

No. 750,506.

PATENTED JAN. 26, 1904.

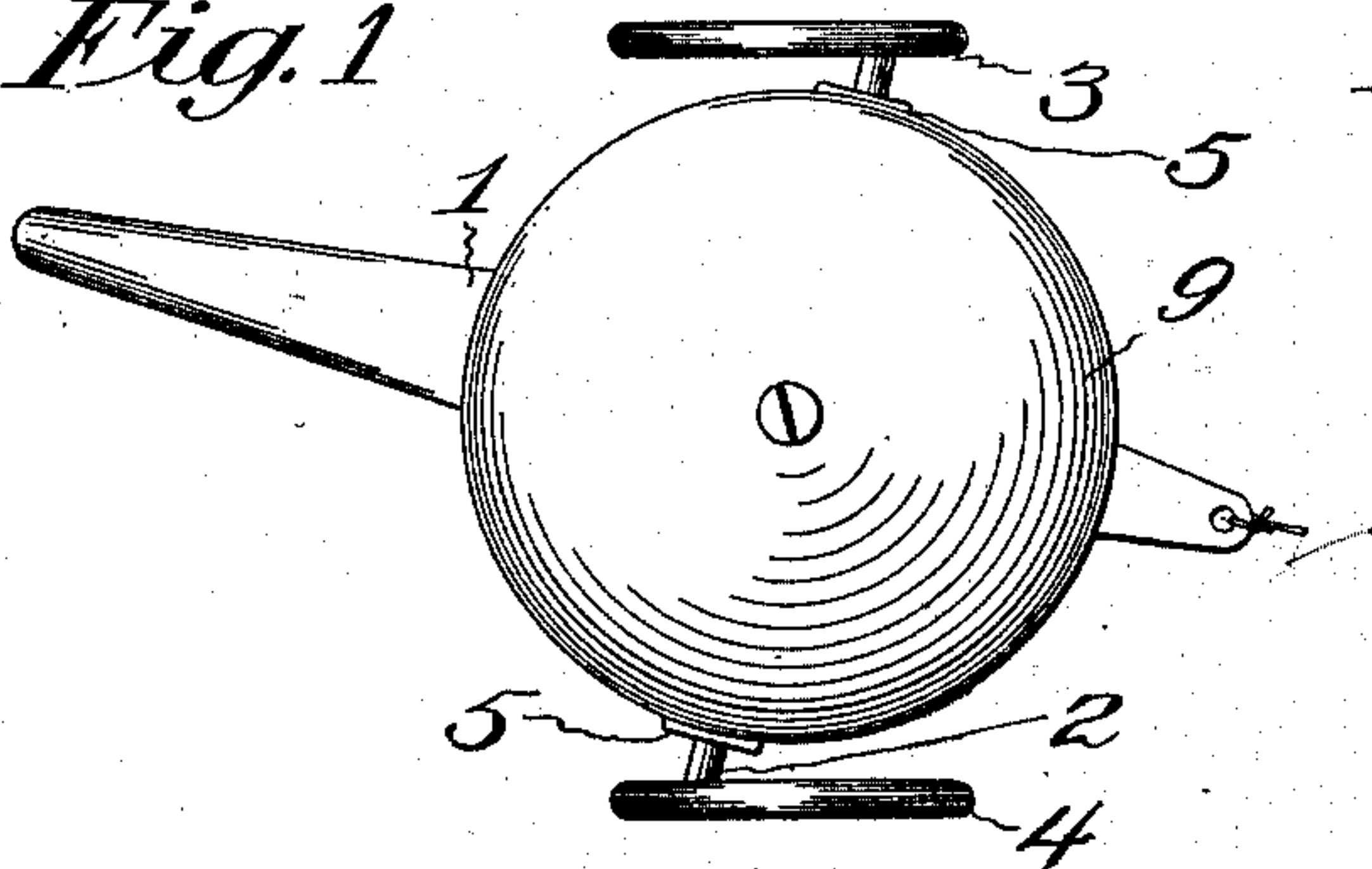
J. C. WELLS.

TOY.

