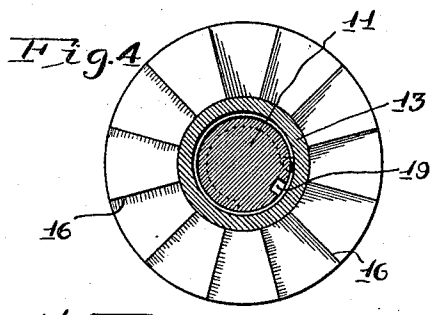
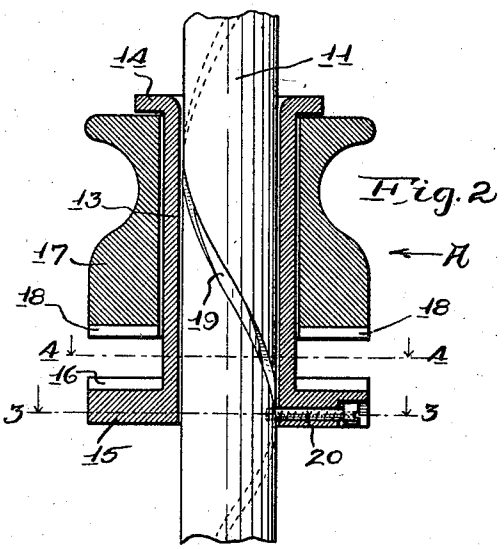
July 17, 1923. 1,461,843

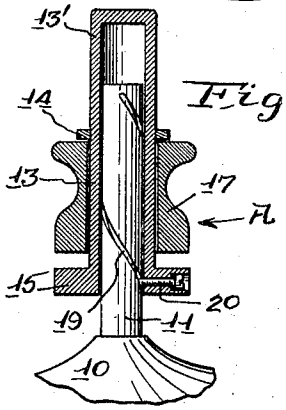
A. L. ZANDER

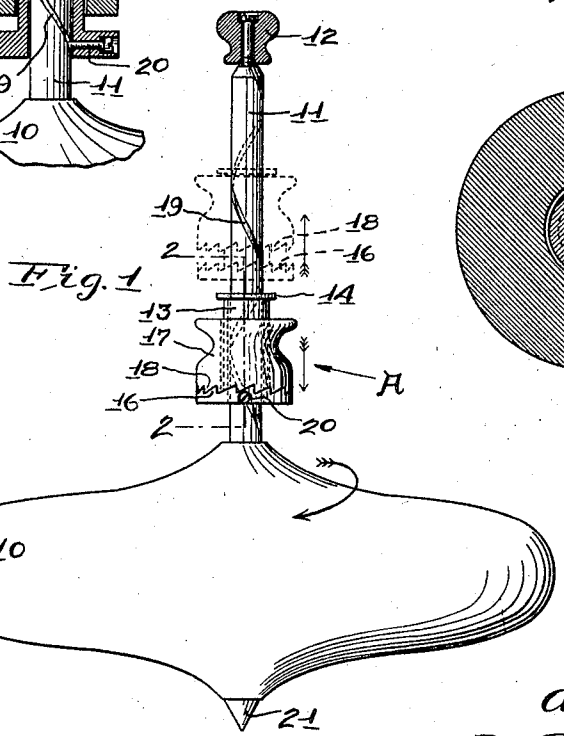
TOP

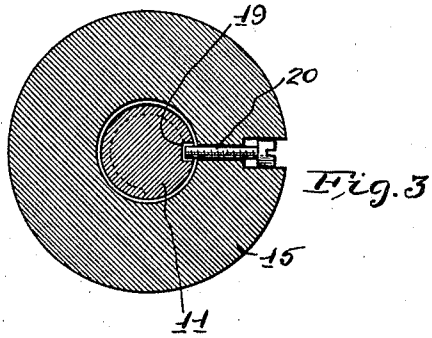
Filed March 25, 1922











Inventor
Alex L. Zander
By Bradbury & Caswell
Attorneys

Patented July 17, 1923. 1,461,843

UNITED STATES PATENT OFFICE.

ALEX L. ZANDER, OF ST. PAUL, MINNESOTA.

TOP.

Application filed March 25, 1922. Serial No. 546,760.

To all whom it may concern:

Be it known that I, ALEX L. ZANDER, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented a new and useful Top, of which the following is a specification.

