

No. 767,015.

PATENTED AUG. 9, 1904.

H. A. SLAUGHTER.
ELECTRIC THERAPEUTIC MACHINE.

APPLICATION FILED OCT. 22, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

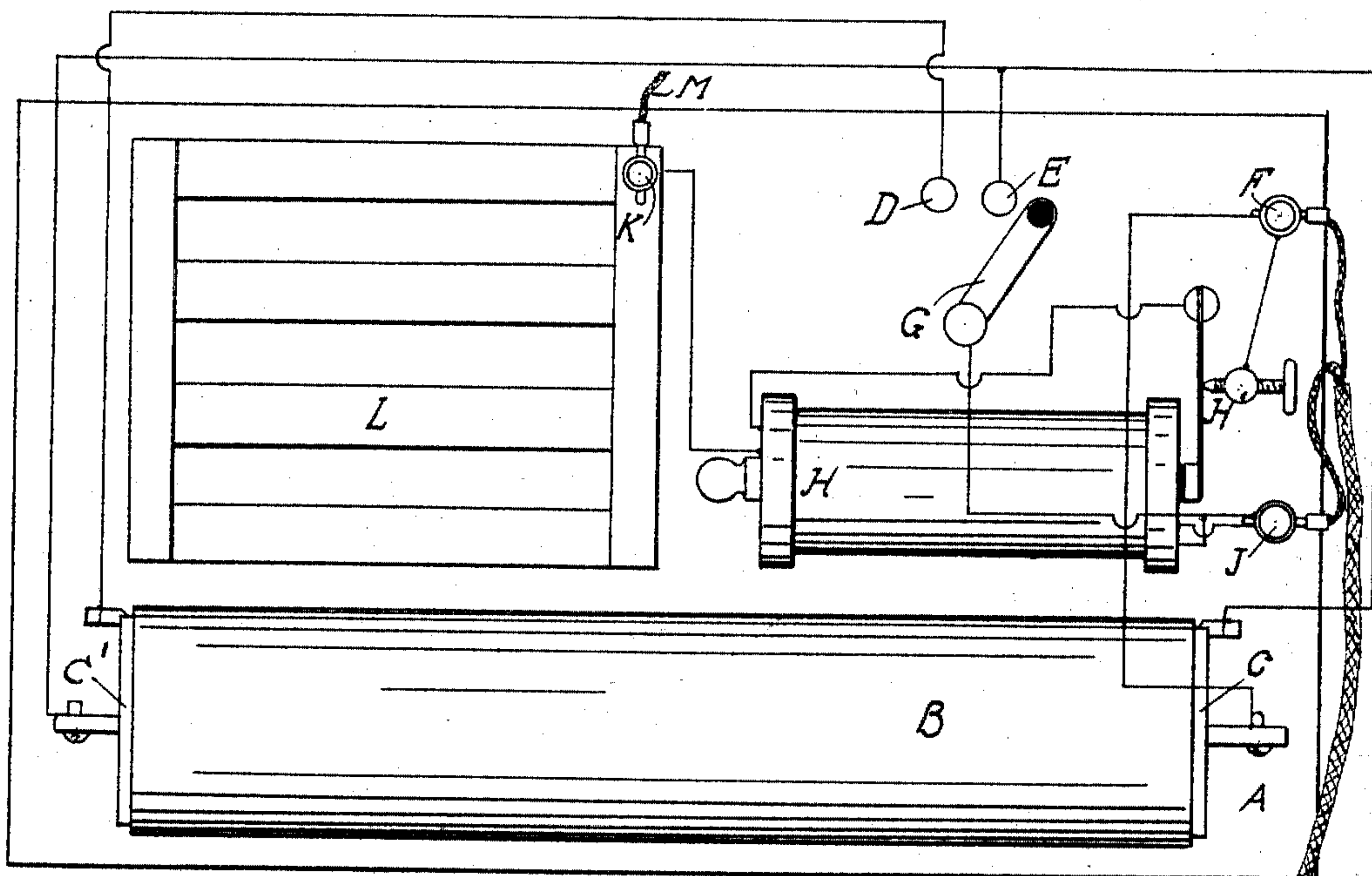
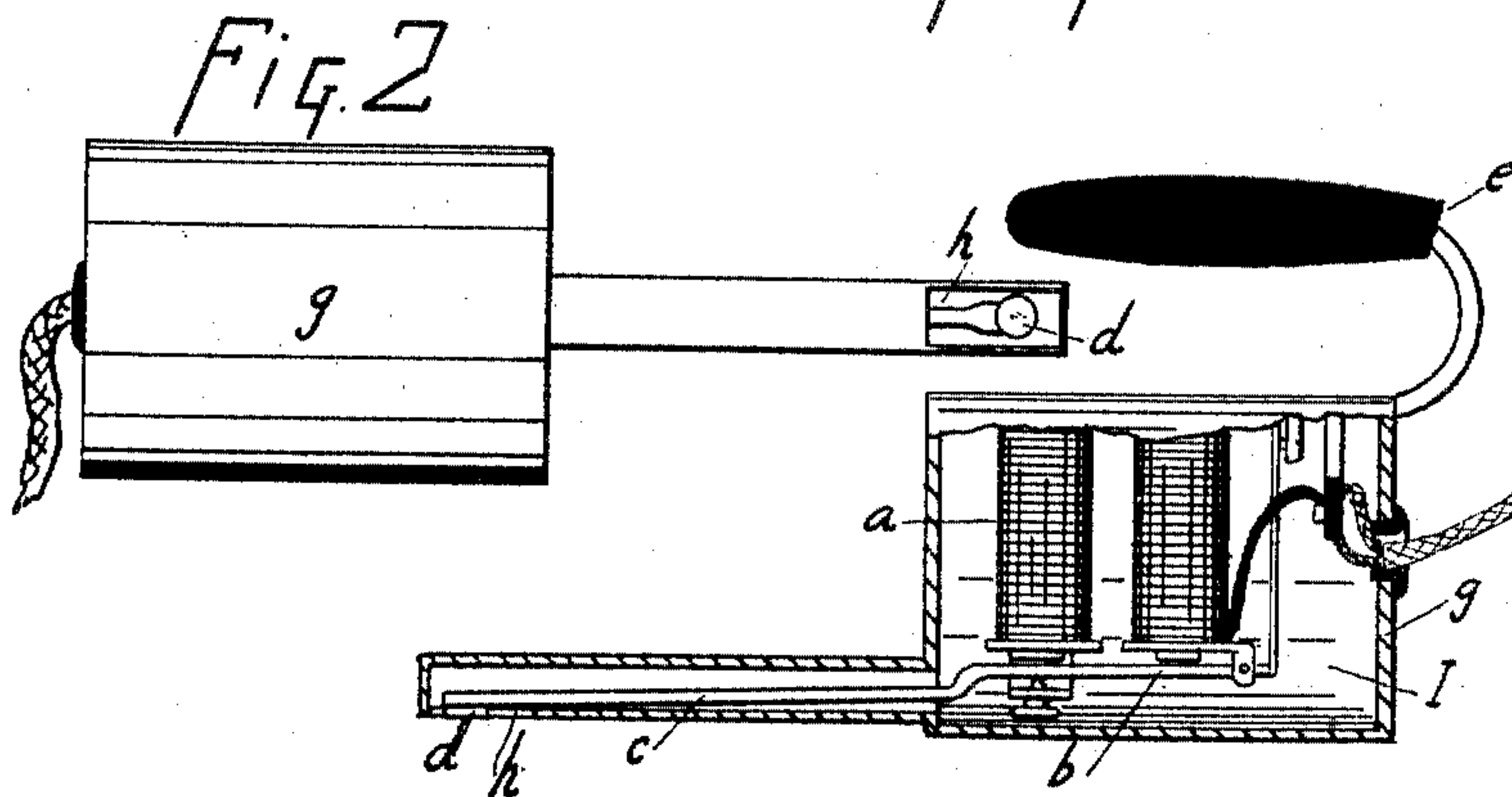