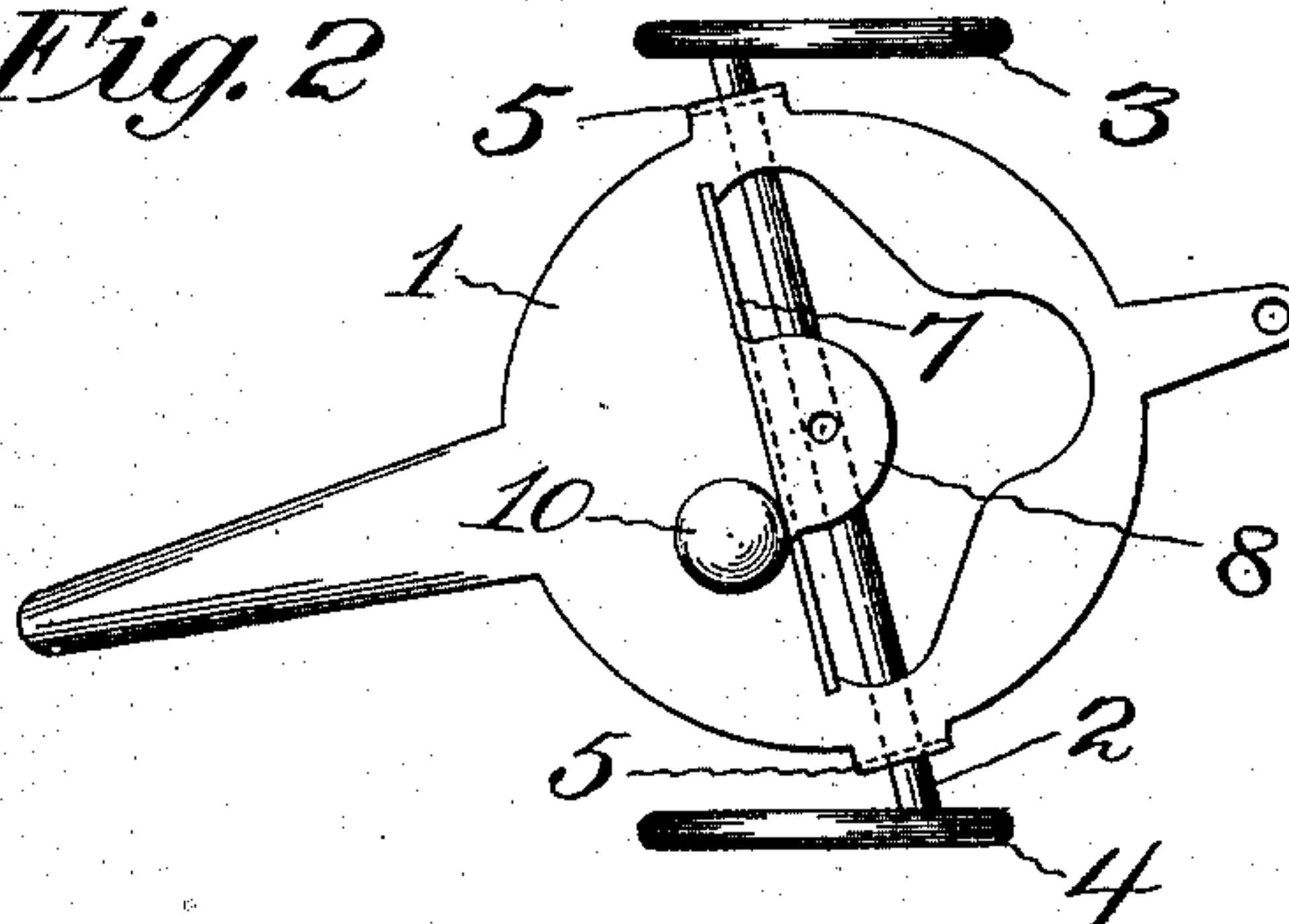
APPLICATION FILED OCT. 4, 1902.

NO MODEL.

