H. A. FREDERICK.

TOP.

APPLICATION FILED OCT. 9, 1917.

1,265,644.

Patented May 7, 1918.

2 SHEETS—SHEET 1.

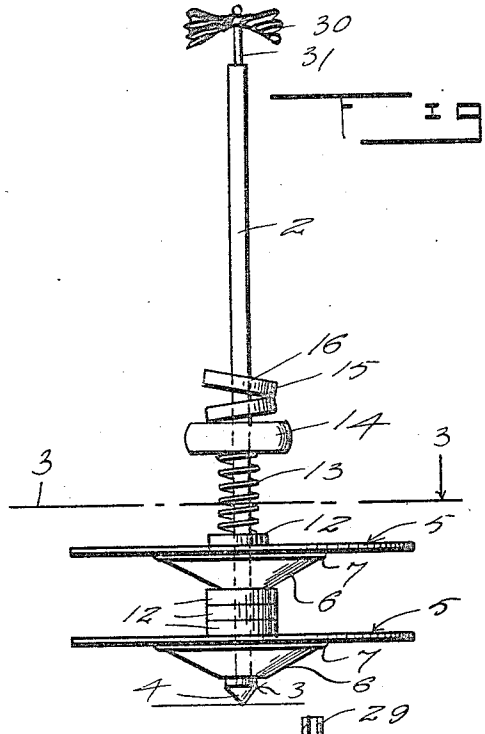


Fig. 1.

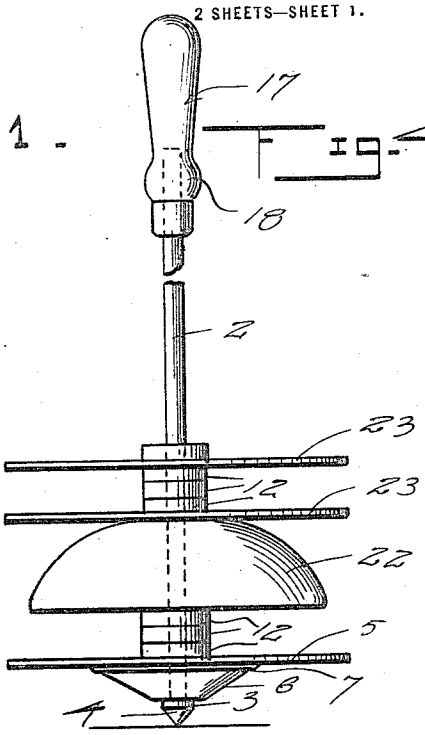


Fig. 4.

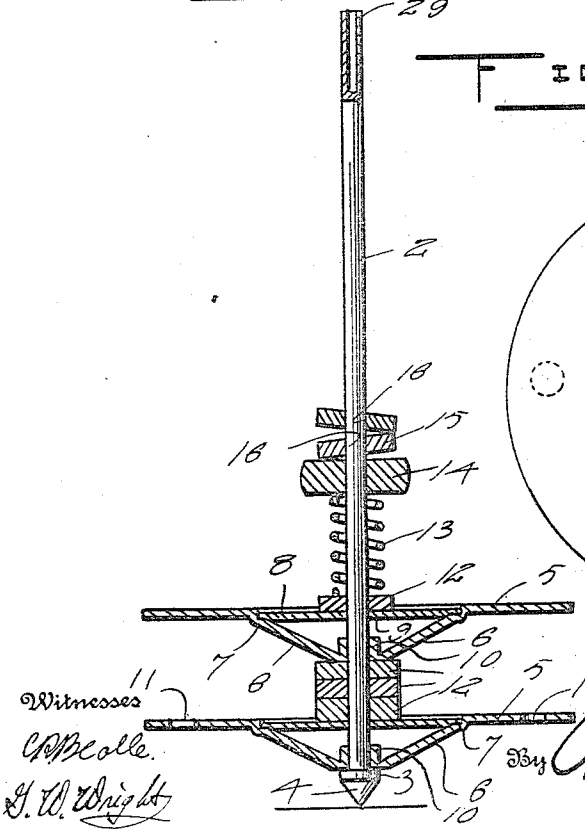


Fig. 2.

