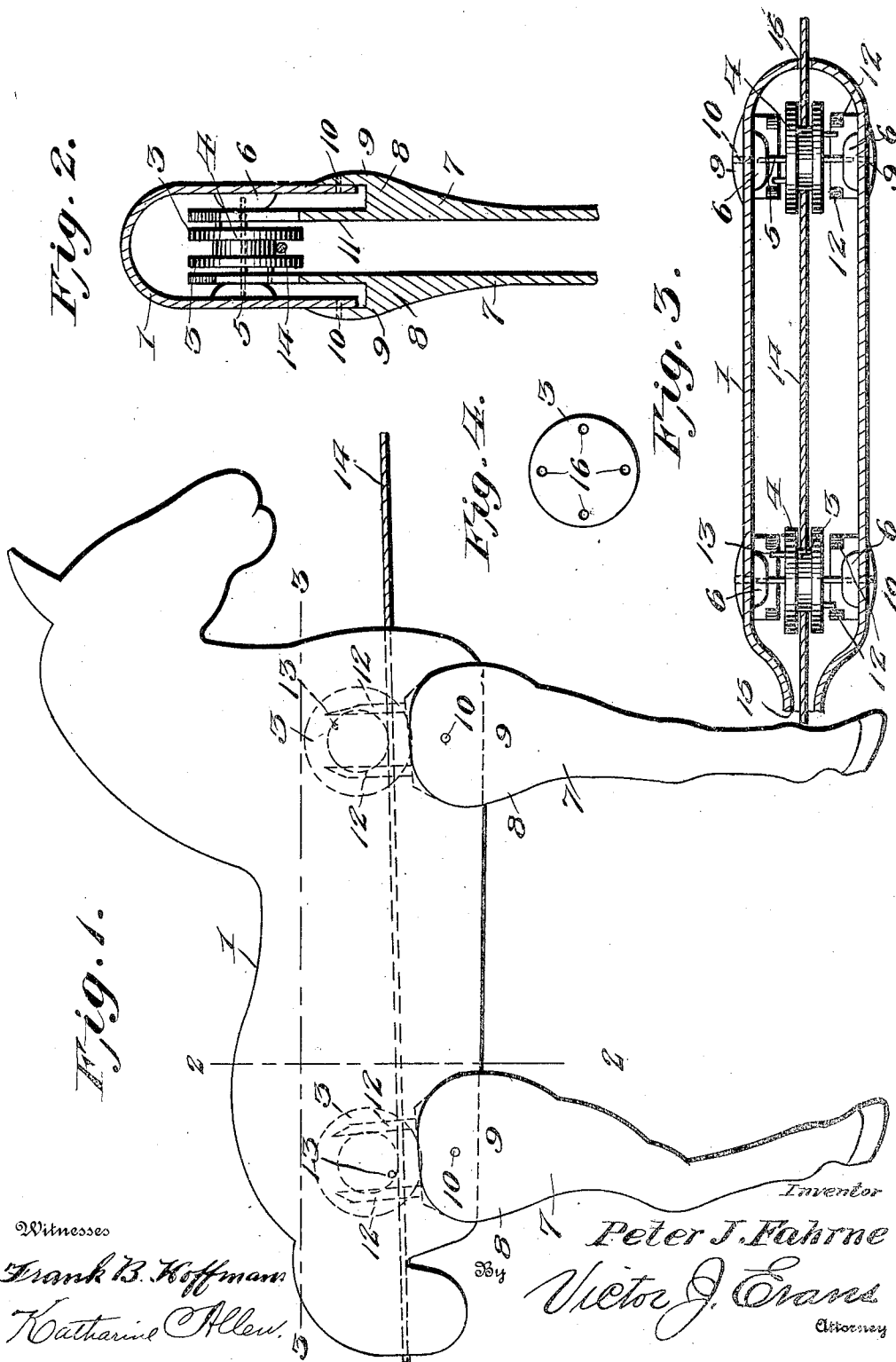


No. 822,198.

PATENTED MAY 29, 1906.

P. J. FAHRNE.
TOY.

APPLICATION FILED MAY 26, 1905.



Witnesses

Frank B. Hoffmann
Katharine Allen.

Inventor

Peter J. Fahrne
Victor J. Crane
Attorney

UNITED STATES PATENT OFFICE.

PETER J. FAHRNE, OF ROCHESTER, NEW YORK.

TOY.

No. 822,198.

Specification of Letters Patent.

Patented May 29, 1906.

Application filed May 26, 1905. Serial No. 262,384.

To all whom it may concern:

Be it known that I, PETER J. FAHRNE, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Toys, of which the following is a specification.

The invention relates to an improvement in mechanical toys of the class known as "figure" toys, adapted in operation to simulate natural movements of the figure.

The main object of the present invention resides in the production of a simple mechanical toy adapted to be supported upon a cord or other flexible connection and to travel lengthwise of the cord by gravity, the construction being such that a life-like movement is imparted to the toy during its travel.

The preferred details of construction will be described in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a view in elevation of a toy constructed in accordance with my invention, the operative parts being shown in dotted outline. Fig. 2 is a transverse section on the line 2 2 of Fig. 1. Fig. 3 is a longitudinal section on the line 3 3 of Fig. 1, and Fig. 4 is a view in elevation of a modified form of supporting-wheel.