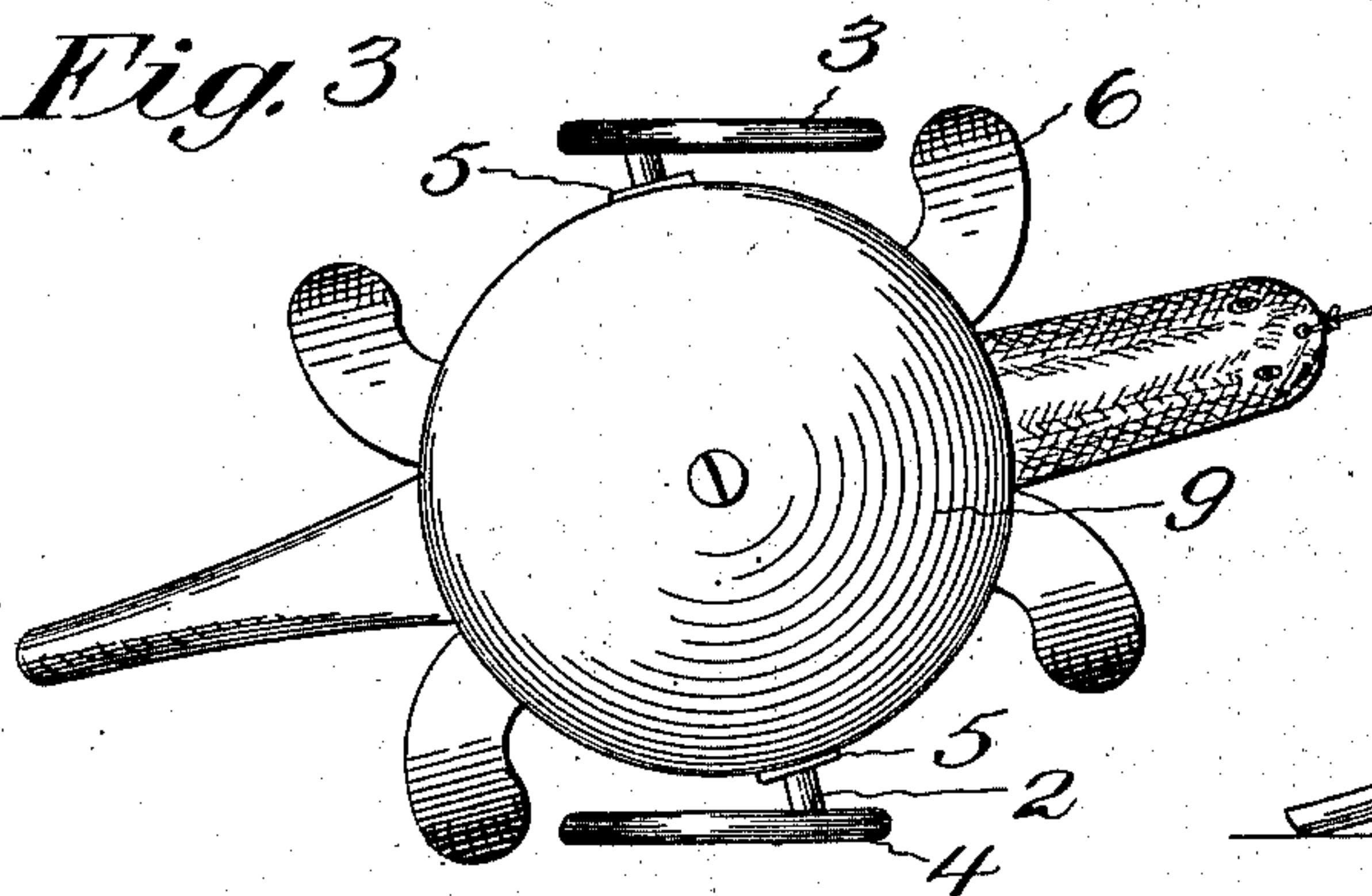
*Fig. 1*



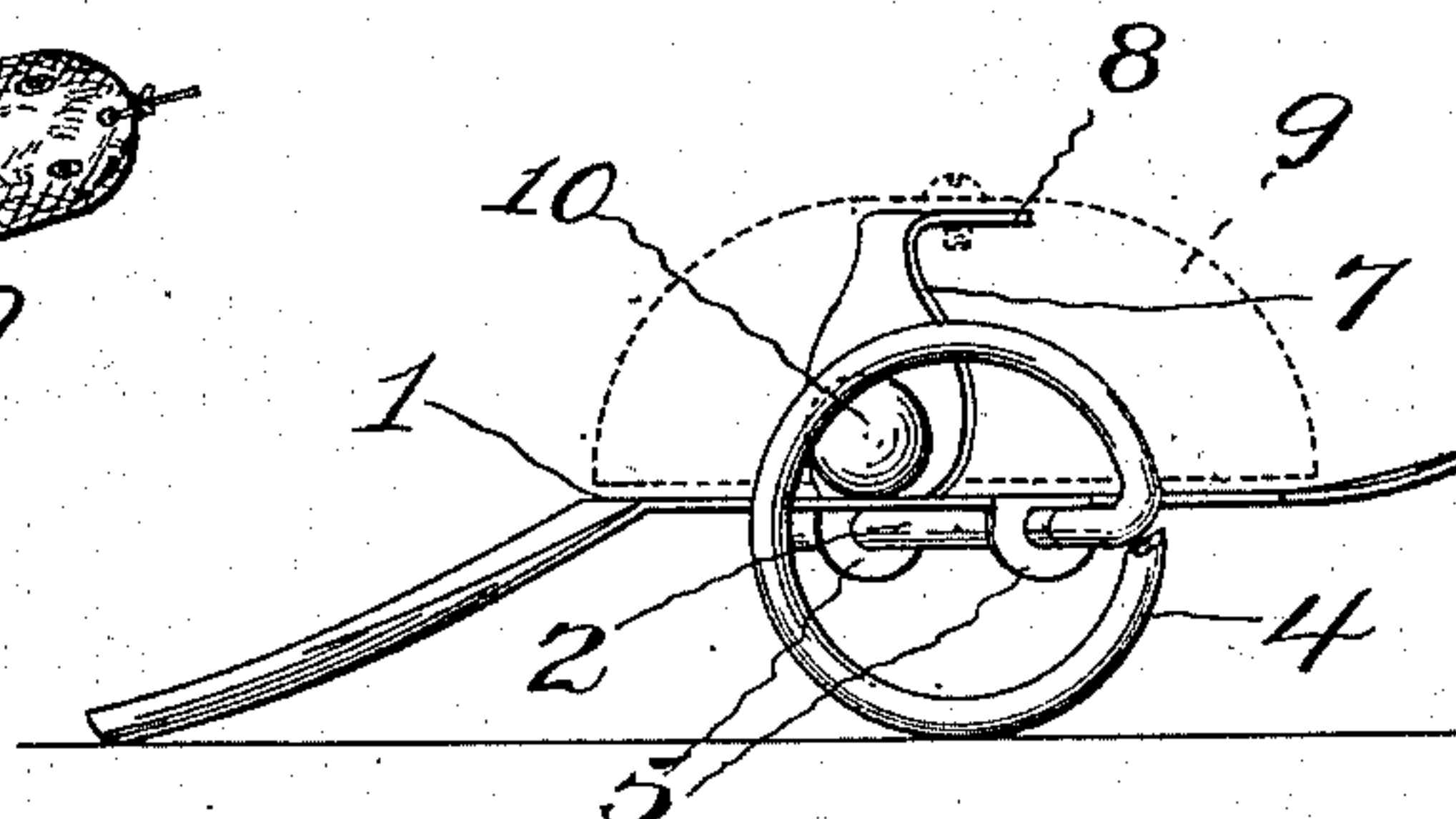
*Fig. 2*



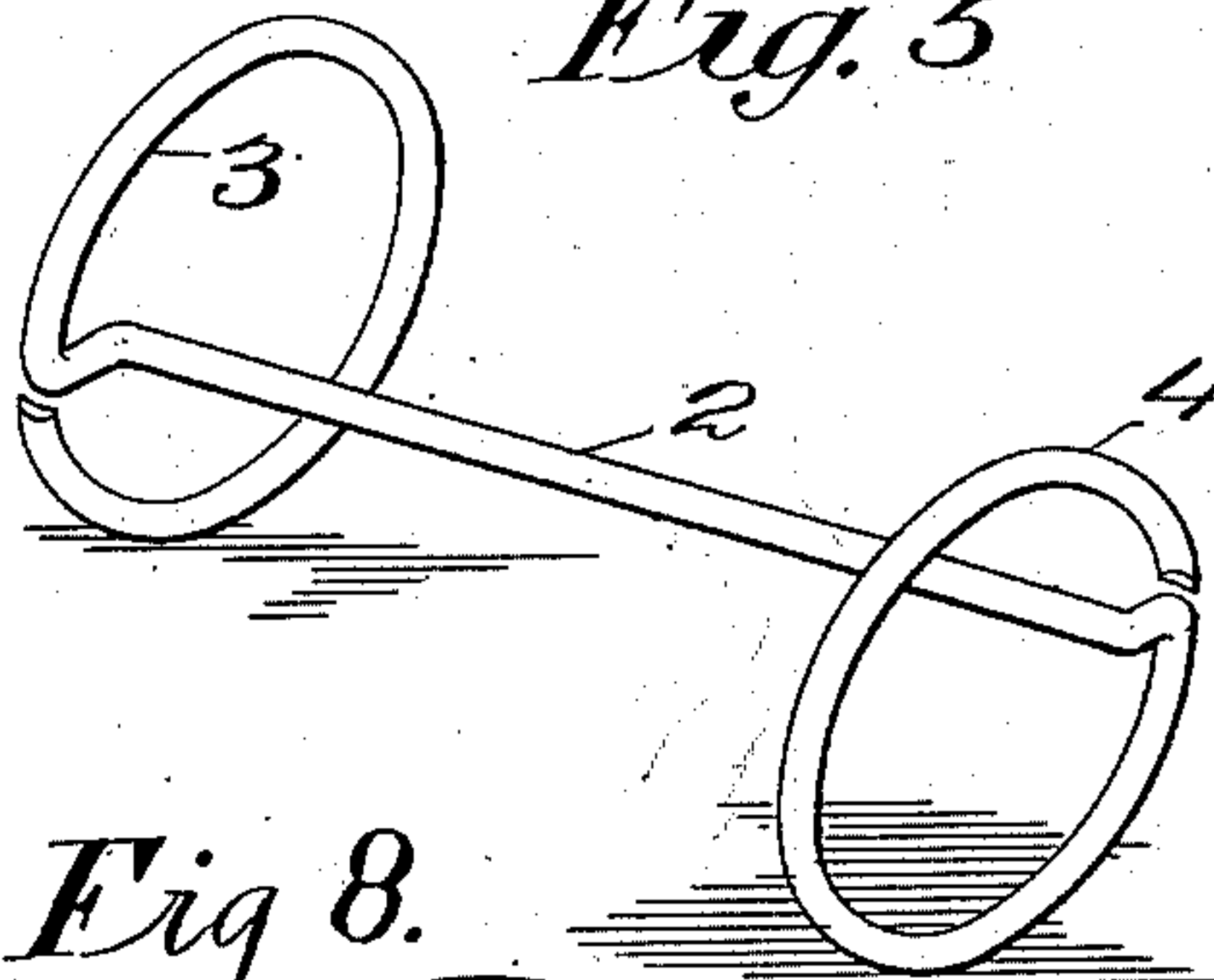
*Fig. 3*



*Fig. 4*

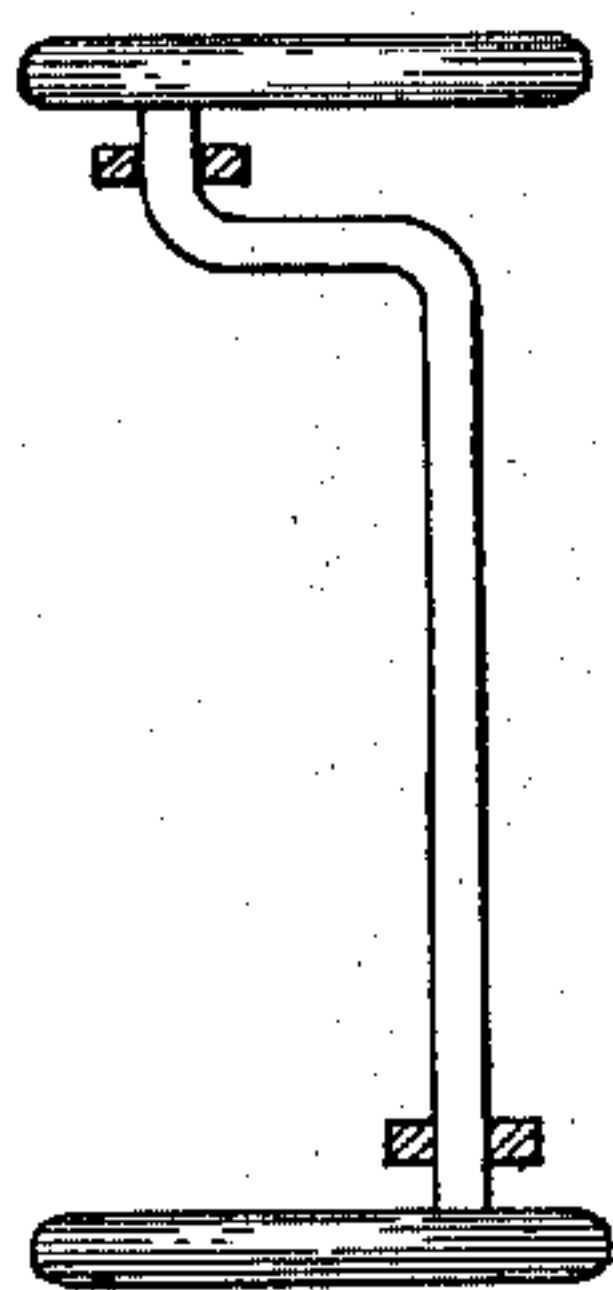


*Fig. 5*

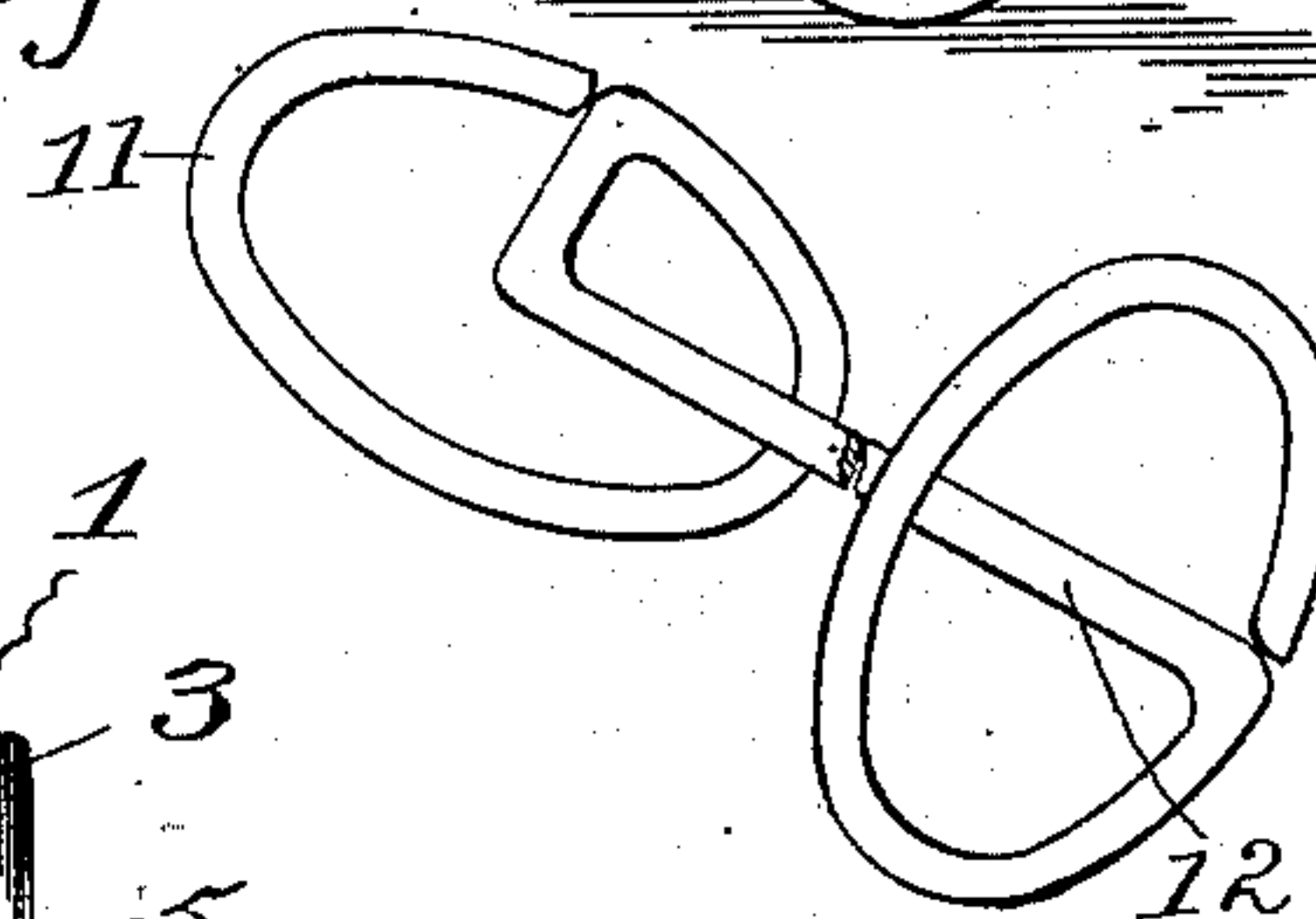


*Fig. 6*

*Fig. 7*



*Fig. 8.*



Witnesses:  
T. R. Holcomb.  
Anna P. Coffin.

Inventor  
John C. Wells  
By his Attorneys  
Jenkins & Backer.



# UNITED STATES PATENT OFFICE.

JOHN C. WELLS, OF EAST HAMPTON, CONNECTICUT.

## TOY.

SPECIFICATION forming part of Letters Patent No. 750,506, dated January 26, 1904.

Application filed October 4, 1902. Serial No. 125,927. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN C. WELLS, a citizen of the United States, and a resident of East Hampton, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Toys, of which the following is a specification.

