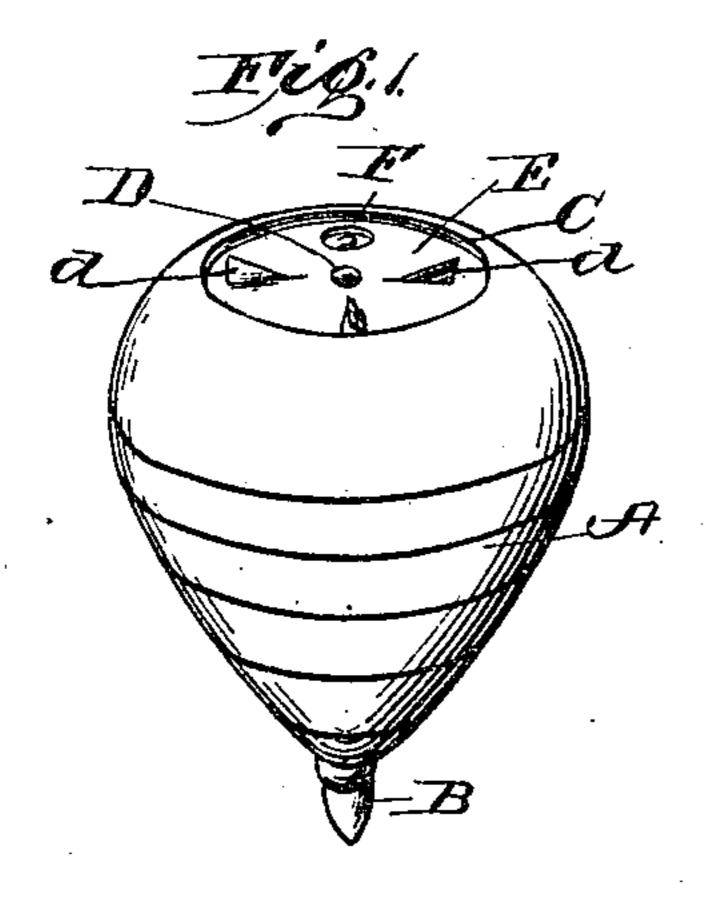
No. 667,794.

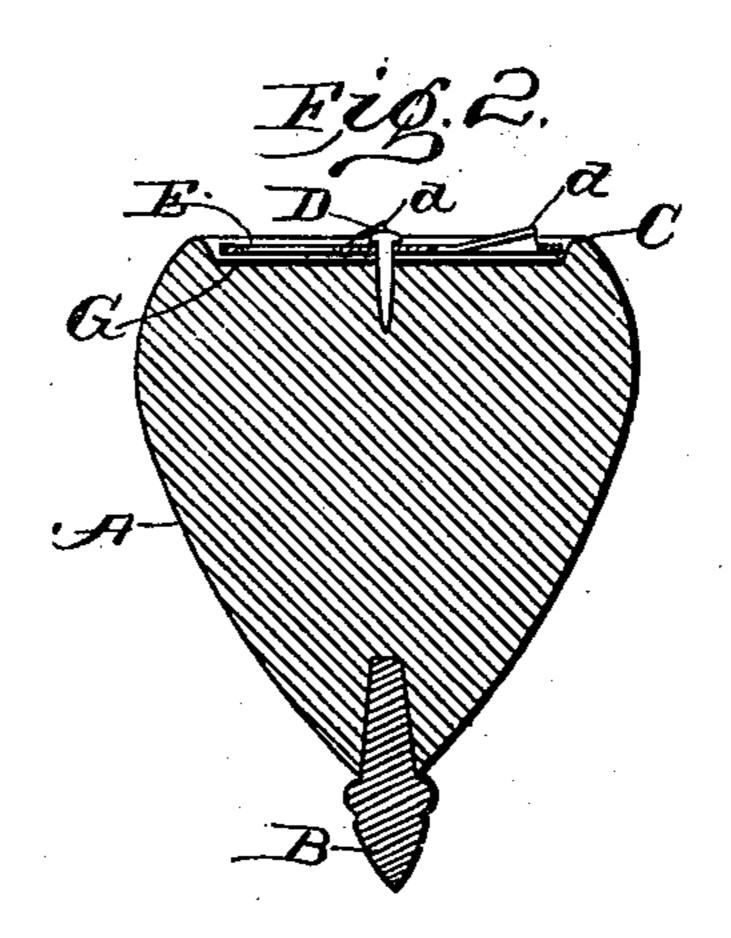
Patented Feb. 12, 1901.

