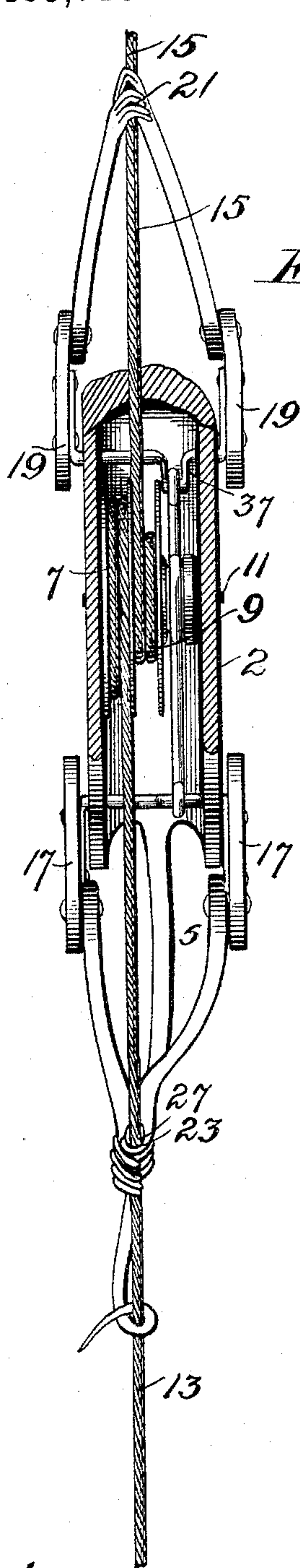


(No Model.)

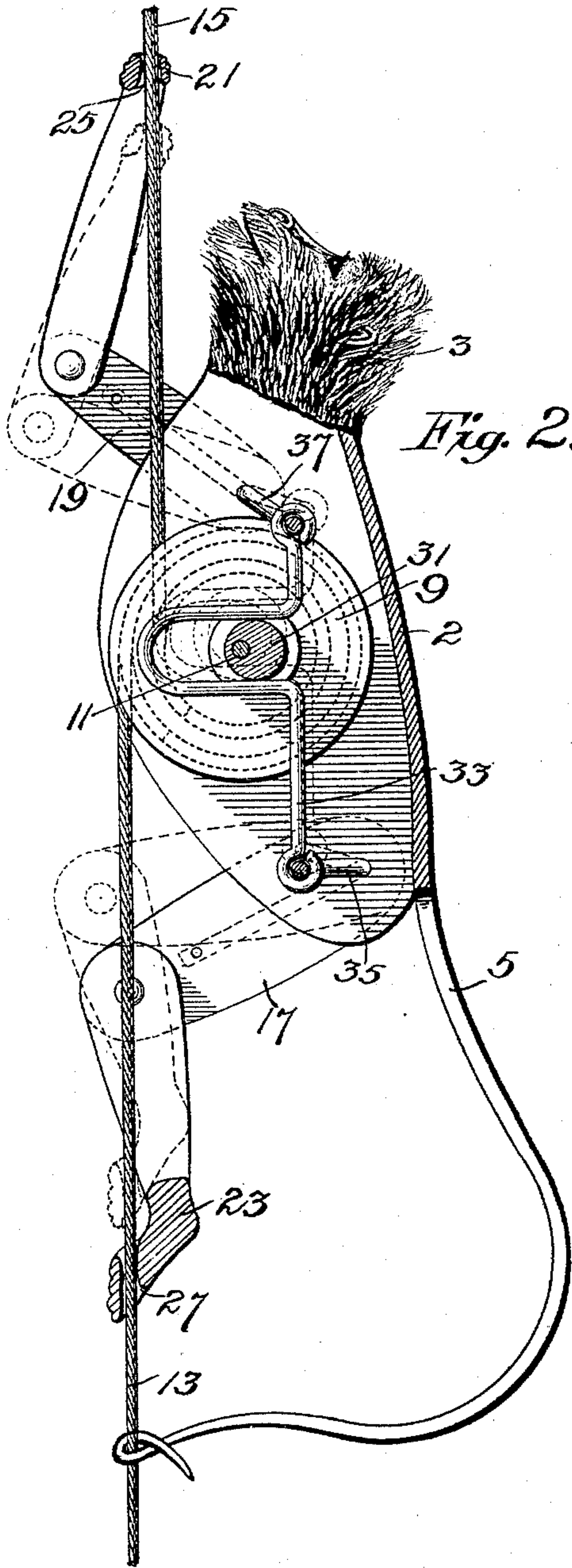
W. P. SHATTUCK.  
TOY.

No. 485,713.

Patented Nov. 8, 1892.



*Fig. 1.*



*Fig. 2.*

Witnesses,  
C. E. Van Dorem,  
C. J. Hawley.

