No. 765,926. PATENTED JULY 26, 1904.

J. KELLY.

ELECTRICAL TOY.

APPLICATION FILED MAY 4, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

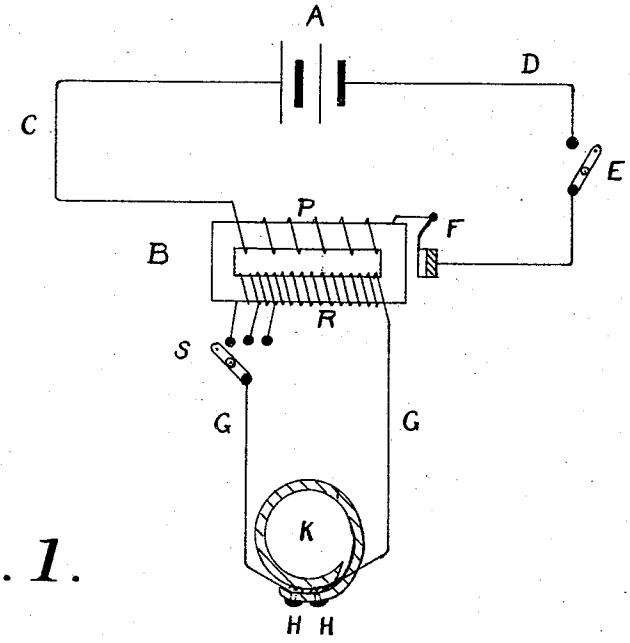


Fig. 1.

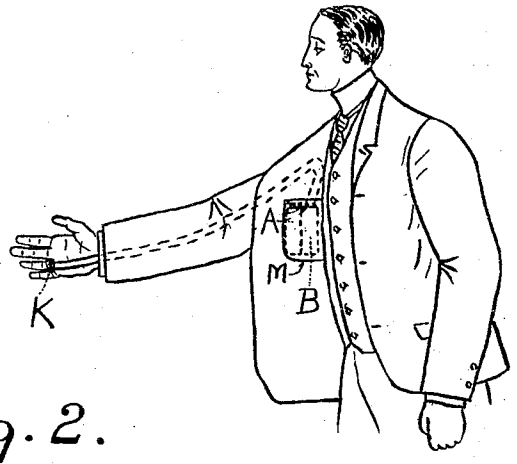


Fig. 2.

Witnesses

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J. R. Allen

Inventor

John Kelly

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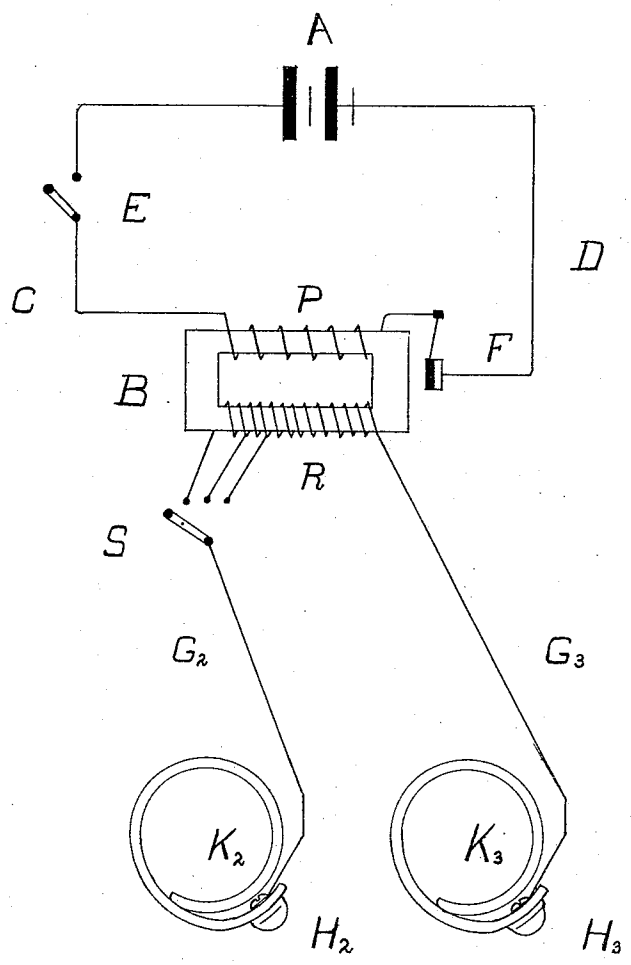


Fig. 3

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN KELLY, OF PATERSON, NEW JERSEY.

ELECTRICAL TOY.

SPECIFICATION forming part of Letters Patent No. 765,926, dated July 26, 1904.

Application filed May 4, 1904. Serial No. 206,317. (No model.)

To all whom it may concern:

Be it known that I, JOHN KELLY, a citizen of the United States, residing at No. 499 Totawa avenue, Paterson, in the county of Passaic and State of New Jersey, have invented a new and original Electrical Toy, of which the following is a specification.

The electrical toy which I have invented consists of a small dry cell or battery connected in series with the low-potential windings of an induction-coil or step-up transformer. The high-potential windings of the induction-coil are connected, by means of two insulated wires, with two contact-buttons mounted on the outside of a finger-ring of hard rubber, celluloid, or other insulating material. Flesh-colored celluloid is very desirable as being inconspicuous. I usually prefer to use an adjustable ring, as shown in Figure 1^K of the attached drawings. The inner lap of the ring serves to insulate the finger of the wearer from the contact-buttons.

