Nov. 5, 1968 F. S. AJERO 3,408,766

TOY COMPRISING TOP AND PLAYING PADDLE AND LAUNCHER

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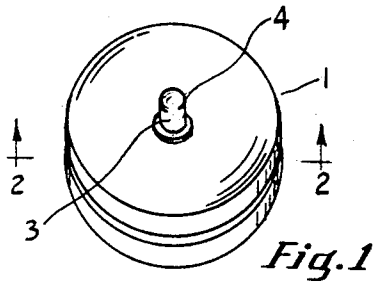


Fig. 1

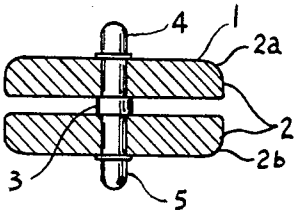


Fig. 2

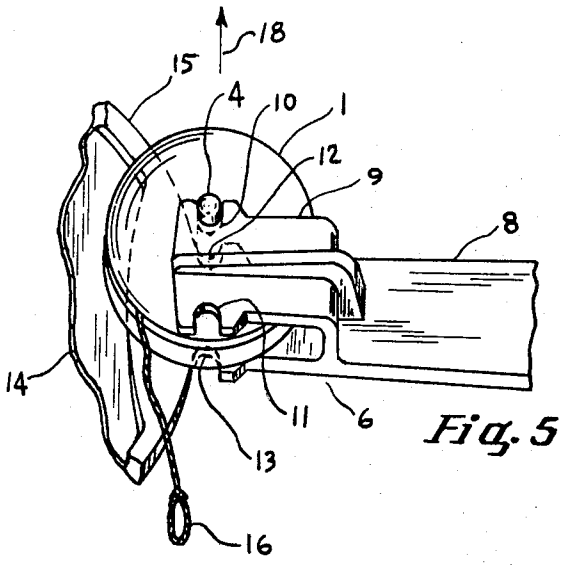


Fig. 5

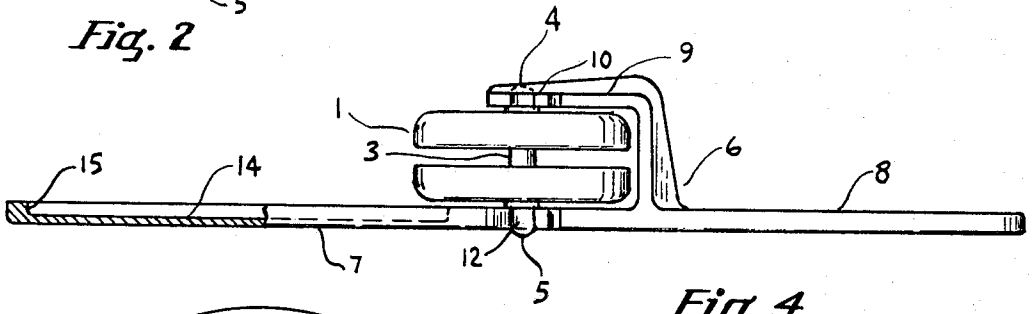


Fig. 4

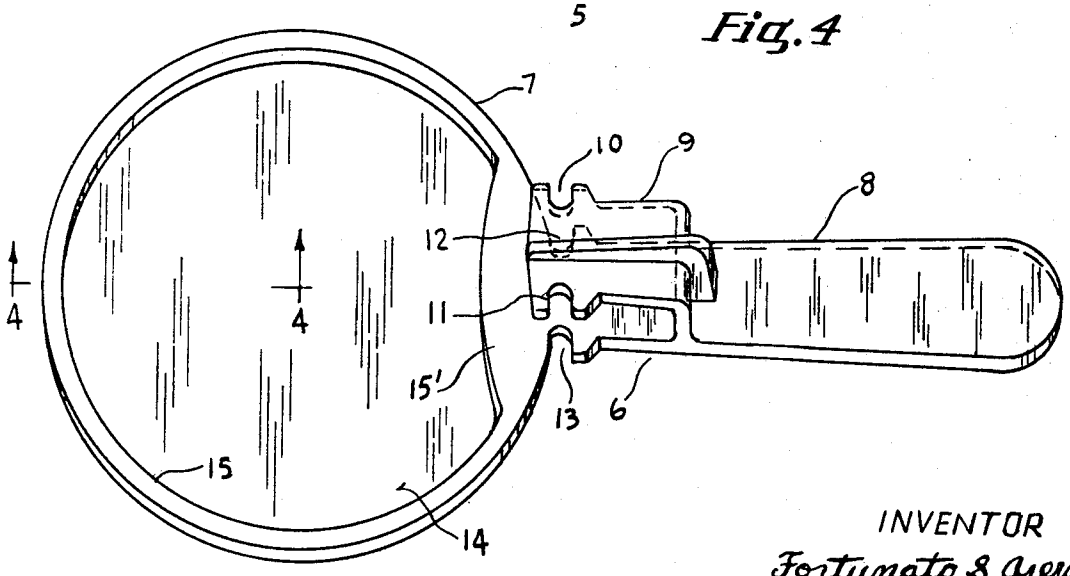


Fig. 3

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TOY COMPRISING TOP AND PLAYING PADDLE AND LAUNCHER

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ABSTRACT OF THE DISCLOSURE

A top with projecting spindle ends has axially separated fly wheel portions between which an operating string may be wound. The projecting ends not only provide a peg upon which the top may spin but also are engageable with notches provided by a paddle handle and bracket and opening laterally for the release of the spinning top. The paddle has a resiliently flexible web portion surrounded by a rim.

Tops with divided fly wheel elements and projecting spindles are known, as shown in Spencer 2,579,022. It is also known to provide a paddle and launcher, as in Murphree 1,890,043.

The primary object of my invention is to provide a free spinning top and an ancillary launcher of paddle-like configuration with a handle and bracket provided with laterally opening slots from which the top is discharged while spinning, together forming a combination toy which may be played in a number of different ways.

With its spinner string detached and simply wound around the shouldered center portion of the spindle of said top, the top may have its spindle ends supported on the launcher and may be set into rotation by a pull on the string, whereupon said top may be launched into a free spin and operated on the paddle portion of the launcher or on any other appropriate surface. If caught on the paddle, the spinning top may be tossed by manipulation of the paddle to be caught by the same player or by another person having comparable equipment.

The manner in which this and other objects have been achieved will be understood more clearly upon a perusal of the detailed description of a preferred embodiment which follows, in conjunction with the drawing wherein this embodiment is shown in detail. For purposes of clarity in exposition, the following description is explicit and the accompanying drawings are detailed, but it is distinctly to be understood that the description and illustration are exemplary only, and that my invention is not restricted to the particular details recited in the specifications or shown in the drawings.