This invention relates to tops and has for its object the provision of improved means for spinning the top.

The various features of novelty will appear from the detailed description of the invention taken in connection with the accompanying drawings in which,—

Fig. 1 is an elevation of a top showing the preferred form of the invention applied thereto; Fig. 2 is a section on line 2—2 of Fig. 1; Fig. 3 is a section on line 3—3 of Fig. 2; Fig. 4 is a section on line 4—4 of Fig. 2 and Fig. 5 is a view showing a modified form of the invention.

In the drawings, 10 designates the top body or balancing member from which extends a stem 11 having at its free end a rotatably mounted knob 12, which may be held while motion is being imparted to the top. Slidably mounted on stem 11 is a spinning member A comprising a sleeve 13, having at its upper end a radial flange 14 and at its lower end a radial shelf 15, which has upon its upper face a series of clutch teeth 16. Mounted on the sleeve 13, so as to have vertical play between the flange 14 and shelf 15, is a thimble 17, said thimble at its lower end having clutch teeth 18 adapted for engagement with the teeth 16 on the shelf 15. The stem 11 has a steep spiral groove 19 with which the sleeve 13 is operatively engaged by means of a pin 20 seated in the shelf 15. This pin is preferably in the nature of a screw to allow the same to be adjusted for wear.

Preparatory to spinning the top, the sleeve 13 is elevated through the medium of the thimble 17, the clutch teeth 16 and 18, during this operation, being separated, as illustrated in dotted lines in Fig. 1. Spinning impulse is imparted to the top by a quick downward push of the thimble 17, causing the clutch teeth to engage, rotary motion being imparted to the top as the pin 20 is moved down the spiral 19 in the stem 11, as will be readily understood. This up and down movement may be repeated until the desired momentum of the top is obtained.

The top may be steadied, during the operation of spinning, by holding the knob 12, this being particularly desirable when a number of successive impulses are given to the top to increase its speed.

In Fig. 5, I have shown the stem 11 as devoid of the knob shown in Fig. 1, and in lieu thereof, have shown the sleeve 13 as extended to provide a cap or housing 13′ for the stem 11. In this form of the invention, the bearing 21 of the top is held upon the spinning surface, during the upward and downward thrusts of the spinning member A. In the form shown in Fig. 1, the knob 12 serves not only as a steadying and holding medium for the top, but also as a stop for the sleeve 13 of the spinning member. In the form shown in Fig. 5, the groove 19 stops short of the upper end of the stem 11, the end of said groove supplying an abutment for the pin 20 and serving to prevent the withdrawal of the spinning member A from the stem 11.

Changes in the specific form of my invention, as herein disclosed, may be made within the scope of what is claimed without departing from the spirit of my invention.

Having described my invention, what I claim as new and desire to protect by Letters Patent is:

1. The combination in a top, of a balancing body, a stem secured to said body and formed with a spiral, a sleeve on said stem in operative engagement with said spiral, a thimble on said sleeve, and means for locking the thimble to the sleeve on a downward thrust.

2. The combination in a top, of a balancing body, a stem rising therefrom, said stem having a spiral, a sleeve on said stem in operative engagement with said spiral, a radial shelf at the bottom of said sleeve, clutch teeth on said shelf, a thimble mounted on the sleeve for movement toward and away from said shelf, said thimble having teeth for locking engagement with the teeth on the shelf.

3. The combination in a top, of a balancing body, a stem rising therefrom, a sleeve mounted for spiral movement on the stem, a thimble mounted for axial and rotary movement on said sleeve, a turnable knob at the upper end of said stem against which said sleeve may engage, and means for locking the sleeve to the thimble when the latter is thrust downward.

4. In combination, a top having a stem

secured thereto, a finger hold revolubly mounted on the upper end of the stem, a sleeve on the stem mounted for spiral movement thereon, a thimble mounted on the sleeve for limited axial movement thereon, and means for locking the sleeve to the thimble on a downward thrust of the latter.

5. The combination in a top, of a balancing body, a stem for said body formed with a spiral, a spinning member including a sleeve slidable on the stem and operably engaged with the spiral, a thimble on the sleeve supplying a fingerhold for reciprocating the spinning member, and means for clutching the sleeve to the thimble to prevent rotation of the former with respect to the latter on a spinning thrust of said member.

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

ALEX L. ZANDER.