

(No Model.)

J. W. HALE.
MECHANICAL TOY.

No. 381,922.

Patented May 1, 1888.

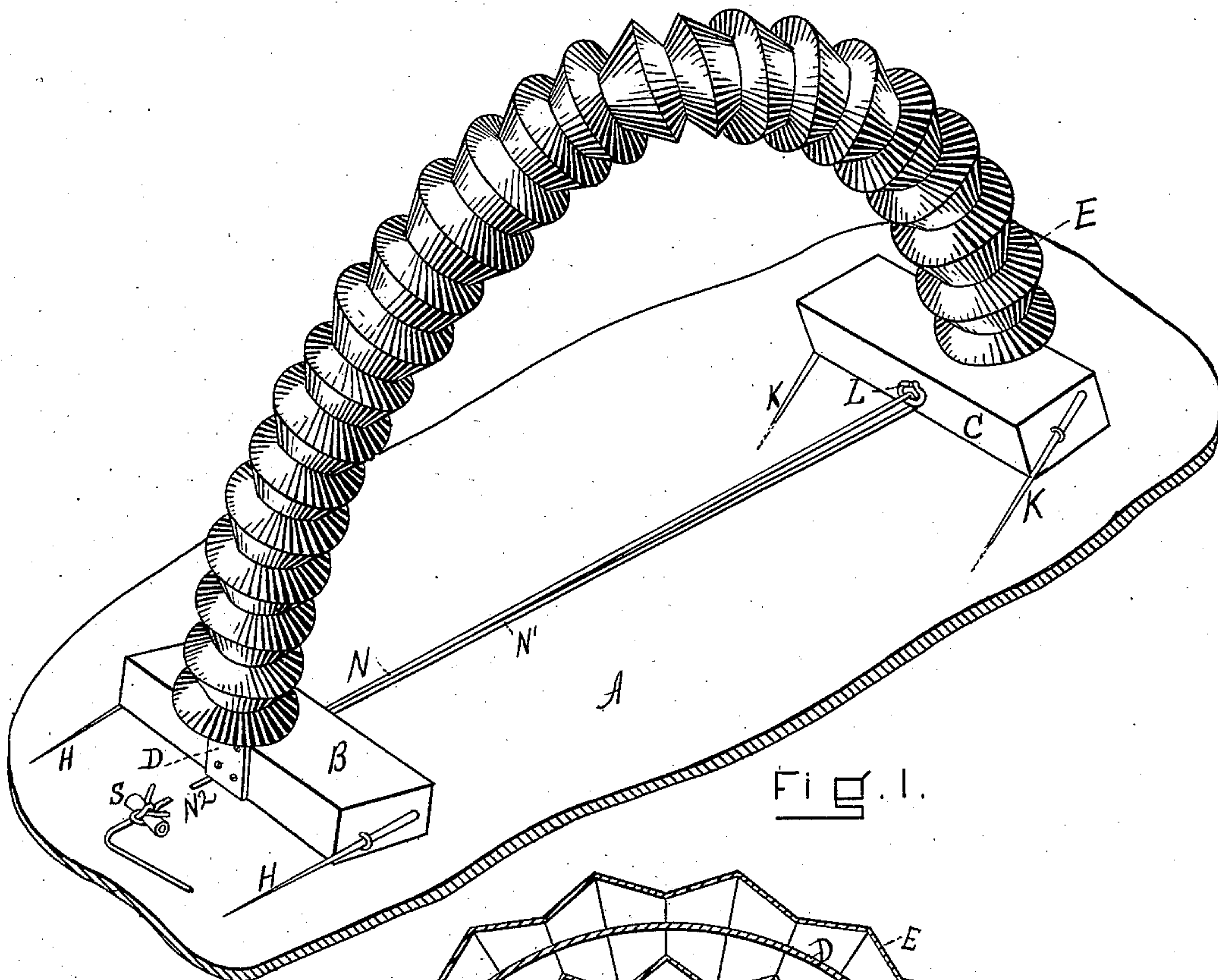
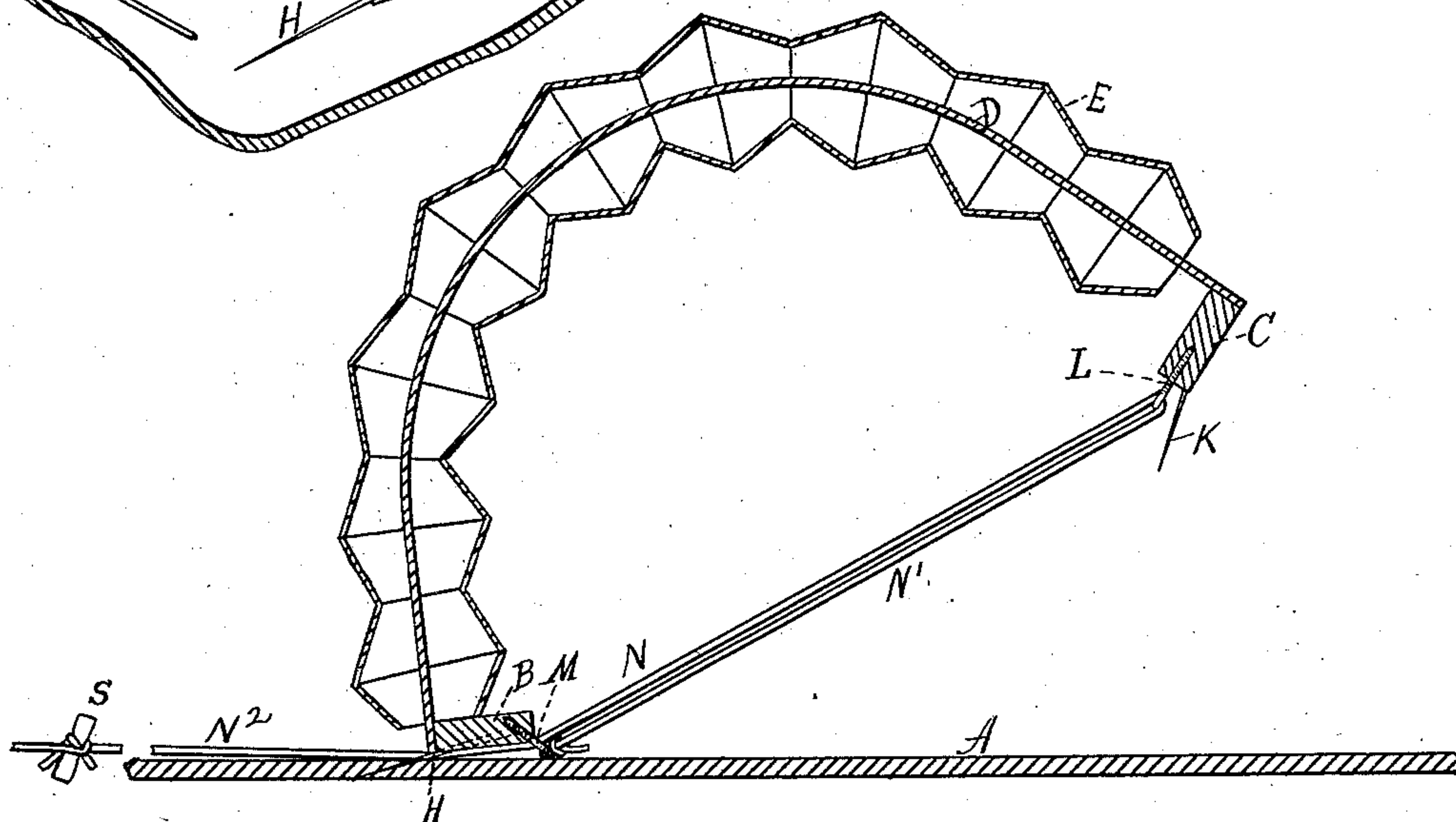


