(No Model.)

J. J. CARR.

SPINNING TOP OR TOY.

No. 432,476. Patented July 15, 1890.

FIG. 4.

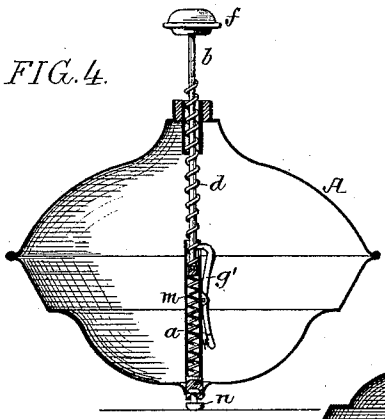


FIG. 1.

FIG. 3.

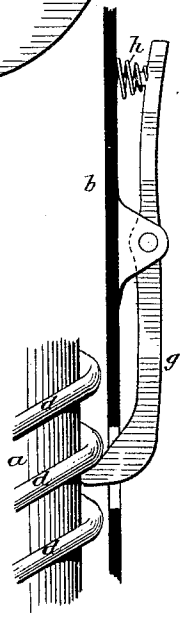


FIG. 5.

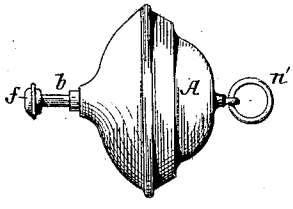
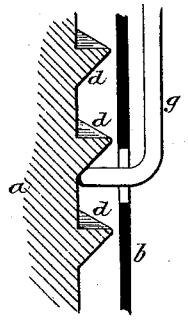


FIG. 2.



Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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SPINNING TOP OR TOY.

SPECIFICATION forming part of Letters Patent No. 432,476, dated July 15, 1890.

Application filed April 8, 1889. Serial No. 306,295. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH J. CARR, a citizen of the United States, and a resident of Wilkes-Barré, Luzerne county, Pennsylvania, have invented certain Improvements in Spinning-Tops or Like Toys, of which the following is a specification.

The object of my invention is to so construct a top or like toy that the spinning of the same can be effected by a simple movement of an operating stem or handle, no winding-cord being necessary. This object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section, partly in elevation, of a spinning-top constructed in accordance with my invention. Fig. 2 is an enlarged section of part of the same; and Figs. 3, 4, and 5 are views illustrating modifications of the invention.

A represents the body of the top, which in the present instance is a hollow structure composed of sheet metal spun into appropriate form, although it will be understood that the top may be made of other material, and may, if desired, be solid, with the exception of the central opening for the reception of the spinning device.

The device, as shown in Fig. 1, consists of a spinning-rod *a*, secured to and projecting upward within the top, and a spinning-stem *b*, which is free to move vertically through an opening in the upper portion of the top. The spinning-rod *a* has formed upon it an external screw-thread *d*, of comparatively steep pitch, and the spinning-stem *b* is tubular, so that it can be moved up and down over the spinning-rod *a*, the upper end of said spinning-tube being by preference provided with an operating knob or button *f*, so that pressure can be conveniently applied to the same.

To the outside of the tube *b* is pivoted a lever *g*, one arm of which is acted upon by a spring *h*, the tendency of which is to maintain the end of the other arm of the lever in engagement with the screw-thread *d* of the spinning-rod, said engaging end of the lever being preferably abrupt on its under side and inclined or beveled on its upper side, as shown more clearly in Fig. 3, or the thread *d* may, if desired, be abrupt on the upper side and beveled on the under side, in which case the beveling of the end of the lever will not be necessary. (See Fig. 2.)

Within the spinning-tube *b* and between the knob or button at the upper end of the same and a cap *i* at the upper end of the spinning-rod *a* is interposed a coiled spring *m*, the tendency of which is to maintain the spinning-tube *b* at the limit of its upward movement. When the tube is forced downward by pressure exerted upon the knob or button *f*, the engagement of the lever *g* with the screw-thread *d* of the spinning-rod *a* causes the latter to turn until the engaging end of the lever *g* has reached the bottom of the thread. If pressure is now removed from the knob or button *f* at the upper end of the spinning-tube, the spring *m* will cause the same to rise, the end of the lever *g* yielding as it passes each convolution of the thread *d* on the spinning-rod, owing to the bevel of the engaging-faces of the thread and lever. A further depression of the spinning-tube will in like manner impart a further forward impulse to the spinning-rod *a*, and hence to the top, and by depressing the spinning-stem *b* a number of times in succession the top may be caused to rotate with extreme rapidity.

Instead of forming the thread *d* upon the spinning-rod and providing the spinning-stem with a spring finger or catch for engaging with said thread, the relation of the parts may, if desired, be reversed, as shown, for instance, in Fig. 4, in which the thread *d* is formed upon the spinning-stem *b*, and the spinning-rod *a* of the top is hollow and contains the spring *m* for elevating the spinning-stem, a spring-catch *g'* being secured to or forming part of the spinning-rod for engaging with the thread of the stem as the latter is pushed downward and slipping over said thread as the latter rises under the influence of the spring *m*. The lower end of the spinning-rod *a* projects beyond the casing of the top and has a supporting-button *n* swiveled thereto, this button forming a fixed base or step on which the top can spin without detriment to the supporting-surface, the provision of such a supporting button or step, moreover, insuring the

spinning of the top as readily and easily upon a carpet or other soft surface as upon the table, floor, or other hard and unyielding surface.

If instead of the base or step a ring *n'* or like attachment for the finger is used, as shown, for instance, in Fig. 5, the top is transformed into a whizzer or buzzing toy, the ring being adapted to a finger of one hand, and the stem *b* operated by the thumb of the same hand or by the other hand.

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

1. The combination of a top or like toy with a spinning or rotating device therefor consisting of a spinning-rod secured to the top and a spinning-stem free to move in and out, one of said parts having a screw-thread and the other having a finger or catch which engages with the screw-thread and imparts rotating movement when the spinning-stem is moved in one direction, but yields when the stem is moved in the opposite direction, whereby the retraction of the stem can be effected without causing reverse rotation, substantially as specified.

2. The combination of a top or like toy with a spinning or rotating device therefor consisting of a spinning-rod secured to the top, a spinning-stem free to move in and out, and a spring for retracting said stem after it has been depressed, one of said parts having a screw-thread and the other having a finger or catch which engages with said thread and turns the spinning-rod when the spinning-stem is moved in one direction, but yields on the movement of the stem in the opposite direction, substantially as specified.

3. The combination of the top or like toy with a spinning or rotating device therefor consisting of a spinning-rod secured to the top and having a screw-thread, a spinning-stem free to move in and out, a spring for retracting the stem after it has been depressed, a lever hung to the stem, and a spring acting on one arm of said lever, so as to maintain its other arm in engagement with the thread of the spinning-rod, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH J. CARR.

Witnesses:
JOHN E. PARKER,
HARRY SMITH.