G. T. JACOBS.
Spinning-Top.

No. 217,876. Patented July 29, 1879

Fig. 1.

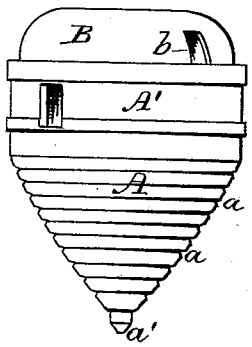


Fig. 2.

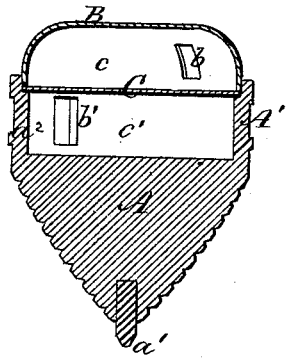


Fig. 3.

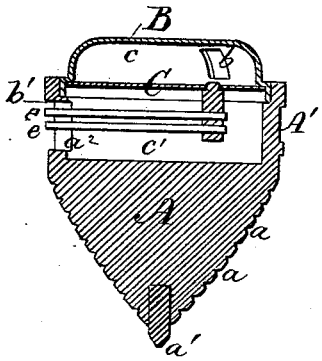


Fig. 4.

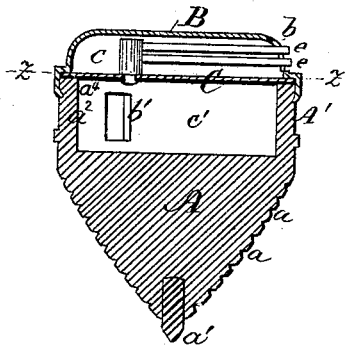


Fig. 5.

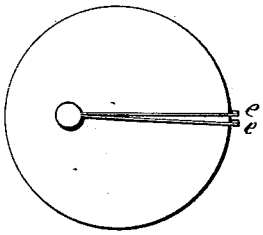


Fig. 7.

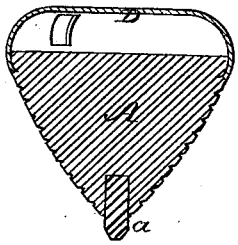
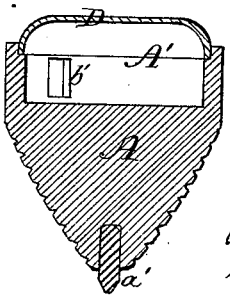


Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE T. JACOBS, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN SPINNING-TOPS.

Specification forming part of Letters Patent No. **217,876**, dated July 29, 1879; application filed November 22, 1878.

To all whom it may concern:

Be it known that I, GEORGE T. JACOBS, of Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Tops; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is an elevation of my improved top. Fig. 2 is a vertical section taken on line *x y*, Fig. 5. Figs. 3 and 4 are sectional views, showing an additional feature of invention; and Fig. 5 is a transverse section on line *z z*, Fig. 4.

The object, primarily, of my invention is to produce, as a new article of manufacture, a peg-top which will hum.

A peg-top as ordinarily constructed is formed of a solid block of wood, the lower part of which is conical in form, ribbed, and provided at the extreme lower end with a metal tip firmly inserted in the wood, the object of this peculiar construction being to insure sufficient weight and strength, both of the body of the top and of the tip to bear the blows and harsh usage to which it is subjected during the games which are played by children with this class of tops.

In my improved top I retain the strength and weight of the peg-top, and combine therewith a humming-chamber, the upper surface of which is of metal.

In the drawings, A is the lower conical portion of the top, provided with the usual grooves *a*, to facilitate the winding of the cord which is employed to spin it. a^1 is the tip or pin inserted in the lower end of the part A.

The upper end, A′, is preferably cylindrical in form, and is chambered or recessed, as shown in Fig. 2, leaving an upwardly-projecting flange, a^2, extending around its periphery, except at *b′*, where an opening is formed into the chamber. B is a cap, made by preference from sheet metal, by any of the well-known methods of swaging or stamping. C is a plate or diaphragm extending across the cap B in such manner as to form an inclosed chamber, *c*, which is provided with an opening, *b*. The cap B and plate C are firmly secured to the upper part, A′, of the top in such manner as to form a second chamber, *c′*.

