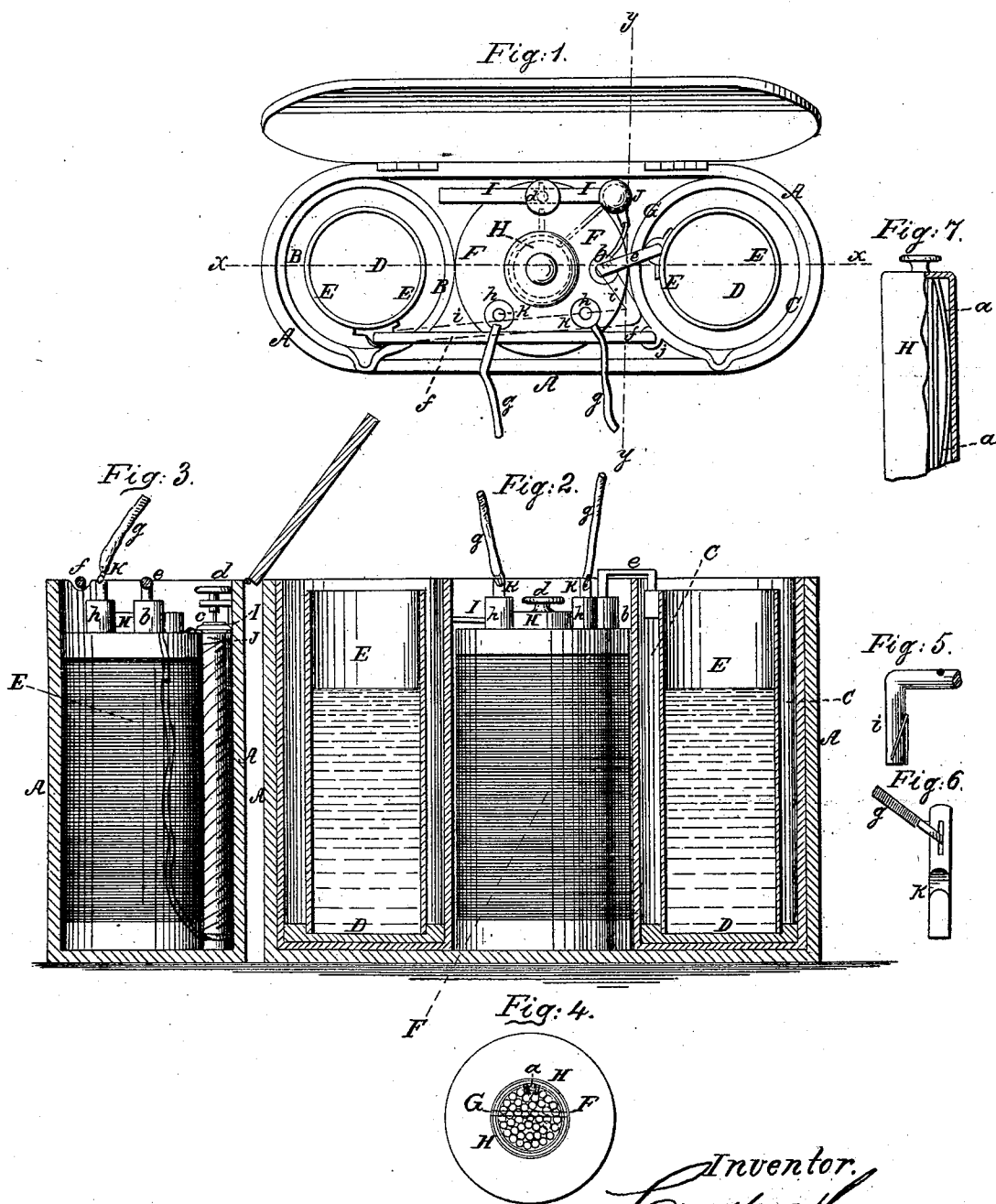


C. W. MEYER.  
Electric Battery.

No. 102,295.

Patented April 26, 1870.



Inventor.  
C. W. Meyer.  
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# United States Patent Office.

CURT W. MEYER, OF NEW YORK, N. Y.

Letters Patent No. 102,295, dated April 26, 1870.

## IMPROVEMENT IN POCKET INDUCTION APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, CURT W. MEYER, of New York city, in the county and State of New York, have invented a new and improved Pocket Induction Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 represents a plan or top view of my improved pocket induction apparatus.

Figure 2 is a vertical longitudinal section of the same, taken on the plane of the line *y y*, fig. 1.

Figure 3 is a vertical transverse section of the same, taken on the plane of the line *y y*, fig. 1.

Figure 4 is a detail horizontal section of the same.

Figures 5 and 6 are detail side views on an enlarged scale, showing the spring and string connections.

Similar letters of reference indicate corresponding parts.

This invention relates to a new electric apparatus to be used for medical purposes, and has for its object simplicity of construction, compactness of form, and reliability of operation.

The whole instrument is inclosed in a small oval box or case, A, which is shown full size in figs 1, 2, and 3, and which can be conveniently carried in the pockets of a garment.

Within this box or case are set up two or more, or less, lead cups, B C, at opposite ends of the same, said cups being grooved or roughened on their inner sides to form larger surfaces for the inner platinum lining.

Into each cup, B C, is placed an insulating bottom, D, made of rubber or other material depressed in the middle to support and insulate the inner zinc tube E, which is formed of pure zinc, without borax or other foreign matter.

Between the cups B C is set up the annular coil F, which surrounds the iron core G, said core being made of separate bars, of which one, *a*, is somewhat bent out to serve as a spring for retaining the current-graduator tube H at any desired elevation.

The cups B C are provided with spouts for pouring out the acid.

I is the interruption spring, connected at one end

with the cup B, while the other end works over an electro-magnet, J, which is by a wire connected with the zinc pole-clamp *l*.

The spring I carries a platinum plate, *e*, and a screw, *d*, is arranged in the apparatus above it to regulate its motion, and to connect the current.

When both cups are to be used the zinc tube in C is by a rod, *e*, connected with the clamp *l*, while the zinc tube in B is by a rod, *f*, connected with the platinum pole *j* of the cup C, as shown in fig. 1.

The connection is then established by the spring I. The handles are by means of wires *g g* connected with the induction-poles *h h*.

When but one cup is used the rods *e* and *f* are dispensed with, and another rod, *i*, is, in their place, carried from the tube in B to the zinc pole, as indicated by red lines in fig. 1.

The cords of the rods *e f i*, where they fit into the tubular clamps provided for them, and also the small rods *k* at the ends of the wires *g* are by an inclined incision, shown in fig. 5, made elastic to retain themselves within such clamps.

The wires *g* are fitted through slots in the rod *k*, and are then turned back to have their ends secured, while the ends of the slots are closed by solder, as in fig. 6.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the bent bar *a*, of the iron core, in the manner described, to act as a retaining spring for the graduator.

2. The combination of a lead cup, B, insulator D, tube E, coil F, core G, graduator H, and rod *i*, all being arranged as described.

3. The combination of duplicate cups, insulators, and zinc tubes, with rods *e f*, and core G, graduator H, and spring I, all being arranged as described.

4. The method of securing the rods *g* to the pins *k* by passing the former through a slot in the latter, then turning back their ends to secure them, and finally soldering the ends of said slots, all as set forth.

CURT W. MEYER.

Witnesses:

FRANK BLOCKLEY,  
ALEX. F. ROBERTS.