

(No Model.)

W. T. MCGINNIS.

ELECTRICAL EXERCISING APPARATUS.

No. 341,593.

Patented May 11, 1886.

Fig. 1.

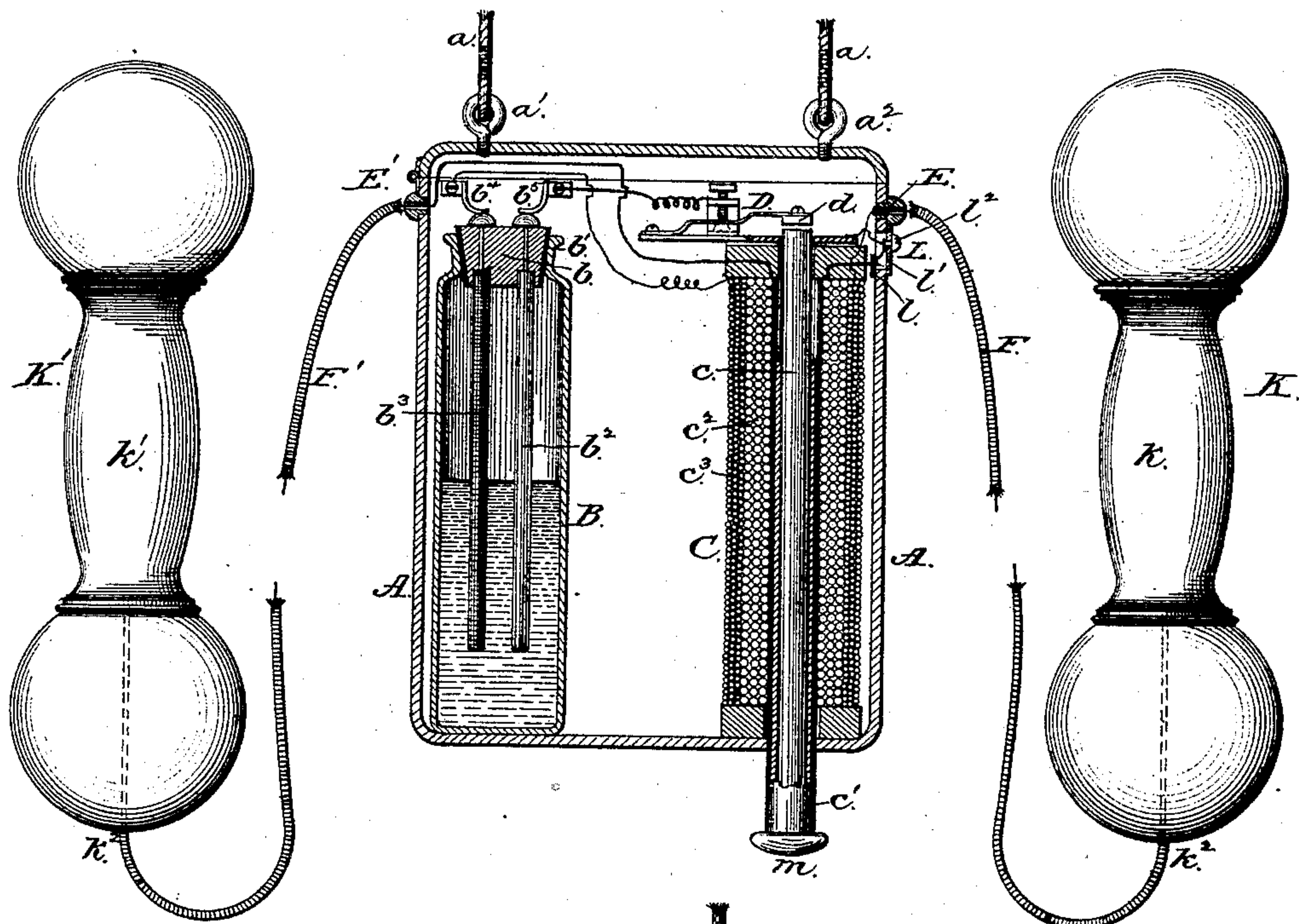
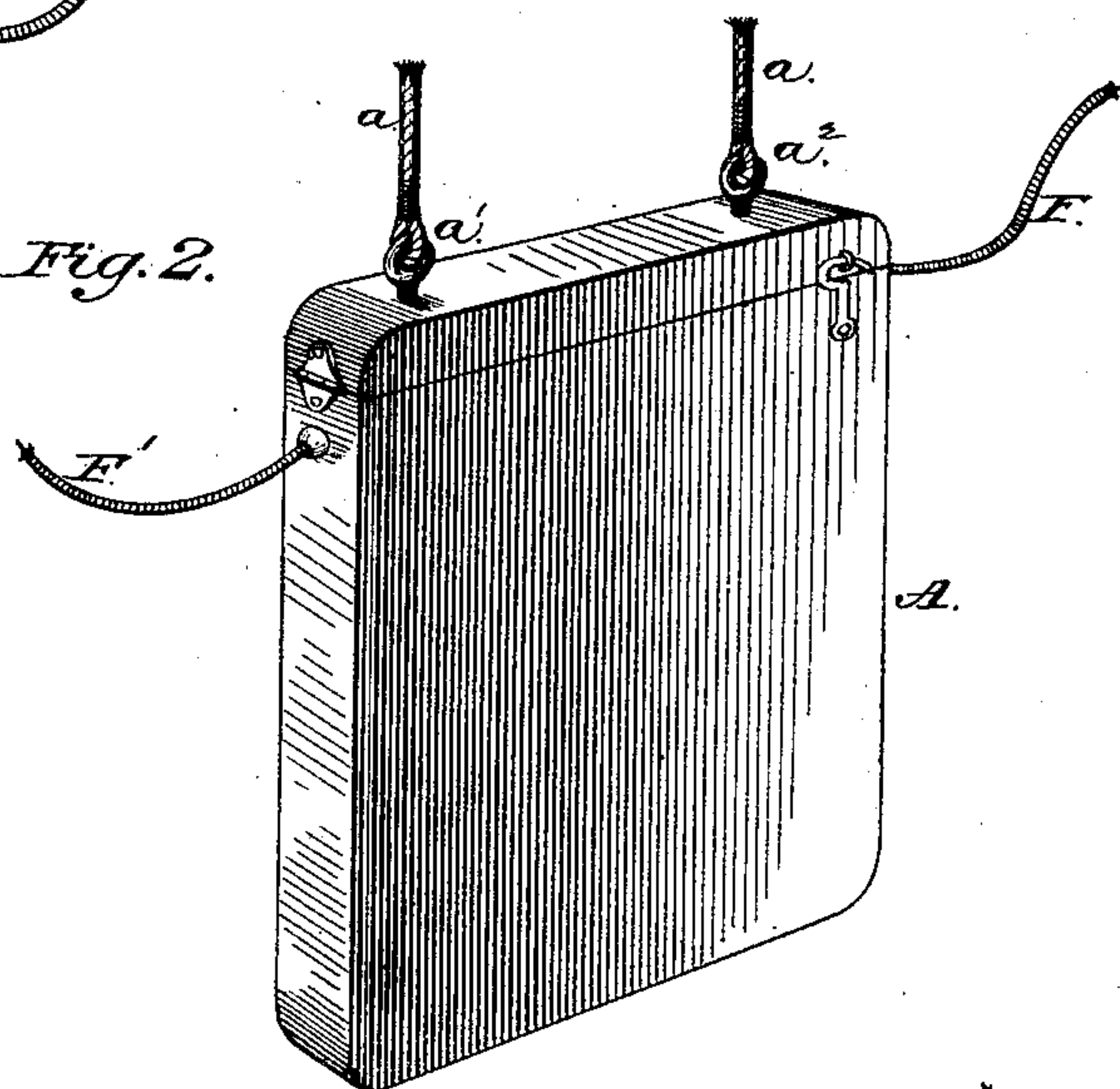


Fig. 2.



Attest:

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ELECTRICAL EXERCISING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 341,593, dated May 11, 1886.

