F. S. NEYD'HART.

JUMPING TOY.

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1,329,201.

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Fig. 1.

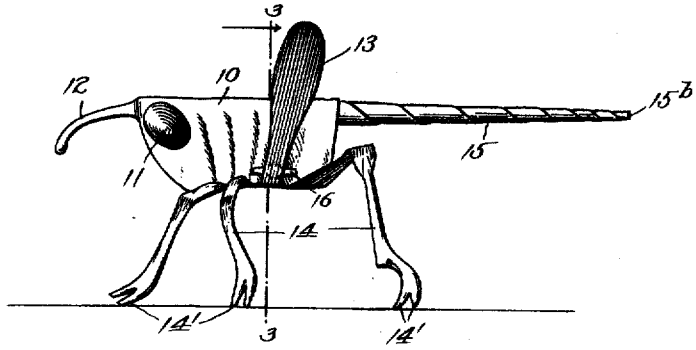


Fig. 2.

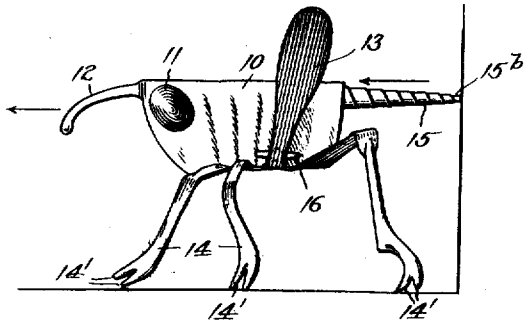


Fig. 3.

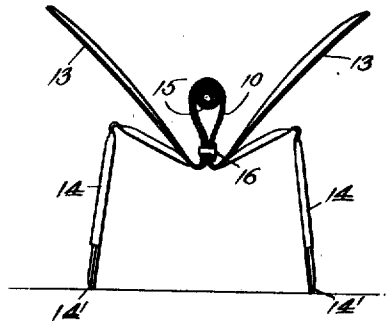


Fig. 4.

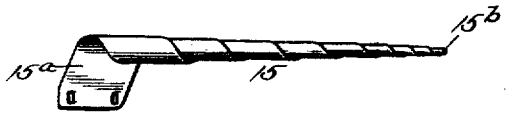
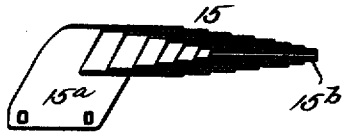


Fig. 5.



WITNESSES

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JUMPING TOY.

1,329,201. Specification of Letters Patent. Patented Jan. 27, 1920.

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To all whom it may concern:

Be it known that I, FRANCIS S. NEYD'HART, a citizen of the United States, and a resident of West Hoboken, in the county of Hudson and State of New Jersey, have invented a new and Improved Jumping Toy, of which the following is a full, clear, and exact description.

This invention relates to toys and consists of a jumping toy or one of the aerial projectile type.

Among the objects of the invention is to provide a toy of any suitable appearance or configuration, preferably simulating a well known animal or insect and having a member so constructed and attached as to act as a projecting means, the same being a permanent or integral part of the figure or device.

A still further object is to provide a toy of the character indicated which is adapted to simulate, under certain conditions, the natural walking or jumping of the creature which the device simulates in appearance.

A further object of the invention is to provide a toy having means for self propulsion and made of relatively cheap sheet material of a nature suitable for insuring strength and durability.

With the foregoing and other objects in view the invention consists in the arrangement and combination of parts hereinafter described and claimed, and while the invention is not restricted to the exact details of construction disclosed or suggested herein, still for the purpose of illustrating a practical embodiment thereof reference is had to the accompanying drawings, in which like reference characters designate the same parts in the several views, and in which—

Figure 1 is a side elevation of a preferred embodiment of my invention shown in normal standing position.

Fig. 2 is a similar view showing the projecting element being put under compression preparatory to the propulsion thereof.

Fig. 3 is a vertical transverse section on the line 3—3 of Fig. 1.

Fig. 4 is a detail view of the spring tail detached; and

Fig. 5 is an enlarged view of the same in longitudinal section put under tension somewhat as in Fig. 2.