In practice I usually prefer to solder the plate C to the cap B, and then insert these parts within the flange a^2, as is indicated in Fig. 2; but under some circumstances there may be a shoulder formed upon the inner face of the flange, upon which shoulder the plate is placed, and held in position by the lower edge of the cap, which fits tightly within the flange without the metal parts being soldered together; or the cap may be formed with a shoulder, as at *b′*, Fig. 3, or with a groove at the same point, within which or upon which the plate C is confined when the parts are in the position shown in said Fig. 4; or the cap may be made of such size that it will inclose the upper part, A′, as in Fig. 4, in which case the plate C may rest upon the upper edge of flange a^2, the lower edge of the cap being spun over a rib or shoulder, a^4, or into a groove formed in the top at that point; or the lower edge of the cap may be prick-punched into the wood or otherwise secured.

Many other equivalent methods might be employed for securing the cap and plate in position.

e e (see Figs. 3, 4, and 5) are reeds secured centrally to the plate C in such position that their outer or free ends project through the opening *b* or *b′* to a short distance beyond the periphery of the top. When preferred, a single reed may be used, and the end or ends may be loaded or made of increased thickness.

It will be observed that the opening *b* is much smaller than the opening *b′*, and that the chamber *c* is somewhat smaller than the chamber *c′* immediately below it in the part A′ of the top.

The object of this feature of construction is this: I have found that when the top is running at a high rate of speed the humming or whistling sound is emitted from the larger opening only, and that at a slower rate of speed the sound is emitted from the smaller opening only; hence, by providing a top with two independent chambers, each having an independent opening, I am enabled to maintain the humming during a much greater portion

of the time which a top will spin than could be done with a single chamber.

The action of the air upon the projecting ends of the reed as the top is spinning causes it to vibrate and produce a pleasant sound, and the pitch of the tone which is produced by the chamber *c* is different from that of the tone produced by the chamber *c'*, thus adding to the attractiveness of the top as a toy.

In Fig. 6 I have shown a simpler form of the first part of the invention, in which but a single chamber is employed, made preferably by chambering the upper part, A', of the top, and applying thereto an inclosing-cap, D.

By preference I make the plate C of very thin metal, in order that it may easily vibrate by the action of the air or by the motion of the top, thereby adding to the volume of the tone produced. The flexibility of plate C also increases the vibration of the reed or reeds *e*.

The reed or reeds might be mounted upon the wooden part of the top; but I prefer to support them as shown. So, also, the chamber might be formed by means of a cap, of metal or other suitable material, attached to the upper end of the wooden part of the top, as indicated in Fig. 7, or in any other suitable manner.

Many other methods might be adopted for providing such tops with humming-chambers without departing from that part of my invention.

It will be readily seen that my top possesses many advantages over one made entirely of either wood or metal. For instance, if it were wholly of metal, it would be altogether too heavy for use; and, further, it would be impossible to impart to it a sufficiently rapid rotation by the use of a string in the act of spinning, while if made wholly of wood it would be impossible to make the walls of the chamber of sufficient strength to bear the blows and shocks to which it will ordinarily be subjected by boys when playing the common games with tops.

Again, the cost of manufacture is much reduced by making the lower solid part of wood, which can be easily turned into the requisite shape, and the upper part of metal, which can be stamped or struck out from flat sheets.

What I claim is—

1. As a new article of manufacture, a top constructed with a solid wooden conical base, provided with a metallic pin at its lower end and an upwardly-projecting flange at its upper end, in combination with a metal cap inserted within said flange, substantially as set forth.

2. A top provided with two humming-chambers of unequal sizes, the larger chamber having an opening of a size greater than the opening in the smaller chamber, substantially as set forth.

3. As a new article of manufacture, a top constructed with a solid conical wooden base, provided with a metallic pin and an upwardly-projecting metallic humming-chamber, substantially as set forth.

4. A top provided with a reed having one end arranged to project into the opening in the side of the top, substantially as set forth.

5. In a top, a flange projecting from the upper end, and provided with a shoulder to receive and support the base-plate C, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

GEORGE T. JACOBS.

Witnesses:

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H. H. DOUBLEDAY.