E. B. T. SPENCER.

KALEIDOSCOPIC TOP.

APPLICATION FILED MAY 11, 1910.

984,044.

Patented Feb. 14, 1911.

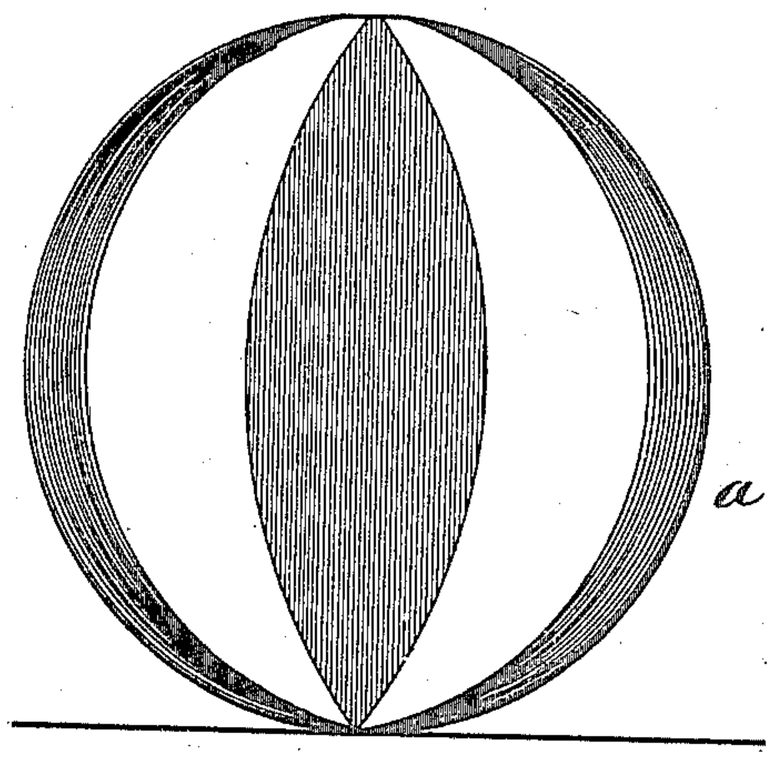

Fig. 1.

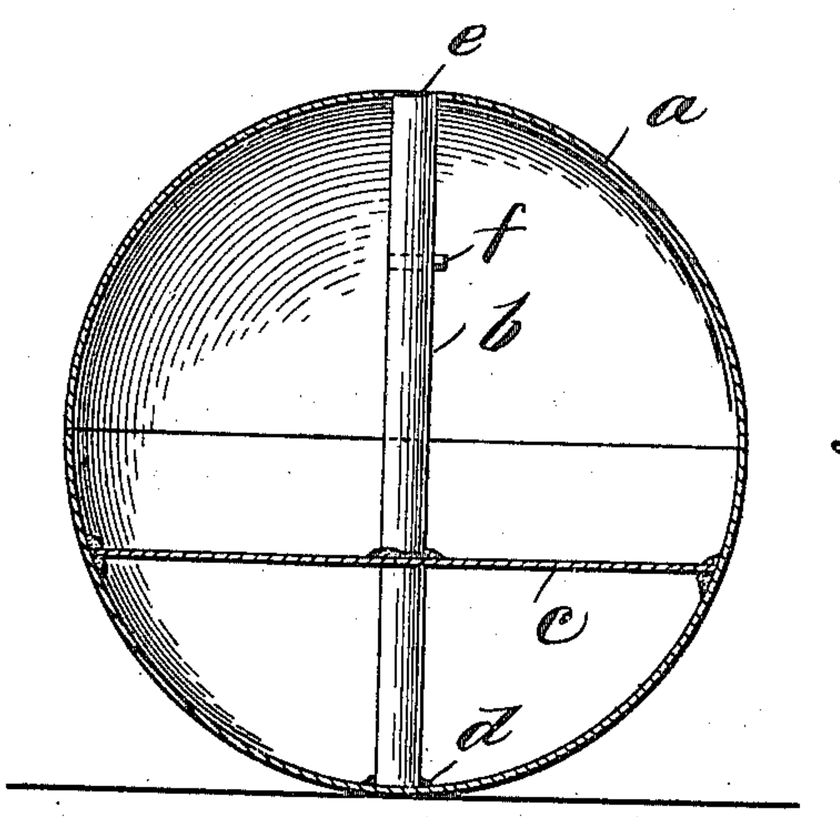

Fig. 2

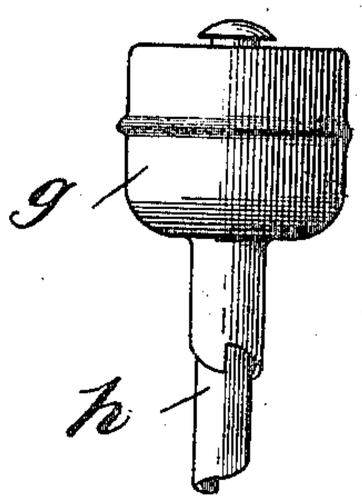

Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

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KALEIDOSCOPIC TOP.

