

No. 717,596.

PATENTED JAN. 6, 1903.

A. H. MUNSELL.
SPINNING TOP.

APPLICATION FILED JUNE 6, 1902.

NO MODEL.

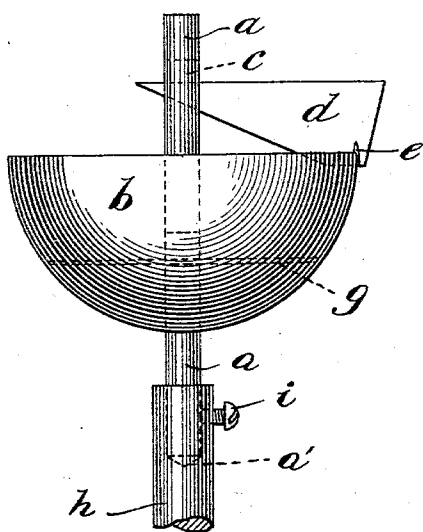


Fig-1-

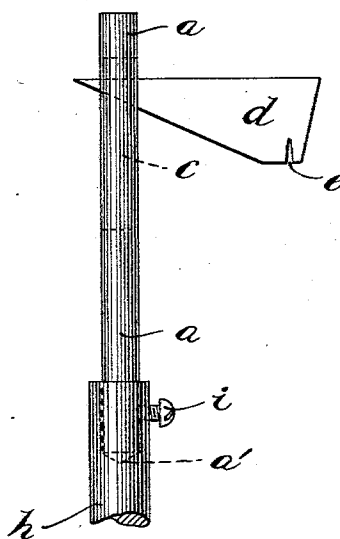


Fig-2-

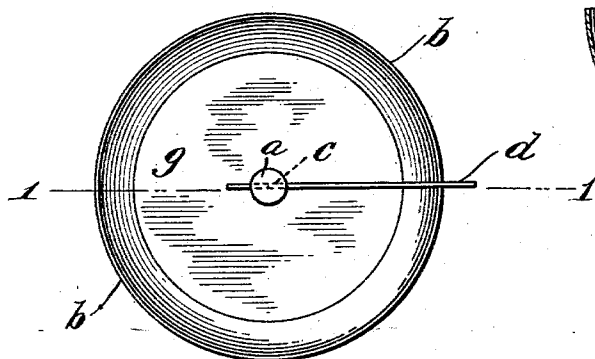


Fig-3-

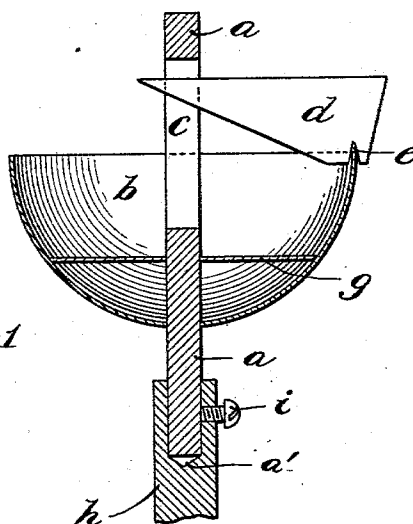


Fig-4

WITNESSES:

A. G. Sullivan.
E. N. Curtis.

INVENTOR:

Albert H. Munsell
by Chas. F. Perreine, Attorney

UNITED STATES PATENT OFFICE.

ALBERT H. MUNSELL, OF BROOKLINE, MASSACHUSETTS.

SPINNING-TOP.

SPECIFICATION forming part of Letters Patent No. 717,596, dated January 6, 1903.

Application filed June 6, 1902. Serial No. 110,456. (No model.)

To all whom it may concern:

Be it known that I, ALBERT H. MUNSELL, a citizen of the United States, residing at Brookline, in the county of Norfolk and Commonwealth of Massachusetts, have invented a new and useful Improvement in Spinning-Tops, of which the following is a specification.

My invention consists of the particular construction of the spindle and body of spinning-tops, whereby color-surfaces may be mounted thereon in various new positions and relations for the purpose of producing novel color effects.

In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of the top connected to a rotary shaft of an electric or other motor. Fig. 2 is the same view with the body or shell of the top omitted. Fig. 3 is a plan view of the top, and Fig. 4 is a vertical section through the line 1 1 in Fig. 3.

