(No Model.)

J. B. SECOR.

Toy.

No. 232,075. Patented Sept. 7, 1880.

Fig. 1.

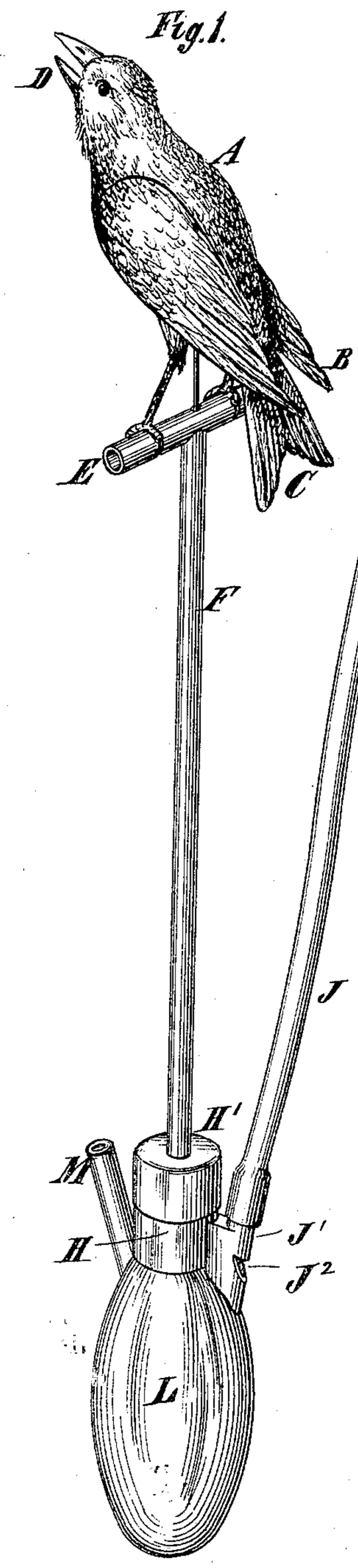
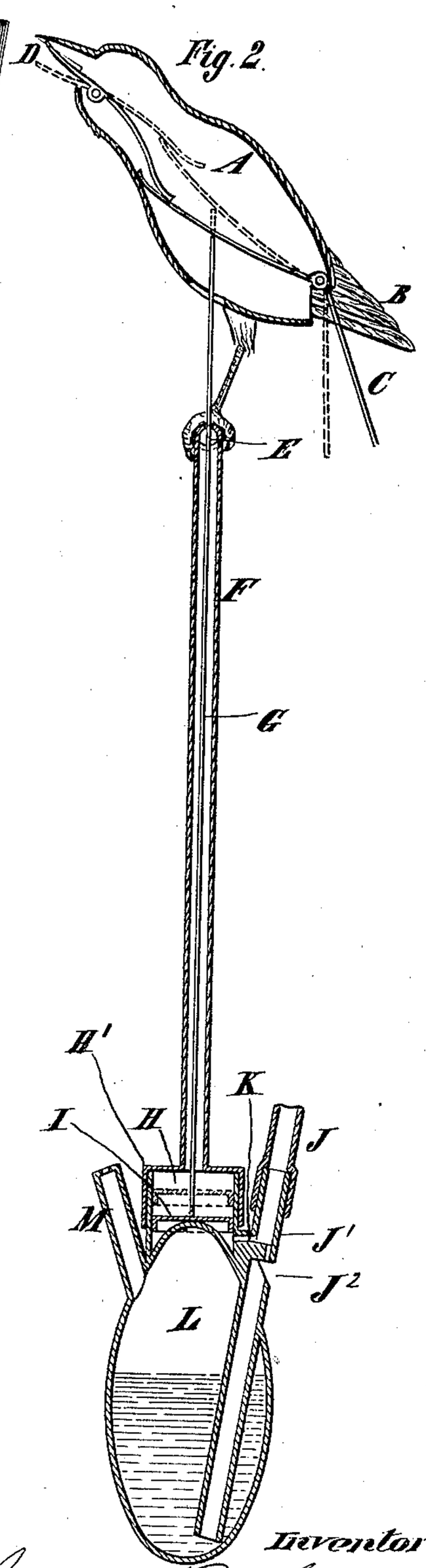


Fig. 2.



Witnesses
John Becker
Jno. C. Haynes

Inventor
Jerome B. Secor
by his Attorneys
Brown & Brown

UNITED STATES PATENT OFFICE.

JEROME B. SECOR, OF BRIDGEPORT, CONNECTICUT.

TOY.

SPECIFICATION forming part of Letters Patent No. 232,075, dated September 7, 1880.

Application filed July 20, 1880. (No model.)

To all whom it may concern:

Be it known that I, JEROME B. SECOR, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented a new and Improved Toy, of which the following is a specification.

My invention relates to toys representing birds and other living creatures and articles having motion and emitting notes or sounds; and the object of the invention is to provide simple means for imparting the desired motions and effecting the emission of sounds in such toys.

The invention consists in the combination, with movable parts, such as the bill and tail of a bird in a toy of the class referred to, of a weight or weights, or the equivalent thereof, for imparting motion to the parts in one direction, and a piston or diaphragm actuated by a current of air or liquid induced with the mouth of the person using the toy, so as to impart motion to the said parts in the opposite direction, a rod being preferably employed to transmit motion from the piston to the said parts.

The invention also consists in the combination, with movable parts of a toy, of weights for imparting motion to them in one direction, a piston or diaphragm for imparting motion to them in the opposite direction, a sound-producing device, and means for inducing a current of air or liquid to operate the piston or diaphragm and sound-producing device, whereby the same may be actuated by simply blowing from the mouth of the person using the toy.

