

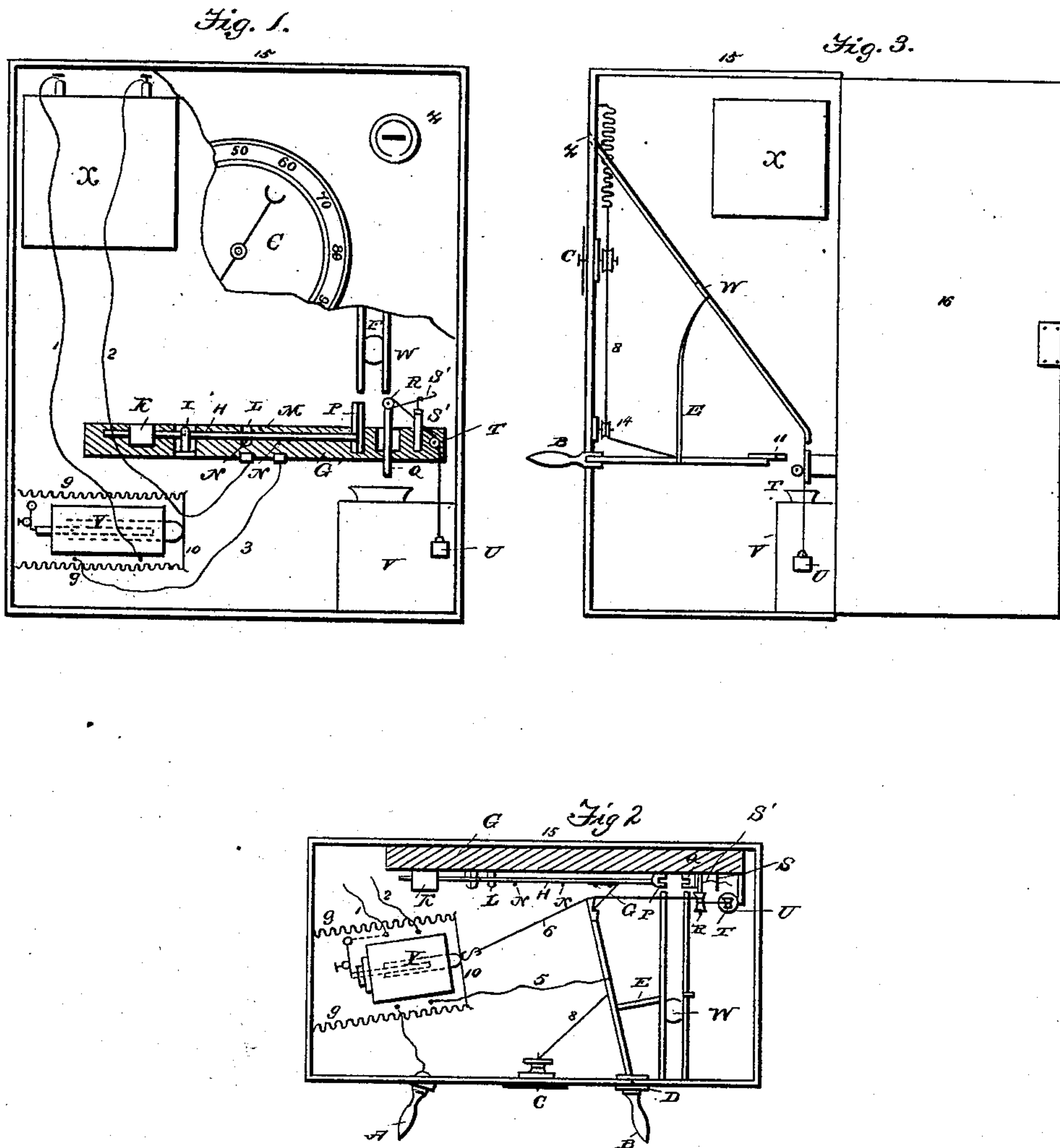
(No Model.)

C. DURIEUX.

COIN OPERATED INDUCTION COIL.

No. 393,625.

Patented Nov. 27, 1888.



Witnesses:

*James J. Sheehy.*

Inventor:  
*Chas. Durieux.*

*By, W. R. Stringfellow*  
Attorney.

# UNITED STATES PATENT OFFICE.

CHARLES DURIEUX, OF NEW ORLEANS, LOUISIANA, ASSIGNOR TO THE  
SOUTHERN AUTOMATIC ELECTRIC SHOCK MACHINE COMPANY, OF  
SAME PLACE.

## COIN-OPERATED INDUCTION-COIL.

SPECIFICATION forming part of Letters Patent No. 393,625, dated November 27, 1888.

