(No Model.)

M. DANNHORN.

TOY OR SPINNING TOP.

No. 245,141. Patented Aug. 2, 1881.

Fig 1.

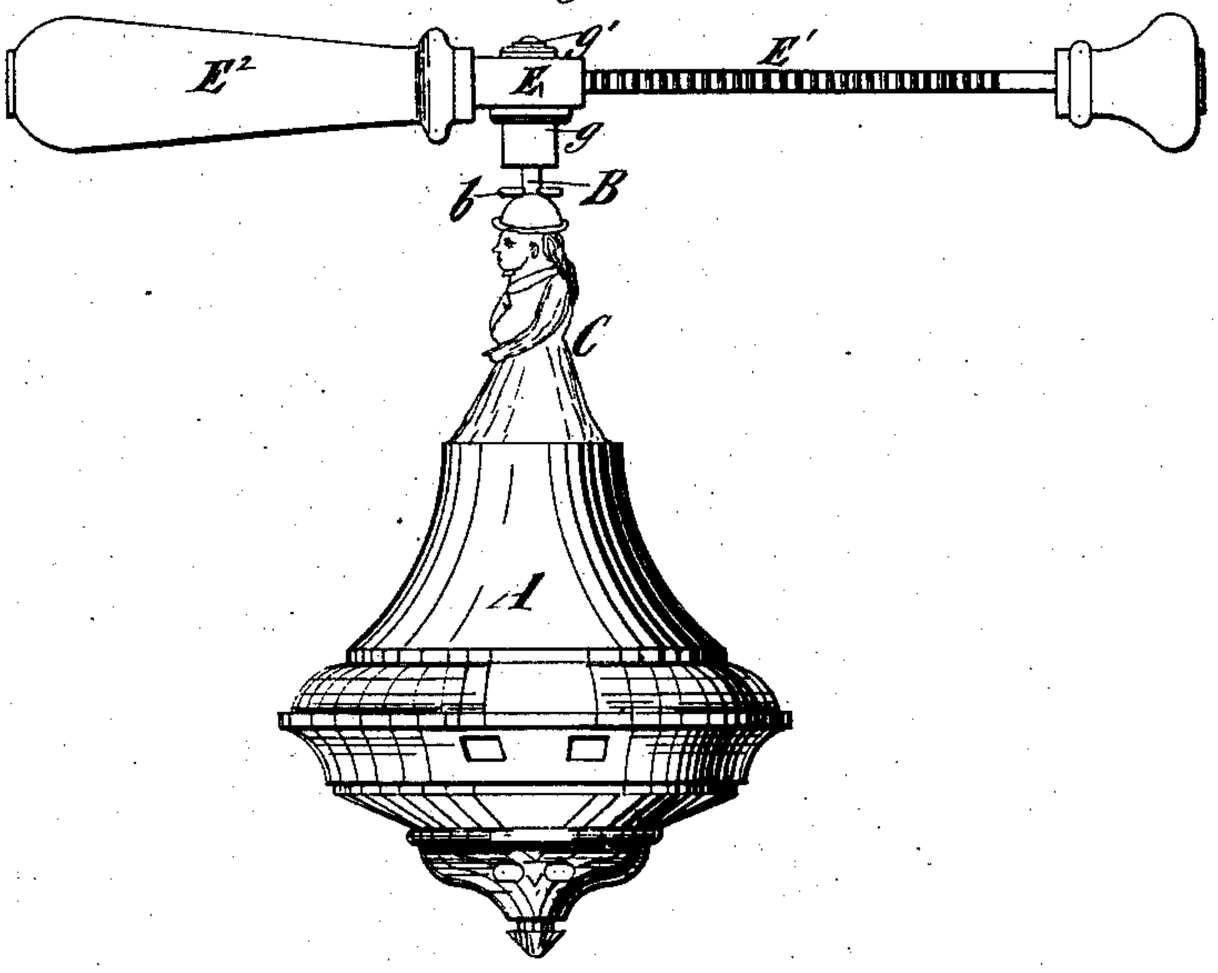


Fig 3.

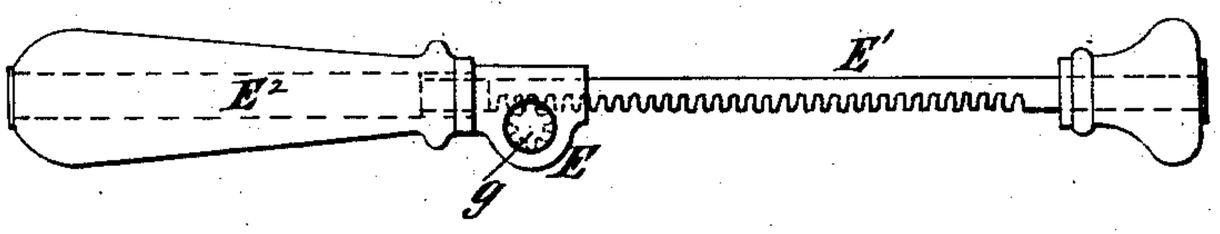


Fig 4.

