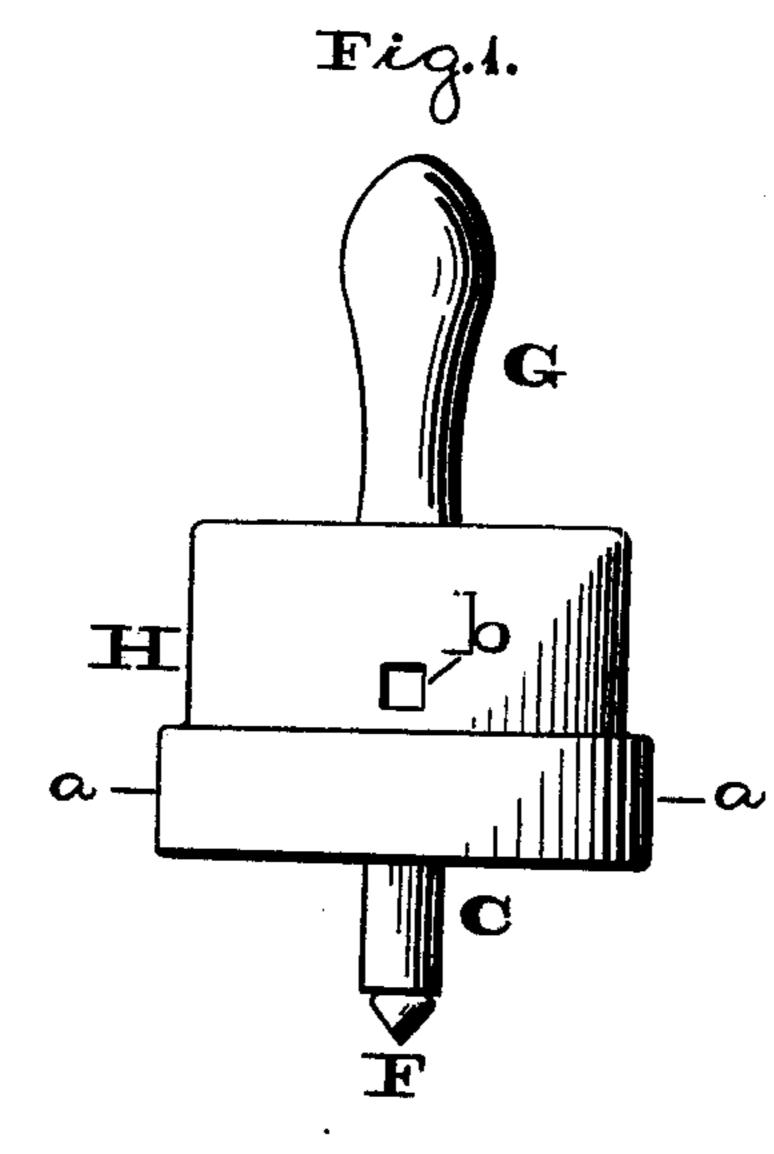
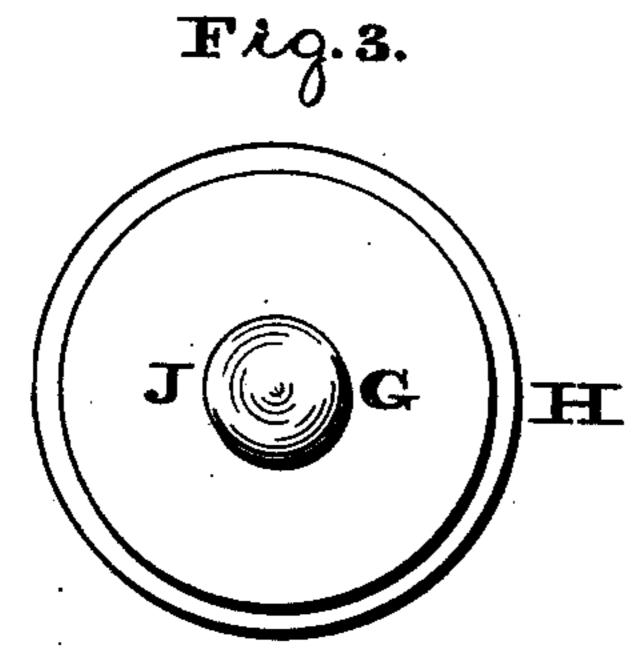
## E. W. PACKER.