In the drawings:

FIG. 1 is a perspective view of a preferred embodiment of my spinning top.

FIG. 2 is a cross sectional view of said top taken on line 2—2 of FIG. 1.

FIG. 3 is a perspective view of a paddle and launcher designed to be used in conjunction with the spinning top shown in FIGS. 1 and 2.

FIG. 4 is a side elevational view of said launcher partially in cross section in the plane indicated by the numerals 4—4 of FIG. 3.

FIG. 5 shows on a reduced scale in perspective a fragmentary view of the launcher showing the top in place and having string wound thereon prior to launching same into free spin.

Like reference characters designate like parts in the drawings.

Referring now to FIGS. 1 and 2, the top **1** is provided with a split flywheel **2** comprising disks **2***a* and **2***b* mounted coaxially in mutually spaced positions on spindle **3** in abutment with its shouldered central portion upon which the string is wound to spin the top. The ends of the spindle are slightly reduced in cross section to receive the disks and to form the two oppositely projecting pivot members **4** and **5**. Said pivot members are preferably provided with rounded ends to reduce friction when said top is in a free spin on a firm and level surface. Any suitable material, such as wood or plastic may be used to make this top.

FIGS. 3, 4 and 5 show a combination launcher and playing paddle **6** designated to be used in conjunction with top **1**. A paddle member **7** is provided with a handle **8** to which is attached a bracket having an arm **9** spaced from the handle. The handle and bracket arm have registering notches to receive the ends **4** and **5** of the top spindle **3** for supporting the top during spinning and launching. For convenience, these may be duplicated at both sides of the device. The said bracket arm **9** is provided with oppositely disposed laterally opening notches **10** and **11** respectively aligned with corresponding notches **12** and **13** of said paddle handle **8**. In use the top flywheel **2** is received between the handle and the bracket as shown in FIGS. 4 and 5. The duplication of the notches permits operation both by right-handed and left-handed persons, it being understood that only one set of notches will be used at any one time.