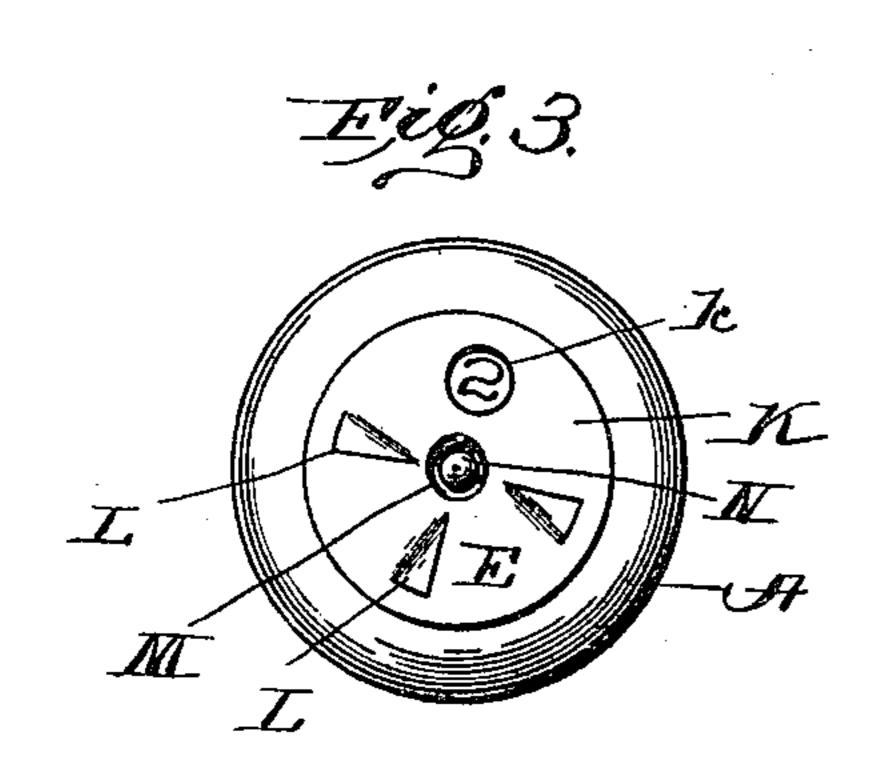
E. W. RISBROUGH. SPINNING TOY.

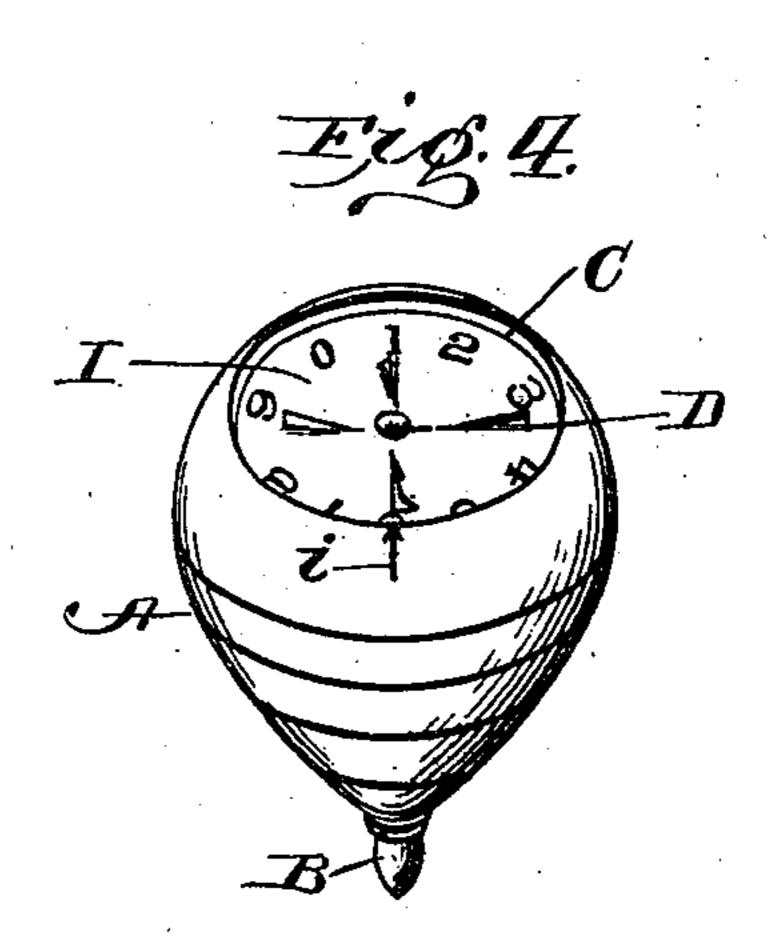
(Application filed July 13, 1900.)

(No Model.)









WITNESSES Thomas Surant ASPenton, Jr.

Colward IV. Riebrough,
Cy Chrich Thrick
Lie Attorneys

United States Patent Office.

