O. R. BENSON.

TOY TOP.

APPLICATION FILED JAN. 24, 1914.

1,122,189. Patented Dec. 22, 1914.

Fig. 1.

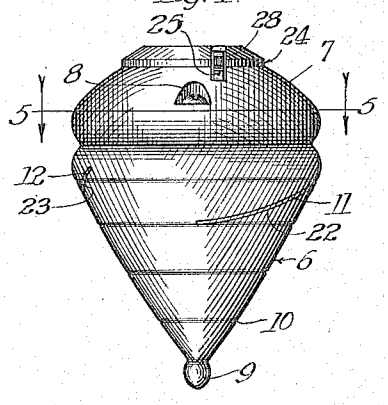


Fig. 3.

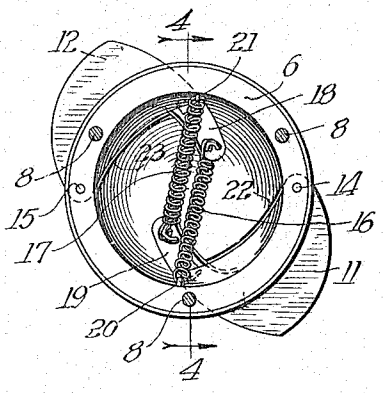


Fig. 2.

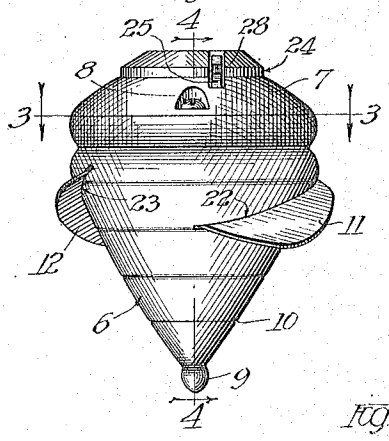


Fig. 4.

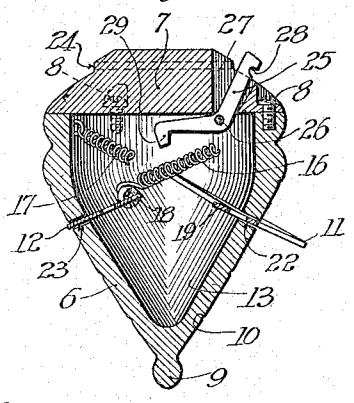
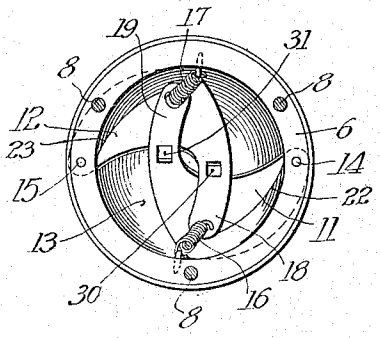


Fig. 5.



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TOY TOP.

1,122,189. Specification of Letters Patent. Patented Dec. 22, 1914.

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To all whom it may concern:

Be it known that I, OLIVER R. BENSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Toy Tops, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to improvements in toy tops.

One of the principal objects of my invention is to provide a new and improved top so constructed that, when spun, it will rise in the air.

It is a further object of my invention to provide a device of such character which has the general appearance of the ordinary peg-top and which may be used merely as such ordinary top.

A further object of my invention is to provide such a top that is durable, simple, attractive in appearance, and economical to manufacture.

In the following specification and accompanying drawings I have described and illustrated one preferred embodiment of my invention, but I wish it clearly understood that numerous changes may be made in the form, construction, and arrangement of the parts without departing from the spirit of my invention or exceeding the scope of the appended claims.

In the drawing: Figure 1 is a side elevation of a top constructed in accordance with my invention; Fig. 2 is a similar view showing the top in spinning position; Fig. 3 is a cross-sectional view taken on the line 3—3 of Fig. 2 looking in the direction of the arrows; Fig. 4 is a similar view taken on the line 4—4 of Figs. 2 and 3; and Fig. 5 is a cross-sectional view taken on the line 5—5 of Fig. 1, looking in the direction of the arrows.

Like reference characters refer to like parts throughout the following specification and the several figures of the accompanying drawing.

The top is in the general form of the ordinary peg-top that is spun by "whipping". It comprises a body portion 6 which is a conical hollow shell formed of some suitable light material such as aluminum, a cap 7 of the same material secured to the body portion 6 by screws 8, and a knob or pin 9 on which the top spins. The body portion 6 is provided with the usual circumferential grooves 10 to aid in the winding of the string.

The top is provided with a pair of wings or blades 11, 12 curved and formed in "propeller blade" shape. These blades are normally contained in the space 13 within the body portion 6, as shown in Figs. 3 and 5. To retain the blades in this normal position, coiled springs 16, 17 are attached to lugs 18, 19 formed at the inner ends of the blades, and extending across the chamber 13, these springs are secured to the body portion 6 as at 20, 21. In the side of the body portion 6 are two slots 22, 23 curved to correspond in configuration to the blades 11, 12. Through these slots the blades are adapted to emerge as hereinafter described.