Inventor,  
William P. Shattuck.  
By Paul Merwin Att'ys,



# UNITED STATES PATENT OFFICE.

WILLIAM P. SHATTUCK, OF MINNEAPOLIS, MINNESOTA.

## TOY.

**SPECIFICATION** forming part of Letters Patent No. 485,713, dated November 8, 1892.

Application filed December 1, 1891. Serial No. 413,686. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM P. SHATTUCK, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain  
5 Improvements in Toys, of which the following is a specification.

This invention relates to improvements in toys; and the object that I have in view is to provide a toy which can be made to move apparently automatically and with motions resembling those of a live creature; and the invention consists generally in a toy provided with differential wheels or pulleys having  
10 cords attached thereto and arranged so that by pulling upon one cord the toy will be made to move along the other cord or by releasing it will return to its former position.

The invention consists, further, in a toy of this class, provided with means for giving to  
20 its movable parts motions resembling those of an animal or living creature that the toy is intended to represent.

In the accompanying drawings, forming a part of this specification, Figure 1 is a vertical section of a toy embodying my invention.  
25 Fig. 2 is a section at right angles to the section of Fig. 1.

In the drawings, 2 represents the body of the toy, which is preferably made to represent the body of an animal, bird, or fish. As  
30 here shown, it is made to represent the body of a monkey provided with the head 3 and the tail 5. Arranged within the body is a differential pulley 7 9, the two parts of the pulley being of different diameters. This pulley is arranged upon a suitable axle 11, so as to turn freely in either direction. A cord 13 is wound upon one part of the pulley and a cord  
35 15 upon the other, and these cords are preferably arranged to extend in opposite directions from the body of the toy. The toy is also provided with the pivoted legs and arms 17 and 19 and with the ends 21 and feet 23. The legs and arms are also preferably jointed,  
45 being formed in two parts and said parts being pivoted together. The ends 21 are preferably provided with an opening 25, through which the cord 15 passes, and the feet 23 with the opening 27, through which the cord 13  
50 passes. I also prefer to provide the axle 11 of the pulley with a cam or eccentric 31, and this engages a connecting-rod 33, that is con-

nected at its ends with the cranks 35 and 37 upon the pivots of the legs and arms 17 and 19 of the toy. It will be seen that the toy as  
55 thus arranged is made to represent a monkey in the act of climbing a rope. By pulling on one of the cords one cord will be wound upon the pulley and the other will be unwound, and the difference in diameter of the two  
60 parts of the pulley will cause the toy to progress along one of the cords, so that by holding the cords in a vertical position and pulling upon one of them the figure will be caused to move up the cord and by slackening upon  
65 the cord the weight will cause it to go down again. The pulley rotates the eccentric, causes a vertical movement of the rod 33, thereby moving the legs and arms up and down and giving to these parts the appearance that  
70 the legs and arms of a live monkey would have in climbing up a rope.

It will be obvious that the figure that the toy is intended to represent may be varied without departing from my invention, and  
75 that in a similar manner the movements of any kind of living creature may be represented and toys may be constructed intended to represent almost any kind of living creature.  
8c

I claim as my invention—

1. A toy consisting of a body formed to represent a living creature, a differential pulley arranged therein, cords wound upon said pulley and extending from the front and rear  
85 thereof, parts upon said body movable in relation thereto and guided by said cords, and connections between said parts and the pulley-shaft for imparting motion to said parts.

2. In a toy, the combination, with a suitable figure, of movable limbs connected therewith, a differential pulley, cords connected with said pulley and arranged to guide said limbs, and means connecting said pulley and said movable limbs for operating said limbs.  
90 95

3. In a toy, the combination, with a suitable figure formed with jointed and movable limbs, of a differential pulley connected therewith, cords upon said pulley, means for guiding said limbs, and means connected with the  
100 axis of said pulley and with said limbs for operating the same as said figure is moved along said cords.

4. In a toy, the combination, with a suit-

able figure provided with upper and lower movable limbs, of a differential pulley connected with said figure, cords connected with said pulley and extending from the opposite ends 5 of said figure, and means connecting the axle of said pulley with said limbs for moving said limbs back and forth along said cords as said figure is moved in either direction.

5. The combination, with a body, of movable limbs connected therewith, a differential pulley arranged therein, a cam provided in connection with said pulley, two cords wound on the same, crank-rods arranged in connec-

tion with the limbs, and a connecting-rod extending between the same and engaging said 15 cam, whereby as the pulley is exerted on one of said cords said body is caused to advance and said limbs to operate, substantially as described.

In testimony whereof I have hereunto set 20 my hand this 17th day of November, 1891.

WILLIAM P. SHATTUCK.

In presence of—

C. G. HAWLEY,

F. S. LYON.