W. L. HUBBELL.

Toy-Gymnast.

No. 161,963. Patented April 13, 1875.

Fig. 1.

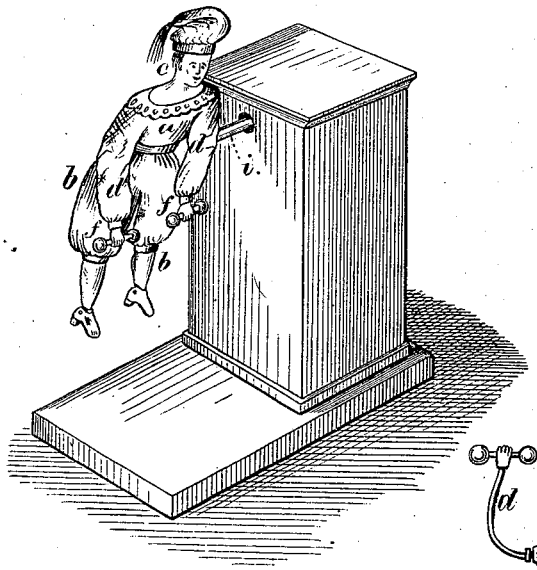


Fig. 3.

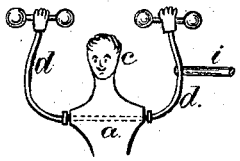
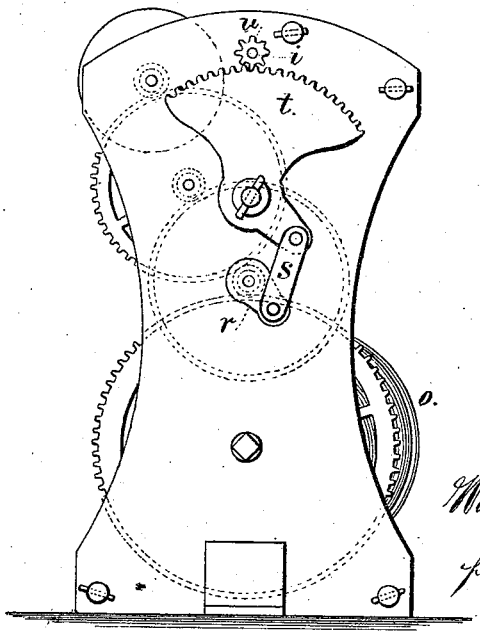


Fig. 2.



Witnesses

Chas. H. Smith

Geo. T. Pinckney

Inventor

William L. Hubbell.

per L. W. Serrell

atty

UNITED STATES PATENT OFFICE.

WILLIAM L. HUBBELL, OF NEW YORK, ASSIGNOR TO RAYMOND JENKINS, OF BROOKLYN, N. Y.

IMPROVEMENT IN TOY GYMNASTS.

Specification forming part of Letters Patent No. **161,963**, dated April 13, 1875; application filed March 16, 1875.

To all whom it may concern:

Be it known that I, WILLIAM L. HUBBELL, of the city and State of New York, have invented an Improvement in Toy Gymnasts, of which the following is a specification:

Toys have been made in which the figure revolves upon a vertical pivot—as a dancer—or turns over a bar or cord which is attached to the hands. In the latter case, the figure, in some positions, hangs from the hands, and hence the distance from the turning-point to the platform has to be sufficient to allow the figure to pass and only touch the feet, and as the figure rises the clock movement, or other power applied, has to be sufficient to lift the weight of the figure with a leverage equal to the length of the arms; hence considerable force is expended, and the train of gearing will run but a short time.

My invention is made for lessening the movement of the toy figure, and the consequent force required to move it, and at the same time obtaining an equally amusing toy.

I unite the actuating power at or near the elbow of the figure, to lessen the leverage, and to make the hands describe a circle while they carry dumb-bells or other articles. The figure as it vaults or turns a somerset is against the hands, and the movement is made in a graceful and amusing manner.

In the drawing, Figure 1 is a perspective view of the toy. Fig. 2 is an elevation of the gearing to actuate said figure; and Fig. 3 is an elevation of a portion of the gymnast.

The figure consists of the body *a*, legs *b*, and head *c*. The legs are preferably jointed. The arms *d* are connected together by a wire passing freely through the shoulders, so that the arms may swing together, and the hands *f* turn over to the back or the front. The shaft *i* is connected to one of the arms at or near the elbow, and it is moved by the gearing, so as to make nearly two revolutions in one direction, then two revolutions in the other direction, and so on. During these motions the figure comes down on its feet, and the hands are raised and thrown over the head. The continuation of the movement causes the figure to turn a somerset upon the hands in one direction, and then the shaft *i*, revolving the other way, the movements of the figure are reversed.

The spring *o* actuates the crank *r* through intermediate gear-wheels, and by the link *s* gives a rocking movement to the segment *t*, that revolves the pinion *u* upon the shaft *i*. The length of movement given by the crank is such as to revolve the shaft *i*, and turn the figure in the manner before described.

This gearing and mechanism for moving the toy figure is very simple, cheap, and durable.

I claim as my invention—

1. The toy gymnast or figure, made with arms, connected to each other, and passing loosely through through the figure, in combination with a shaft attached to one of the arms near the elbow, and which acts to raise the figure and turn it over, as set forth.

2. The shaft *i*, attached at or near the elbow of the toy figure, in combination with the pinion *u*, segmental gear *t*, link *s*, crank *r*, and its actuating gearing, substantially as set forth.

Signed by me this 11th day of March A. D. 1875.

WM. L. HUBBELL.

Witnesses:
GEO. T. PINCKNEY,
CHAS. H. SMITH.