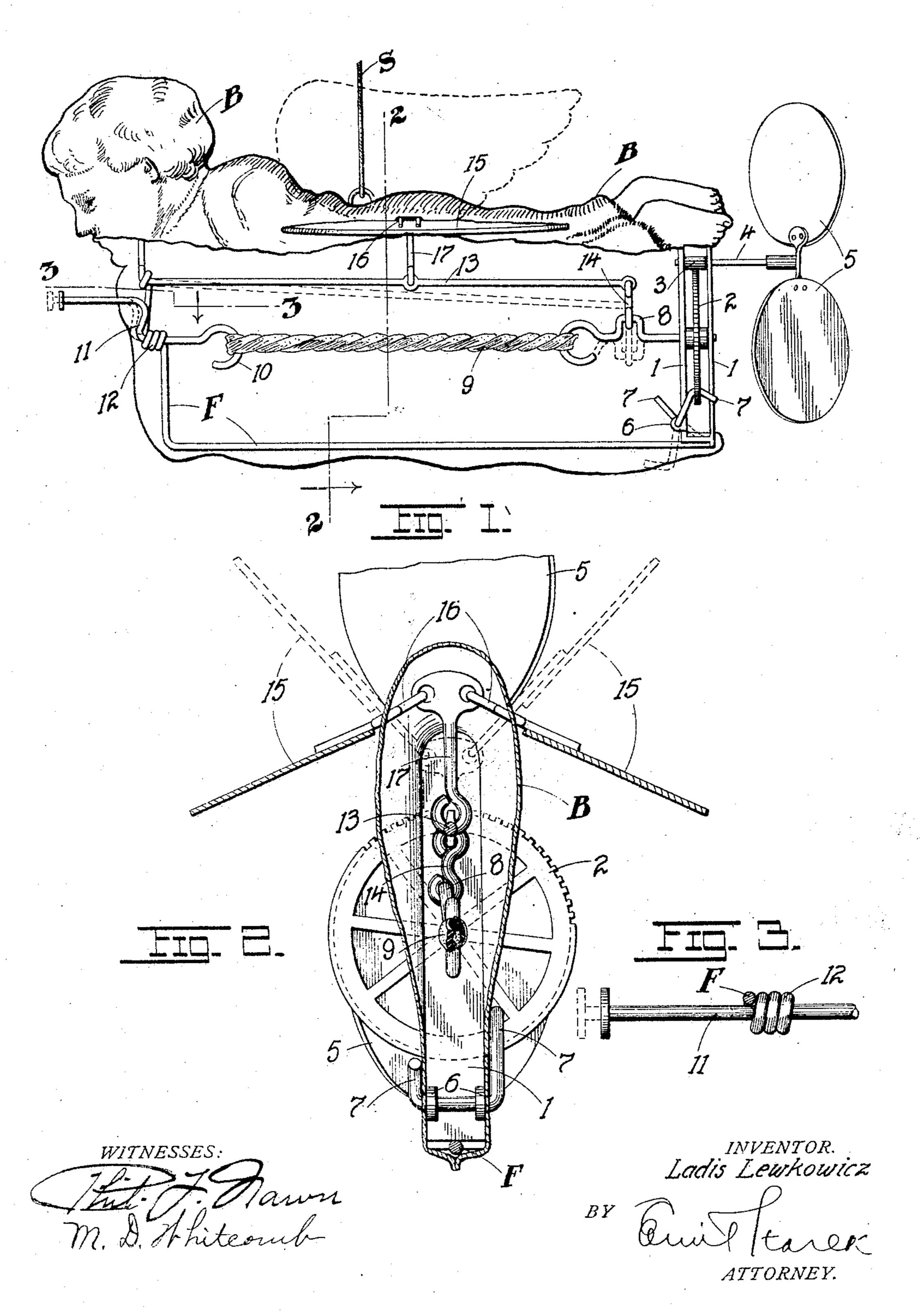
## L. LEWKOWICZ. FLYING TOY.

APPLICATION FILED JAN. 26, 1906.



## UNITED STATES PATENT OFFICE.

## LADIS LEWKOWICZ, OF ST. LOUIS, MISSOURI.

## FLYING TOY.

No. 829,660.

Specification of Letters Patent.

Patented Aug. 28, 1906.

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To all whom it may concern:

Be it known that I, Ladis Lewkowicz, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Flying Toys, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in flying toys; and it consists in the novel construction of toy more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my invention with parts broken away. Fig. 2 is a vertical transverse section on line 2 2 of Fig. 1, and Fig. 3 is a horizoutal section on line 3 3 of Fig. 1.

The object of my invention is to construct a toy figure of any design, human or animal, with suitable mechanism for impelling the same through the air about a point of suspension, such a figure in its flight constituting a source of amusement and pleasure. The character of the figure or body is immaterial, and while in the present instance I have illustrated a conventional "Cupid" any other design will fall within the spirit of my invention.