984,044. Specification of Letters Patent. Patented Feb. 14, 1911.

Application filed May 11, 1910. Serial No. 560,693.

To all whom it may concern:

Be it known that I, EDWARD B. T. SPENCER, a citizen of the United States, residing at Rome, Italy, have invented certain new and useful Improvements in Kaleidoscopic Tops, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to tops, and particularly to tops of the class known as "kaleidoscopic", in which variegated color effects are produced by the rotation of the top.

Heretofore tops have invariably been provided with a pivot or spinning point which forms a constant support for the body of the top during its rotation and preserves a constant axis of rotation. Since the spinning point of tops as heretofore made always lay in the axis of rotation of the top, the fact that the axis of rotation was constant limited the variety of color effects which could be secured without the use of separate or supplemental devices, such as colored disks, to secure additional kaleidoscopic effects. Without using such supplemental devices the various effects that could be obtained with any given top were limited to those due to change in the speed of its rotation.

The purpose of my invention is to provide a top provided with means by which it may be spun in which a great variety of kaleidoscopic effects may be secured without the use of separate devices for the purpose, and this I accomplish by employing a globular top which may be suitably colored and is provided with means for causing it to rotate. The distinguishing feature of my improved top, however, is the fact that it is not provided with a pivot or other projecting spinning point, and has means for engaging a spinning device contained within a smooth globular body, any part of which may serve as a point of support as occasion may arise. Thus the axis of rotation of the top is capable of change under the influence of unequal friction between the top and the surface on which it rests, the result being that an almost unlimited variety of kaleidoscopic changes occur as the top spins.

In the accompanying drawings, in which I have illustrated my improved top provided with a simple form of spinning device,—Figure 1 is an elevation of the top; Fig. 2 is a vertical section thereof; and Fig. 3 is an elevation of the spinning device which I prefer to employ.

Referring to the drawings, it will be seen that the top has a globular body *a* preferably painted in different colors as indicated in Fig. 1. The body *a* is hollow, as shown in Fig. 2, and is preferably made of two hemispheres suitably secured together. The body is provided with a fixedly-secured stem or shaft *b* which is braced by a disk *c*. One end of the stem *b* is secured to the body *c*, as shown at *d*, while the other end projects into a circular opening *e* in the shell or body, as best shown in Fig. 2. Near the latter end of the stem *b* it is provided with a laterally-projecting pin *f*, as shown.

g indicates the spinning device, which is of the type commonly employed for spinning tops, said spinning device being provided with a ratchet sleeve *h* adapted to fit upon the stem *b* and engage the pin *f* for winding up the spring contained in the spinning device *g*. This device is shown and described in Letters Patent of the United States No. 45,816, dated January 10, 1865, and is not claimed herein. While I have shown and described it as a convenient means for spinning my improved top, any other device suitable for the purpose may be employed.

In spinning the top the spinning device is applied to the upper end of the stem *b* through the opening *e*, and when wound and released it causes the top to spin. The top first rotates upon an axis which is coincident with the stem *b*, but owing to the unequal friction of the body of the top with the surface on which it rests its axis of rotation gradually changes, producing a great variety of kaleidoscopic effects.

So far as I am aware, I am the first in the art to provide a top of this character in which the top equipped with means for connection with a spinning device is provided with no spinning point or pivot, so that it is capable of changing its axis of rotation as circumstances may determine, and my invention, therefore, is generic in character, and the claims hereinafter made are to be construed accordingly.

That which I claim as my invention, and desire to secure by Letters Patent, is,—

1. A top, comprising a globular body containing means by which a rotary motion may be imparted to said body, the outer surface of said body having no projecting pivot to determine its axis of rotation.

2. A top, comprising a globular body hav-

ing a smooth outer surface, and means within said body by which a rotary motion may be imparted thereto.

3. A kaleidoscopic top, comprising a globular body having portions of its surface differently colored and having no projecting pivot to determine its axis of rotation, and a stem secured within said body and adapted to coöperate with external means for initiating rotation of the top.

4. A kaleidoscopic top, comprising a globular body having portions of its surface differently colored and provided on the inside with means whereby axial rotation thereof may be initiated, said body having no projecting pivot, so that the axis of rotation is capable of changing as the top rotates.

EDWARD B. T. SPENCER.

Witnesses:
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