Referring now more specifically to the drawings I show the toy as made to simulate an insect such as a grasshopper or locust, the same having a body 10, eyes 11, antennæ 12, wings 13, legs 14, and a spring tail 15. The body and other parts may be made of any suitable form or from any desired material, but for this purpose I have found in practice that a good quality of paper or sheet celluloid is quite suitable, the body and all of the parts attached thereto, except the tail, being made by stamping of a single piece and then folded longitudinally along the back so as to bring the two side portions of the body into close contact as shown in Fig. 3 where they may be fastened by any suitable means such as cement or by a metallic fastener 16. The legs and wings are bent so as to present a natural appearance and the legs because of their form and construction have a proper degree of flexibility so that when distorted somewhat from the normal position they will tend to spring back again to such normal position. The legs moreover as well as the wings being flexible constitute cushioning means for the entire device when it falls to the floor after being projected into the air.

The tail 15 is made as a separate piece and is formed by the long spiral winding of a tapered piece of flat material having inherent flexibility. For this purpose thin sheet celluloid is found to be very suitable not only for the elasticity thereof, but for its durability. As thus constructed it comprises a flat anchorage end portion 15^a through which the fastener 16 will pass in securing the tail in place at the same time the side portions of the body are fastened together, but if other means than the fastener is used to secure the parts together the flat member 15^a will lend itself immediately to this function. All the rest of the tail is wound or rolled into a long spiral beginning at the point 15^b. Naturally the anchorage portion 15^a of the tail is inserted at the posterior portion of the body, and is firmly held by the fastening means aforesaid while the tapered main portion of the tail projects rearward substantially in a straight line with the back of the figure.

In the operation of the invention, for projecting purposes the figure is grasped between the thumb and finger of either hand at the forward portion of the body or directly over the two eyes, which being convex portions of the body structure are very strong and rigid. The operator then will place the point 15^b of the tail upon his knee

or sleeve or any other place having preferably a fabric covering to prevent slippage of the point of the tail and then will press rearward directly putting the spring tail under compression, as indicated in Fig. 2. Upon release of the fingers from the body the recoil of the spring will propel or project the toy forcibly forward in a straight line with the axis of the tail. With practice a child or other person may cause the device to be thrown with precision both as to direction and distance, and hence the device or several of them may be used in the playing of a competitive game, the result of the game depending upon the skill in the propulsion of the projectiles. Obviously the direction in which the figure will move will depend upon the direction or position of the axis of the tail when put under compression and released. The spring member 15 in normal position fills the posterior portion of the body loosely, but when it is put under tension the larger or base portion of the spring increases in diameter filling the space just referred to.

As a variation from the operation above described, a child will find much amusement in causing the figure to move along a piece of fabric or other relatively rough surface in which the claws 14′ of the legs coöperate. This action of the figure may be produced either by grasping the tail and pushing the figure, or by grasping the antennæ and pulling it along the rough surface. The friction between the claws and the surface will cause a sort of walking or creeping action or movement of the legs.

The device is not only simple and cheap to manufacture, but may be made up so as to be durable for a long period of time with ordinary or reasonable care.

I claim:

1. A figure toy comprising a body of sheet material and having eyes pressed outward from opposite sides of the head portion of the body to produce maximum strength or stiffness, and a spring member extending rearward from the posterior portion of the body and adapted to be put under tension through the rearward pressure of the body while the operator grasps the body at the eyes and presses rearward thereon while the tip of the tail is applied against a fixed object.

2. A figure toy comprising a body and a plurality of legs formed of an integral piece of sheet material, the same being folded upon itself along its longitudinal center forming the body into two equal side portions and a similar number of legs on each side, the legs being flexible and having terminal claws, means to secure the side portions of the body together at its nether portion, and means attached to the body serving to propel the body over a rough surface whereby the friction with the claws will cause the legs to vibrate and simulate a natural progressive movement of a creature represented by the toy.

3. A figure toy comprising a body having integral legs formed from a single piece of sheet material and bent along the back bringing the side portions of the body against each other and the legs into supporting position, a coil spring tail having a flat end located between the side portions of the body, said tail being made of spring material, and fastening means passing through the side portions of the body and the interposed portion of the tail serving to lock the parts together and the tail in place.

FRANCIS S. NEYD'HART.