No. 700,497. Patented May 20, 1902.

C. HUBERT.

ELECTRIC BATTERY.

(Application filed Apr. 1, 1901.)

(No Model.)

Fig 1.

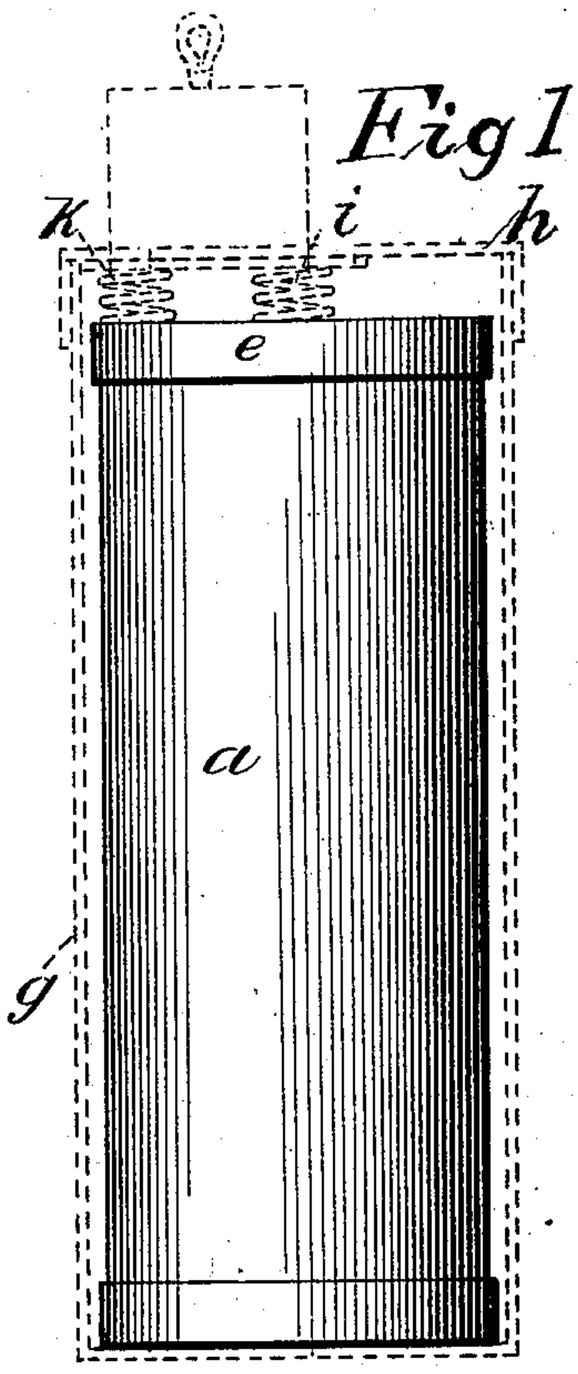


Fig. 2.

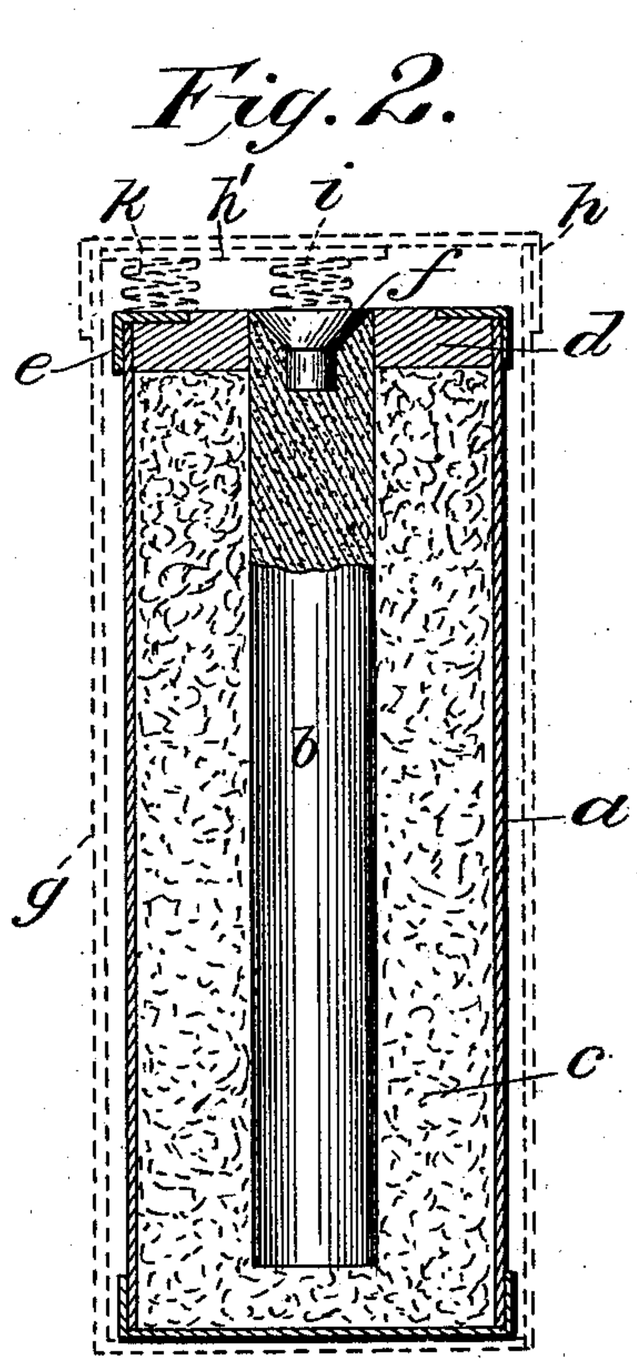
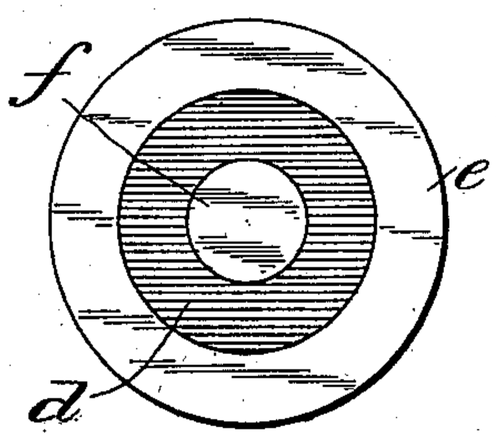