FIG. 1.



WITNESSES:

J. M. Hartnett.
B. M. Williams.

FIG. 2.

INVENTOR:

James W. Hale.
By his Atty.
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UNITED STATES PATENT OFFICE.

JAMES WHITE HALE, OF NEWBURYPORT, MASSACHUSETTS.

MECHANICAL TOY.

SPECIFICATION forming part of Letters Patent No. 381,922, dated May 1, 1888.

Application filed December 1, 1887. Serial No. 256,633. (No model.)

To all whom it may concern:

Be it known that I, JAMES WHITE HALE, of Newburyport, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Mechanical Toys, of which the following is a specification.

My invention relates to that class of mechanical toys in which the motions of life are imitated by means partially automatic and partially by movements communicated by the user, the object being to make a mechanical toy that by proper manipulation will imitate creatures the movements of which are like those of the inch or loop worm. This object I attain by the mechanism shown in the accompanying drawings, in which—

Figure 1 is a perspective view of my invention as it appears on the table or floor, and Fig. 2 is a vertical section of the same.

Similar letters of reference indicate like parts.

A in the drawings represents the floor or table upon which I place my toy when I wish to exhibit it. B and C are two blocks which serve as foot-pieces—C the front one and B the rear one. Each of these foot-pieces is provided with spurs like those shown at K K and H H. The foot-pieces C and B may be made of any material and of any design and provided with any desirable means for securing contact with the surface upon which the thing is placed. A cloth or carpet surface is to be preferred.

The two foot-pieces B and C are united by a spring-plate, D, as shown in Fig. 2, and also by a running looped string or cord, N N' N². The spring may be concealed by any fancy covering—as E, for instance—or the covering may be shaped to represent a living or fanciful creature—a worm, snake, or dragon, for instance.

The looped string or cord N N' N² has one end tied to the eyebolt M, Fig. 2, in the foot-piece B; thence the cord passes to and through the eyebolt L in the foot-piece C; thence back

and through the eyebolt M and under the foot-piece B, as shown at N²; thence to a stop-piece, S, and from there to the hand of the user.

To operate my toy I proceed as follows: The stop-piece S in the cord N² is so adjusted that it will not admit of the spring D becoming straight, but will always maintain it slightly curved—that is, the stop is so adjusted that as the spring D straightens, the cord N N² will be drawn through the eyebolt M until the stop S reaches said eyebolt, and thus prevent any further extension of the spring. In this condition the toy may be placed upon the carpet and the spurs K K of the foot-piece C inserted into the carpet. Now, by pulling the cord rearward, the rear foot-piece, B, is drawn forward by slackening the cord, the spurs H H of the foot-piece B will enter the carpet, being forced in by the reaction of the spring D, and the forward foot-piece, C, will advance with a tendency to rise upward, imitating the motion of a worm. Now, if the cord is again pulled rearward, the forward foot-piece, C, comes down and engages with the carpet, and the rear piece, B, is drawn forward. These motions may be repeated indefinitely, and with a little practice the toy may be made to contort itself in a great variety of ways.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a mechanical toy, the combination of the spring D and foot-pieces C and B, having engaging spurs, with the cord N, said cord being secured at one end to the rear foot-piece, B, thence passing freely through a loop or eyebolt secured to the forward foot-piece, C, and thence back under the foot-piece B, substantially as described, and for the purpose set forth.

JAMES WHITE HALE.

Witnesses:

FRANK G. PARKER,
J. M. HARTNETT.