Application filed June 8, 1888. Serial No. 276,543. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES DURIEUX, a citizen of Belgium, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Coin-Operated Induction-Coils; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to that class of automatic devices known as "coin-operated induction-coils," and is designed to produce a device whereby a coin of proper denomination will unlock certain mechanism by which the induction coil is put in operation.

In the accompanying drawings, Figure 1 is a front elevation with a portion of the front removed to expose the interior mechanism. Fig. 2 is a plan view with the top and the battery removed. Fig. 3 is a side view with the interior exposed.

The mechanism is contained within a box, 15, on the front of which is a dial with its needle C, a slot, Z, for the reception of the coin, (shown in the figures at W,) and handles (electrodes) A and B, the former being fixed and the latter being horizontally movable on a pivot, D, and extended into the box, as shown.

In the box and extending from the slot Z to a point above a receptacle, Y, is a coin-guide, F, and attached to the handle B is an arm, E, with its upper and free end within the guide F and normally in the path of the coin.

H designates a lever pivoted at I, and provided at one end with a counter-weight, K. The other end of the lever is formed into a head, P, under the lower end of the guide F, and between the latter and the receptacle V. Between the pivot I and head P the lever carries two contact-points, N, arranged to engage the terminals O, hereinafter referred to. Stops L and M limit the movement of the lever. The lever also carries a detent-finger, G, arranged to normally engage a notch, 11, in the innermost end of the handle B.

Q is a coin-retaining pivoted arm carrying a pulley, R, at its upper end, and is arranged opposite the head P and under the guide F.

To the upper end of the arm Q is attached a wire, S', of such length that by engaging a stop, S, the movement of the said upper end of the arm toward the head P will be limited. A cord, 7, is attached to the inner end of the handle B and passes around the pulley R, and also over a pulley, T, and sustains a weight, U, the purpose of which is to maintain a tension on the said cord. A cord, 8, is attached to the handle B, and passes around a guide-pulley, 14, around a pulley, 12, on the arbor of the indicator-needle C, and to a spring, 13. The handle B is also attached by a cord, 6, to the core-sheath of an induction-coil, Y, of the usual well-known form used in medical batteries, and of which no description is here necessary. The said sheath is retained normally with the coil by springs 9, attached to an arm, 10, on one end of said sheath.

Wires 1, 2, and 3 are the primary-circuit wires, and wires 4 and 5 convey the induced current. Wire 1 is connected to a suitable battery, X, and to primary circuit of the coil. Wire 2 is connected to the battery and one of the terminals O, and wire 3 is connected to the other terminal O and the coil. The wires 4 and 5 connect with the secondary circuit of the coil and the handles (electrodes) A and B, respectively.

The box 15 may be provided with a door, 16, if desired.

When a coin is dropped in the guide, it moves downward until caught by the arm E. If the handles be then grasped and the handle B moved slightly toward the handle A, the coin is released and falls between the head P and arm Q, where it is held, the action of the weight U on the cord 7 and the latter on the pulley R causing the lower end of the said arm to move toward the head P and retain the coin. The coin in falling strikes the head P, and overcoming the weight K forces the lever downward until the points N are in contact with the terminals O, thus establishing an electric circuit from battery through wire 1 to coil, to wire 3, to terminals O and lever H, to wire 2, to battery. The electrical current being thus established, a further movement of the handle B will draw the core-sheath from



the coil and thereby increase the strength of the induced current. At the same time the cord 8, acting on the needle C, will cause the latter to indicate the amount of such increase of strength. When the handle B is released or moved toward its normal position, the cord 7, being held to the roller R by the weight U, will move the said roller and the arm Q so as to carry its lower end away from the head P and release the coin, which immediately falls into the receptacle V. The weight K then returns the lever H to its normal position, breaking the circuit at O. The parts then all return to the first or normal position, the springs 9 and 13 effecting such return, and the machine is in condition to be again operated.

Having described my invention, what I claim is—

1. The combination, with a battery and induction-coil, of a coin-guide, a counterweighted lever with contact-points and a head adjacent to the guide, a coin-retainer, Q, adjacent to the head of the lever, a movable handle connected to said retainer, and terminals in the battery-circuit adjacent to the contact-points on the lever, substantially as specified.

2. The combination, with a battery and induction-coil, of a fixed handle or electrode and a movable handle or electrode, the weighted lever H, with the head P, the detent-finger G on the lever, the pivoted arm Q, with roller R, the weighted cord 7, and the terminals O, substantially as specified.

3. The combination, with the battery and induction-coil, of the handles A and B, the lever H, with the head P, the detent G on the lever, the arm Q, with the roller R, the cord 7, with the weight U, the arm E on the handle B, the spring-retained core-sheath of the coil connected to the handle B, the cord 8, and indicator-needle, the terminals O, and the wires, as described, for the electric circuits, the whole arranged to operate substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES DURIEUX.

Witnesses:

PERCY D. PARKS,  
JNO. A. ADAMS.