March 26, 1963 W. F. HELLMAN 3,082,574

TOY TOPS

Filed April 25, 1960

Fig. 1.

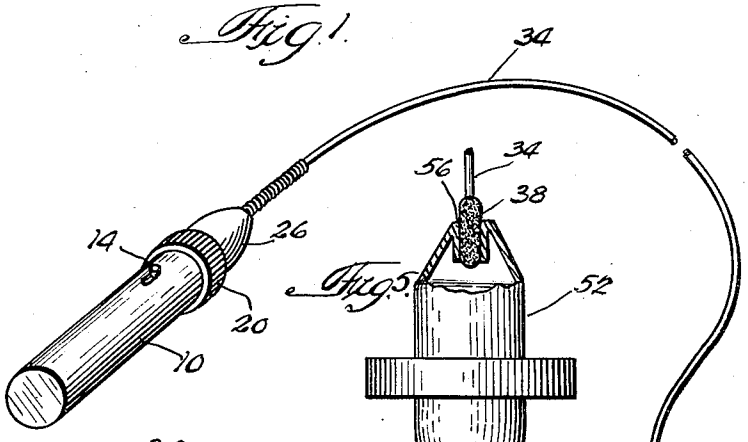
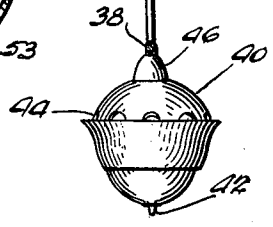


Fig. 5.



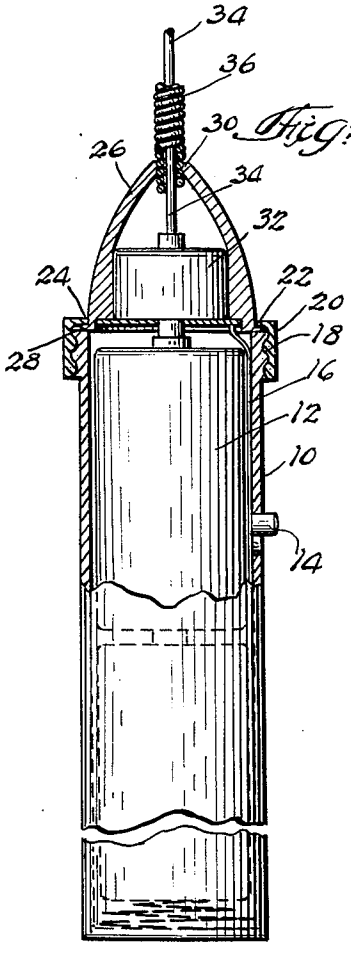
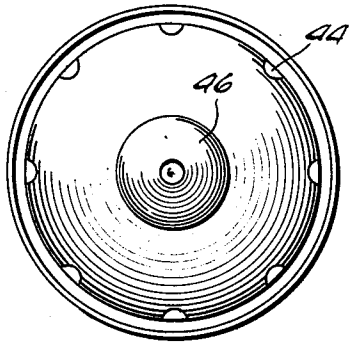


Fig. 2.

Fig. 3.



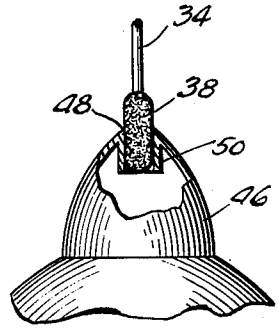


Fig. 4.

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TOY TOPS

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4 Claims. (Cl. 46—243)

This invention relates to improvements in toy tops.

One of the objects of this invention is to provide a toy top which is electrically operated to cause it to spin.

Another object of this invention is to provide a toy top which is caused to spin by means of an electrically operated motor and a connecting cable and wherein the direction and movement of the spinning top may be guided, manipulated and controlled by the child.

Another object of this invention is to provide a toy top, which is electrically operated and which is highly maneuverable and provides great play value for the child.

Other objects will become apparent as this description progresses.

In the drawings:

FIGURE 1 is a perspective view of my invention.

FIGURE 2 is an enlarged view partly in cross-section showing the battery housing, motor, and a portion of the flexible cable.

FIGURE 3 is an enlarged top plan view of the top.

FIGURE 4 is a view partly in cross-section, showing the upper portion of the top and the means wherein the cable is detachably connected to the top, and

FIGURE 5 is a view partly in section showing a modified form of the top.

The elongated battery housing is designated by the numeral **10** and same is adapted to contain a pair of conventional dry cell batteries **12**. The housing supports the conventional push button switch member **14** which connects with a suitable conductor **16** in turn connected to a motor presently to be described.

