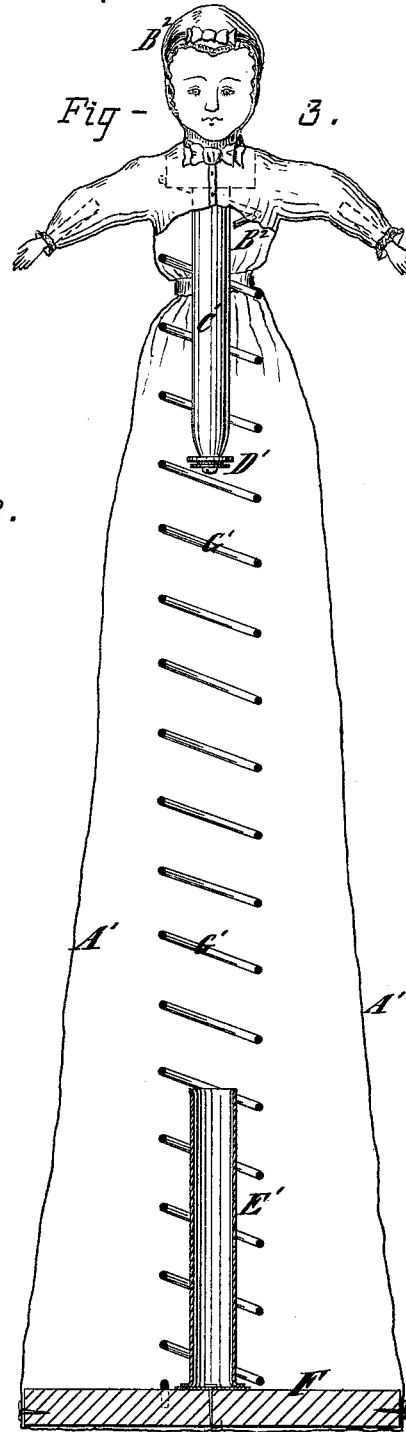
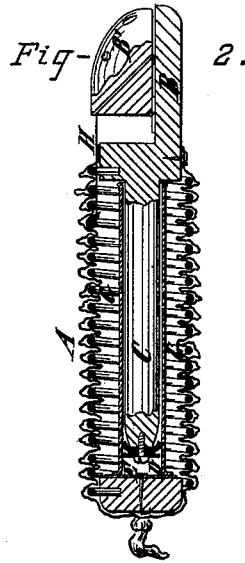
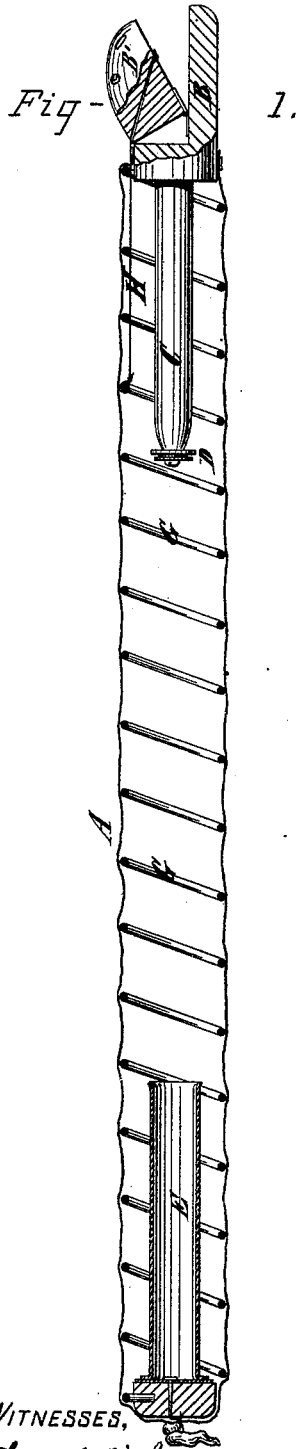


C. E. CHINNOCK.
Jumping-Toy.

No. 202,990.

Patented April 30, 1878.



WITNESSES,
Thomas E. Birch,
Leander Hall

INVENTOR,
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Edwin H. Brown

UNITED STATES PATENT OFFICE.

CHARLES E. CHINNOCK, OF BROOKLYN, ASSIGNOR TO IVES, BLAKESLEE & CO., OF NEW YORK, N. Y.

IMPROVEMENT IN JUMPING TOYS.

