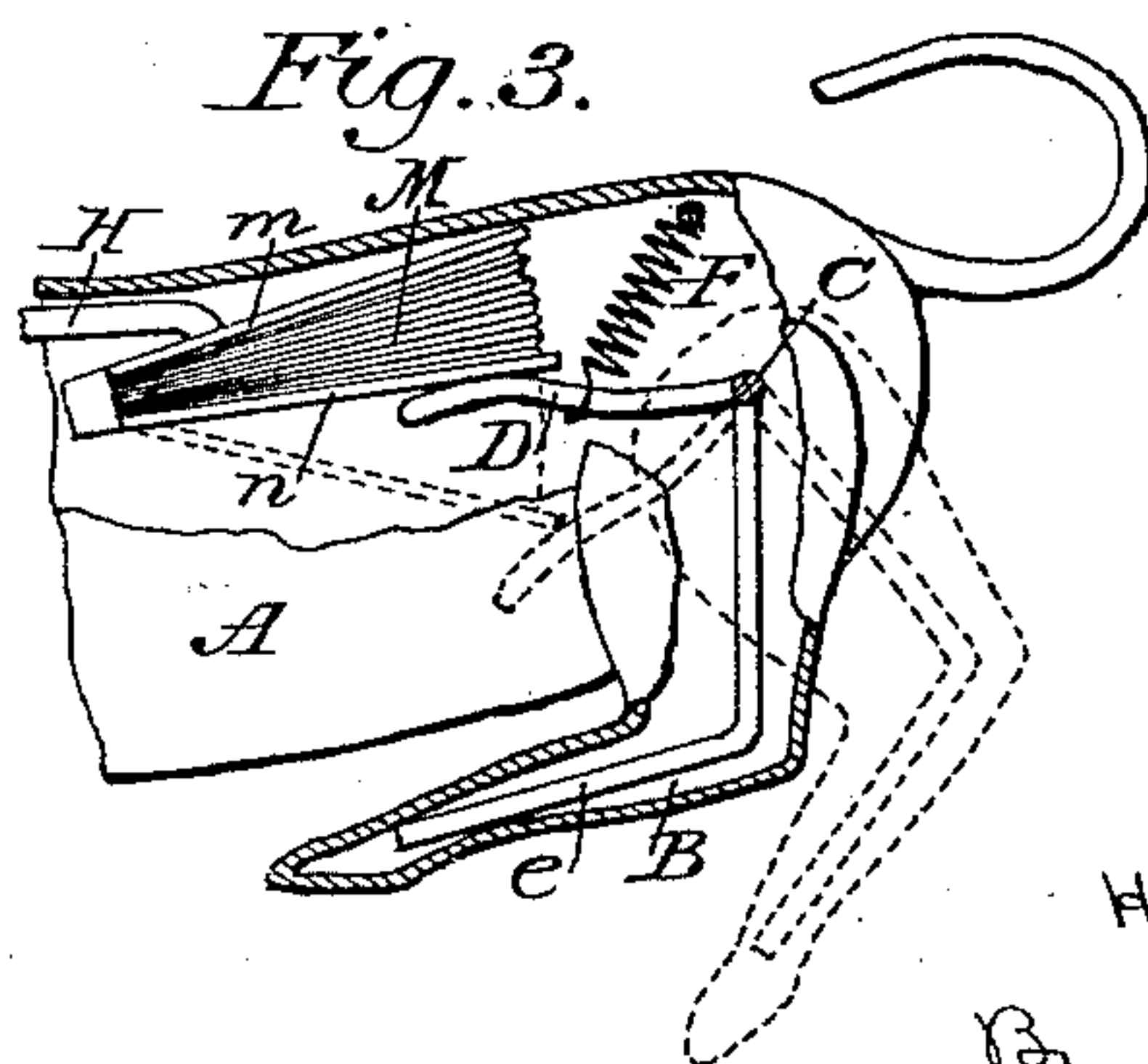
