No. 669,177. Patented Mar. 5, 1901.

J. P. O'NEILL.

AUTOMATIC TOY CYCLE.

(Application filed July 13, 1900.)

(No Model.)

Fig. 1.

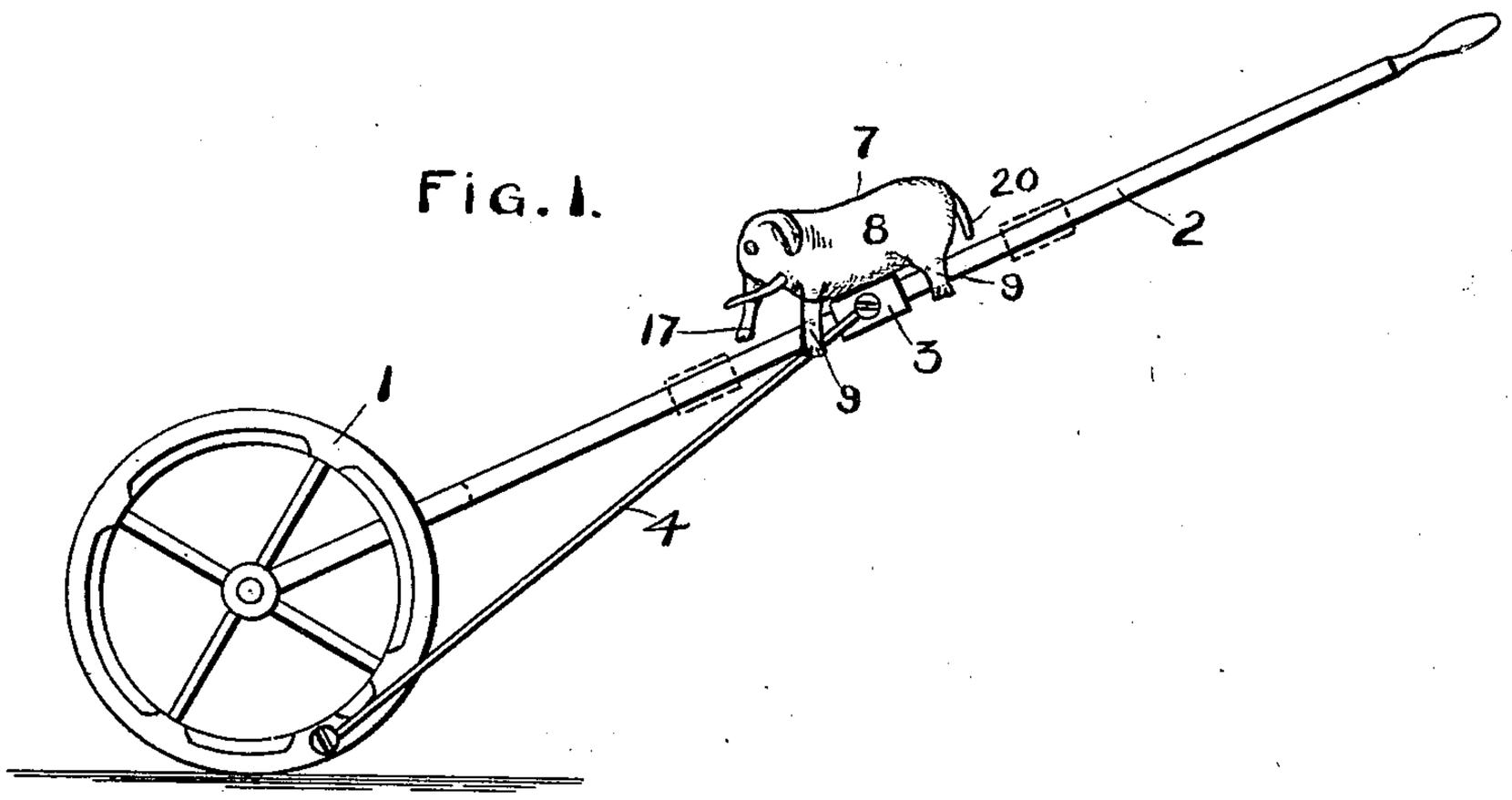


Fig. 2.

