S. ASATURIAN.

SPINNING TOP.

APPLICATION FILED APR. 3, 1920.

1,401,952. Patented Jan. 3, 1922.

Fig. 1.

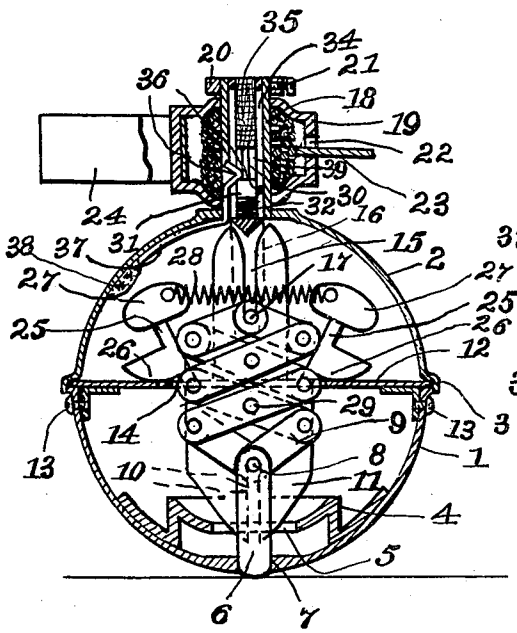


Fig. 2.

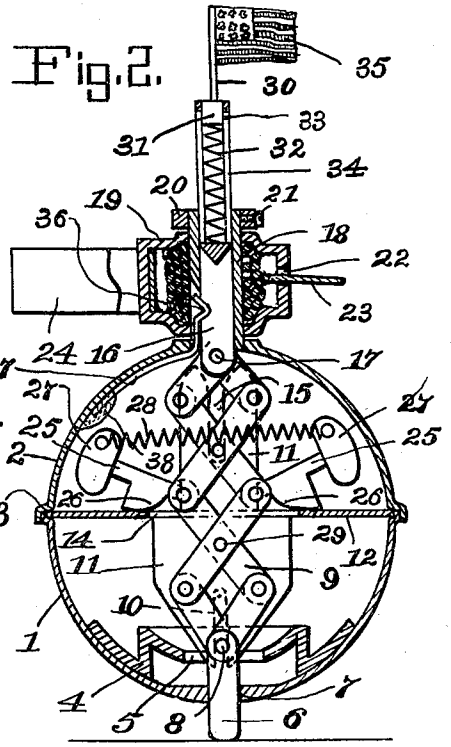


Fig. 3.

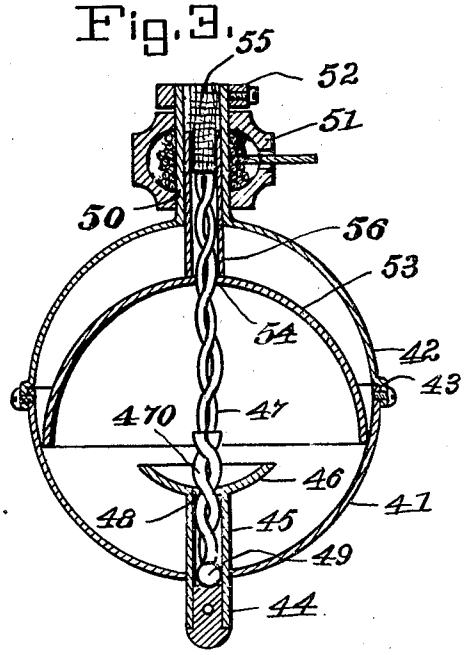
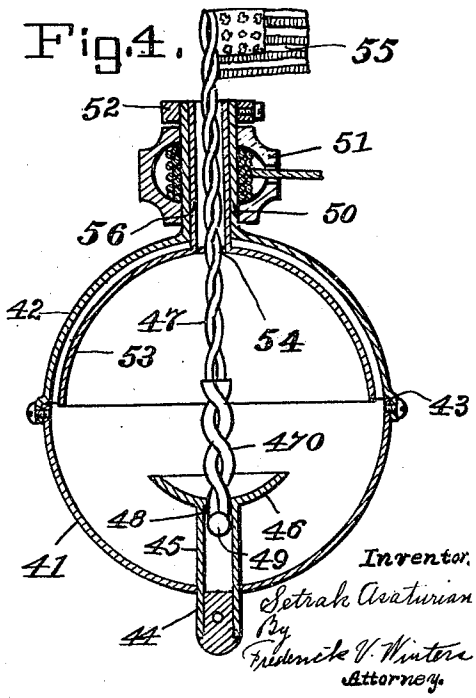


Fig. 4.



Inventor,
Setrak Asaturian
By
Frederick V. Winters
Attorney.

