No. 699,344. Patented May 6, 1902.

G. E. PATON.

MECHANICAL TOY.

(Application filed Nov. 7, 1901.)

(No Model.)

Fig. 1.

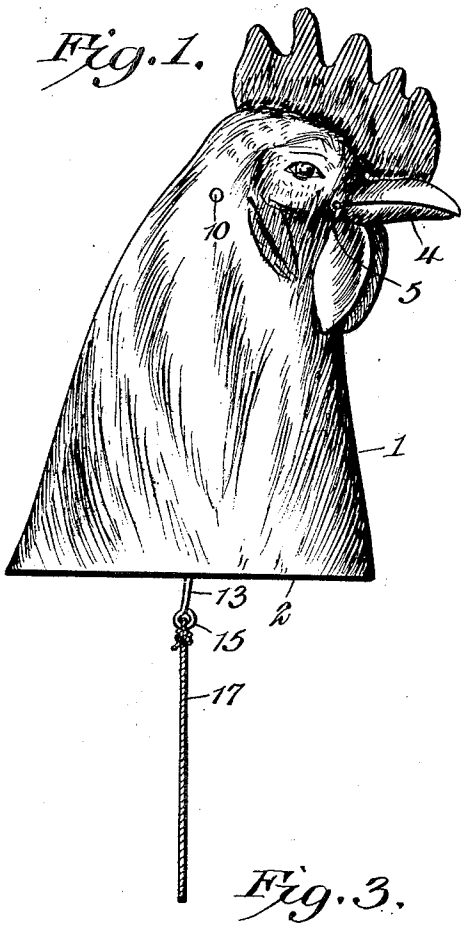


Fig. 2.

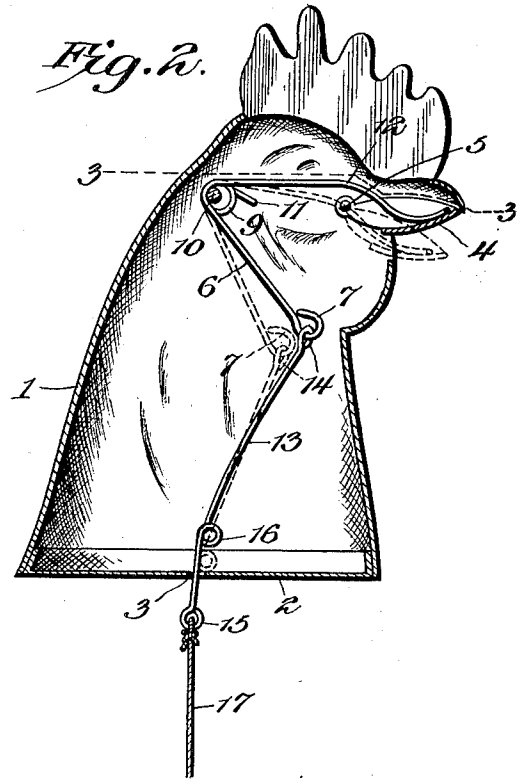


Fig. 3.

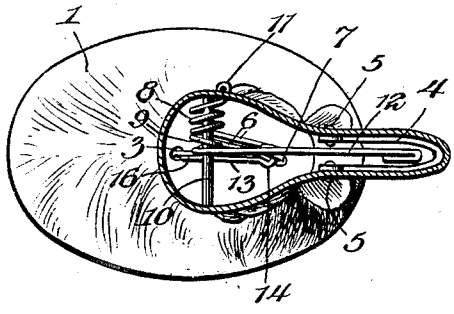
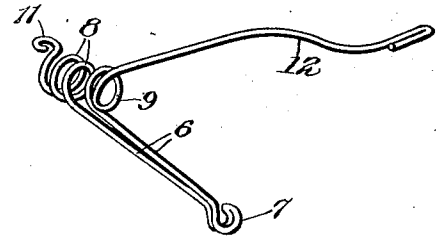


Fig. 4.



George E. Paton, Inventor,

By E. G. Siggers.

Attorney

Witnesses
Howard D. Orr.
L. J. Shepard.

UNITED STATES PATENT OFFICE.

GEORGE EDWARD PATON, OF FAYETTEVILLE, NORTH CAROLINA.

MECHANICAL TOY.

