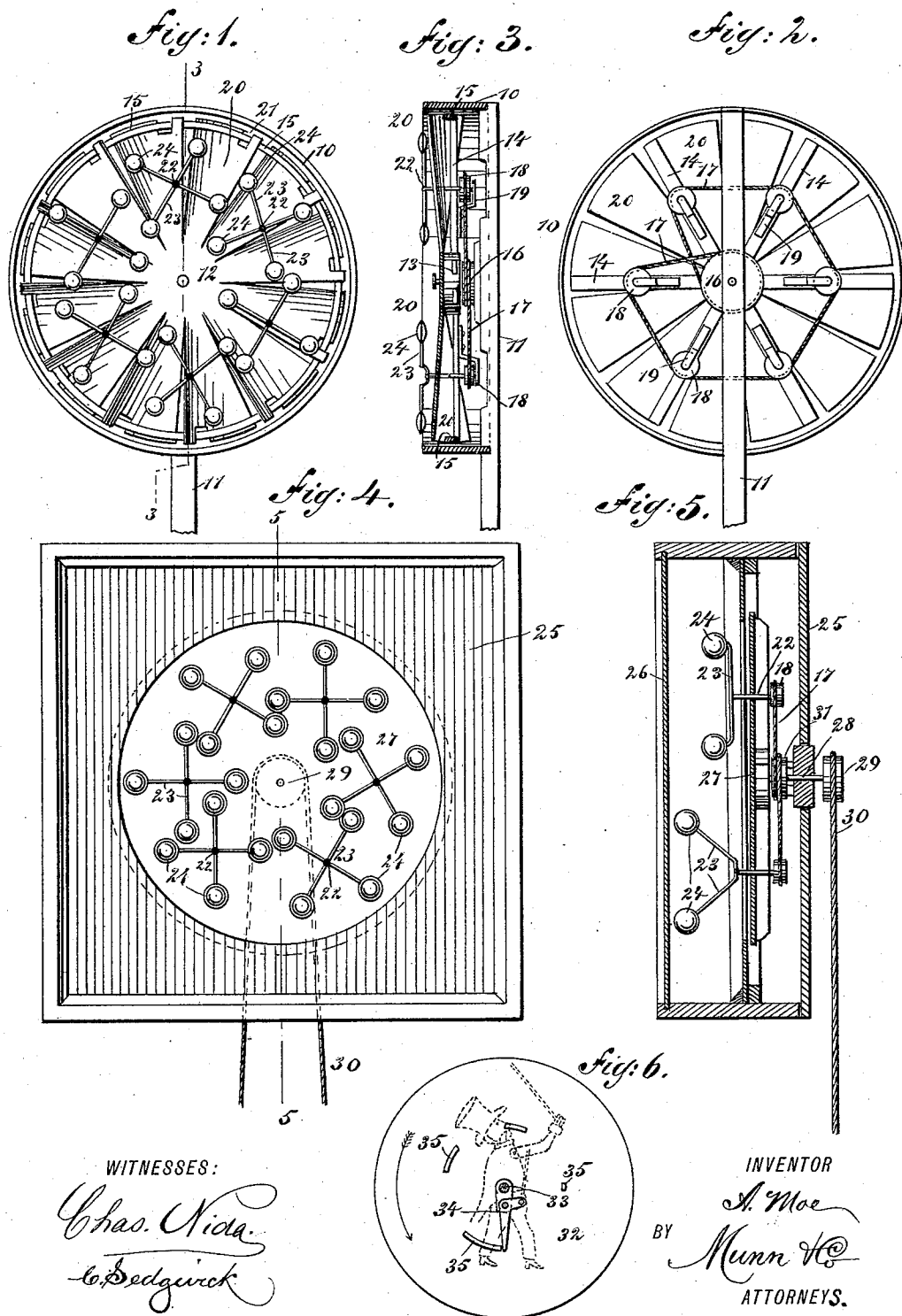


(No Model.)

A. MOE.
WHIRLIGIG.

No. 475,594.

Patented May 24, 1892.



UNITED STATES PATENT OFFICE

ALFRED MOE, OF JERSEY CITY, NEW JERSEY.

WHIRLIGIG.

SPECIFICATION forming part of Letters Patent No. 475,594, dated May 24, 1892.

Application filed April 18, 1891. Serial No. 389,409. (No model.)

To all whom it may concern:

Be it known that I, ALFRED MOE, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Advertising Device, of which the following is a full, clear, and exact description.