UNITED STATES PATENT OFFICE.

SETRAK ASATURIAN, OF NEW YORK, N. Y.

SPINNING TOP.

1,401,952. Specification of Letters Patent. Patented Jan. 3, 1922.

Application filed April 3, 1920. Serial No. 371,078.

To all whom it may concern:

Be it known that I, SETRAK ASATURIAN, a citizen of the United States, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Spinning Tops, of which the following is a full, clear, and exact specification.

This invention relates to toy spinning tops, and has for its object to provide such tops with means for automatically raising or projecting a flag over the same when spinning.

The invention will be first hereinafter described in connection with the accompanying drawings, which constitute part of this specification, and then more specifically defined in the claims at the end of the description.

In the accompanying drawings, wherein similar reference characters are used to designate corresponding parts throughout the several views:—

Figure 1 is a sectional view of a top made substantially in accordance with this invention, showing the parts in the positions they occupy before spinning.

Figure 2 is a similar view showing the positions of the parts when spinning, and

Figures 3 and 4 are corresponding views of a modified form of the top.

Referring first to Figures 1 and 2, the spherical hollow casing or body of the top is preferably made in two sections 1 and 2 fastened together in any suitable manner along the median line 3. In the bottom of the lower section 1 there is preferably secured a weighted member 4 for retaining the top in an upright position when at rest as well as when spinning. Said weighted member 4 has a central opening 5 through which the spinning foot or lug 6 extends, the latter also extending through a concentric hole 7 in the center of the base section 1. Said spinning foot 6 is attached at its upper end by a pin 8 to the lower extremity of a lazy-tongs 9, the pin 8 also being guided in a vertical slot 10 in a plate or strip 11 arranged in the center of the top casing and suitably supported by connection to a horizontal partition 12 which is fastened between the meeting edges of the upper and lower sections 1 and 2 as by the screws 13, Figure 1. The plate 11 extends through a slot 14 in the partition 12, through which slot the lazy-tongs 9 also extend into the upper portion of the casing. The upper portion of the plate 11 is also centrally slotted at 15 to serve as a guide for a tubular standard 16 which is pivotally connected to the upper extremity of said lazy-tongs by a pin 17, said pin working in said slot 15.

The standard 16 is mounted to slide vertically in a tubular stem 18 fitted in an opening in the center of the top section 2 of the casing and extending above the same for some distance. On this stem 18 a cord holder 19 is loosely mounted and held in place by a collar 20 secured to the stem by a set screw 21. The cord holder has a hole in one side thereof, as at 22, through which the end of the cord 23 extends to be grasped by the operator, the inner end portion of said cord being wound upon the stem 18 in the usual manner, as shown. The cord holder 19 may also have a detachable projecting arm 24 to be grasped by the other hand of the operator while the end of the cord is being pulled for spinning the top.

A pair of governor arms 25 are connected at their inner ends pivotally to the lazy-tongs 9 just above the partition 12, said arms having cam-shaped lateral projections 26 adapted to rock on said partition. The outer ends of said arms are weighted, as at 27, and said weights are connected together by a coiled spring 28 tending to draw them together, as shown in Figure 1, when the top is at rest. When the top is spinning, however, centrifugal force causes said weights 27 to move away from each other against the tension of the spring 28, during which movement the arms 25 swing downward from their normal inclined positions so as to approach the horizontal, as indicated in Figure 2, the cam-shaped projections meantime rocking on the partition 12 and extending the lazy-tongs as shown. Said lazy-tongs are connected to the plate 11 by a fixed pivot pin 29, and when they are extended they operate below said fixed pivot to project the spinning foot or lug 6 so as to reduce friction upon the spinning surface. At the same time, the extension of the lazy-tongs operates above the fixed pivot 29 to project the tubular standard 16 from the stem 18.

In the standard 16 there is telescopically arranged a flag staff 30 secured to a block 31 mounted to slide in said standard and seated on a coiled spring 32 which tends to hold said block in a raised position or near the upper end of the standard. The block is re-

tained in the standard by a stop lug or pin 33 working in a slot 34 in one side of said standard. A flag 35 is carried by the staff 30 and is adapted to be unfurled when the staff is projected from the standard, as shown in Figure 2. When the top is at rest, as in Figure 1, the flag staff, with the flag furled thereon, may be telescoped into the standard 16 and retained in that position by a V-shaped head 36 on a leaf spring 37 which is soldered at 38 to the inside of the upper section 2 of the casing and extends into the stem 18 and through a slot 39 in the standard, so that said V-shaped head may engage the block 31 for holding it down. Just as soon as the top starts to spin and the lazy-tongs begin to be extended by the governor weights as explained, the standard is raised and with it the block 31 is moved upward past the V-shaped spring head 36, whereupon the spring 32 immediately projects the flag staff fully above the standard, as shown in Figure 2, after which an increase in the speed of rotation of the top will further project the standard and spinning foot until the limit of their projection is reached. It will be understood, however, that the flag will be fully projected or raised above the upper end of the standard as soon as said standard is slightly projected above the stem 18, so that the flag raising is sure to take place upon spinning the top even at a slow speed.