The cap 7 is provided with a shoulder 24 forming a groove about which the whipping string is usually first wound. Secured to the cap are two latching members, only one of which appears in the drawing, but as they are duplicates of one another the description of one will suffice. This latch member, 25, the function of which is hereinafter referred to, comprises a bent arm pivoted, approximately at the elbow, to the cap 7, as at 26 (Fig. 4). The upper end of the arm 25 moves in a recess 27 formed in the cap 7 and is provided with a notch 28 near the end thereof, corresponding with the groove formed by the shoulder 24. The lower portion of the arm 25 extends into the chamber 13 and terminates in a downwardly extending catch 29. When the upper portion of the arm is moved inwardly, as hereinafter described, the lower portion swings downwardly and the catch 29 engages an aperture 30 formed in the blade 11. A similar aperture 31 is formed in the blade 12 for the corresponding latching member.

In operation a string is wound about the body portion 6, a turn first being taken about the groove formed by the shoulder 24. This

turn embraces the upper portion of the latching members 25, engaging the notches 28 thereof, and pulls them inwardly, thereby causing the catches 29 to engage the apertures 30, 31 as above described. The top is then spun in the usual well known manner. It will be seen that as the top is spun the centrifugal force on the blades will overcome the tension of the springs and the former will tend to fly outwardly through the slots. The blades are held in, however, by the latching members as long as the first turn of the string embraces the latter. When the string is entirely removed the latching members are free to move on their pivots and the blades are permitted to move out of engagement with the catches and fly outwardly. Even if the string is not first wound about the shoulder 24 to embrace the latching members, the blades cannot move outwardly until the string is substantially removed as the slots are covered by the several turns of the latter. Consequently the blades are prevented from emerging prior to the proper movement. The blades are so formed that, as the top spins, they act as propellers and cause it to rise in the air. As the centrifugal force lessens the springs will draw the blades inwardly until the top eventually descends again to the ground.

In case it is desired to use the top in the ordinary manner, dispensing with the flying feature, the latching members may be utilized to lock the blades in normal inoperative position. To attain this end it is only necessary to secure a piece of string or a rubber band about the shoulder 24, embracing the notches 28 of the arms 25. This will force the catches 29 into engagement with the blades as before described and the latter are thereby locked in inoperative position until such string or band is removed.

It will be seen that by my invention I have provided a "flying" top that is extremely simple, that is spun in the ordinary "whipping" manner, requiring no complicated mechanism to place it in operation, and that not only has the appearance of an ordinary peg-top but may, if desired, be used as such.

What I claim being:

1. In a toy top, a substantially cone-shaped hollow body portion, a plurality of propeller blades set at an angle to the axis of the top and pivoted and normally inclosed in said body portion, a plurality of slots in said body portion corresponding to said blades and through which the latter emerge under centrifugal force when the top is spun, thereby to cause the top to rise in the air.

2. In a toy top, a substantially cone-shaped hollow body portion, a plurality of propeller blades set at an angle to the axis of the top and pivoted within said body portion and adapted to swing outwardly under centrifugal force when the top is spun, and means for holding said blades against such outward movement until the top attains a certain velocity.

3. In a toy top adapted to be spun by whipping, a substantially cone-shaped, hollow body portion, a plurality of propeller blades set at an angle to the axis of the top and pivoted and normally inclosed within said body portion and adapted to swing outwardly under centrifugal force when the top is spun, thereby to cause the top to rise in the air, and means for holding said blades against such outward movement until the whipping string is free of the top.

4. The combination with a toy top, of a plurality of propeller blades associated therewith, normally inclosed therein and adapted to move outwardly when the top is spun, thereby to cause the top to rise in the air, and means for locking said blades against such outward movement when desired.

5. The combination with a toy top, adapted to be spun by whipping, of a plurality of propeller blades normally inclosed within said top and adapted to move outwardly under centrifugal force when the top is spun, thereby to cause the top to rise in the air, said blades being so located as to be held in by the whipping string until the top attains a proper spinning position.

6. In a toy top, a substantially cone-shaped hollow body portion, a plurality of blades set at an angle to the axis of the top and pivoted within said body portion and normally inclosed therein and adapted to move outwardly under centrifugal force when the top is spun, said blades being located substantially midway between the top and bottom of said body portion.

7. In a toy top, adapted to be spun by whipping, a plurality of propeller blades normally inclosed therein and adapted to move outwardly under centrifugal force when the top is spun, thereby to cause the top to rise in the air, means for retaining said blades against such outward movement until the whipping string is removed, said means being also utilized to lock said blades in inoperative position when desired.

8. In a toy top, a hollow body portion, a plurality of propeller blades set at an angle to the axis of said top and pivoted within said body portion and adapted to swing outwardly under centrifugal force when the top is spun, and means for holding said blades against such outward movement until the top attains a certain velocity.

9. In a toy top, a hollow body portion, a plurality of propeller blades set at an angle to the axis of the top and pivoted and nor-

mally inclosed in said body portion, a plurality of slots in said body portion corresponding to said blades and through which the latter emerge under centrifugal force when the top is spun, thereby to cause the top to rise in the air.

In witnesses whereof, I have hereunto subscribed my name in the presence of two witnesses.

OLIVER R. BENSON.

Witnesses:
H. MONROE HUMASON,
E. R. KING.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."