SPECIFICATION forming part of Letters Patent No. 699,344, dated May 6, 1902.

Application filed November 7, 1901. Serial No. 81,438. (No model.)

To all whom it may concern:

Be it known that I, GEORGE EDWARD PATON, a citizen of the United States, residing at Fayetteville, in the county of Cumberland and State of North Carolina, have invented a new and useful Mechanical Toy, of which the following is a specification.

This invention relates to mechanical toys, and is particularly designed to provide an improved device of this character which, in addition to its function as a toy, is also adapted for advertising purposes and for use in political campaigns.

It is furthermore designed to arrange the device for convenient manipulation, so as to emit a shrill harsh sound—as, for instance, in imitation of the crowing of a rooster—and also to give the device any attractive or suggestive shape, in the present instance that of the head and neck of a rooster.

Another object is to arrange for imparting movements to the jaw or bill of the device in imitation of the fowl, animal, or whatever the device has been shaped to represent.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of a toy embodying the present invention. Fig. 2 is a central longitudinal sectional view thereof. Fig. 3 is a cross-sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a detail perspective view of the means for manipulating the jaw or bill of the device.

Like characters of reference designate corresponding parts in all the figures of the drawings.

In carrying out the present invention there is provided a hollow or tubular body portion 1, preferably formed of sheet metal, so as to be resonant, and also shaped in any particular form to meet the requirements for which the device is particularly adapted, the form shown in the drawings being that of the head, face, and neck of a rooster, which is a general type of the present device adapting it for use as a children's toy, an advertising medium, and also particularly appropriate for use in political campaigns. However, it will of course be understood that I do not desire to limit myself to the particular shape shown in the drawings, as any configuration of the device may be employed without departing from the present invention.

The bottom of the hollow or tubular body is closed by means of a resonant bottom plate 2, preferably of thin sheet metal, although other resonant material may be employed, and this bottom is provided with a central perforation 3 for the reception of the manipulating device, whereby the lower jaw or bill of the rooster's head may be opened and closed. The lower jaw 4 is hinged or pivoted to the face portion of the head, as indicated at 5, so that said jaw may be moved in imitation of a rooster's jaw when crowing. To effect movement of the hinged jaw, there is provided a swinging arm 6, located within the body of the device and inclined vertically and transversely thereof. This arm is formed by the doubled intermediate portion of a spring-wire, the bend of which is formed into a hook 7, located at the lower end of the arm. At the upper end of the arm the wire members are twisted into oppositely-disposed coils 8 and 9, which embrace a rod or pin 10, fixed transversely within the device and preferably located opposite the movable jaw. The outer terminal of the coil 8 is rigidly connected to one side of the body—as, for instance, by having said terminal formed into a hook 11, which is engaged with a suitable perforation in the adjacent side of the body. The outer terminal of the other coil is extended to form an arm 12, the outer free end of which is connected to the movable jaw. By this arrangement the two arms 6 and 12 form a bell-crank lever, which has its pivot or fulcrum upon the wire rod 10 by reason of the spring-coils 8 and 9 embracing said rod, so that by swinging the arm 6 downwardly the arm 12 will also be moved downwardly and carry the jaw 4 therewith, thereby opening the jaw. It will of course be understood that the tension of the

spring-coils is sufficient to hold the bell-crank lever at its upper limit, thereby to normally maintain the jaw in its closed position.

For convenience in manipulating the bell-crank lever a wire link 13 is connected to the free end of the arm 6 by having an upper terminal eye 14 to engage with the hook 7, so as to form a loose connection between the link and the lever. The lower end of this wire link projects loosely through the perforation in the bottom plate 2 and is provided with a lower terminal eye 15, located exteriorly of the body of the device, and within said body the link is twisted into a loop 16 to form a lateral projection or stop for engagement with the inner side of the plate 2 when the link 13 has been drawn to its downward or outward limit. A flexible cord 17 is connected to the terminal eye 15 of the link and resin is applied to the string, so as to render the same sticky.

In manipulating the device, the body thereof is held in one hand and the fingers of the other hand are drawn along the cord 17 in an outward direction, and as the fingers alternately stick and slip upon the cord rocking movement will be imparted to the bell-crank lever, which movement will result in a quick opening and closing movement of the lower jaw 4, somewhat in imitation of the action of the lower jaw of a rooster when crowing. Furthermore, when the stop 16 comes into engagement with the inner side of the resonant bottom plate or diaphragm 2 the latter is thrown into vibration and in connection with the hollow metallic body a shrill grating noise is emitted. The device can also be manipulated by holding the string and swinging the device in the path of a circle.