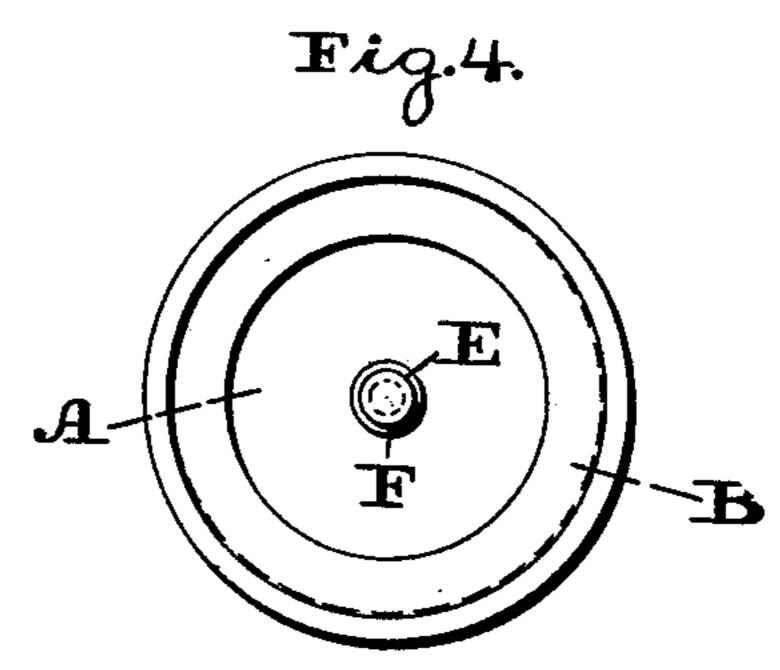
SPINNING-TOPS.

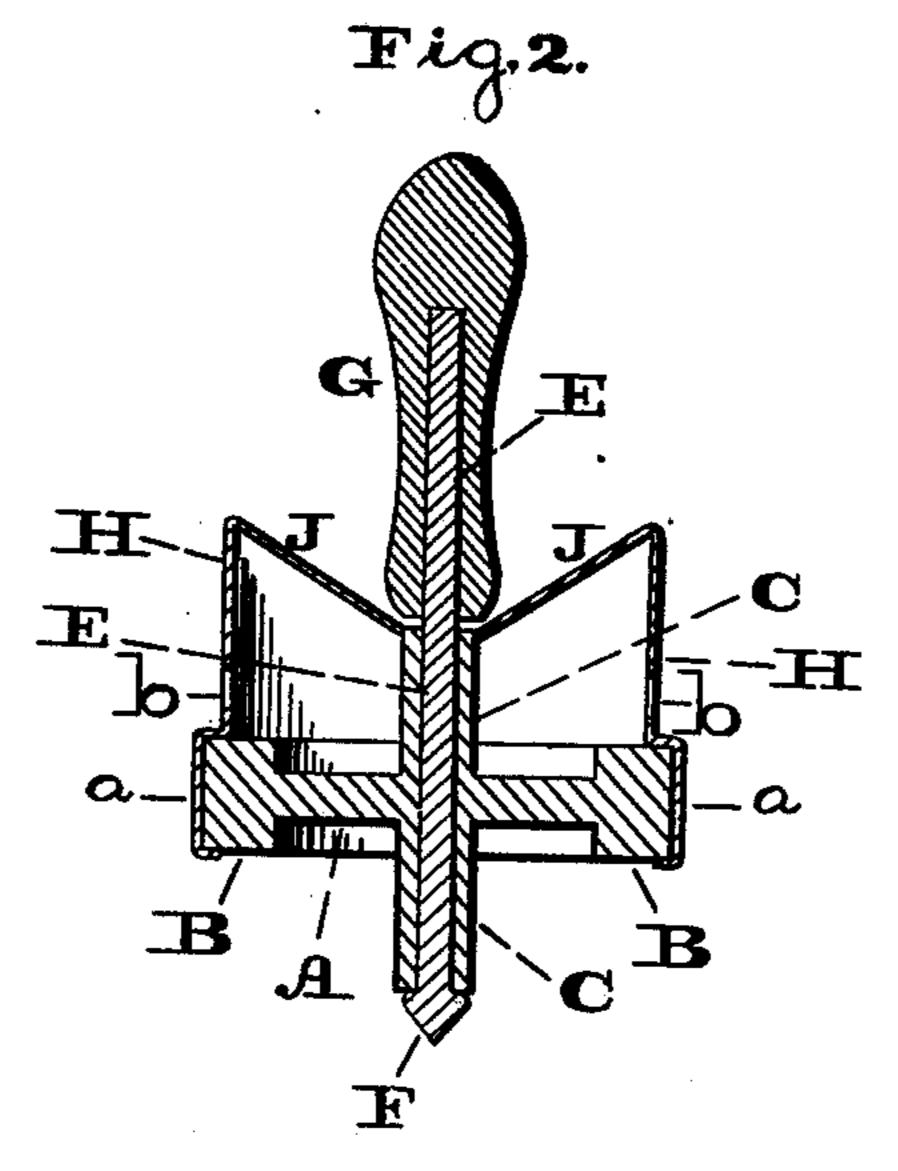
No. 188,174.