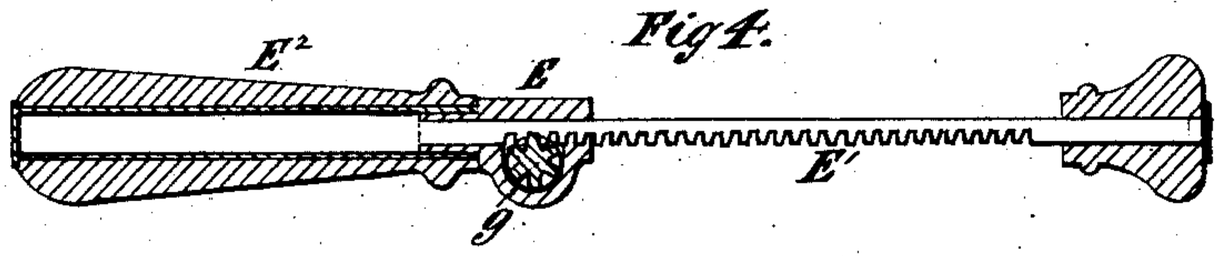


Fig 2.

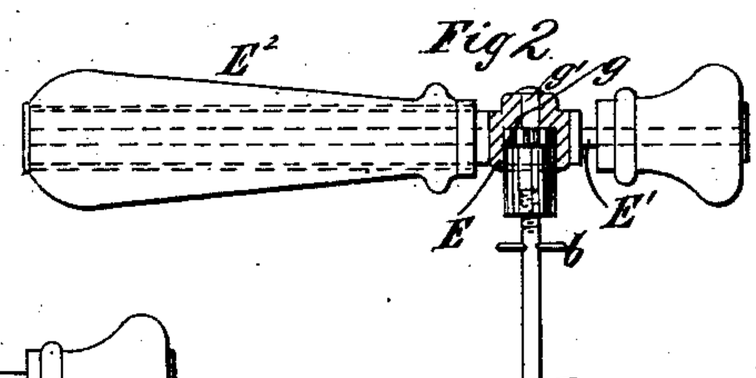
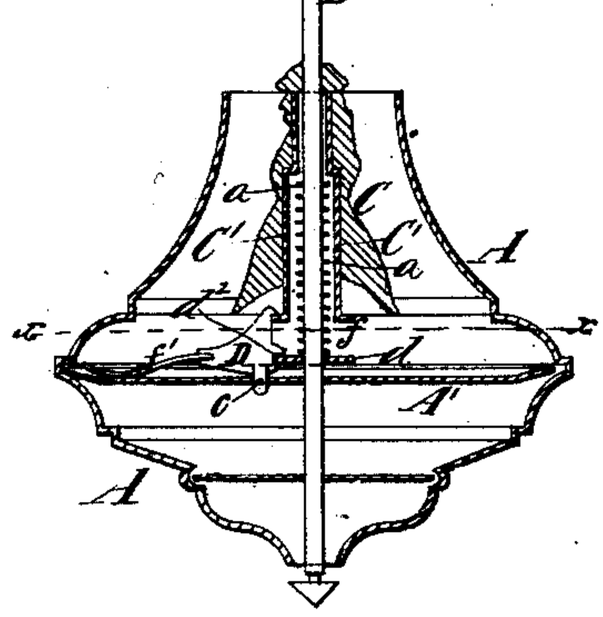


Fig 5.



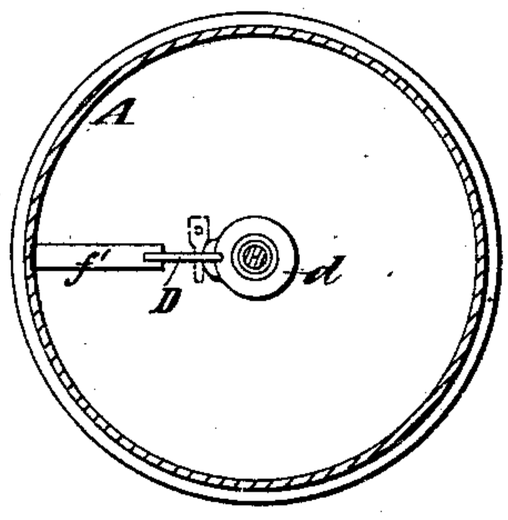


Fig 7.

Fig 6.

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UNITED STATES PATENT OFFICE.

MAX DANNHORN, OF NUREMBERG, GERMANY.

TOY OR SPINNING TOP.

SPECIFICATION forming part of Letters Patent No. 245,141, dated August 2, 1881.

Application filed June 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, MAX DANNHORN, of Nuremberg, Germany, have invented a new and useful Improvement in Toys or Spinning Tops, of which the following is a specification.