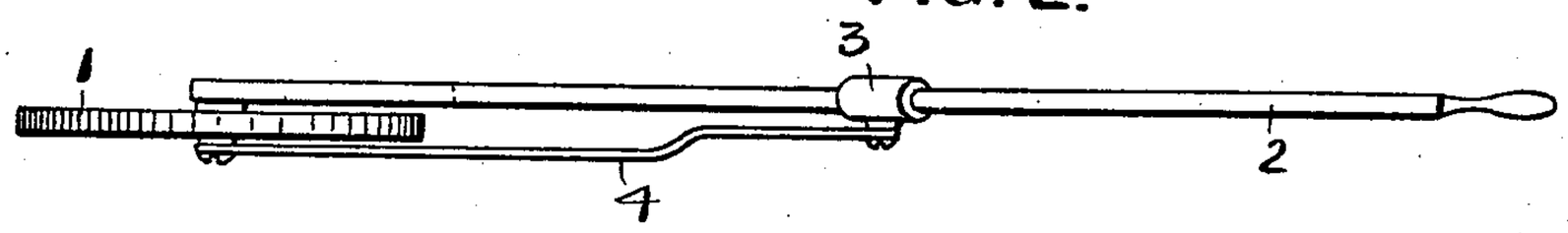
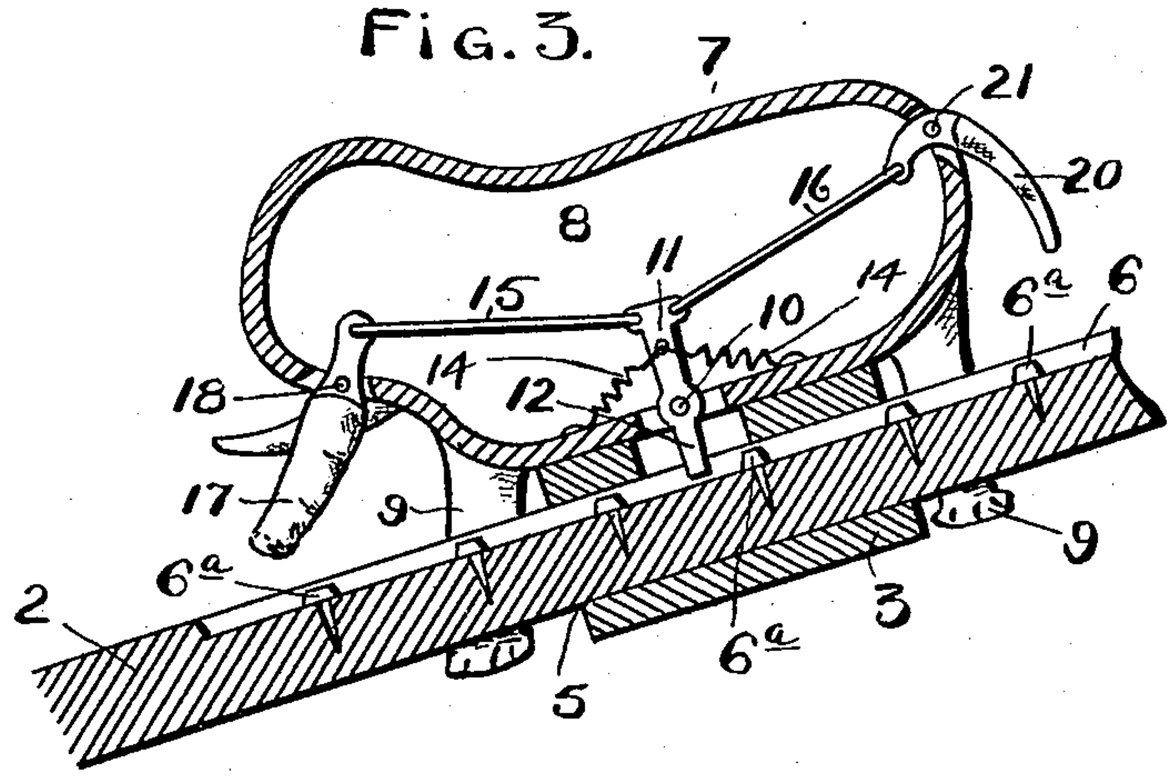


Fig. 3.



WITNESSES.

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AUTOMATIC TOY CYCLE.