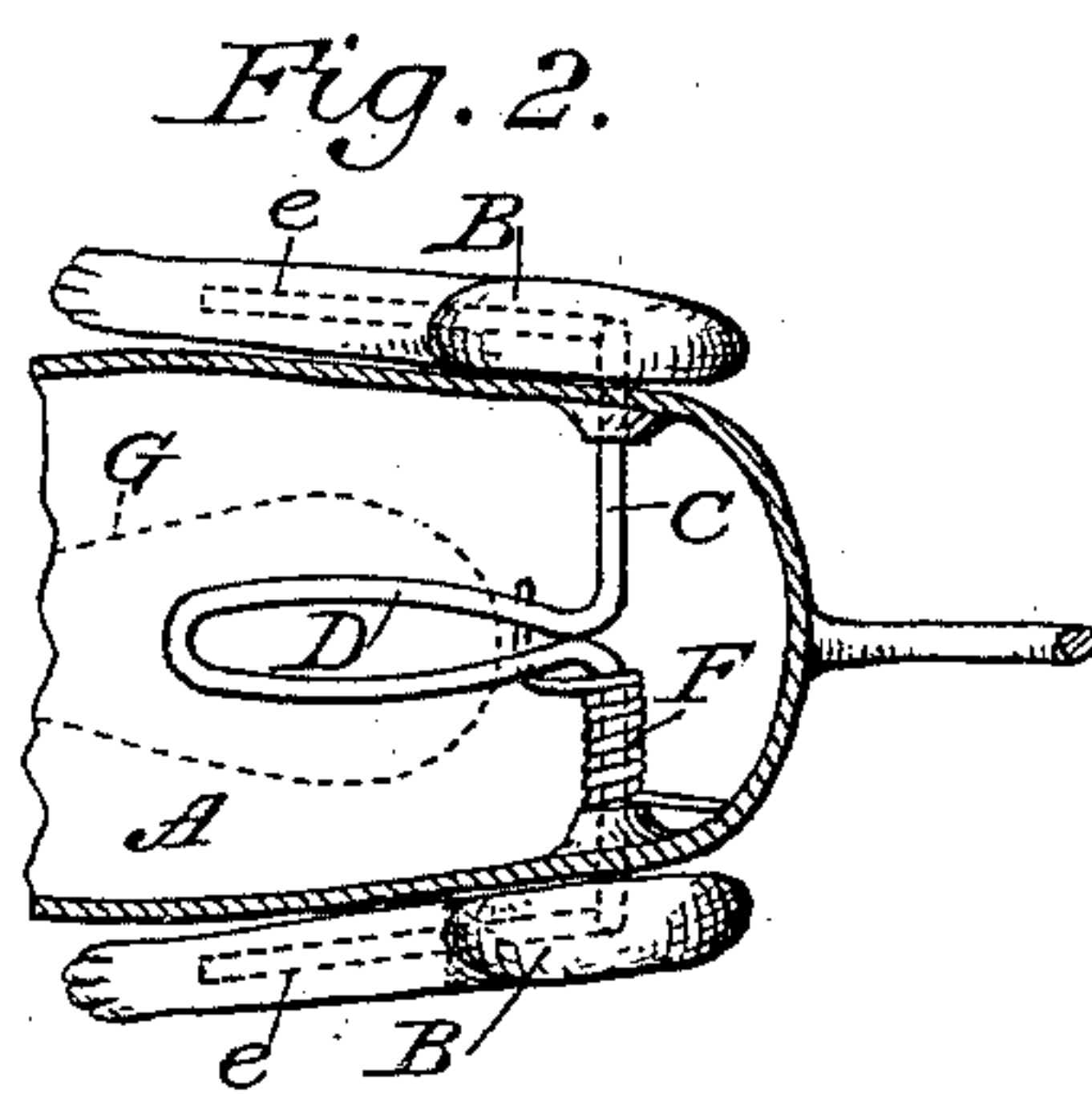