Specification forming part of Letters Patent No. 202,990, dated April 30, 1878; application filed February 5, 1878.

To all whom it may concern:

Be it known that I, CHARLES E. CHINNOCK, of the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Toys, of which the following is a specification:

My invention consists in a toy comprising the combination, with a spring for extending it, or a part of it, of a device serving to retard the spring in its initial movement, and controlled in its operation by atmospheric pressure, whereby I am enabled to make a toy admirably simulate the jump or spring of a living creature.

My invention also consists in a toy snake, comprising a spring for extending it, and a tube and piston for controlling such spring.

It also consists in details of construction to be hereinafter explained.

In the accompanying drawing, Figure 1 represents a longitudinal section of a toy snake embodying my invention, and showing the same as extended. Fig. 2 is a similar section thereof when contracted; and Fig. 3 is a front view, partially in section, of a toy baby embodying my invention.

Similar letters of reference designate corresponding parts in all the figures.

Referring first to Figs. 1 and 2, A designates a flexible body, which may be of any suitable woven or equivalent material, and is of tubular form. This may be painted or ornamented in any way to cause it to resemble the body of a snake. It is provided at one end with a head, consisting of two wooden blocks, B B¹, which are shaped to represent the head of a snake, and the latter of which is hinged or pivoted to the former, so that it may be swung up relative thereto, to give the appearance of the opening of the mouth of the snake.

C designates a rod extending rearwardly from the head-block B, and provided at its extreme end with a washer or disk, D, of leather or other suitable material, adapted to serve as a piston. E designates a tube, shown as of cylindrical form, attached to a portion of the body A of the snake, which is not intended to have motion imparted to it. In the present instance it is attached to a block secured to the rear portion. G designates a

spiral spring, arranged within the body A of the snake, and abutting against the rear end of the head-block B and the forward end of the block to which the cylinder E is secured, it preferably being secured permanently to both said blocks. H designates a piece of string or cord extending rearwardly from the hinged head-block B¹, and fastened to one of the coils of the spring G, so that when the said spring is extended the head-block B¹ is drawn back, simulating the opening of the mouth of the snake.

The operation of this particular form of my toy is as follows: The head of the snake is forced rearwardly toward the tail, so that the piston D enters the tube E and expels the air therefrom. The snake is then placed upon the floor, or any suitable support, with its tail against some immovable object. The spring forces the head forward, and with a very slow initial movement during the passage of the piston D through the tube E, owing to the pressure of air on the forward side of the piston; but the moment that the spring forces the piston out of the said tube it throws the head forward with a quick motion, and makes the snake appear to jump or dart forward, as if after some prey.

This toy snake is so natural in its operation as to afford a great deal of entertainment for children, and even others.

The swinging of the head-block B¹ to simulate the opening of the mouth of the snake may be effected in various ways, and the initial movement of the snake may be retarded by other suitable devices, which depend upon the equalization of the atmospheric pressure upon opposite sides.

Turning now to Fig. 3, A' designates the skirt of a baby's dress, which may be made of suitable material and of tubular form, contracted or drawn in at a suitable portion to represent the waist of a baby. B² designates the head, bust, and arms of a baby, to which is attached a rod, C', provided with a piston, D'. E' designates a tube extending from a block, F, which may be termed the "base" of the toy. G' designates a spiral spring, arranged between the body of the baby and its block F.

The operation of this particular form of my toy is as follows: The body of the baby is pressed downward, so as to cause the piston D' to enter and expel the air from the tube E', whereupon it is released, and the spring G forces it upward with a very slow initial movement until the piston D' leaves the tube, and then with a sudden rapid movement, simulating the jump of a baby.

It is obvious that this invention of mine may be embodied in various kinds of toys with a similar effect.

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

1. A toy comprising the combination, with a spring for extending it or a part of it, of a device serving to retard the spring in its initial movement, and controlled in its operation

by atmospheric pressure, substantially as and for the purpose specified.

2. A toy comprising the combination, with an extensible portion of the same, of a spring, a piston, and a tube, substantially as and for the purpose specified.

3. A toy snake composed of an extensible body and spring, a piston, and a tube, substantially as and for the purpose specified.

4. A toy snake composed of an extensible body, a spring, a piston, a tube, and an adjustable or swinging head-block, for simulating the opening of the mouth, substantially as specified.

CHAS. E. CHINNOCK.

Witnesses:

CHANDLER HALL,
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