What I claim is—

1. A device of the character described, comprising a hollow body having a characteristic head and face, the latter being provided with a movable lower jaw, means for yieldably holding the movable jaw normally closed, a resonant diaphragm stretched across the hollow head, and a manipulating-cord operatively connected with the movable jaw and in operative relation with the resonant diaphragm.

2. A device of the character described, comprising a hollow body having a fixed characteristic head and face at one end thereof, the face being provided with a fixed jaw and a movable jaw, a spring to hold the latter jaw normally closed, a resonant diaphragm stretched across and closing the opposite end of the body, and a manipulating-cord connected to the movable jaw and in operative relation with the resonant diaphragm.

3. A device of the character described, comprising a hollow body, a movable member carried thereby, a resonant diaphragm also carried by the body and provided with a perforation, a manipulating-cord connected to the movable member and projected through the perforation of the diaphragm, and a stop carried by the cord and in operative relation to the diaphragm.

4. A device of the character described, comprising a hollow body, a characteristic head at one end of the body and provided with a movable jaw, a resonant diaphragm closing the opposite end of the body and provided with a perforation, a manipulating-cord projected through the perforation and connected to the movable jaw, and a stop carried by the cord within the body and in operative relation to the diaphragm.

5. A device of the character described, comprising a hollow body having a fixed characteristic head and face, the latter being provided with a fixed upper jaw and a movable lower jaw, a spring-actuated bell-crank lever mounted in the body and having one arm connected to the movable jaw to normally hold the latter closed, a resonant diaphragm stretched across the hollow body, and a manipulating-cord connected to the other arm of the lever and in operative relation with the diaphragm.

6. A device of the character described, comprising a hollow body having a characteristic head and face, the latter being provided with a fixed jaw and a movable jaw, a spring-actuated bell-crank lever within the body, one arm of the lever being connected to the movable jaw to hold the latter normally closed, a resonant diaphragm stretched across the body, and an operating-cord connected to the other arm of the lever and in operative relation with the diaphragm.

7. A device of the character described, comprising a hollow body, a characteristic head at one end of the body and having a movable jaw, a resonant diaphragm closing the opposite end of the body and provided with a perforation, a spring-actuated bell-crank lever mounted within the body and having one arm connected to the movable jaw, a manipulating-cord projected through the perforation in the diaphragm and connected to the other arm of the lever, and a stop carried by the cord and in operative relation to the inner side of the diaphragm.

8. A device of the character described, comprising a hollow body, a movable member carried thereby, a resonant diaphragm also carried by the body, a spring-actuated lever mounted within the body and connected with a movable member, a link connected to the lever and projected through a perforation in the diaphragm, the link being twisted into a loop adjacent to the inner side of the diaphragm to form a stop for engagement therewith, and a cord connected to the outer free end of the link.

9. A device of the character described, comprising a hollow body, a movable member carried thereby, a resonant diaphragm also carried by the body, a transverse pin or rod within the body, a wire doubled upon itself to form an arm, and having its opposite portions twisted into spring-coils embracing the

rod or pin, the outer end of one of the coils being connected to the body, and the outer end of the other coil being extended to form an arm connected to the movable member, and an operating-cord connected to the first-mentioned arm and in operative relation to the diaphragm.

10. A device of the character described, comprising a hollow body, a characteristic head at one end of the body and provided with a movable jaw, a transverse rod or pin within the body, a wire doubled upon itself to form a downwardly-inclined arm, the bend of the wire being formed into a hook, the opposite portions of the wire being twisted into spring-coils embracing the rod or pin, the outer end of one of the coils being connected to the body, the outer end of the other coil being extended into an arm connected to the movable jaw, a wire link connected to the hook of the first-mentioned arm and having its opposite end projected through a perforation in the diaphragm, an intermediate portion of the link being twisted into a loop to form a stop in operative relation to the inner side of the diaphragm, and a cord connected to the outer free end of the link.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE EDWARD PATON.

Witnesses:

A. E. RANKIN,

LEIGHTON HUSKE.