Patented March 6, 1877.









Lewis F. Brous, Ab. F. Grank

John attuderokein

Inventor:

## UNITED STATES PATENT OFFICE

EDMUND W. PACKER, OF PAULSBOROUGH, NEW JERSEY.

## IMPROVEMENT IN SPINNING-TOPS.

Specification forming part of Letters Patent No. 188, 174, dated March 6, 1877; application filed October 25, 1876.

To all whom it may concern:

Be it known that I, EDMUND W. PACKER, of Paulsborough, in the county of Gloncester and State of New Jersey, have invented a new and useful Improvement in Spinning-Tops; and I.do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which-

Figure 1 is a side elevation of the top embodying my invention. Fig. 2 is a central vertical section thereof. Fig. 3 is a top or plan view thereof. Fig. 4 is a bottom view thereof.

Similar letters of reference indicate corre-

sponding parts in the several figures.

My invention consists of a spinning-top constructed of a disk, to the rim of which is secured a humming-chamber, whereby there is provided a top that will spin rapidly, and well balanced, and one that is of a humming, gyroscopic order.

Referring to the drawings, A represents a disk having a loaded rim, B, and collars C projecting centrally from opposite faces of the disk, said parts being preferably cast together. Through the disk A and collars C there is passed loosely a spindle, E, whose lower end is formed with a shoulder or head, F, to prevent upward displacement of the spindle, and whose upper end is connected to a han dle, G, which prevents downward displacement of the spindle, and provides means for holding the top during the operations of winding the top-cord and starting the spinning. H represents a hollow chamber of sheet-metal, and it is secured at top to the upper collar C, and at bottom to the rim of the disk A by being spun around and on the same, as at a, suitable openings b being formed in the body of the chamber.

The operation is as follows: The top will be held by the handle G. A cord is now wound !

on the lower collar, C, and drawn forcibly therefrom, as is well known, in order to impart rotation to the disk A and chamber H. Simultaneous with the rotation of the disk the chamber H begins to hum, and the top may be set on a table, floor, or other proper place for spinning, it being noticed that the top spins with great rapidity. In order, however, to properly balance the top the upper side J of the chamber H is dished or concave, so that the elongation of the handle G and spindle is prevented, and, without destroying the utility of the chamber, the handle is brought closer to the disk A.

When the top is spinning it may be suspended horizontally by a cord from the spindle E between the head F and lower collar, C, and operate after the manner of a gyroscopic top, and if this horizontal suspension is accomplished when the top is first started, and has the greatest momentum, a gyroscopic humming-top is presented. It will also be noticed that the humming-chamber H is connected to the disk A by a joint which is secure, and one in which solder is avoided, whereby there is

place of connection of the humming-chamber and disk.

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

a uniformity and regularity of the top at the

1. The disk A, with collars C, spindle E, with head F and the handle G, in combination with the humming-chamber H, substantially

as and for the purpose set forth.

2. The disk A, with rim B and collars C C, the spindle E, with head F and handle G, in combination with the chamber H counected to the disk A, and formed with the concave top J, substantially as and for the purpose set forth.

EDMUND W. PACKER.

Witnesses:

John A. Wiedersheim, H. E. HINDMARSH.