The upper end of the battery housing is threaded as at **18** to receive a threaded collar **20** which has an inwardly extending flange **22** and an enlarged central opening **24**. A conically shaped cap member generally designated by the numeral **26** has a hollow interior and is provided at the lower end thereof with an outwardly extending annular flange **28** which is engaged by the top of the collar **20** to detachably secure the cap to the housing **10**, as best seen in FIGURE 2. The upper end of the conically shaped cap **26** is truncated and is provided with a central opening **30**.

Mounted within the cap **26** is a small electric motor **32** which is secured in a fixed position within said cap. Secured to the motor shaft of the motor **32** is a flexible cable designated by the numeral **34** which extends outwardly through the opening **30** and is of sufficient length so that a child may operate the top a sufficient distance from the battery housing **10** which forms the handle portion of the toy.

Also secured within the opening **30** in the cap **26** is a coiled wire member **36** surrounding the flexible cable but spaced therefrom. Said coiled wire member serves to support the flexible cable **34** adjacent the cap and also serves to guide the cable from the motor end so as not to interfere with the rotation of said flexible cable.

The motor **32** is also connected to the positive pole of the top battery **12** to complete the circuit. By depressing or actuating the finger switch **14** the circuit to the motor is closed so that the motor **32** is caused to operate and rotate the flexible cable **34**. The batteries may be

replaced by unthreading the collar **20** so that the interior of the housing **10** is accessible.

The opposite end of the flexible cable **34** has secured to it a rubber member or plug designated by the numeral **38**.

The spinning top may take any form or shape desired, provided that it has the means whereby it may be attached to the plug **38** of the flexible cable **34**. In the exemplification shown, the top **40** is of generally hollow construction and has a conventional bearing point **42** at the bottom thereof. It is also provided with a plurality of spaced openings **44** so that a whistling sound may be produced as the top is spinning. The upper end **46** of the top has a dome-shaped configuration and is integrally formed with the hollow body of the top. The upper end of the dome-shaped portion of the top has an opening **48** and a depending tubular-shaped section **50** extending into the upper end **46** of the top. The rubber member or plug **38** is inserted into the tubular section **50** and forms a friction tight fit therewith so that as the flexible cable **34** rotates it will rotate the top **40**. The plug **38** is, however, removable and hence the top is detachably secured with respect to the cable.

The top during its spinning or rotation may be controlled or manipulated by the movement of the hand held battery casing **10** and the flexible cable **34** connected thereto so as to cause the top **40** to move from one spinning surface to another without interfering with the spinning of the top. Thus the spinning of the top and the direction of travel of the top while spinning may be controlled. The spinning of the top may be arrested merely by opening the circuit from the battery to the motor, such as by operating the hand switch **14**.

FIGURE 5 shows a modified form of top **52** which has particular application to this invention in that it may be caused to jump or hop around as it is rotating. Instead of providing the lower end of the top with a point or bearing surface such as **42**, as is conventional with tops, I have provided a coiled spring **53** secured to the lower end of the body inside a tubular-shaped section **54**. The upper end of the top is provided with a tubular-shaped section **56** similar to section **50** to receive the rubber plug **38** heretofore described. As the top shown in FIGURE 5 spins on the coil spring **53**, it will jump or hop about its spinning surface.

Due to the detachable feature of the cable with respect to the top, any number of different types of tops may be interchangeably used and operated by this construction. Thus a varied number of different styles and types of tops may be driven by the cable means shown herein.

It will be understood that various changes and modifications may be made from the foregoing without departing from the spirit and scope of the appended claims.

I claim:

1. A toy of the character described comprising a self-contained and self-operated unit comprising a portable housing, a battery and a motor secured within said housing, said housing adapted to be held in the hand, a flexible cable having one end secured to the motor inside said housing and having the opposite end extending exteriorly of said housing, a top secured to said opposite end of said flexible cable, said motor when actuated rotating said cable and said cable rotating said top to spin said top, said rotating cable adapted to guide the movement of said spinning top.

2. The structure defined in claim 1 in which the flexible cable is detachably secured to the top.

3. A toy comprising a self-contained and self-operated unit comprising a hand held portable casing, a dry cell battery and electric motor supported within said casing, a flexible cable secured to said motor and rotated thereby, a top having its upper end secured to the opposite end of said cable to be rotated by the rotation of said cable to spin said top.

4. The structure defined in claim 3 in which the top has a coil-shaped member on which the top is adapted to spin, said coil-shaped member causing said top to bounce during its spinning operation.

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