Like letters indicate corresponding parts in all the figures of the drawings.

a is a spindle made of wood or other suitable material preferably tapering to a point at the bottom *a'* when designed to be spun by hand. Secured to the spindle *a* is a thin metal hemisphere or shell *b*, forming the body of the top. This may be secured by inserting the spindle through a central hole in the bottom of the shell, to which it is tightly fitted, as shown, or in any other manner. A slot or narrow opening *c* is cut in the spindle *a*, into which one end of a colored card or disk *d* is inserted, so that it may project radially therefrom and be supported upon the edge of the shell *b* and preferably held in place by inserting the latter into a slit *e* in the edge of the card. The described means of securing the card are not essential. It would be sufficiently secured if the card extended outwardly from the spindle to the inside surface of the shell *b*, simply bearing against it, or if secured in any other manner. If the card were made of stiff material and fitted tightly into the slot *c*, it would not require any bearing at the outer extremity. Several slots can be made in the spindle at different heights thereon, and they may be made at any angle thereto for the purpose of mounting several cards of different colors on the spindle and in a variety of positions.

I do not limit my invention to the employ-

ment of slots in the spindle to secure the cards, as it is obvious that any means of attaching the end of the card to the spindle would be equivalent therefor; neither do I limit my invention to the use of cards of the particular size and shape shown, as the invention contemplates the use of cards or other color solids of every variety in shape and size. The operator is expected to follow his own taste, theories, or caprice in the selection of color, shape, and size of cards or other color solids and in making combinations, of which the possibilities are infinite. A circular disk or colored card, as *g*, having a hole in the center, is passed over the top of the spindle and laid on the bottom of the shell *b* before the cards are inserted in the slots in the spindle.

h is a socket secured to the rotary shaft of an electric or other motor, into which the spindle *a* is fitted and fastened by means of the set-screw *i* or by any other suitable device. It is evident that other forms of support for the cards could be substituted for the central spindle shown, but the one selected is simple and is preferred by me.

The operation of the invention consists of spinning the top by means of the motor or by twirling it by the fingers of the hand or the unwinding of a string or by any of the well-known ways of spinning hand-tops. When operated by a motor, the shell *b* is not so essential as in the case of hand-spinning. When the motion of the top can be sustained by power, the atmospheric resistance to the cards does not materially interfere with the rotation when the shell *b* is omitted; but if spun by hand it is essential to prolong spinning that the cards should be substantially inclosed within or surrounded by a wall or shell, preferably of the shape shown, although this may be varied and measurably accomplish the desired results. The operator provides himself with a number of cards or color solids of irregular shapes and sizes and variety of color. A colored disk *g* is placed in the bottom of the shell and one or more cards of different colors than the disk are secured to the spindle in the manner described, and the spindle is then rotated, blending the colors of the cards and the color of the disk *g* and producing a very pleasing and novel effect.

I have discovered that when a colored card is mounted upon a rotating device at any angle to a plane which is perpendicular to the axis of rotation and is rotated rapidly a peculiar color effect is produced, which appears like an ethereal color or colored atmosphere, through which other objects are visible. This effect may be varied and heightened by placing a disk of different color on the spindle below the card, as heretofore described, or by placing the top between the eye and a different-colored background, or by throwing reflected light upon the top while spinning. By thus adding cards of other colors and sizes, placing them at different angles, beautiful effects of colored atmosphere of a never-ending variety are obtained, which not only serve to please, but train and educate the mind in color discrimination.

The gist of the invention resides in the discovery of the effect of rotating colored cards while mounted edgewise to a horizontal plane, and the essential feature of the mechanism therefor is a rotatable device provided with means for detachably securing thereto colored cards at any angle to a plane perpendicular to the axis of rotation and for supporting a disk having a different color than said cards and located so as to provide a colored background to the colored effect produced. The color of the background blends with the ethereal color produced by the cards and presents a unique and fascinating effect.

What I claim, and desire to secure by Letters Patent, is—

1. In a spinning-top, a rotatable support having means provided thereon for detachably securing cards or disks thereto, com-

bined with one or more cards or disks, *d*, having colored surfaces, mounted on said support at an angle to a plane which is perpendicular to the axis of rotation, and a card having a different color than that of said cards or disks *d*, and rotated therewith, and located so as to be observed through the color effect produced by said cards or disks *d*.

2. In a spinning-top, the combination of a shell open at the top to form the body portion, having means for securing cards or disks thereto, one or more cards or disks *d*, having colored surfaces mounted on said shell at an angle to a plane which is perpendicular to the axis of rotation and a card having a different color than that of said cards or disks *d*, supported in said shell so as to be observed through the color effect produced by said cards or disks *d*.

3. In a spinning-top, a shell consisting of a hollow hemisphere open at the top to form the body portion, a central spindle extending through and secured to the same, said spindle being provided with means for supporting cards or disks thereon, combined with one or more cards or disks *d*, having colored surfaces, mounted on said spindle at an angle to a plane which is perpendicular to the axis of rotation, and a card having a different color than that of said cards or disks *d*, mounted on said spindle in a plane perpendicular to the axis of rotation.

In witness whereof I hereunto set my hand this 28th day of May, A. D. 1902.

ALBERT H. MUNSELL.

Witnesses:

A. G. SULLIVAN,
CHAS. F. PERKINS.