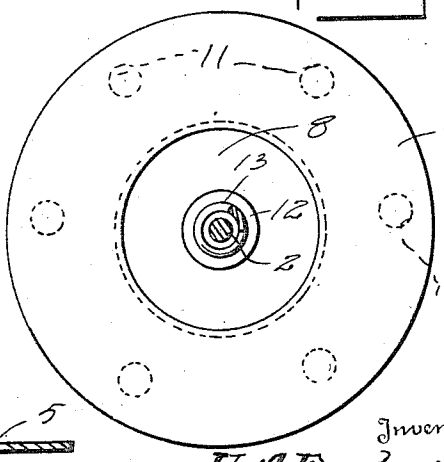


Fig. 3.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 5.

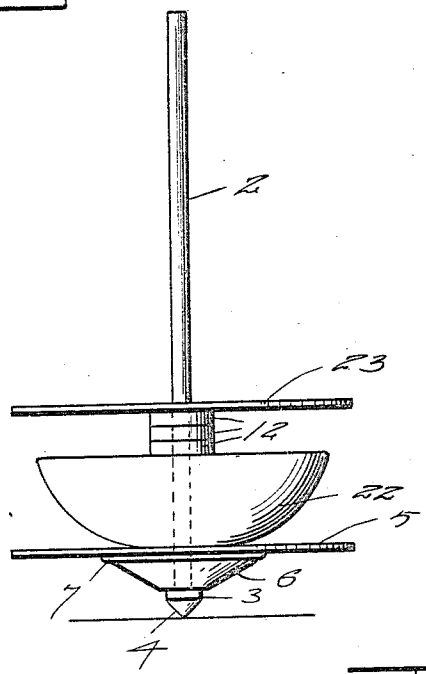


Fig. 6.

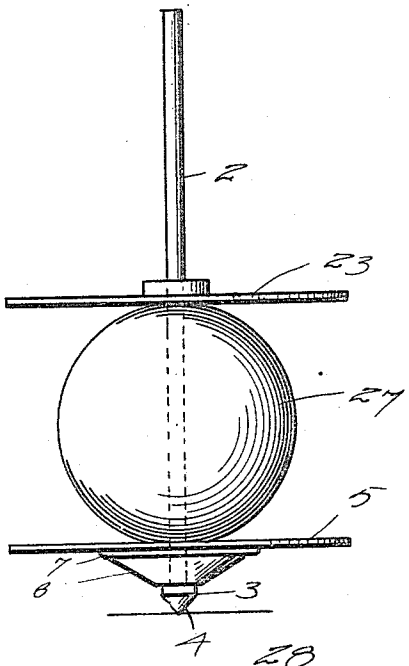


Fig. 7.

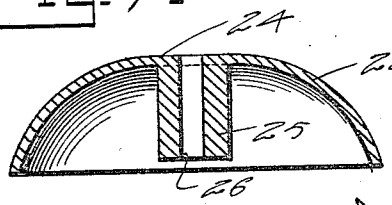


Fig. 8.

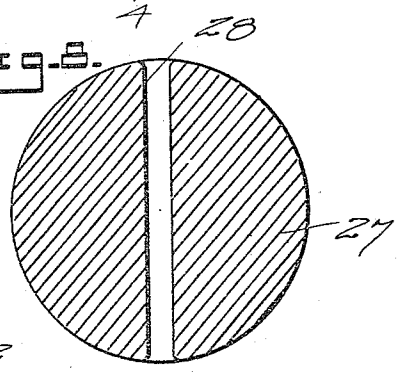


Fig. 11.

