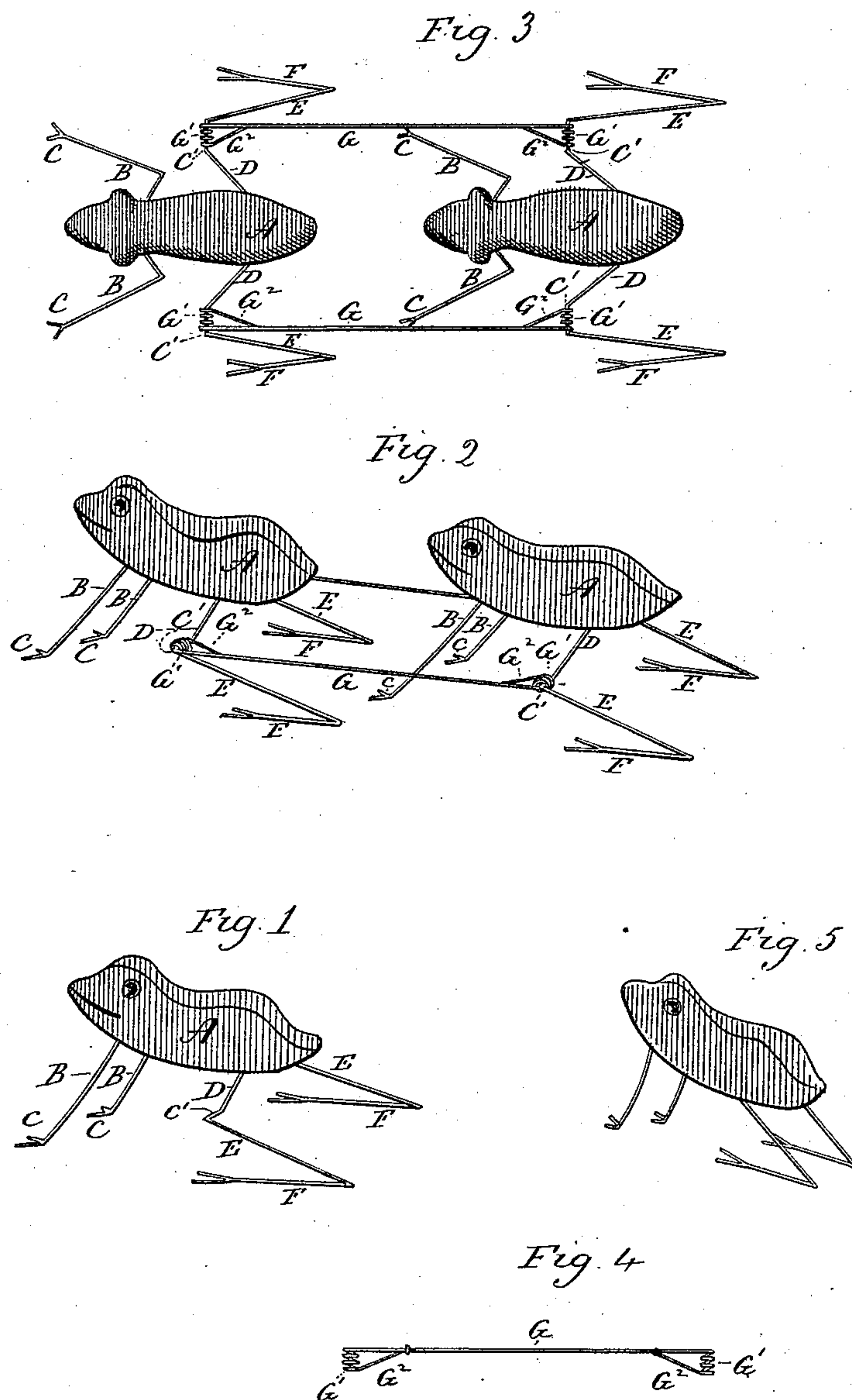


(No Model.)

W. A. WARNER.
JUMPING TOY.

No. 455,079.

Patented June 30, 1891.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM A. WARNER, OF BRIDGEPORT, CONNECTICUT.

JUMPING TOY.

SPECIFICATION forming part of Letters Patent No. 455,079, dated June 30, 1891.

Application filed March 2, 1891. Serial No. 383,417. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. WARNER, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new Improvement in Jumping Toys; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of a toy frog constructed in accordance with my invention; Fig. 2, a perspective view of a combined toy composed of two such toy frogs connected together so as to reproduce the game of leap-frog; Fig. 3, a plan view of the combined toy; Fig. 4, a detached view of one of the coupling-links by means of which the two toy frogs are connected together; Fig. 5, a perspective view of a toy frog constructed in accordance with my invention, but of modified form.

My invention relates to an improvement in toys, the object being to produce a toy frog adapted to spring or leap from one place to another in the manner of frogs by the application of pressure to its rear part.

With these ends in view my invention consists in a toy frog having a body portion and a pair of fore and hind legs, the hind legs being constructed in length and shape to yield under pressure applied to the body portion of the frog and, suddenly recovering, cause the same to leap from place to place.