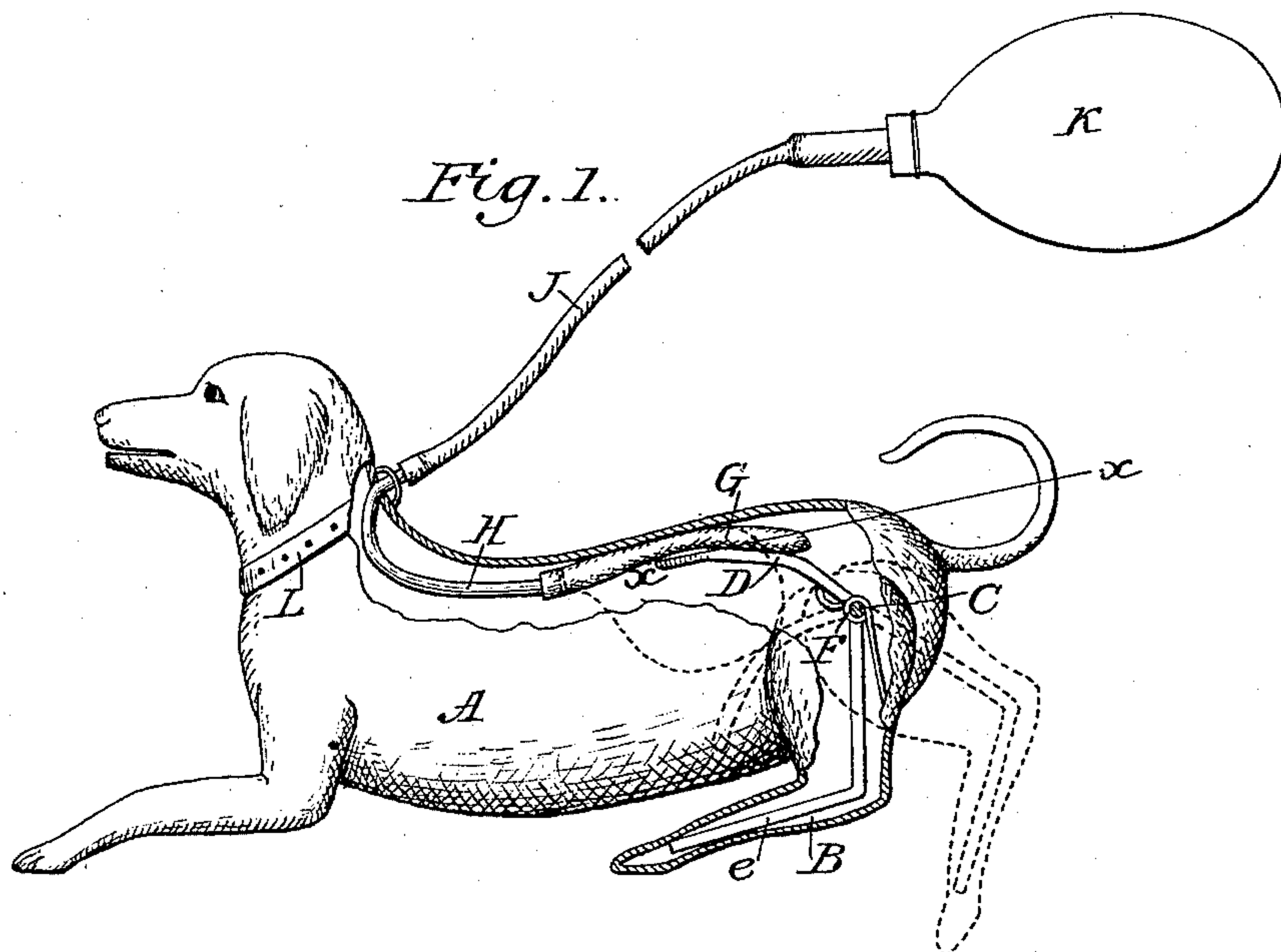