The invention relates primarily to toys, and particularly to those of the movable type, and more particularly to a mount, running-gear, or operating mechanism for causing certain peculiar movements as the toy is caused to move.

The object of the invention is to produce a very simple and cheap device which by its operation will simulate the natural movements of fish, animals, or even human beings.

A further object of the invention is to combine with the mechanism for producing these peculiar movements a sounding device which will be automatically actuated during the movement of the mechanism.

A still further object is to provide a very simple and inexpensive running-gear or base for movable toys upon which any desired figure may be mounted and so arranged that various types of figures and various styles of sounding mechanism may be readily secured thereto.

Referring to the drawings, Figure 1 is a top or plan view of a form of the device embodying the invention. Fig. 2 is a similar view with the supporting-wheels advanced a half-revolution and with the cover or sounding device removed. Fig. 3 is a plan view of a toy embodying the invention representing a turtle or tortoise. Fig. 4 is a detail side view of the parts shown in Fig. 2, the sounder or gong being shown in dotted outline. Fig. 5 is a perspective view of the wheels and supporting-axle. Fig. 6 is a view illustrating a toy embodying my invention and with the figure of a man thereon. Fig. 7 shows a modified form of axle member. Fig. 8 shows a modified form of device for producing the peculiar movement.

In the accompanying drawings the numeral 1 denotes a base-plate for any suitable toy, mounted upon an axle 2, having at its extremities wheels 3 4. The base-plate 1 may

of course be of any desired shape and pattern and is preferably formed with downturned ears or lugs 5, forming a suitable bearing through which the axle 2 passes. This plate, together with the axle and its supported wheels, constitutes what might be termed the "running-gear" for the toy, and obviously any desired figure may be mounted upon the plate 1 or mounted directly upon the axle.