SPECIFICATION forming part of Letters Patent No. 669,177, dated March 5, 1901.

Application filed July 13, 1900. Serial No. 23,480. (No model.)

To all whom it may concern:

Be it known that I, JAMES P. O'NEILL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Automatic Toy Cycles, of which the following is a specification.

My invention relates to an automatic toy cycle, and has for one object to produce an inexpensive toy of this character in which by the travel of a wheel a model or representation of an object—such as an animal, a soldier, or a grotesquely-arrayed clown—may be actuated, thereby affording amusement to the child propelling the wheel.

A further object is to produce a toy of this character comprising few parts and of an inexpensive construction.

The invention consists in the parts and combination of parts shown in the drawings and hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation, Fig. 2 is a top plan view, and Fig. 3 is a longitudinal vertical section, of a model, the front half being removed to disclose the actuating mechanism for operating the disclosed portions, a section of the handle-bar being also shown to disclose the contact-points for the actuating mechanism of the model.

I will illustrate and describe the automatic toy cycle as provided with the model of an elephant, in which the trunk and tail of the model are caused to alternately rise and fall, it being understood that the actuating mechanism is the same in case of modification to operate models in representation of different characters.

1 designates a wheel, to the axis of which is secured a handle 2, by which to propel the wheel. Movably secured upon handle 2 is a block 3, and connected with the periphery of wheel 1 and block 3 is a rod 4, whereby when the wheel 1 is revolved the block 3 is reciprocated upon handle 2.

In order to reduce the cost of manufacture of the toy to a minimum and also to provide for mounting the block 3 upon handle 2 in a manner to allow of free reciprocatory movement and at the same time guard against lateral swaying, block 3 is formed with an opening 5 through its longitudinal center, through which the handle 2 is passed. To fit closely within the opening 5, handle 2 is provided with a longitudinal groove 6, in which are secured contact-points 6^a, which project upwardly in the groove.

7 designates a model in representation of an elephant, the body 8 being secured upon block 3, with legs 9 projecting below the handle 2 and block 3. Pivoted to the model at 10 is a swinging arm 11, the lower end 12 of which when the block 3, and consequently the model 7, is moved projects in the groove 6 and contacts with points 6^a, thereby swinging arm 11 upon its pivots. The upper end of arm 11 is formed with a T-head perforated to receive the ends of rods 15 and 16, respectively, the rods diverging in opposite directions within the body of the model, with the outer end of each attached to a movable portion of the model. In the present instance the outer end of rod 15 is attached to the trunk 17 of the model, the trunk being pivoted to the body of the model at 18, and the outer end of rod 16 is attached to the inner end of the tail 20 of the model, the tail being pivotally attached to the body of the model at 21. Arm 11 is normally held in a fixed position by means of springs 14.

With this description the operation will be apparent. The child grasps the free end of lever 2 and propels the cycle, causing wheel 1 to revolve, thereby reciprocating block 3 and the model. The lower end of arm 11 contacts with contact-points 6, thereby swinging the arm upon its pivot and actuating rods 15 and 16, reciprocating said arms in alternate reverse directions—that is to say, as arm 15 is pulled inwardly arm 16 is pushed outwardly, with the effect of simultaneously actuating the trunk and tail of the model, this effect being produced by either a forward or rearward movement of the block.

It will be understood that rods 15 and 16 may be connected to any portions of the model capable of being articulated to illustrate the natural movement of the particular object characterized by the model.

The toy constructed to illustrate the movements of a living object affords amusement and is of so few parts that it is inexpensive of construction and durable even with severe usage.

What I claim is—

1. In an automatic toy cycle, a wheel, a handle axially connected therewith, a block slidingly arranged upon the handle contact-points upon the handle, a rod connected with the wheel and block, a model mounted upon the block having articulated parts, an arm pivotally connected with the model the upper end of which is connected by rods with the articulated portions of the model, the lower end depending to contact with the contact-points upon the handle.

2. In an automatic toy cycle, a wheel, a handle, a longitudinal groove in the handle, contact-points arranged in the groove, and a model slidingly secured upon the handle having movable parts actuated by the contact-points when the wheel is revolved.

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

JAMES P. O'NEILL.

Witnesses:

SAMUEL CHESTNUT,

WILLIAM WEBSTER.