(No Model.)

J. DOYLE.

SKATING TOY.

No. 260,671. Patented July 4, 1882.

Fig. 4

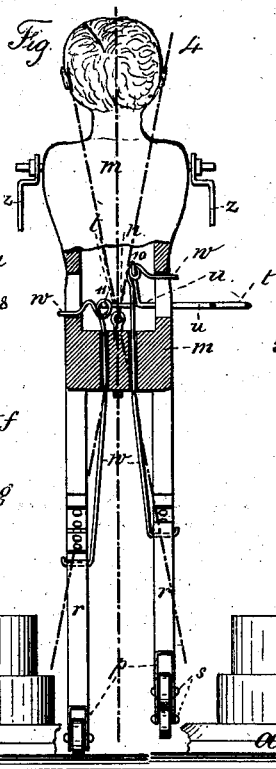


Fig. 2

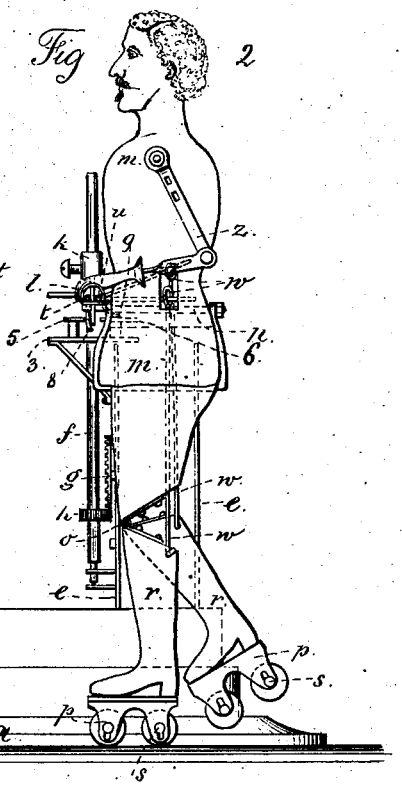


Fig. 3

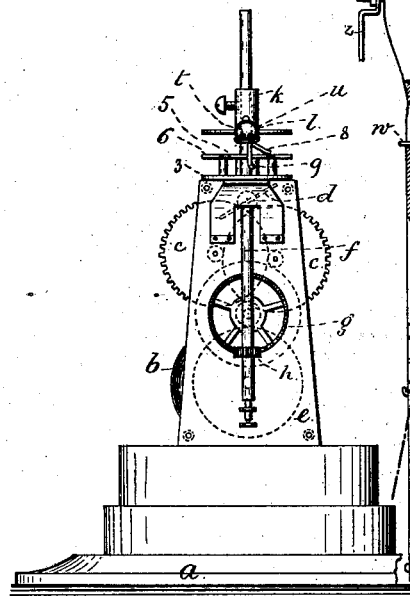


Fig. 5

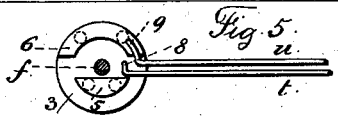
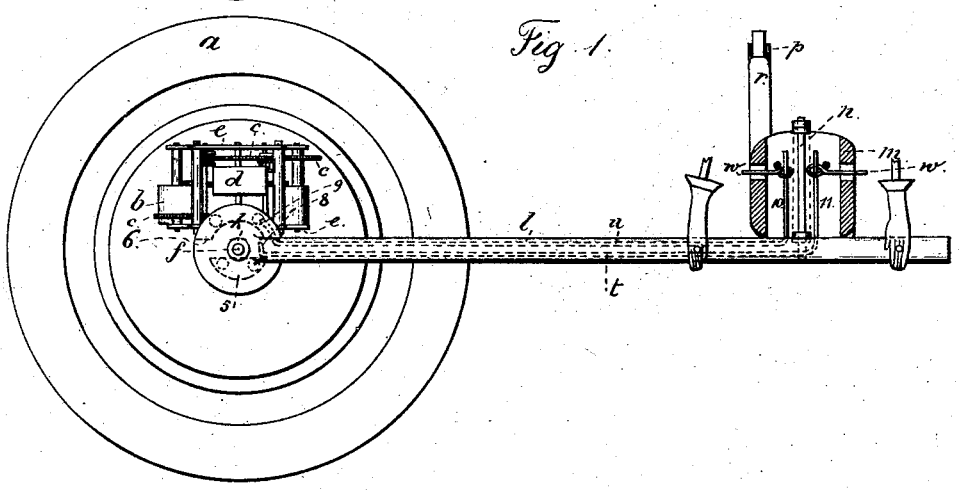


Fig. 1



Witnesses:

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per Samuel W. Serrell

Atty

UNITED STATES PATENT OFFICE.

JOHN DOYLE, OF HOBOKEN, NEW JERSEY, ASSIGNOR TO LEO SCHLESINGER, OF NEW YORK, N. Y.

