J. FLAHERTY. MECHANICAL TOY.

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NO MODEL.

United States Patent Office.

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MECHANICAL TOY.

SPECIFICATION forming part of Letters Patent No. 725,432, dated April 14, 1903.

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Lo all whom it may concern:

Be it known that I, JOHN FLAHERTY, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in 5 the county of New York and State of New York, have invented a new and Improved Mechanical Toy, of which the following is a full, clear, and exact description.

This invention relates to a mechanical toy

to designed to imitate a snake.

According to my invention the body of the toy is constructed to represent a snake and is formed of several sections jointed together, so that by independently moving these sec-15 tions the toy may be given a sinuous appearance, representing a snake in movement. The toy is also provided with a forked tongue at the front, representing the fangs of the snake. This tongue is moved rapidly back 20 and forth as the snake moves, so as to give | not positively driven, but is weighted at its the impression of a snake advancing to strike. Clockwork or other motive devices are contained in the body to propel the toy.

This specification is an exact description 25 of one example of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indi-30 cate corresponding parts in both views.

Figure 1 is a section on the line 11 of Fig. 2, and Fig. 2 is a section on the line 2 2 of

Fig. 1.

According to the construction here shown 35 the body of the snake is formed of four sections, (designated a, b, c, and d.) These sections are formed, preferably, of metal suitably covered to represent the skin of a snake and joined by hinges e, made of flexible fab-40 ric, leather, or the like, so as to permit the independent movement of the sections without disclosing any mechanical connection. The sections are further connected by a hinge f between the sections c and d, hinges g be-45 tween the sections b and c, and hinges h between the sections a and b. These hinges are all arranged with vertical pintles or axes, so that the sections of the snake move in a horizontal plane.

i indicates a clockwork or any other suitable form of motor, which is mounted in the main section b and drives the wheels i',

which form not only traction-wheels, but the supporting-wheels for the main part of the

toy.

i² indicates a crank driven from the clockwork i and having links i^3 and i^4 connected therewith, these links respectively extending forward and rearward to impart swinging movement to the sections a and c, respec- 60 tively. The link i^3 is connected with the section α through the medium of an arm k^2 , in turn attached to a frame k', which is fastened in the rear end of the section a, so that as the rod i^3 reciprocates the section a is 65 caused to swing around the center of the hinge h from one side to the other of the section b. The link i^4 is connected with an arm c' on the section c at a point at one side of the center of the hinge g to cause the proper 70 movement of the section c. The section d is outer end, as indicated at d', and it being thus weighted as it swings with the section c it is given a slight movement independently 75 of said section owing to the inertia of the weight d'.

Mounted in the frame k' is a wheel k, which not only supports the front end of the toy, but also drives the crank k^3 , and this crank 80 is connected by a rod k^4 with the longitudinally-movable tongue l, which projects beyond the head a' of the toy and represents the

fangs of the snake.

After the motor i is wound up and the de- 85vice placed on the floor, table, or other surface the toy will move steadily forward by the action of the wheels i', and also the sections a and c will be swung on the section b, one to the right and the other simultaneously 90 therewith to the left, and vice versa, and the section d will have a relatively slight wriggling movement on the section c. As the wheel kturns from frictional engagement with the supporting-surface it will impart a steady in- 95 and-out movement to the tongue l.

It will be observed that this construction produces an extremely life-like representation of a snake. It will also be observed that the form of the motor i is not material to my 100 invention. I desire it distinctly understood that the motive power may be derived from

any suitable source.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. In a mechanical toy, the combination with a body portion having a motor, of a headsection hinged to the front end of the body portion; a tongue member extending longitudinally of said head-section and projecting from the front end thereof, and a wheel carried by the head-section for moving said tongue member back and forth longitudinally, said wheel being operated by frictional contact with the floor, as specified and for the purpose set forth.

2. A mechanical toy comprising a main section having a motor, sections pivotally connected to the ends of said main section to form a continuation of the body of the animal and adapted to swing thereupon in a horizontal plane; and pitman-rods connecting the end sections at one side of their pivot-points to a crank on the motor to impart to said end sections a positive movement simultaneously in opposite directions from each other.

3. In a mechanical toy, the combination with a main section having a motor for propelling the toy, of a second and third section hinged respectively to the front and rear ends of the main section; means connected with the motor for positively swinging said on end sections back and forth from right to left, with respect to the main section, said end sections always simultaneously swinging in opposite directions, a tongue member adapted to project from the forward end of the front member of the toy and means for imparting a back-and-forth movement to said member, said movement always being in a direction

longitudinal with respect to the front section of the toy.

4. A mechanical toy, comprising a main 40 section having a motor, front and rear sections pivotally connected to said main section to form a continuation of the body of the animal, and adapted to swing thereupon in a horizontal plane, said rear section being 45 formed in two parts hinged together, the extreme one of said parts being weighted, and pitman-rods connecting the front section and the forward one of the rear sections at one side of their pivot-points to a crank on the 50 motor, to impart to said end sections a positive lateral movement simultaneously in opposite directions from each other.

5. A mechanical toy having a main section and a motor, a head-section pivotally consected to said main section, a tongue member extending longitudinal of the head-section and having free longitudinal movement therein, and a wheel carried by the head-section of the toy, said tongue member having 60 its front end projecting from the forward end of the head-section, and its rear end connected to a crank carried upon the axle of said wheel, whereby said tongue member is thrust back and forth longitudinally as specified and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN FLAHERTY.

Witnesses:
JNO. M. RITTER,
F. W. HANAFORD.