

(No Model.)

3 Sheets—Sheet 2,

J. MASON.

COIN FREED MACHINE FOR GIVING ELECTRIC SHOCKS.

No. 468,955.

Patented Feb. 16, 1892.

Fig. 2

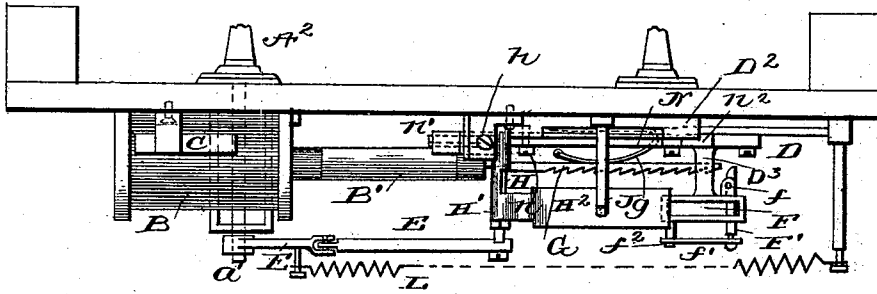
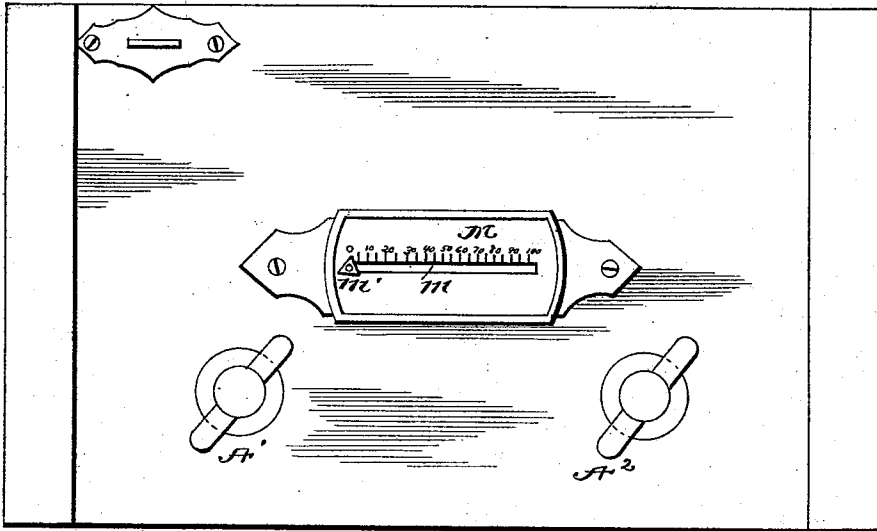


Fig. 3.



Witnesses

John D. Dwyer
Alfred T. Gage

Inventor

Joseph Mason
By K. E. Henderson
Associate Attorney.

UNITED STATES PATENT OFFICE.

JOSEPH MASON, OF LONDON, ENGLAND.

COIN-FREED MACHINE FOR GIVING ELECTRIC SHOCKS.

SPECIFICATION forming part of Letters Patent No. 468,955, dated February 16, 1892.

Application filed March 14, 1891. Serial No. 385,115. (No model.) Patented in England January 31, 1889, No. 1,757.

To all whom it may concern:

Be it known that I, JOSEPH MASON, electrician, a subject of the Queen of Great Britain, residing at London, in the county of Middlesex, England, have invented a certain new or Improved Automatic Coin-Freed Machine for Giving Electric Shocks, (for which I have previously obtained Letters Patent in Great Britain, dated January 31, 1889, No. 1,757,) of which the following is a full, clear, and exact description.

My invention relates to an improved automatic coin-freed apparatus for imparting electric shocks, and has for its object to provide a simple mechanism whereby a coin dropped into a suitable receptacle will become itself a part of the electric circuit or act as a contact-maker by a mechanical action.

In order that the invention may be fully understood, I have hereto annexed sheets of drawings illustrative thereof, such parts only of the apparatus being shown as are necessary to explain my improvements.