In detail the invention may be described as follows:

Referring to the drawings, B represents the body portion, the same having depending 35 therefrom a suitable wire frame F, the rear of the wire portion being connected to the body by the brackets 11, between which is mounted a gear-wheel 2. The teeth of the gearwheel mesh with a pinion 3, mounted be-40 tween the brackets, the shaft 4 of the pinion being extended rearwardly and terminating in a blade propeller 5. At the base of the brackets 1 1 are formed lugs or ears 6 6, in which is mounted the central portion of a 45 bent-wire trigger 7, which may be tripped so as to bring one end thereof between two consecutive spokes or radial arms of the gearwheel, and thus lock the same against rotation. The shaft of the gear-wheel 2 is pro-50 vided at its inner end with a crank-arm 8, which in turn is coupled to the adjacent end of a longitudinally-disposed motor or rubber band (or spring) 9, the opposite end of the band or motor being connected to the inner hooked 55 end 10 of a crank handle or arm 11, mounted 1 crank 8.

in the bearing 12 of the frame F. The bearing 12 is formed by coiling the wire of the frame through a certain number of wraps, as shown. The crank-arm 11 is susceptible of a slight longitudinal movement in the bearing 60 12, and when shoved inwardly its full limit the crank portion of the crank-arm bears against the wire portion of the frame, thus preventing the crank-arm from turning under the tension of the rubber band 9.

Formed with the frame F and disposed below the body B is a resilient oscillating wire member 13, fixed at one end, its free or opposite end being coupled to the crank-arm 8 by means of a link 14. Hinged to the sides of 70 the body portion are a pair of wings 15 15, the connection being effected by means of wire levers or supports 16, piercing the walls of said body, the inner arms of said levers being connected to the member 13 by a link 17, respectively looped about said member and about the adjacent ends of the short arms of the wing-supporting levers 16.

The operation of the device may be described as follows: The trigger 7 is first 80 tripped to a position to lock the gear-wheel 2 against rotation, Fig. 1. The crank-handle 11, being then pulled outward to the dotted position, Fig. 1, is rotated until the rubber. band (or spring) is wound up or considerably 85 twisted. The crank is then given a slight inward movement, so as to cause it to bear against the wire portion of the frame, Fig. 1, whereby rotation of the crank-handle under the tension of the twisted band is prevented. 90 The trigger 7 is then tripped to release the gear-wheel 2, (see dotted position of trigger, Fig. 1,) when the untwisting or unwinding of the rubber band will impart rotation to the shaft of the gear-wheel and to the gear-wheel 95 itself. This in turn imparts rotation to the pinion 3 and to the propeller 5. At the same time rotation is imparted to the crank-arm 8, which oscillates the member 13 about its fixed end, the oscillation of said member re- 100 ciprocating the link 17, which in turn oscillates the wing-supporting levers and the wings. The toy will thus sail through the air in a circle when suspended from the ceiling by a string or cord S. In lieu of the rub- 1.5 ber band I may of course substitute a coiled or any other form of spring which in the act of untwisting or unwinding will impart rotation to the shaft of the gear-wheel and its

Having described my invention, what I claim is—

1. A toy having a body portion, a frame depending therefrom, a propeller at the rear 5 end of the frame, a pair of oscillating wings on the body, a spring-motor, and intermediate connections for simultaneously revolving the propeller and oscillating the wings, sub-

stantially as set forth.

2. A toy having a body portion, a wire frame depending therefrom, a resilient member fixed at one end to the frame and disposed longitudinally thereof, a crank-shaft, a springmotor coupled to the shaft, a crank-handle 15 mounted in the frame forwinding said motor, a link coupling the free end of the member aforesaid with the crank-shaft, a pair of wings on the body, and link connections between the wings and said member for oscil-20 lating the wings with the unwinding of the motor, substantially as set forth.

3. A toy having a body portion, a wire frame depending therefrom, a crank-shaft at one end of the frame, a gear-wheel on the

shaft, a propeller impelled by the gear-wheel, 25 a longitudinal member fixed at the front end to the frame and having its opposite end coupled to the crank-shaft, a longitudinallymovable crank-handle, a bearing for the same formed in the frame by a series of suc- 30 cessive wraps coiled from the wire, a rubber band or spring having its opposite ends coupled respectively to the crank-handle and crank-shaft, a pair of wings hinged to the body, and a link connecting the wings to the 35 longitudinal member, the parts operating substantially as, and for the purpose set forth.

4. In a flying toy, a body portion, a rear propeller for the same, oscillating side wings, and means for operating said propeller and 40

wings, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

LADIS LEWKOWICZ.

Witnesses: EMIL STAREK, MARY D. WHITCOMB.