(No Model.)

H. L. PHILLIPS.  
TOY.

No. 409,701.

Patented Aug. 27, 1889.



*Attest:*

*A. N. Jesbrow.*  
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Henry L. Phillips  
By *David A. Burr*  
*Atty.*

# UNITED STATES PATENT OFFICE.

HENRY L. PHILLIPS, OF NEW YORK, N. Y.

## TOY.

SPECIFICATION forming part of Letters Patent No. 409,701, dated August 27, 1889.

Application filed May 29, 1889. Serial No. 312,629. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY L. PHILLIPS, of the city, county, and State of New York, have invented a new and useful Improvement in Toys; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to an improvement in toys made to represent animals or other living creatures, and has for its object to produce a jumping or springing movement thereof.

It consists in the novel construction and arrangement of devices hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of a toy dog embodying my invention; Fig. 2, a cross-section of the hind portion in line *xx* of Fig. 1, and Fig. 3 a detail illustrating a modification in the motor device.

A in the drawings represents the body of a dog in a playful attitude, crouching and ready to spring forward.

B B are the hind legs, made separately from the body and so bent that the lower or fore arm of each is at a right angle to the upper or thigh portion. These legs are pivoted to the body by means of a transverse bar or rod C, secured firmly to each leg and left free to rock in suitable bearings in the body. The body is made hollow, and the middle portion of the pivotal rod C is bent forward in the form of an extended loop, or is otherwise provided with an arm D, extending forward therefrom at a right angle therewith in a plane substantially parallel with that of the lower or outer lengths of the legs, as shown in the drawings. The two legs, the transverse connecting-rod, and the middle arm are thus in effect all connected rigidly to move together as one piece and form a lever of the order having the end of the legs as its fulcrum and the weight applied at the pivotal bearings. Preferably the ends of the transverse pivotal rod C are bent to extend out through the legs to the end thereof, as shown at *e* in Fig. 1, so as to re-enforce them. The swinging legs B are kept automatically in position under

the dog by means of a spring F, of any suitable description, fitted in position to bear the lever-arm D upward. This spring may consist of a spiral coil encircling one end of the transverse pivotal rod C, and which, being secured at one end to the body of the animal, is made to bear by an extension of its opposite end against the under side of the lever-arm D.

A collapsible bag G, of rubber or other flexible material capable of being made air-tight, is inserted between the arm D and the top of the shell or case of the hollow body A, and is connected by a pipe H, fitted in said body to a flexible tube J, extending to a rubber hand-bulb K, so that by compressing the bulb a charge of air will be forced out therefrom into the bag G. The expansion of the bag G thus produced will operate to force down the arm D, and thereby cause the legs B B to swing out from the body, and by their contact with the floor or ground thereby cause the rear part of the body to move upward and forward. So soon as the bulb K is relieved of pressure the action of the spring F will cause the lever D to compress the bag G and force back the air therein into the bulb, thereby allowing the legs to return to their normal position. Thus by a compression of the bulb the animal will be made to spring forward, and by constantly repeating the operation may be made to travel over a floor or smooth surface, the quickness or energy of the movement being determined by the manner in which the bulb is handled.

The flexible tube may be carried to a collar L, fitted about the dog's neck and made to resemble a leading-cord extending out therefrom.

As an equivalent for a flexible inflatable bag G, inserted between the end of the lever D and the inclosing shell or casing A, an expanding and collapsible case of any description may be employed to bear upon the lever.

In Fig. 3 of the drawings, M represents a bellows similar to the ordinary blacksmith's bellows, adapted to the movement of the lever, the air being forced in and expelled through the pipe H, which is connected to the upper fixed board *m* of the bellows, the lower movable board *n* being left free to bear upon the



lever and move it, as shown by the dotted lines in Fig. 3.

It is evident that the outer configuration of the toy is not essential to my invention, and I contemplate the application of said invention to the figures of all manner of animals, insects, and living creatures to produce a movement thereof.

I claim as my invention—

10 1. A jumping toy having a body, legs hinged to the body, and an inflatable case operating by its expansion to move the legs, in combination with a hand device for supplying air to the case, substantially in the manner and  
15 for the purpose herein set forth.

20 2. The combination, in a toy, with its movable body, of a bent lever pivoted to said body and having one of its arms free to swing outward therefrom, an inflatable case carried by the body in position to bear against the

inner arm of said lever, a separate collapsible bulb, and a tube connecting said bulb and case, substantially in the manner and for the purpose herein set forth.

3. The combination, in a toy, of a bent lever 25 pivoted to the body of the toy, a spring actuating the lever to carry its inner arm inward, an inflatable case bearing upon said inner arm to overcome when inflated the tension of the spring, and thereby swing the lever 30 outward, and a device for inflating the case, substantially in the manner and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two sub- 35 scribing witnesses.

HENRY L. PHILLIPS.

Witnesses:

BENJAMIN FRANKLIN,  
A. N. JESBERA.