As ordinarily constructed the apparatus consists of a box or case for containing the batteries, &c., such box being provided with a door in front, to which are fixed the handles by means of which the shock is conveyed to the person using the machine. As according to my invention the whole of the mechanism is attached to the inner surface of the door, I have not thought it necessary to show any other portion of the box or case.

In the accompanying drawings, Figure 1 represents an interior elevation of the door with the mechanism attached thereto; Fig. 2, a plan thereof, and Fig. 3 a front view. Fig. 4 is a partial repetition of Fig. 1, showing the parts in the position which they assume when the movable handle is turned round and contact made by means of the coin. The coin-box is here cut away, and the coin itself is indicated in dotted lines, and it will be noticed that the bolt N is raised clear of the stop n^2 , thereby allowing the bar D to move forward, while the lever H^2 , having been raised by the periphery of the coin, is in contact with the spring J, thus rendering the electric circuit complete.

Fig. 5 is a plan view of Fig. 4 and shows the inclination of rack G under forward motion of the lever F' .

Fig. 6 is a cross-section of the bar D and guides D^2 , taken through the line xx of Fig. 1.

Fig. 7 is a detail, full size, of the underside of the coin-box F, lever F' , and rack G during the return movement of the coin-box, showing how the teeth of the ratchet-bar operate to remove the lever outward and so increase the opening of the coin-box sufficiently to allow the coin to pass.

A is the door of the apparatus, to which are attached the usual handles A' A^2 . The handle A' is fixed by a nut a ; but the handle A^2 is mounted on a spindle a' and is free to revolve.

B is an ordinary induction-coil provided with its core or armature B' and vibrating contact-maker C for securing the necessary alterations of the current. To the core B' is connected a sliding bar D, the connection being effected by means of an angular bracket D' . (Shown in Fig. 5^a in detail.) The bar D is capable of sliding in a dovetailed groove formed in a plate D^2 , which is screwed to the door. This sliding of the bar occurs when the handle A^2 is turned, and is effected by means of the jointed lever E, one arm of which is fixed to the spindle a' and the other to the bracket D' . Attached to the bar D by means of a bracket D^3 is a rectangular frame F, resembling an oblong box without top or bottom, the interior of the box being of sufficient dimensions to allow a penny or other specified coin to pass through freely. The opening on under side of the box is contracted by means of a lever F' , pivoted at f and kept in position by a spring f' , connecting the longer end of the lever with a stud f^2 , fixed in the side of the box. The shorter end of the lever is beveled in one direction in order that it may pass smoothly over a ratchet-bar G as the bar D slides in the direction of the induction-coil. As it is intended that the unbeveled edge of the lever F' shall engage with the rack on the return movement, the latter is pivoted at g to a lug formed on the plate D^2 , so that it will yield as the lever F' moves for-

ward; but, being kept in contact with the end of the lever by the spring g' , the perpendicular edges of the ratchet-teeth will engage with the unbeveled edge of the lever F' on the return movement and cause this lever to turn on its axis. In so doing the longer arm of the lever will turn away from the box or frame F , and so enlarge the opening on the under side. On a stud H , fixed to the door, is mounted
 10 a sleeve H' , to the outer extremity of which is fixed a flat lever-arm H^2 , the free end of which reaches the nearest side of the frame or box F , but does not rest thereon, being prevented from doing so by the adjusting-screw
 15 h , which bears on a short arm h' , fixed to the inner end of the sleeve H' . Fixed to the door is a flat spring J , which projects over the lever-arm H^2 and nearly touches the same.