The running-gear is peculiar, inasmuch as its supporting wheels and axle are or may be formed of a single piece of wire. The wheels are oppositely disposed, while the axle member is arranged transversely to their central axis. The wheels and axle are relatively so arranged that each end of the axle shall have a rising-and-falling movement and also what may be termed a "backward-and-forward" movement, the movement of that end of the axle attached to each wheel being in an opposite direction to the end of the axle attached to the opposite wheel—that is, when one end of the axle is at its lowermost position the opposite end of the axle is at its highest position and when one end of the axle is in its most advanced position with respect to the opposite end said opposite end will be at its farthest backward movement—that is, the axle may be said to have two simultaneous swinging movements, one on a vertical and the other on a horizontal axis. This peculiar movement of the axle, and consequently of any object supported thereon, may be obtained by the arrangement shown in Figs. 1 to 6, in which each end of the axle member is connected to the wheel at a point on its radius, this point of connection to each wheel being substantially on the opposite side of the axis from the point of connection of the opposite wheel, or it may be obtained in the form of device shown in Fig. 7, in which the axle is offset, as illustrated. The same result may be obtained in the form of device shown in Fig. 8, in which the wheels 11 are of elliptical form, the longer diameter of each wheel being transversely arranged to the longer diameter of the opposite wheel. In this form the axle 12 may be connected at the axis of each wheel or connected with the radius, as in the forms hereinbefore described. This arrangement of the axle and supporting-