In Figures 3 and 4 a simpler and less expensive form of the invention is illustrated. In this case, the spherical casing is also made in two sections 41 and 42 suitably secured together at 43. The spinning foot 44 is fixed in the bottom of the lower section 41 of the casing, and has a tubular portion 45 with a flared weighted upper end 46. A twisted wire flag staff 47 has its lower end portion 470, which is twisted in a reverse direction from the upper part, seated in said tubular portion 45 of the spinning foot, said staff engaging and extending through a slot 48 in the base of said flared weighted part 46 at the upper end of the tubular portion, so that relative movement of the staff and spinning foot will cause the staff to be rotated and fed upwardly through said slot 48. An enlargement 49 on the lower end of said staff prevents it from being entirely withdrawn from said foot.

A tubular stem 50 projects upwardly from the center of the upper section 2 of the casing, and on said stem is loosely mounted the cord holder 51, the same being retained thereon by the collar 52. Within said stem is mounted to slide a tubular member 56 attached to the top of a semi-spherical bell or drum 53 having a slot 54 through which the upper portion of the twisted flag staff 47 is passed and with which it has operative engagement similar to that which the slot 48 in the top of the spinning foot has with the lower portion 470 of said staff. The flag 55 on the upper end of the staff 47 is raised and unfurled when the top begins to spin by reason of the relative rotation of the casing and the drum or bell 53 and spinning foot 44, said staff being raised from the position shown in Figure 3 to that in Figure 4. It will be understood that any suitable object may be substituted for the flag staff in either form of my invention.

The arm or handle 24 shown in Figs. 1 and 2 may be detachably secured to the cord holder 19 in any suitable manner, and if desired such a handle may be attached to the cord holder 51 of Figures 3 and 4. When such handle is not used, the operator may grasp said cord holder 51 while pulling the cord for spinning the top.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:—

1. The combination with a spinning top, of a standard telescopically mounted therein, an object telescopically mounted in said standard, means for retaining said object in retracted position in the standard when the top is at rest, means for retracting the standard into the top when the latter is at rest, and means for positively projecting the standard from the top and the object from the standard when the top spins.

2. The combination with a spinning top, of an object telescopically mounted therein, a lazy-tongs in the top and connected to said object, and a governor also mounted in the top and attached to said lazy-tongs for automatically projecting the same and the object when the top spins.

3. The combination with a spinning top, of a horizontal partition therein, an object telescopically mounted in the top, a lazy-tongs extending through the partition in the top and connected to said staff, and a governor comprising weighted arms attached to the lazy-tongs for projecting the same and the object when the top spins, said arms having cam-shaped lateral projections to rock on said partition for the purpose specified.

4. The combination with a spinning top, of a horizontal partition therein, an object telescopically mounted in the top, a lazy-tongs extending through the partition and connected to the object, and a governor for projecting the lazy-tongs and object when the top spins, said governor comprising a pair of oppositely inclined levers connected at their inner ends to the lazy-tongs and having weights on their outer ends, there being cam-shaped lateral projections on said levers intermediate of their end to rock on said partition, and a spring connecting said levers for automatically returning them to normal position when the top stops spinning.

5. The combination with a spinning top, of a lazy-tongs therein, an object telescopically mounted in the top and connected to the upper end of the lazy-tongs, a spinning foot also telescopically mounted in the top and connected to the lower end of the lazy-tongs, and a governor for extending said lazy-tongs when the top spins, whereby the object is projected from the upper end of the top and the spinning foot is simultaneously projected from the bottom of the top.

6. The combination with a spinning top, of a tubular standard telescopically mounted in the same and having a longitudinal slot therein, a block mounted to slide in said standard, an object mounted on said block, a spring catch to engage said block for retaining the object in retracted position, and means for positively projecting said object from the standard when the top spins.

7. The combination with a spinning top, of a tubular standard having a longitudinal slot therein, a block mounted to slide in said standard and having a lug extending into said slot to limit the outward movement of the block, an object mounted on said block and adapted to be retracted into the standard, means for retaining said block and object in retracted position, means for releasing them when the top spins, and a spring arranged below the block in the standard for projecting the object when released.

In testimony whereof, I have signed my name to this specification.

SETRAK ASATURIAN.