My invention consists in the combination, in a toy, of a rotary swivel case or shell, open at the top and having a longitudinal movable stem or spindle, a doll or image fitting therein and adapted to be impelled upward by a spring, so as to project above the swivel-case, and a catch which serves to hold the doll or image within the case or shell, and which is released by the movable spindle striking the ground, thus permitting the spring to elevate the doll or image above the case at the instant the spindle strikes the ground.

It also consists, in the combination, with the aforesaid toy, of a novel device for rotating it, as hereinafter fully described.

In the accompanying drawings, Figure 1 represents a side view of my improved toy; Fig. 2 represents a central vertical section thereof. Figs. 3 and 4 represent, respectively, a plan and horizontal section of the device for rotating the toy. Fig. 5 represents a horizontal section on the dotted line *x x*, Fig. 2. Fig. 6 represents a side view of the spindle of the toy and other internal mechanism; and Fig. 7 represents a plan of a flange fitting on the spindle, and hereinafter described.

Similar letters of reference designate corresponding parts in all the figures.

A designates an ornamental swivel case or shell, of sheet metal, having an open top and a central spindle, B, which has a slight longitudinal movement therein.

C designates a doll or image, which may be made of plastic material, or otherwise, and is formed upon a metallic sleeve, C′, which is adapted to slide upon the spindle B, and the lower part of which is of enlarged diameter, so as to contain a spindle-spring, *a*. The doll or image C is adapted to fit within the shell or case A, as seen in Fig. 2, and is capable of being impelled upward by the spring *a*, through the open top of the said case or shell, as seen in Fig. 1, so as to project above the same.

In the upper part of the spindle B is a cross-pin, *b*, which forms a stop to limit the upward movement of the doll or image C.

A′ designates a horizontal plate extending across the plate or shell, and D designates a catch pivoted at *c* in said plate, and adapted to engage with a collar or flange, *d*, on the spindle B. In said collar or flange is a notch, *d′*, into which the catch D fits; and in said catch is a notch, d^2, with which the edge of the flange or collar *d* engages with said notch. Inasmuch as the collar or flange *d* is fast on the spindle, and the catch with which it engages is secured in the case or shell, it will be understood that the two said parts will always turn together. The catch D is hooked at the upper end, so as to engage with a flange, *f*, upon the lower end of the sleeve, C′, to hold the latter, with the doll or image, in its lowest position, as seen in Fig. 2, and the catch is impelled forward to engage with the flange *f* by a spring, *f′*, acting upon its back end. When the doll or image C is pressed down into the case or shell the flange *f* passes the nose of the catch D, and is held down by the catch engaging therewith; and when the toy is dropped onto the ground the spindle will be pressed upward, and the flange or collar *d*, acting upon the top of the notch d^2 in the catch D, will disengage the upper hooked end of the catch from the flange *f*, and leave the doll or image free to be impelled upward by the spring *a*.

I will now describe the device which I employ for rotating the toy.

E designates a box or stock-piece, in which is fitted a pinion, *g*, the shank *g′* of which extends through a hole in the top of said box and is riveted, leaving it free to rotate therein.

E′ designates a rack-bar, which is free to be reciprocated through a hole or slot in the box or stock-piece E, and engages with the pinion *g;* and E^2 designates a handle, to which the box or stock-piece E is secured, and which is made hollow to permit the bar E′ to be moved within it.

The upper end of the spindle B is screw-threaded, and is screwed into the hub of the pinion *g*.

In using my toy the rack-bar E′ is thrust into the box or stock-piece E, and the upper end of the spindle B is screwed into the pinion *g*. The rack-bar is then pulled quickly outward, and thus rotates the pinion *g*, and

with it the swivel case or shell and spindle. As soon as the rack-bar is fully pulled out the pinion ceases to rotate; but the swivel case or shell and spindle continue to rotate through their momentum until the spindle is unscrewed from the pinion *g*, whereupon the toy falls to the ground, and the spindle B is pressed upward by impact on the ground, thus releasing the doll or image and permitting it to be impelled upward by the spring *a*.

My improved toy, which, it will be seen, is susceptible of use in a manner somewhat similar to a top, will afford great amusement to children.

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

1. In a toy, the combination of a swivel case or shell, adapted to be rotated and having an open top, and a central spindle which is longitudinally movable, a doll or image fitting upon said spindle, a spring for imparting an upward movement to said doll or image, and a catch for holding the latter within the case or shell and adapted to be released by the upward movement of said spindle, substantially as specified.

2. The combination, with the toy comprising the swivel case or shell, the spindle provided at the top with a screw-thread, the doll or image, the spring, and the catch, of the rotating device comprising the stock-piece or box E, the pinion *g*, pivoted therein, the rack-bar E′, and the handle E², substantially as specified.

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

MAX DANNHORN.

Witnesses:
G. HEINRICH SCHMIDT,
HEINRICH LUZINGER.