My invention further consists in coupling two such toy frogs together by means of coupling-links, so that they will leap over one another when properly manipulated, and in certain details of construction, as will be hereinafter described, and pointed out in the claims.

As shown by Fig. 1 of the drawings, the toy has a body portion A, shaped to the form of and preferably properly colored to heighten its resemblance to a frog. A pair of fore and a pair of hind legs made of wire or of narrow strips of elastic sheet metal, but preferably made of spring-wire, are inserted into the lower face of the said body portion, respectively at the forward and rear ends thereof. As herein shown, the fore legs B B are made of wire and bent outwardly and rearwardly and then for-

wardly, and bent, flattened, and split at their lower extremities C C to simulate web-feet. The hind legs, which are also made of wire, are bent outwardly and forwardly, as at D D, then rearwardly in parallel lines, as at E E, and then forwardly and outwardly, as at F F, to form feet, whereby they are shaped to conform to a frog's hind legs in preparing to leap, the said extremities F F being flattened and split to simulate web-feet. The fore legs may be made elastic or non-elastic; nor are the hind legs necessarily shaped as described. They may, for instance, be made straight and extended directly backward in inclined positions, as shown by Fig. 5 of the drawings, or they may have still other forms. If desired, they may be coiled to increase their elasticity. They must, however, be made elastic and adapted in length and shape to cause the toy frog to jump from place to place when they recover after being sprung by pressure applied to and suddenly removed from the rear end of the body portion of the toy.

As shown by Figs. 2 and 3 of the drawings, two toy frogs, made substantially as described, are connected together by two links respectively placed on their opposite sides and each consisting of a single piece of light wire shaped to form a long straight central portion G, two coiled bearings G', respectively located at the ends thereof and extending in the same direction therefrom and at a right angle therewith, and two braces G² G², extending from the outer ends of the coils diagonally back onto the said central portion. These links are applied to the outward-extending portions D D of the rear legs of the two frogs, the said portions D D being there-to bent, as at C' C', to form four parallel centers for the coiled bearings G' G' to turn upon. If desired, wire links, such as described, may be replaced by links made of flat strips of sheet metal, having their ends folded over to form loops to encircle the parallel centers C' C', formed in the hind legs of each frog, as explained. The links are adapted in length to establish a sufficient distance between the two toy frogs to permit them to clear each other, so that when pressure is applied to the rear end of the rear frog it will leap over the forward frog which may now be jumped over the frog in front, and so

on, in reproduction of the game of leap-frog. The fore legs of the frogs shown by Figs. 2 and 3 are simply bowed longitudinally, and thus show another form which these legs
 5 may have given to them. I would therefore have it understood that I do not limit myself to the exact construction shown and described, but hold myself at liberty to make such changes and alterations as fairly fall
 10 within the spirit and scope of my invention.

I am aware that it is old to make a jumping toy in the similitude of a grasshopper, the under side of the body portion whereof is notched at its rear end to receive the sharp-
 15 ened rear end of a base-piece which is connected at its forward end by a bent and coiled wire attached to the forward end of the body portion, which is also furnished with antennæ, which are inoperative so far as either sup-
 20 porting the body portion or assisting in jumping the toy is concerned, the body portion only springing under the restraint of the base-piece. On the other hand, both the fore and hind legs of my toy co-operate in supporting
 25 its body portion, and it is free to jump without restraint from place to place.

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

30 1. A toy frog having a body portion and a pair of fore and a pair of hind legs respectively attached to the forward and rear ends of the said body portion and co-operating to support the same, the said hind legs being
 35 constructed and shaped to spring and recover when pressure is applied to and suddenly removed from the rear part of the said body portion, substantially as described, and whereby the said toy may be jumped from place to
 40 place without restraint.

2. A toy frog having a body portion and a

pair of elastic fore legs attached to the forward end thereof and a pair of elastic hind legs attached to the rear end thereof, said legs being constructed to co-operate to support the
 45 said body portion and shaped to spring and recover when pressure is applied to and suddenly removed from the rear part of the same, substantially as described, and whereby the toy may be jumped from place to place with-
 50 out restraint.

3. A toy frog having a body portion and a pair of fore legs and a pair of hind legs respectively attached to the forward and rear
 55 ends of the said body portion and co-operating to support the same, the hind legs being bent outward, then rearward, and then forward, substantially as described, and whereby when pressure is applied to the rear part of
 60 the said body portion and suddenly removed the hind legs will yield and, recovering, cause the toy to jump from place to place without restraint.

4. A combined toy consisting of two frogs, each consisting of a body portion and fore
 65 and hind legs, the latter being bent outward, rearward, and then forward, and two links located on opposite sides of the toy frogs and attached to the outward-bent portions of the
 70 hind legs, substantially as described, and whereby the frogs are caused to jump over each other when pressure is applied to and suddenly removed from the rear part of the
 body portion of the rear frog.

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

WILLIAM A. WARNER.

Witnesses.

J. H. ROCK,

W. G. ARMSTRONG.