Fig. 1



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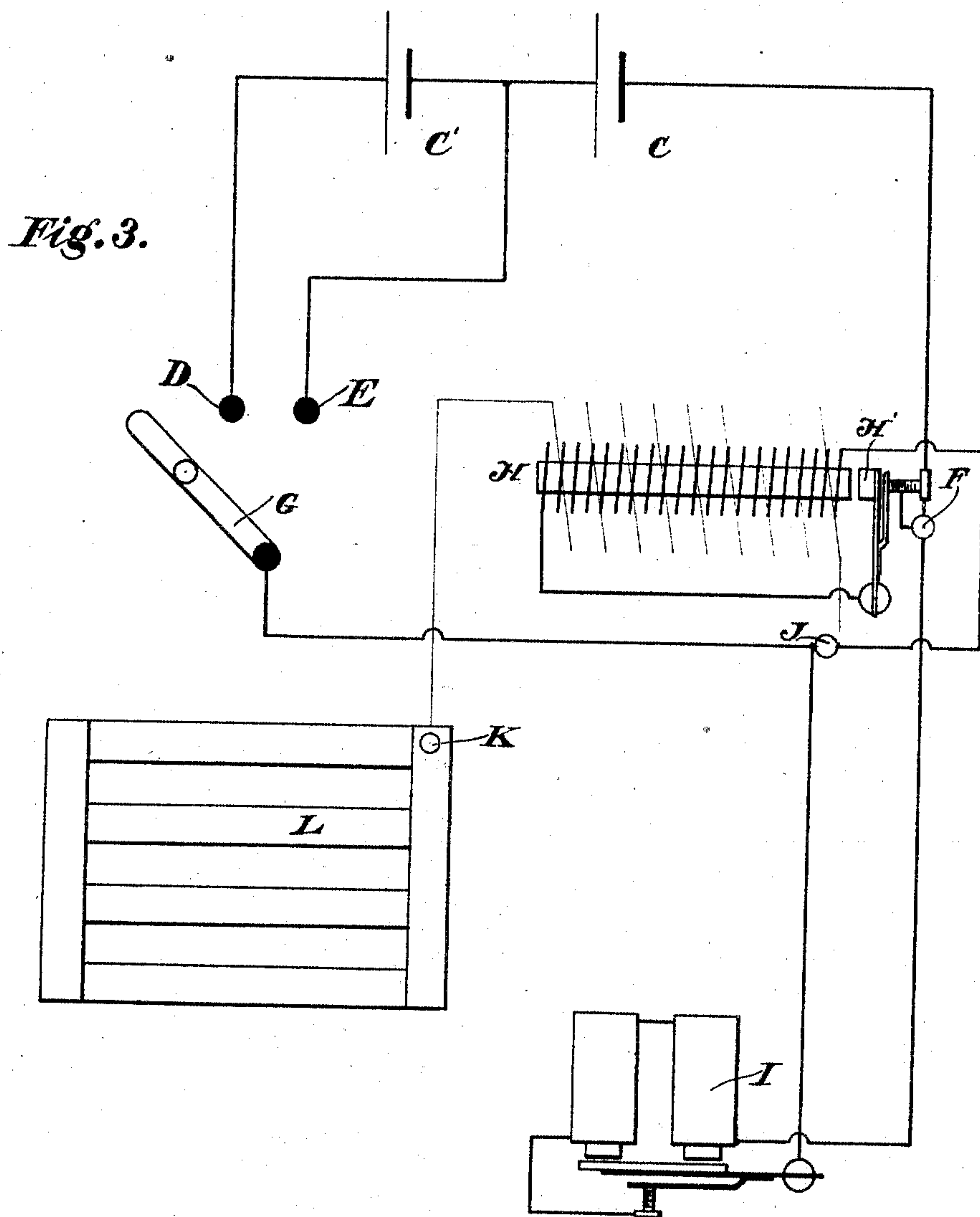
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Witnesses
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UNITED STATES PATENT OFFICE.

HARRY A. SLAUGHTER, OF LOS ANGELES, CALIFORNIA.

ELECTRIC THERAPEUTIC MACHINE.

SPECIFICATION forming part of Letters Patent No. 767,015, dated August 9, 1904.

Application filed October 22, 1903. Serial No. 178,141. (No model.)

To all whom it may concern:

Be it known that I, HARRY A. SLAUGHTER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Electric Therapeutic Machines, of which the following is a specification.