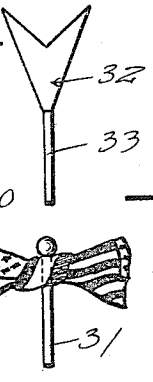
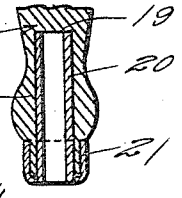


Fig. 10.

Fig. 9.



Witnesses
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UNITED STATES PATENT OFFICE.

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TOP.

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Application filed October 9, 1917. Serial No. 195,585.

To all whom it may concern:

Be it known that I, HARRY A. FREDERICK, a citizen of the United States, residing at New Rochelle, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Tops; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to toys, and more particularly to tops and the primary object of the invention is to provide an improved top which will while spinning will look and make a noise similar to an aeroplane in flight.

Another object of the invention is to provide an improved top in which the body parts are removably mounted on a central shank, so that various shapes and number of parts can be placed upon the shank, so that different effects will be produced, while the top is spinning.

A further object of the invention is to provide an improved top which will simulate the appearance of an aeroplane in flight and which consists of a central elongated shank having a point, a plurality of planes or disks removably mounted on the shank, and spring means for holding the planes on the shank.

A still further object of the invention is to provide a top in which the shank is provided with a longitudinally extending bore, so as to receive a flag or various shaped removable tails, which will turn with the shank and give the top a novel appearance.

A still further object of the invention is to provide an improved top of the above character, which is durable and efficient in use, one that is simple and easy to manufacture, and one that can be placed upon the market at a reasonable price.

With these and other objects in view the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed and illustrated in the accompanying drawings, forming a part thereof, in which:—

Figure 1 is a side elevation of the improved top in spinning position.

Fig. 2 is a vertical section through the same.

Fig. 3 is a section taken on the line 3—3 of Fig. 1.

Fig. 4 is a side elevation of the improved top showing the planes arranged in a different manner on the shank and other shapes attached thereto.

Fig. 5 is a side elevation of the top showing other arrangement of the parts on the shank and showing the locking means removed from the shank.

Fig. 6 is a side elevation of the top showing a further arrangement of the parts on the shank.

Fig. 7 is a detail sectional view through the bell, which is adapted to be removably placed on the shank of the top.

Fig. 8 is a vertical section through the sphere which is adapted to be placed on the shank of the top.

Fig. 9 is a fragmentary sectional view of the handle by means of which the top is held while being spun.

Fig. 10 is a side elevation of one of the devices which can be placed in the bore formed in the top of the shank, and

Fig. 11 is a side elevation of another one of the devices which can be placed in the bore of the shank.

Referring to the drawings in detail, wherein similar reference numerals designate corresponding parts throughout the several views, the numeral 1 generally indicates the improved top, which includes the elongated cylindrical shank 2 having an enlargement 3 formed on its lower end which has its free end tapered or sharpened to provide a point 4 upon which the top 1 is adapted to be rotated. A plurality of disks or planes 5 are adapted to be removably mounted on the shank 2 and as shown in Fig. 1 two of the same are positioned on the shank, each of which includes a circular body having a central conical shaped depression 6. The walls of the conical shaped depression 6 are bent adjacent the upper edge thereof to provide an abrupt shoulder 7 which receives the circular plate 8, which is secured to the same in any well known manner. The circular plate 8 and the disk 5 adjacent the central portion thereof are provided with alined openings 6, through

which the shank 2 is adapted to extend. The lower edges of the walls of the conical shaped depressions 6 are turned upwardly to provide guide flanges 10. The lower plane 5 is preferably formed with a plurality of spaced openings 11, which can be of any size or shape and when the planes are rotated with the top and at a considerable speed air passing through the openings and between the spaced planes will sound similar to an aeroplane in flight. A plurality of spacing washers 12 are provided for spacing the planes 5 and any number of washers can be used as desired. An expansion coil spring 13 is coiled around the shank 2 and positioned on the same for holding the planes 5 on the shank and in frictional engagement with the enlargement 3 which forms the point 4 and this spring is adapted to bear against a spacing washer 12 placed upon the top of the upper plane and against an enlarged washer 14. A pair of locking washers 15 are provided for frictionally engaging the shank 2 and are placed against the enlarged washer 14 and these washers are provided with oblique bores 16 which bind on the shank. The spring 13 holds different parts of the top on the shank to prevent the accidental displacement thereof.