Having mentioned the most important part
 20 of the apparatus, I will now describe the action thereof. In the normal condition the electrical circuit is broken in two places—viz., where the spring J is not in contact with the arm H^2 and where the said arm H^2 is not
 25 in contact with the box or frame F . In other places the circuit is complete, as will be readily seen by tracing the course of the conducting-wires x , it being presumed that the handles are connected through the body of the
 30 person receiving the shock. If now a penny or other specified coin be dropped into the chute K , (not shown in Fig. 2,) it will fall into the frame F , but will not pass through by reason of the lever F' contracting the opening on the under side. The edge of the coin
 35 thus arrested remains projecting above the top of the frame F . The handle A^2 being now turned, the bar D , and with it the frame F , is drawn forward and the coin comes in contact with the slightly-upturned edge of the
 40 lever H^2 , thus closing one break in the circuit. As the bar and coin continue to travel forward, the end of the lever H^2 rises upon the coin, and in so doing comes in contact
 45 with the spring J and the circuit is complete. The strength of the shock of course increases the farther the handle is turned round, the coin remaining in the frame F . On the release of the handle A^2 the sliding parts are
 50 returned to their original position by means of the spring L , and as soon as this return motion commences the end of the lever F' engages with the ratchet-bar G , with the result that, as before described, the coin is released and free to fall into a receptacle provided for the purpose. Thus the current is
 55 interrupted and the circuit broken.

In order to afford a true indication of the strength of the current, a graduated scale is
 60 fixed on the outside of the door, in which is a slot m , through which passes a pin or stud, which is fixed to the sliding bar D . The outer end of this stud carries an index or pointer

m' , which travels along the scale as the bar is moved forward. 65

In order to prevent the fraudulent use of the apparatus, I provide a locking-lever N , which is pivoted on a stud n . The longer arm of this lever rests on the bracket D^3 , while the shorter arm is in insulated contact with an
 70 arm n' , fixed on sleeve H' . On the bracket D^3 is a stop-piece n^2 , which prevents the bar D from being moved forward if the proper coin is not inserted. When, however, the proper coin is inserted, the lever-arm H^2 is raised, as before described, and simultaneously the arm n' , fixed to the sleeve H' , is depressed, this depression being accompanied
 75 by a corresponding movement of the short arm of the lever N , whereby the longer arm is elevated clear of the stop-piece n^2 . As it is requisite that the bar D should travel forward a short distance before the arm H^2 can be elevated sufficiently to cause the lever N
 80 to clear the stop n^2 , the requisite interval is allowed between the end of the lever and the stop to afford time for this to take place.

Having thus particularly described my invention, what I claim as new, and desire to secure by Letters Patent, is— 90

1. In a coin-freed mechanism for giving electric shocks, the combination, with the conducting-wires and the handles, of the induction-coil, its armature and contact-maker, the coin-chute, the sliding bar connected to said
 95 armature, the jointed lever connected to said sliding bar and one of the handles, the open frame located under the coin-chute, the pivoted lever lying across said frame to control the size of the opening therein, the swinging
 100 ratchet-bar engaging said lever and yielding to the pressure of said lever as the lever moves in one direction and turning the lever as it moves in the other direction, and a movable circuit-closer H^2 , actuated by the coin in
 105 the open frame to bring it into contact with suitable parts to complete the circuit, substantially as and for the purposes set forth.

2. In a coin-freed mechanism, the combination, with the coin-receiving frame F and a spring-actuated lever connected thereto and
 110 lying across said frame to control the opening therein for the passage of the coin, of a swinging rack engaging said lever, a movable bar to which said frame is connected, and a
 115 movable circuit-closer moved in one direction to complete the circuit by a coin in said coin-receiving frame and automatically returning to its normal position after said coin has
 120 passed from its receiving-frame, substantially as and for the purposes set forth.

3. In a coin-freed mechanism, the combination, with the sliding bar D and the circuit-closer, of a locking-lever acting on said bar to prevent its movement until the insertion of
 125 the proper coin and having a portion of said

locking-lever lying adjacent to said circuit-closer and acted on by said circuit-closer to release said bar when the proper coin is inserted, substantially as and for the purposes set forth.

5 4. In a coin-freed mechanism, the combination of the sliding bar D, the pivoted lever N, locking said bar, the arm H², sleeve H', and an arm n', projecting from said sleeve
10 adjacent to said lever N to bear on the latter

to move it and unlock bar D when the sleeve H' is moved, substantially as and for the purposes set forth.

London, November 17, 1890.

JOSEPH MASON.

Witnesses:

H. CLARK,

FRANK HUGHES,

76 Chancery Lane, London, W. C.