FIGS. 4 and 5 show the ends **4** and **5** of the top spindle **3** positioned in notches **10** and **12** of the bracket and paddle respectively. When using notches **10** and **12** to retain the top **1** in position for launch, the handle **8** will be held with the operator's right hand. Tension exerted on the string by the operator's left hand will then hold the top in the notches as it gains speed. Only when the string is fully unwound by such tension will the top be released. The right hand, meantime, will be resisting string tension. Consequently, the reaction of the right hand when the string leaves the spindle will project or launch the top. The top thus launched will be in rapid rotation. It may readily be caught on the paddle or may be permitted to complete its spinning motion on some other surface. Notches **11** and **13** are similarly utilized with said launcher being held with the left hand.

The paddle member **7** is preferably provided with a center panel **14** framed on at least one face with a peripheral reinforcing and top confining rim **15**. The rim tends to confine the top on the paddle. It is desirably broadened at **15'** to prevent the top from contacting the bracket arm **9** of handle **8**. The ridge **15** also reinforces the paddle margins to tend to keep the paddle center panel flat, notwithstanding its flexibility. The center panel **14** is desirably flexible, to deaden impact, but is relatively non-resilient so that there will be little tendency for the spinning top to bounce when it is caught on the paddle. It may be made of sheet plastic or other suitable material. For some games it may be rigid.

To play the top as a free spinning top, the spinner string **16** is first wound around the top's center spindle **3**, after which the projecting ends of the spindle of said top are inserted into a selected pair of the described laterally open notches of launcher **6**. The operator will grasp handle **8** to hold the launcher **6** firmly. The free end of said spinner string held in the operator's other hand is jerked or pulled to rotate the top and ultimately to pull free thereof. This initiates a spinning action, and said top is simultaneously ejected from receiver **9** of said launcher as indicated by arrow **18** in FIG. 5, launching the spinning top into the air. At this point the player has the option to allow the top to spin on the floor or on any firm and level surface, or to retrieve the ejected top on the paddle member **7** of the said launcher. It should be noted herein that the peripheral rim or ridge **15** fram-

ing the paddle member **7**, as shown in FIGS. 3 and 4, is intended to inhibit the spinning top **1** from falling off after its retrieval, thus aiding a novice player in keeping the top spinning on said paddle member. However, the confining ridge desirably occurs only on one side of the paddle. Experienced players may invert the paddle to rely entirely on their manual skill to retain the top on panel **14**.

When the top is in free rotation on the paddle, it may be tossed into the air and caught again. Alternatively, it may be tossed and caught by the paddle of another player. Various games may be played according to such rules as may be adopted by the players.

My top toy may also be played as a yoyo or return top by attaching one end of the spinner string **16** to the top's center spindle **3** before winding said string around said center spindle. In this application, the launcher **6** is not used. However, the invention is principally concerned with the combination with the top of its launcher and paddle.

I claim:

1. A toy comprising a top having a fly wheel portion and spindle means with axially projecting ends and having a surface upon which a top-rotating string may be wound, in combination with a playing paddle and launcher including a paddle portion and a projecting handle provided with a bracket, the handle and bracket having vertically spaced laterally opening notches adapted to receive the spindle ends of the top for launching the spinning top when string wound thereon leaves the spindle.

2. A toy according to claim **1** in which the handle has oppositely opening notches immediately adjacent the paddle portion, the bracket being connected with the handle at a point sufficiently remote from the handle notches to accommodate the fly wheel portion of the top,

said bracket also having oppositely opening notches at opposite sides thereof and registering with the said notches of the handle.

3. A toy according to claim **2** in which the paddle has another face which is substantially planiform from side to side and is provided with no confining flange.

4. A toy according to claim **1** in which said paddle portion comprises a central web which is flexibly yieldable and a rim surrounding one face of the web and of less height than the spindle end of the top engaged with said face, and tending to restrain the top on said face.

5. A device for supporting and spinning and manipulating a top with a spindle, said device comprising a paddle having a handle and a top-manipulating panel, and a launcher mounted on the paddle adjacent the panel and having means for supporting a top while spinning it, said supporting means comprising a bracket having a portion spaced from the paddle, the bracket and the said paddle portion from which the bracket is spaced having corresponding laterally opening notches adapted to receive the spindle end portions of the top during the spinning of the top and being adapted to launch the top in a direction away from said paddle panel.

6. A device according to claim **5** in which the paddle has a centrally flexible panel and a marginal reinforcing rim.

References Cited

UNITED STATES PATENTS

1,890,043	12/1932	Murphree	46—72
2,561,554	7/1951	Barist	46—70 X
2,579,022	12/1951	Spencer et al.	46—70 X

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