The object of my invention is to provide a machine by means of which any portion of the surface of the body may be mechanically beaten and at the same time an electric current may be passed through such portions of the body as are being treated, thereby giving both the mechanical and electrical effect in the treatment of disease. I accomplish this object by the mechanism described herein, and illustrated in the accompanying drawings, in which—

In Figure 1 the upper portion thereof shows a part of a device in plan and the circuits diagrammatically, and the lower portion is a side view, partly in section, of the vibrator. Fig. 2 is a plan of the vibrator looking at it from the hammer-opening of the case. Fig. 3 is a diagrammatic representation of the circuits and batteries and vibrator.

In the drawings, A represents the base of my machine, to which is secured receptacle B, which provides a housing for the batteries C and C', which are preferably ordinary one-cell dry batteries. One side of these batteries is connected in series to contact D, while one side of battery C is alone connected to contact E. The other side of these batteries is connected to binding-post F. Binding-post F is connected with switch G through the primary of induction-coil H and the current-interrupter H'. Binding-post F is also connected, through vibrator I, with switch G. The terminals of the secondary of the induction-coil are connected to binding-posts J and K. Binding-post K is secured to and is in electrical contact with hand-plate L. Binding-post J is electrically connected with the vibrator I and with switch G. The induction-coil is provided with current-interrupter H'. Vibrator I is composed of the electromagnets *a*, having armature *b*. To the armature is attached hammer

c, having on the end thereof a copper-faced head *d*. The vibrator metallic case *g* is provided with an insulated handle *e*. The case which incloses the magnets and hammer to protect the same from injury is made of metal and forms a ground for the electric circuit of the vibrator. The end inclosing the hammer is provided with a hammer-opening *h*, which permits the blows of the head of the hammer to strike the flesh of the person on which it is being used.

In the operation of my device if a slight current is desired the switch is turned to throw one battery in circuit. Now if it is desired to treat both electrically and mechanically any part of the body—say the fingers of the hand for rheumatism—the vibrator is grasped around the case by one hand and the other hand is laid upon the hand-plate, and the hammer-opening in the casing of the vibrator is moved over the portion of the hand that it is desired to treat. By this arrangement both electrical and mechanical treatment of parts of the body may be obtained at the same time from the same instrument. Should only mechanical treatment be desired, the vibrator may be grasped by the insulated handle and no connection be made with the hand-plate. Should electrical treatment only be desired, the vibrator is grasped by the case, and connection is made to the hand-plate or to binding-post K. In case the hand-plate is not convenient to use wire M may be secured to the binding-post, and an electrode (not shown) may be attached thereto, which can be applied to any part of the body. The casing of the vibrator forms the other electrode. In case a heavier current is desired the switch is turned to connect both batteries into the circuit.

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

1. An electrotherapeutic machine comprising a battery; an induction-coil, having a current-interrupter, electrically connected thereto; a vibrator electrically connected in multiple with the primary of the induction-coil, and with one side of the secondary of the in-

duction-coil; an electrode connected to the other side of the secondary of the induction-coil.

2. In an electrotherapeutic machine a vibrator electrically connected in multiple with the primary of the induction-coil and with one side of the secondary of the induction-coil; an induction-coil having an interrupter; a battery connected to the primary of said induction-coil; a switch in said connection, an electrode connected to the other side of the secondary of the induction-coil.

3. In an electrotherapeutic machine a battery composed of two cells, having one side thereof connected in series to a contact; a contact; a second contact connected to the same side of said cells, the other side of said cells being connected in series to the primary of an induction-coil; an induction-coil having the other side of the primary thereof connected to a switch; a switch adapted to close the cir-

cuit between the induction-coil and said contacts which are connected with the cells of the battery; a vibrator having a hammer-armature connected with the primary of the induction-coil and to one side of the secondary of the induction-coil; an electrode connected to the other side of the secondary of the induction-coil.

4. In an electrotherapeutic machine a vibrator comprising a metallic case, an electromagnet in said case having an armature terminating in a hammer; an insulated handle for said case.

In witness that I claim the foregoing I have hereunto subscribed my name this 16th day of October, 1903.

HARRY A. SLAUGHTER.

Witnesses:

G. E. HARPHAM,

MARGARETE C. NICKELESON.