My invention relates to an improvement in advertising devices; and the object of my invention is to produce a simple device which is capable of imparting unique and apparently erratic movements to various figures, so as to attract attention, and which is also adapted for use as a toy.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the device, showing it as arranged for a windmill. Fig. 2 is a rear elevation of the same. Fig. 3 is a vertical section on the line 3 3 in Fig. 1. Fig. 4 is a front elevation of a modified form of the device which is to be mechanically operated. Fig. 5 is a cross-section of the same on the line 5 5 in Fig. 4, and Fig. 6 shows another modified form of the device adapted to operate movable figures or automatons.

When used as a windmill, the fans of the mill form the background of the device, and the windmill is preferably arranged in a circular frame 10, which is carried by a central support 11, and pivoted on this support is the wind-wheel 12, the frame-work of which consists of a central hub 13, a series of radiating ribs 14, which are secured to the hub, and a circular band 15, which turns within the frame 10 and which is secured to the outer ends of the ribs 14. A grooved pulley 16 is fixed to the support 11 immediately behind the hub 13, and extending over this pulley is a cable 17, which also extends over a series of pulleys 18, which pulleys are arranged circumferentially around the hub of the wheel and are pivoted to keepers 19, which are attached to the ribs of the wheel. The wheel is provided with the usual series of fans 20, and these fans

are cut away at their outer ends, as shown at 21, so as to embrace the band 15, and the band will thus serve as a support for the fans. The axles 22 of the pulleys 18 project through the fans 20 and terminate at their front ends in radially-extending arms 23, and these terminate in balls 24. The particular arrangement of the arms is not material, however, and instead of balls other articles may be attached to the arms.

The wheel 12 is preferably made of a dark color and the balls 24 are preferably of very bright color, which contrasts strongly with the dark background of the wheel. When the wheel is actuated by the wind, it will be seen that the axles 22 and the balls supported thereby will be carried around with the wheel, and it will also be seen that the action of the wheel upon the belt 17 and pulleys 18 will cause the pulleys and the axles 22 to revolve independently of the main wheel, and thus the balls will have a double movement.

It will be seen that as the central pulley 16 is much larger than the pulleys 18 the balls 27 will have an axial movement much more rapid than their circumferential movement around the main axle of the wheel, and as a result the effect is somewhat bewildering and the rapid movements of the balls make them appear to represent continuous scintillating lines.

As shown in the drawings, the rotating balls will produce a star-like figure, the points of the star appearing at the outer extremities of the balls' rotation; but it will be readily seen that the balls may be changed for other articles and that they may be arranged to produce various figures.

As shown in Figs. 4 and 5, the device is arranged in a hollow case or frame 25, which may be provided with a glass front 26, and in lieu of the wind-wheel a mechanically-rotated disk 27 is substituted, which disk is secured to an axle 28, and the axle is mounted in the case or frame and is provided at its outer end with a pulley 29, which may be driven by a cable belt 30, as shown in the drawings, or may be driven by a clock-work or any suitable mechanism. The axle 28 extends through a grooved pulley 31, which is secured in the

frame and is similar to the pulley 16, already described, and the arrangement of the pulleys 18, axles 22, and balls 24 is substantially the same as in Figs. 1 and 2. The balls and disk 5 27 are made of contrasting colors, and when the disk is rotated it carries the balls with it, and the belt causes the balls to rotate on their independent axles 22 in the manner already described, and the effect is the same in this 10 form of the device as when the windmill is used.

In Fig. 6 I have shown the disk 32, which is adapted to be rotated in the same manner as the disk 27 is rotated, and arranged loosely 15 on the axle 33 of the disk are cam-levers 34, which are connected with the various movable parts of a figure, which is suspended in front of the disk, as indicated by dotted lines in the drawings, and a series of projections 20 35 are arranged on the face of the disk and are adapted as the disk revolves to strike the cam-levers and actuate the various parts of the figure or automaton, and it will be seen that the levers may be arranged so that the 25 figure may be given a life-like movement. The particular arrangement of the projections

and levers is not material, however, as I claim as my invention the means for actuating a movable figure by the rotation of a disk placed in the rear of the figure and forming a back- 30 ground for it.

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

1. An advertising device comprising a wind- 35 wheel, a series of figures carried by the wheel, and means for imparting a rotary movement to the figures independent of the movement of the wheel, substantially as described.

2. An advertising device consisting of a 40 windmill, a central stationary hub secured in the rear of the wind-wheel, a series of pulleys carried by the ribs of the wind-wheel and provided with axles which extend through to the face of the latter, figures secured to the axles, 45 and a belt connection between the pulleys on the ribs and the central pulley, substantially as described.

ALFRED MOE.

Witnesses:

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C. SEDGWICK.