wheels I have termed herein an "angular" arrangement, meaning by this term any form of device in which the peculiar swinging movement of the axle on a vertical or on a horizontal pivot, or on both combined, is obtained, and especially when this term is used in the claims. This angular arrangement of the axle and wheels gives in the operation of the device a peculiar movement to the supported plate, the ears 5 of which are arranged adjacent to the respective wheels. The opposite sides of the plate are alternately caused to rise and fall and during the rising movement are advanced with the wheel and axle, so it might be said to have two movements in transverse planes. This gives a peculiar rolling effect, which in the case of a turtle is almost a perfect simulation of its movements.

With the parts in the position shown in Fig. 3 if the toy be drawn along the floor the foot 6, which forms a part of the supported plate, will first be raised and advanced until the plate is swung into the position illustrated in Fig. 1. Upon a continued movement this foot 6 will be depressed and swung back into the position illustrated in Fig. 3.

The plate 1 is preferably stamped up from sheet metal, and a retainer 7 is formed by striking up a portion from the body of the plate, and this retainer is also provided with a supporting-lug 8, upon which a sounding device or gong 9 may, if desired, be mounted. The striker for this sounding device consists of a free-running ball 10, which is retained by the struck-up portion 7 of the plate within the periphery of the gong, and upon the rocking movement of the plate 1 the ball is caused to roll from side to side of the plate, and thus sound the gong. In case it is desired to produce a toy representing a turtle the gong may be decorated to serve as the back or shell, while the supporting-plate when made to the desired form represents the head, tail, and legs. The same form of sounding mechanism as above described may be used in this instance.

Obviously the mechanism is not confined to the use of the turtle toy, and any figure which may be desired may be secured either to the gong or, if it is not desired to use a gong, may be mounted directly upon the plate or attached directly to the axle.

As shown herein, the wheels and axle are made from a single piece of stock, although obviously this is not essential to the invention, which so far as the wheels and axle are concerned contemplates so disposing said wheels and connecting the axle thereto that the latter shall have a simultaneous swinging movement in transverse planes. It is apparent that the degree of roll may be varied by

changing the points of attachment of the supported plate and axles and may be increased or decreased by arranging the points of attachment close to or remote from the wheels or by otherwise arranging the axle and wheels.

Obviously numerous changes might be made in the details of the device without materially affecting the intent or scope of the invention, which contemplates producing a toy and mounting the same upon the wheels, which are oppositely disposed and so arranged and connected with the axle member as to produce the peculiar movements above described.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A running-gear for toys comprising a pair of wheels having their members arranged in the same axial line, an axle connecting said wheels and formed integral therewith, said axle joining the wheels at points substantially opposite their central axis, a support mounted upon said axle, said support having an in-turned lip, an inclosing sound-yielding member mounted upon said lip, and a free-moving striker retained within the inclosing sound-yielding member and the lip.

2. In combination in a toy, a pair of oppositely-disposed wheels, an axle joining said wheels, a base-plate mounted upon the axle and having an upwardly-extending portion, a gong secured to said plate, a pocket formed by the gong and upwardly-extending portion of the plate, and a free-moving striker for the gong arranged to roll in said pocket in various directions.

3. In combination in a toy, a base-piece having the form of the legs, head and tail of a turtle, a pair of oppositely-disposed wheels, an axle joining said wheels and arranged transversely to their central axis, said axle adapted to support the base-piece, a gong mounted upon said base-piece and forming the shell of the turtle, an upwardly-extending projection from the base-piece within the gong cooperating therewith to form a pocket, and a free-moving sounder arranged within said pocket.

4. In combination in a toy, a pair of wheels, a support operatively arranged with relation to the wheels, an inclosure formed by an upturned lip upon the body, and a gong mounted on the upturned lip, a free-moving striker located in the inclosure, and means intermediate the wheels and support for causing a movement of the free-moving striker as the wheels are rolled.

JOHN C. WELLS.

Witnesses:

LUCY BARTON WELLS,  
GEO. A. STRONG.