It is intended that the cell or battery and transformer be concealed in the inside breast-pocket or other convenient hiding place on the person intending to operate the toy. The two wires are to be run down the sleeve of the operator and the ring slipped on one of his fingers, the two contact-buttons being turned toward the palm of his hand. If now, the circuit through the induction-coil and battery being closed, the operator shakes hands or otherwise brings the two buttons on the ring into contact with another person, this person receives a most surprising and effective electric shock. Owing to the small size and the ingenious method of concealing the apparatus, the recipient of the shock does not at once discover the source of the discharge, and the toy is productive of much amusement.

Instead of running both wires from the induction-coil to the ring through one sleeve one wire may be run down each sleeve of the operator and connected to a contact-button on a ring on each hand. If the operator then induces a number of persons to join hands with him and form a ring, as is the custom in certain round dances, immediately the ring is completed an electrical shock is felt by all the persons composing the ring with the exception of the operator.

Other applications of the toy will readily suggest themselves.

I am very well aware that there has been in common use for a long time an apparatus consisting of a battery, an induction-coil, and two handles, by means of which an electrical discharge of high potential is given to the person or persons taking hold of these handles. This apparatus is used for medicinal purposes and also as a toy. I am also aware that there is a well-known practice of charging certain objects, as door-knobs or the wire fences surrounding an orchard, with electrical currents of high potential in order that persons touching these objects may receive an electrical shock. My invention differs from these appliances, however, in that it is portable and is so proportioned as to be concealed on the person of the operator and in that the coil is connected to two contact-points which differ materially in their arrangement from any previously used, as they are mounted on a non-conspicuous insulating finger-ring. Moreover, I think it will be readily appreciated that the general arrangement and method of operation of my toy is distinctly novel.

The operation of my invention will be made clear by referring to the accompanying drawings.

Fig. 1 represents the diagram of connections; Fig. 2, one of the methods of carrying and concealing the apparatus.

The cell or battery A is connected with the low-potential winding P of the induction-coil B by means of the insulated wires C and D, the circuit being controlled by the switch E. The vibrator of the induction-coil is shown at F.

The high-potential windings R of the induction-coil are connected by the insulated wires G G to the two contact-buttons H H, mounted on the adjustable ring K. The inside flap of the ring may be made to insulate the finger of the wearer from the buttons, as shown.

Fig. 2 illustrates one of the methods of

using the toy. The cell or battery A, the two wires D and C, and the induction-coil B, with its vibrator F, are inclosed in a case M, which is slipped in the pocket of the operator, as shown.

Fig. 3 represents the diagram of connections when two rings are used. In this case one of the insulated wires G^2 from the high-potential windings R of the induction-coil B is connected to the contact-button H^2, mounted on the ring or insulating-base K^2. The other wire G^3 from the high-potential winding R is connected to the contact-button H^3, mounted on the ring or insulating-base K^3. The rest of the connections are the same as in Fig. 1.

It is to be understood that where I use the word "ring" I do not necessarily limit myself to a circlet placed around one finger, but wish to include also any ring or band or similar insulating-base so fastened to the fingers or hand that the contact-points may be positively mounted thereon.

The method of operation is as follows: On closing the switch E a circuit is established through the windings P and the vibrator F. By the well-known principle of the induction-coil a current of high potential is induced in the secondary windings R. When the gap across H H is closed, as by the hand of a person, the circuit is completed through the windings R, the conductors G G, the buttons H H, and the hand across H H, which latter receives an electric shock. A switch S may be inserted in the circuit, by means of which a number of turns of the induction-coil may be cut out and the degree of electric shock regulated.

I claim as my invention—

1. In an electric toy, the combination of an induction-coil, a battery, two conductors and two contact-points, the points mounted on one or two insulating finger-rings as described.

2. In an electric toy, the combination of a portable induction-coil and battery, two conductors from the coil and means for connecting the coil with two contact-points mounted on one or two insulating finger-rings as described.

3. In an electric toy, the combination of a portable induction-coil, a battery intended to be concealed on the person, two insulated wires from the high-potential windings of the induction-coil adapted to be concealed in the sleeve or sleeves of the wearer and connected with two contact-points, mounted on one or two insulating-rings as described.

4. In an electric toy, the combination of a dry cell or battery electrically connected with the low-potential windings of an induction-coil, the circuit being controlled by a switch, the high-potential winding of the coil being connected to two contact-points mounted on one or two insulating-rings, the whole being of small size and inconspicuous, and so arranged as to be readily concealed on the person.

5. In an electric toy, the combination of a dry cell or battery electrically connected with the low-potential windings of an induction-coil, the circuit being controlled by a switch, the high-potential winding of the coil being connected to two contact-points mounted on one or two insulating-rings, the whole being of small size and inconspicuous, and so arranged as to be readily concealed on the person and to give a mild electric shock to the person touching the two contact-buttons and completing the electric circuit through the high-potential windings of the coils, and means for regulating the amount of shock.

6. The combination with a source of electric current of low amperage and high voltage adapted to be carried on the person and to transmit an electric shock to a second person, of terminals for the said source, and an insulating support capable of being carried upon the first-named person, and means whereby upon a selected mode of contact with a second person, a shock shall be transmitted to said second person, as and for the purpose described.

Signed at New York, in the county of New York and State of New York, this 2d day of May, A. D. 1904.

JOHN KELLY.

Witnesses:
WM. H. CAPEL,
STANWOOD E. FLICHTNER.