On reference to the accompanying drawings it will be noted that my improved toy is in the present instance shaped to represent a horse, though it is to be understood that the toy may assume any form desirable, as the gist of the present invention resides in the means by which life-like motion is imparted to the figure during its travel, and the particular form of the figure is immaterial.

The toy of my invention comprises a figure 1, in the present instance representing a horse, consisting in a hollow body including an outline of the complete representation of a horse with the exception of the legs. As the operating mechanism is to be contained within this hollow body, it is obvious that for convenience of construction said body may be formed in two sections and suitably secured together subsequent to the insertion of the mechanism.

3 represents supporting-wheels, preferably two in number and positioned within the body immediately above the connection of the legs thereto, as hereinafter described. These wheels 3 are preferably provided with

edge flanges 4 to prevent accidental escape of the supporting-cord, as hereinafter described, and are revolvably mounted on transverse shafts 5, secured in hangers or spacing-blocks 6, fixed interiorly of the body-walls, all as clearly shown in Fig. 2.

The legs 7, which, of course, are four in number, are supported from the body in pairs immediately beneath each respective wheel 3. The legs, which are properly shaped, are slightly thickened at the upper end, as at 8, and cut away or recessed at the extreme limit of the upper end to provide a projecting lip 9, designed to overlap the outer surface of the figure-body and be pivotally secured thereto through the medium of a pin 10. The inner wall of the cut-away portion is projected vertically within the body, as at 11, being extended upward adjacent the wheel 3. At the upper end the extension 11 is bifurcated to leave projecting arms 12, which are spaced apart a distance considerably less than the diameter of the wheel 3.

From the construction described it will be noted that the legs are pivotally connected to the body and are each provided with a vertical extension projected parallel to and immediately adjacent the side of the approximate wheel 3, the upper end of the projection being bifurcated to provide two spaced arms arranged in parallel relation to the side of the wheel and spaced apart a distance less than the diameter of the wheel.

The wheel is provided near its peripheral edge with a laterally-projecting pin 13 of a length to extend between the arms 12 when the parts are assembled. The radial distance of said pin from the center of the wheel is greater than one-half the distance between the arms 12, so that as the wheel is revolved the pins 13 contact with and move said arms.

It is to be understood that each wheel is provided with pins projecting from opposite sides thereof, which are arranged to cooperate with the leg projections arranged in parallel relation to the respective sides. The pins 13 may be arranged in different relative positions on the opposite side of the wheel, as particularly illustrated, whereby to impart an independent and distinct movement to each leg, or they may be arranged in the same relation, and thereby impart a simultaneous and similar movement to the legs, as will be obvious.

The toy is supported upon a cord or other

flexible connection 14, extending lengthwise the body and passing through openings 15 at opposite ends thereof, said cord within the body engaging the wheels 3 intermediate their flanges 4.

In operation the cord supported at one end from a fixture or by the hand of the operator is elevated or lowered at the opposite end, causing the toy to travel lengthwise of the cord by gravity. This movement of the toy revolves the wheels 3 and through the medium of the pins 13 transmits movement to the legs 7, it being understood that in the movement of the wheels the pin 13 contacts, for example, with the forward arm 12, swinging the leg on its pivot, and in continued movement of the wheel will contact with the rear arms 12 and the particular leg and swing the leg on its pivot in reverse direction, this operation, of course, being accomplished through the radial distance of the pin from the center of the wheel with relation to the distance of the arms 12.

I desire to provide means whereby the movement of the legs in the particular instance illustrated may be adjusted to imitate galloping, trotting, or pacing, and to this end I provide the surface of the wheels 3 with a plurality of openings 16, extending transverse said wheel and designed to receive the pin 13. By seating the pin in the proper hole on either side of the wheel 3 the movement imparted to the legs may be controlled as desired and the various movements of the animal closely imitated.

The toy constructed and arranged as described is simple in operation, of few parts, and not liable to become broken in continued use.

Having thus described the invention, what is claimed as new is—

1. A toy comprising a body, a member pivotally connected thereto, a wheel mounted within the body and adapted for revolution in the movement of the toy, a pin projecting from said wheel, and arms projecting from the member and spaced apart and adapted to be operated in the movement of said pin, said arms being so spaced relative to the diameter of the pin as to avoid contact with the latter at predetermined points in its path of travel.

2. A toy comprising a body, members pivotally connected thereto, flanged wheels mounted within the body and adapted for revolution in the movement of the toy, a pin projecting from each of said wheels, and arms projecting from each of said members and lying in the path of travel of said pin, said arms being so spaced as to permit contact of the pin only at diametrically opposite points in its path of travel.

3. A toy comprising a body, members pivotally connected thereto, wheels mounted within the body, arms projecting from the members and spaced apart slightly less than the diameter of said wheels, and a pin adapted for adjustable connection with the wheels and serving for respective and opposite contact with the arms at predetermined points in its path of travel.

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

PETER J. FAHRNE.

Witnesses:

FRANK N. WEINS,
JACOB HOFFMAN.