Application filed October 16, 1884. Serial No. 145,652. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. MCGINNIS, of the city, county, and State of New York, have invented a new and useful Improvement in Electrical Exercising Apparatus; 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.

My invention relates to an improved galvanic-electric exercising apparatus, the object being to cause an electric current to pass through the muscles of the body while they are in action.

It consists of a galvanic battery, an induction-coil, and a current-breaker, neatly and compactly stored in a case adapted to be suspended upon the body of the user, and fitted with flexible metallic cords, by which the electrodes of the secondary coil may be connected with metallic handles or grip-pieces upon the exercising implements.

In the accompanying drawings, Figure 1 is a central vertical section through the case containing the battery and the accompanying parts, and showing the same connected with a pair of exercising dumb-bells; and Fig. 2 is a perspective view of the case, illustrating the manner of suspending the same upon the body.

A is a case, preferably of wood and rectangular in shape, with corners rounded, and of such a size as to be conveniently suspended upon the body of the person using the same by means of a flexible cord or strap, *a*, secured thereto by the eyes *a'* *a''*. Within this case A are placed, side by side, the galvanic battery B and the induction-coil C.

The battery B may be of any well-known pattern; but I preferably use one constructed as shown in the drawings, wherein B is a bottle-shaped cell provided with a sealing-stopper, *b*, of vulcanized rubber, upon the lower or inner end of which are secured the two elements *b'* *b''* of the battery in position to project inward into the excitant fluid. The electrodes of the battery are led outward through the sealing-stopper in position to form contacts with the spring contact-plates *b'* *b''*,

secured to the inner face of the case A, and which in turn are connected with the primary coil hereinafter described.

The induction-coil C is placed within the case with its axis parallel with that of the battery-cell, and is formed, as usual, with a central core or magnet, *c*, surrounded by an enlarging tube or slide, *c'*, projecting outward through the case A, and terminating in a handle or knob, *m*, for operating it, and outside of which are wound the primary and secondary coils *c'* *c''*, the former of which is connected with the electrodes of the battery B, so as to include in its circuit an ordinary vibrating current-breaker, D, the armature *d* of which is brought over the end of the magnet *c*. The electrodes of the secondary coil *c''* are connected by metallic strips or wires with perforated metallic plates or buttons E E' upon the outer surface of the case A, in position to be easily connected by means of flexible metallic cords F F' with metallic handles or grip-pieces upon the exercising implements.

In the drawings I have shown my device as adapted for use with a pair of dumb-bells, K K', the handles or grip portions *k* *k'* being of metal and provided with weighted heads, which may, if desired, be of some non-conducting material, the connecting buttons *k'* *k''* being placed in the ends thereof and connected by a concealed wire with the handles. For convenience, I interpose a cut-out, L, in the primary circuit, preferably between the primary coil and the current-breaker; and this cut-out consists of a fixed plate, *l*, secured to the case, and a sliding plate, *l'*, adapted to slide on or off of the fixed plate, and to be operated by a handle or button, *l''*, projecting outwardly through the case. One of these plates is connected with the coil, and the other with the circuit-breaker.

Although I have described the electro-magnetic machine as connected with a pair of dumb-bells, I contemplate its connection in like manner with the handles of a pair of oars, or of a pair of Indian clubs or other exercising devices, the ordinary handles being in each case provided with manual contact-plates or grip-pieces of a good conducting material,

and which are adapted for electrical connection with the conducting-cords F F', substantially in manner as above described.

Having described my invention, what I claim is—

5 The combination, with an exercising apparatus provided with handles containing electrical conducting contact-plates or grip-pieces, of a separate galvano-electric battery, an in-
10 duction-coil, a vibrating current-breaker, and connecting-wires therefor, all inclosed in a case adapted to be suspended to the body of

the user, and provided with flexible metallic cords for connecting the electrodes of the secondary coil with the conducting-plates or grip-
15 pieces of the handle, 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 subscribing witnesses.

WILLIAM T. MCGINNIS.

Witnesses:

JOHN A. ELLIS,

A. B. MOORE.