SKATING TOY.

SPECIFICATION forming part of Letters Patent No. 260,671, dated July 4, 1882.

Application filed May 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN DOYLE, of Hoboken, in the county of Hudson and State of New Jersey, have invented an Improvement in Skating Toys, of which the following is a specification.

This invention relates to a figure that is carried around by a bar revolved by clock-work, such figure being provided with roller-skates and receiving a swaying movement from one side to the other to cause the figure to rest on the feet and skates alternately, and thus to imitate a skater as he goes around in a circle.

In the drawings, Figure 1 is a plan view with the figure in section. Fig. 2 is an elevation of the figure and mechanism endwise of the supporting-bar, and Fig. 3 is a section at the inner end of the bar. Fig. 4 is a rear view of the figure, partly in section; and Fig. 5 is a detached view of the cams that raise the feet and sway the figure.

There is a base having sufficient weight to render the toy steady. Upon this base *a* is supported a spring-power consisting of the spring *b*, train of gearing *c*, and fly *d*, within the frames *e*.

The vertical shaft *f* is sustained in supports upon one of the frames *e* and revolved by the wheels *g h*. Near the upper end of the shaft *f* there is a hub, *k*, and a hollow bar, *l*, extending out horizontally or nearly so. Upon this bar, near the outer end, there is a horizontal stud, *n*, extending out at right angles to the bar and forming a gudgeon for the support of the toy figure, and on which such figure is swayed first one way and then the other way by the means hereinafter described. The figure itself is to be either a male or female figure and of any desired size, and the stud *n* passes into the lower part of the body *m*. The lower limbs, *r*, of the legs are hinged at *o*, and a roller-skate, *p*, is applied at the bottom of each foot.

Each skate is made with two rollers, and the pivot-pins *s*, upon which such rollers turn, are in slots in the skate-body, so that such rollers may rest upon the surface of a table or other support, and rise and fall to accommodate slight inequalities.

Within the hollow bar *l* there are two parallel wires, *t* and *u*, with crank ends, and upon the stationary disk 3 there are two segmental cams, 5 and 6, one nearer to the center shaft than the other, and the cam 5 is adapted to act upon the crank end 8 of the wire *t* and the cam 6 to act upon the crank end 9 of the wire *u* as the gearing revolves such shaft and arm.

At the toy figure the wire *u* is bent to form a crank-arm, 10, that passes into such figure, and the wire *t* is similarly bent to form the crank-arm 11. A wire link, *w*, is applied to each leg. At the lower end there is an offset or bend in the wire passing into a hole in the leg at the back part, so that the lower part of the leg will be swung backwardly when this link *w* is drawn up.

At the upper end each link is formed with an eye, and one eye is passed over the crank end 10 of the wire *t*, and the other link-eye is passed over the crank end 11 of the wire *u*. Hence as the toy figure is carried around by the train of gearing and spring the wire *t* is partially turned by its crank end 8 coming in contact with the cam 5. This, by the crank 11, draws up the link *w*, swings the left leg back, lifts it up, and raises that side of the toy figure, causing the right leg to come down in position for the skate to rest on the table. When the bar and figure reach the opposite part of the revolution the wire *u* is partially turned by its end 9 coming into contact with the cam 6, and the crank 10, at the other end of the wire *u*, raises up the link *w*, lifting the right foot of the figure and swaying the upper part of the figure to the left, so that the left foot and skate come down to position for resting on the table, and so on the figure changes position each half-revolution.

The figure has jointed arms 2, with hands resting upon the turning bar. Such hands preferably have wires on the under surface, passing through holes in the bar.

The links *w* are represented as bent at right angles at their upper ends and passing into slots at the sides of the figure. If the length of these slots is less than the motion given by the crank-arms to the links, the upper ends of

the links will aid in swaying the figure by coming in contact with the figure at the ends of the slots.

I claim as my invention—

1. The combination, with a spring and gearing, of a vertical shaft, a bar carried by such shaft, a toy figure having hinged legs and skates on the feet, and a pivot on which such toy figure can be swung, substantially as set forth.

2. The combination, with the spring-gearing and vertical shaft, of a bar, a toy figure with the hinged legs, a pivot for attaching the figure-links connecting to the hinged legs, wires passing through the bar, and cams for giving motion to such wires and figures, substantially as set forth.

3. The combination, with a bar revolved automatically, of a toy figure having hinged arms and legs, and skates on the feet, and mechanism, substantially as set forth, for raising the feet successively and swinging the figure, substantially as set forth.

4. The combination, with the toy figure, of roller-skates connected with the feet, substantially as set forth.

5. The combination, with the toy figure having hinged legs and mechanism for supporting and moving such toy, of roller-skates having slots for the axes of the rollers, substantially as set forth.

Signed by me this 4th day of May, A. D. 1882.

JOHN DOYLE.

Witnesses:

GEO. T. PINCKNEY,

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