EDWARD W. RISBROUGH, OF PHILADELPHIA, PENNSYLVANIA.

SPINNING TOY.

SPECIFICATION forming part of Letters Patent No. 667,794, dated February 12, 1901.

Application filed July 13, 1900. Serial No. 23,503. (No model.)

To all whom it may concern:

Beitknown that I, EDWARD W. RISBROUGH, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia, State 5 of Pennsylvania, have invented certain new and useful Improvements in Spinning Toys; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying to drawings, forming a part of this specification, and to the letters of reference marked thereon.

The present invention relates to improvements in toys or tops, and particularly to 15 those which are adapted to be spun by means of a cord wound about the body of the topas illustrated, for instance, in my prior patent, No. 607,552, dated July 19, 1898.

The invention has for its object to provide 20 an improved device whereby the top may be used in games requiring the indication of a number the selection of which is dependent upon chance, to which end the invention consists in certain novel details of construction 25 and combinations and arrangements of parts, all as will be now described, and pointed out particularly in the appended claims.

Referring to the accompanying drawings, Figure 1 is a perspective view of a top em-30 bodying the invention in its preferred form. Fig. 2 is a vertical section through the same. Fig. 3 is a top plan view of a modified form, and Fig. 4 is a perspective view showing another modification.

Like letters of reference in the several fig-

ures indicate the same parts.

In said drawings the letter A indicates the body portion of a spinning-top of ordinary construction, having at the lower end a plug 40 or point B, also of ordinary construction, these parts being adapted to be spun by winding the cord about the tapering body | portion from the plug upwardly and throwing the top from the hand, while retaining 45 one end of the cord in a manner well understood by those indulging in the game of topspinning. At the top of the body portion a flat surface is provided, which in the forms illustrated in Figs. 1, 2, and 4 is recessed 50 somewhat or bounded by an annular wall C, providing a circular concavity in which is mounted on a central pivot D a rotary disk |

E. This disk E is somewhat loosely mounted upon its pivot, so as to be capable of a very slight vertical movement, and in the body of 55 the disk there is formed a series of vanes d, preferably struck up from the metal of the disk itself and inclined at such an angle and in such direction that as the top is spun air will be drawn in beneath the disk and to a so certain extent confined in the space between such parts, whereby said disk is caused to float, as it were, upon a film of air and its rotation with respect to the body of the top materially facilitated. Obviously with such an 65 arrangement there can be no possible certainty with respect to the point at which the disk will come to rest, and hence by providing suitable numerals, letters, or other indications either upon the disk itself with a 70 pointer on the body of the top or on the body of the top with a pointer or indicator on the disk advantage may be taken of the construction to utilize the device in games such as specified.

In Figs. 1 and 2, where the disk is let into a recess in the top of the top-body, such disk is provided at a suitable point with an aperture or opening F, and beneath the disk there is provided a disk G, bearing numerals from "0" 80 to "9," with which numerals the aperture in the disk is adapted to register. The numbered disk is adopted as a convenience only in manufacture, for it is obvious that the numerals may be stamped or printed directly on the 85 body of the top where so desired.

In Fig. 4 the floating disk itself (lettered I) is provided with a pheripheral row of numerals and the body of the top with a pointer i, adapted to register therewith. In Fig. 3 it 90 will be observed no recess is formed in the top of the body portion; but the disk K in this instance is mounted upon the flat surface of the top and is provided with an aperture k and vanes L, set at an inclination, as in the 95 first form of the device described. In this device also the central portion of the disk is preferably countersunk at M for the reception of the head of the pivot N, and, in fact, the countersunk center may be adopted in 100 any of the forms illustrated. With this device it is found that the floating of the indicating-disk upon a film of air overcomes any tendency of the disk to come to rest at a predetermined point, as is liable to be the case with old devices having frictional resistance and with which it is almost impossible to prevent a greater friction being developed between the parts at some point in the rotation than at other points.

Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

o 1. In a spinning-toy, the combination with the free-spinning-toy body having a spinning-point and a flat upper surface, of a rotary disk centrally pivoted in said flat upper surface and having vanes set at an inclination to direct the air in beneath said disk and be-

tween said disk and flat surface, whereby the disk is caused to float upon a film of air, with

a series of numerals or indications and an indicator; substantially as described.

2. In a spinning-top the combination with 20 the spinning body portion having a point at the lower end and a flat surface at the upper end, of a circular disk pivoted axially of the spinning-body on said flat surface, and having upwardly-projecting vanes and an indicating-25 aperture near its periphery with a series of numerals or indications on the body portion adapted to be exposed successively through said indicating-aperture; substantially as described.

EDWARD W. RISBROUGH.

Witnesses:

MERCER E. GIBSON, LEWIS LAWRENCE SMITH.