A removable handle 17 is provided for holding the top while the same is being spun. The handle 17 includes the hand grip 18 which is provided with a longitudinal bore 19 in which is positoined the cylindrical sleeve 20 which forms a bearing for receiving the upper edge of the shank 2. A ferrule 21 is positioned around the lower edge of the hand grip 18 and prevents the same from splitting.

When it is desired to spin the top the handle 17 is placed on the shank 2 and a flexible cord is wound around the shank and one end of the cord is grasped by one hand of the operator and the handle is taken hold of by the other hand and the cord is given a quick pull which will rotate the top 1. The handle is removed after the top is spun.

In Figs. 4, 5 and 6 the top is shown with various other parts removably fitted on the shank and it is to be understood that the parts can be arranged in any manner whatsoever as desired by the operator, so that the top may produce different sets while spinning. Other parts or forms may be added to the shank if so desired.

In Fig. 4 a semi-circular member or bell 22 is slidably positioned on the shank above the plane 5 and any number of spacing washers 12 can be used to space the same therefrom. A pair of flat disks 23 are positioned on the shank above the bell 22 and the same are spaced from each other by means of the spacing washers 12. The depression springs 13 and the locking washers 15 are then placed upon the shank and the different parts are held in position. The bell 22 includes the substantially semi-circular body 24 having a sleeve 25 carried thereby which is provided with an axial bore 26 through which the shank 2 is adapted to extend. In Fig. 5 is illustrated another means of positioning the different parts of the top on the shank and in this figure the bell 22 is inserted and placed directly in engagement with the lower plane and one of the flat disks 23 is positioned above the bell and spaced therefrom by the washers 12. These parts are likewise held in position by means of the spring and locking washers.

In Fig. 6 is illustrated a still further method of applying the parts on the shank and in this view a sphere is provided having an axial bore 28 and is positioned on the shank above the bottom plane 5 and one of the disk members 23 is positioned above the same and the locking washers and springs are then applied thereto.

The upper end of the shank 2 is provided with a longitudinally extending bore 29 and when the top is rotating various shaped devices can be placed therein for rotation therewith and as shown in Fig. 1 a flag 30 having a staff 31 can be placed therein. An arrow-shaped member 32 having a shank 33 can be positioned in the bore 29 if so desired. While only two different devices are shown for positioning in the bore 29 it is to be understood that any suitable device can be placed therein such as a shank having a disk at its upper end, a shank having a cross bar and a ball at each end thereof or a small pinny wheel.

In practice, I have found that the form of my invention, illustrated in the accompanying drawings and referred to in the above description, as the preferred embodiments, is the most efficient and practical; yet realizing the conditions concurrent with the adoption of my device will necessarily vary, I desire to emphasize the fact that various minor changes in details of construction, proportion and arrangement of parts may be resorted to, when required, without sacrificing any of the advantages of my invention as set forth.

What I claim is:—

1. A top comprising a shank a plurality of various shaped members detachably mounted on the shank, means to space said members, resilient means adapted to engage the upper member, and lock washers for engaging the spring, as and for the purpose specified.

2. A top comprising a shank, a plurality

of members detachably mounted on the shank, spring means for holding the members in position on the shank, said shank having its upper end provided with a longitudinal bore, and plates detachably mounted in the bore.

In testimony whereof I affix my signature in presence of two witnesses.

HARRY A. FREDERICK.

Witnesses:

BEATRICE R. LATKER,

VIOLA WILLIAMS.

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