It also consists in various features and combinations of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a toy representing a bird, embodying my invention, and Fig. 2 is a central vertical section of the same.

Similar letters of reference designate corresponding parts in both figures.

A designates the body of a bird, made of any suitable material—for instance, sheet metal. B designates the wings, which may be made of the same material as the body and attached thereto by soldering or otherwise, and C D designate, respectively, the tail and the lower part of the bill or beak, which also may be made of the same material as the body, and are designed to be susceptible of motion resembling that which the corresponding parts of a living bird usually have.

The tail C, as here shown, consists of a lever pivoted to the body A at or near the rear end thereof, and having one portion or arm protruding through and beyond the body and the other portion or arm extending forwardly within the said body. The forwardly-extending portion may constitute or be provided with a weight to move downward and impart motion to the tail in one direction—namely, upward. The lower part, D, of the bill or beak, as here shown, consists of a lever pivoted to the body or head at or near the forward end, so that one part will protrude outward and the other and longer portion will extend inward and lap over the adjacent portion of the lever forming the tail C. The inwardly-extending portion of this bill or beak lever may constitute or be provided with a weight for operating the lower part of the bill or beak in one direction.

The bird is represented as standing on a perch, E, which is supported by an upright rod, F. (Here shown as made hollow.)

G designates a rod extending through the upright hollow rod F into the body A of the bird, and abutting against the lever forming the tail C. Whenever this rod G is impelled upward it raises the inner portions of the levers forming, respectively, the tail and lower part of the bill or beak, and imparts to the tail and lower part of the bill or beak downward movements. As soon as the impulse ceases, however, the inner ends of the said levers descend and raise the tail and lower part of the bill or beak. In this way a raising and dropping of the tail and closing and opening of the bill or beak of the bird is simulated. Springs or a spring may be used in lieu of providing the said levers with or constituting said levers weights, if desirable, to impart motion to the said levers in one direction.

H designates a cylinder, into which the lower end of the rod G extends, and I is a piston fitting in said cylinder and acting on and preferably connected to the rod G.

J designates a tube, preferably of india-rubber or other flexible material, fitted to a pipe,

J′, and into or through which air may be blown by the mouth of the person using the toy. A pipe or passage, K, leads from this pipe J′ to the cylinder H, below the piston I. When a current of air or liquid is intermittently blown, forced, or induced through the tube J into the cylinder H against the piston I the rod G is forced up and allowed to drop, and the tail and lower part of the bill or beak are thus operated.

A diaphragm may be employed in lieu of a piston, if desired.

Preferably the cylinder H is provided with a removable cap, H′, having the rod F attached to it, so as to provide for opening the cylinder easily whenever it is desirable so to do.

L designates a vessel designed to contain water or other liquid, and shown as of spheroidal shape. The pipe J′ enters and extends nearly to the bottom of it, and just outside the same is provided with a whistle, J^2.

M designates a vent-pipe extending from the vessel L. Air forced or induced through the tube J thus operates the movable parts of the bird and the whistle or sound-producing device, the liquid in the vessel producing an effect like the trill of a bird.

It is obvious that the toy may be modified to represent other living creatures and various articles which, while in motion, emit sounds.

It is not necessary that the piston or diaphragm for operating the movable parts should be arranged in a compartment separate from the vessel containing the water or other liquid, or that two pipes or passages, one leading to said vessel and another below the piston or diaphragm, should be employed. Indeed, I may dispense entirely with the water or liquid and employ a pea, small ball, or pepper-corn, to effect the trilling.

The pipe whereby air is conveyed to the vessel containing the water or other liquid may also lead to the vessel above the diaphragm of the whistle or sound-producing device, if desirable.

In lieu of supplying the air by the mouth a hand-pump or elastic bulb or bellows or other apparatus for inducing currents operated by a clock-work or other motor may be employed with good results where preferable.

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

1. The combination, with movable parts in a toy representing a bird or other living creature or article, of a weight or weights or the equivalent thereof for imparting motion to said parts in one direction and a piston or diaphragm for imparting motion to said parts in the opposite direction, substantially as and for the purpose specified.

2. The combination, with movable parts in a toy representing a bird or other living creature or article, of a weight or weights or the equivalent thereof for imparting motion to said parts in one direction and a rod for imparting motion to said parts in the opposite direction, substantially as and for the purpose specified.

3. The combination, with movable parts in a toy representing a bird or other living creature or article, of weights or like devices for imparting motion to them in one direction, a piston or diaphragm for imparting motion to them in the other direction, a sound-producing device, and means for inducing a current of air or liquid to operate the piston or diaphragm and sound-producing device, substantially as specified.

4. The combination, in a toy representing a bird or other living creature or article, of movable parts, a mechanism for actuating the same, a sound-producing device, and means whereby a current of air or liquid may be induced to effect the operation of the movable parts and the sound-producing devices.

5. The combination, in a toy representing a bird or other living creature or article, of a vessel for containing liquid, a sound-producing device, a cylinder separate from said vessel, a piston or diaphragm in the said cylinder for actuating movable parts of the toy, and a tube for inducing a current of air to actuate the sound-producing device and piston or diaphragm, substantially as specified.

6. The combination, in a toy representing a bird, of a perch therefor, an upright hollow rod for supporting the perch, and a rod arranged in the said hollow rod for actuating movable parts of the bird, substantially as specified.

7. The combination of the toy bird and movable parts C D, the hollow rod F, the rod G, the cylinder H, movable cap H′, piston I, vessel L, tube J, pipe J′, whistle J^2, pipe or passage K, and vent-pipe M, substantially as specified.

JEROME B. SECOR.

Witnesses:
ALFRED B. BEERS,
ADAM WHITMAN.