofore developed.

Another object of my invention is the provision of a device of the class described, wherein a gong will be automatically caused to sound at the termination of each unwinding cycle of the spool from the cord upon which it is wound.

A still further object of my invention is the provision of a device of the class described, which will produce an audible and pleasing sound without detracting from the efficiency of the operation of the device.

A still further object of my invention is the provision of a device of the class described, which can be produced at a minimum of cost, which has a minimum of working parts, and which is easy to assemble and extremely durable in use.

The above and still further objects of my invention will become apparent from the following detailed specification, appended claims, and attached drawings.

Referring to the drawings, wherein like characters indicate like parts throughout the several views:

Fig. 1 is a view in side elevation of my novel structure;

Fig. 2 is an end view;

Fig. 3 is an enlarged sectional view taken on the line 3—3 of Fig. 1;

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 2;

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 2; and

Fig. 6 is a perspective view of the striker element of my novel structure.

Referring with greater particularity to the drawings, the numeral 1 indicates, in its entirety, a winding spool including a generally circular winding drum 2 and a pair of generally circular radially-extended flanges 3 concentrically arranged with respect to the winding drum 2. As shown, particularly by reference to Figs. 4 and 5, winding drum 2 is provided with a segmental notch 4, the bottom of which terminates in spaced relation to the axis thereof. A pair of opposed cup-shaped gongs 5 are retained one each in spaced relation to one of said flanges 3 by means of spacer sleeves 6. As shown, an elongated rivet 7, having heads 8 at its opposite

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ends, retains the elements 2, 3, 5, and 6 in relatively rigid relationship.

The flanges 3 are provided with aligned apertures 9, the axes of which intersect said notch 4 at its circumferential center adjacent the base of said notch 4 but in parallel relationship to the axis of the drum 2. The striker element shown in Fig. 6 includes shaft portions 10, one each of which is receivable in one of the aligned apertures 9 in the flanges 3, and a generally U-shaped crank portion 11 which projects radially outwardly within the notch 4. Projecting radially outwardly from opposite ends of the shaft portion 10 are angular portions 12, the free ends 13 and 13' of which project in opposite directions and terminate in striker heads 14 adjacent, but normally radially inwardly-spaced from, the rim portions 15 of the gongs 5.

A flexible cord element 16 has inter-looping engagement with the U-shaped crank portion 11 and is adapted to be wound about the winding drum 2, as shown. It will be observed that, when the cord element 16 is wound about the winding drum 2 in the normal operation of structures of this type, the crank portion 11 will be caused to come into contact with one wall 17 of the notch 4, as shown particularly in Figs. 4 and 5. As the device is thrown outwardly, whereby to cause an unwinding cycle of the cord 16 upon the winding drum 2 in one direction and the initiation of winding movements of said cord on said drum in the opposite direction, the crank portion 11 will be caused to swing into engagement with the opposite wall 18 of the notch 4. However, centrifugal force, caused by rapid reversal of directions, will cause the striker head 14, secured to the element 13, to come into striking engagement with the wall 15 of its cooperating gong 5. Likewise, engagement of the crank portion 11 with the wall 17 of the notch 4—under like conditions—will cause the striker head 14 secured to portion 13' of the resilient angular portion 12 to come into striking engagement with the wall 15 of its cooperating gong element 5. In this manner, a pleasant tingling sound is produced at the end of each unwinding cycle of the device from the cord upon which it is wound.

While I have illustrated and described a preferred embodiment of my invention, it should be obvious that the same is capable of modification without departure from the spirit and scope of the invention as defined in the appended claims.

What I claim is:

1. In a device of the class described, a winding

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spool including a winding drum and laterally-spaced radially-extended flanges, said winding drum being provided with a segmental notch and one of said flanges being provided with an aperture the axis of which intersects said notch at its circumferential center adjacent to the axis of said spool and parallel thereto, a cup-shaped gong, means mounting said gong in laterally-spaced relation to one of said flanges and concentric therewith, a striker for said gong, said striker including a shaft portion extending through the aperture in said flange, a crank portion projecting radially-outwardly within said notch, and an angular portion in said gong element terminating in a striker head, and a flexible element secured to the radially-projected end of said crank portion and adapted to be wound on said spool whereby to position said crank portion in engagement with one side of said notch, rapid unwinding of the flexible member from said spool causing swinging movements of said crank portion toward engagement with the opposite side of said notch, said swinging movement causing said striking head to impinge said gong.

2. In a device of the class described, a winding spool including a winding drum and laterally-spaced radially-extending circular flanges, said winding drum being provided with a segmental notch and said flange being provided with aligned apertures, the axes of which intersect said notch at its circumferential center adjacent the axis of said spool and parallel thereto, a pair of op-

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posed cup-shaped gongs, means mounting said gongs in laterally-spaced relation one each to one of said flanges and concentric therewith, a striker for said gongs, said striker including shaft portions extending through the apertures in said flanges, a U-shaped crank portion projecting radially outwardly within said notch, and angular portions intermediate said flanges and said gongs the free ends of which project in opposite directions and terminate in striker heads, and a cord element secured to the U-shaped crank portion of said striker element and windable on said spool whereby to position said crank portion in engagement with one side of said notch, rapid unwinding movements of said cord element from said spool under the weight of said device causing swinging movement of said crank portion and engagement thereof with the opposite side of said notch, said swinging movement causing one of said striker heads to impinge upon said gong.

3. The structure defined in claim 2 in which said striker is formed from a single piece of resilient wire.

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REFERENCES CITED

The following references are of record in the file of this patent:

FOREIGN PATENTS

Number	Country	Date
22,401	Great Britain	Aug. 25, 1904