Fig. 3.



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UNITED STATES PATENT OFFICE.

CONRAD HUBERT, OF NEW YORK, N. Y.

ELECTRIC BATTERY.

SPECIFICATION forming part of Letters Patent No. 700,497, dated May 20, 1902.

Original application filed August 9, 1900, Serial No. 26,397. Divided and this application filed April 1, 1901. Serial No. 53,929. (No model.)

To all whom it may concern:

Be it known that I, CONRAD HUBERT, a citizen of the United States of America, and a resident of New York city, borough of Manhattan, in the county and State of New York, have invented certain new and useful Improvements in Electric Batteries, of which the following is a specification.

My invention relates to certain improvements in battery-cells, such as are especially adapted for use in connection with the form of casing described and claimed in another application filed by me in the United States Patent Office on the 9th day of August, 1900, and serially numbered 26,397, for improvements in electric lamps, of which said previous application my present application is a division, made in pursuance of requirements of the Commissioner of Patents.

My invention consists in the construction and arrangement of the several parts of a battery-cell, as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, which form a part of this application, and in which corresponding parts are designated by corresponding marks of reference, Figure 1 is a side elevation of a battery-cell constructed in accordance with this invention. Fig. 2 is a central vertical section thereof. Fig. 3 is a plan view of the head of a cell.

As shown, my improved cell consists of a cylindrical cup *a*, the cup itself forming by preference one of the elements of the cell and inclosing the centrally-located and opposite element *b* and the electrolyte *c*. In the precise construction used by me the cup *a* is of zinc and the centrally-located element *b* of carbon, the top of the cell being closed by a layer of insulating-cement *d*. A flanged annulus *e*, of good conducting material, such as copper or brass, is soldered to the head of the cup-shaped element *a* and has its upper surface approximately flush with a metallic button *f* on the head of the central element *b*, the annulus and button being exposed above the cement.

The particular material of which the several parts hereinbefore referred to are constructed is not essential to my invention, which is directed to such an arrangement of the parts in respect to each other as will permit my improved cell to be automatically and properly connected up by the act of placing it in a casing of appropriate construction—such, for instance, as is described in my aforesaid previous application, Serial No. 26,397. For the purpose of more clearly bringing out the result thus obtained I have in several figures of my drawings shown in dotted lines a casing having proper contacts for accomplishing the ends above set forth. Thus in Fig. 1 I have shown a suitable casing *g* in the form of a cylinder, provided with a removable top *h*, the top carrying a centrally-disposed contact-point *i* and an eccentrically-disposed contact-point *k*, the distance of the contact-point *k* from the contact-point *i* being substantially equal to the radial distance between the annulus *e* and the metallic button *f* of the cell, whereby when the cover is placed upon a cell the central contact *i* will rest upon the button *f* and the eccentric contact *k* will rest upon the annulus *e*. Owing to the annular shape of the part *e* the connection between it and the eccentric contact *k* will be made without regard to the rotation of the cell and cover in respect to each other and to the casing. It is therefore possible with my improved construction of cell to connect a cell in a casing with great ease and rapidity. The contact-point *i*, corresponding to one element of the cell, should of course be insulated from the point *k* and the other element of the cell except through the connection made by the external circuit, the parts *i* and *k* being connected to the opposite leads thereof. Thus in the form of casing shown in the drawings if the cylinder and top be of metal the contact-points may be supported, as shown, by an insulating-strip *h'*. (See Fig. 2.)

I do not in this application make any claim to the construction of the casing or the arrangement of the contact-points therein, as such matter is claimed in my original application, Serial No. 26,397, of which this is a division; but

What I do claim is—

1. As a new and improved article of manufacture the hereinbefore-described battery-

cell having two elements, and having a centrally-disposed contact-point and a surrounding annulus upon one end thereof, substantially flush with each other and connected respectively with the several elements, the contact-point and annulus forming terminals of the respective elements of the cell, substantially as described.

2. As a new and improved article of manufacture, the hereinbefore-described battery-cell consisting of two elements, one element being centrally located and the other element surrounding the first-named element and being concentric thereto, and a button and a surrounding annulus, substantially flush with each other, and connected to the central and concentric elements respectively, substantially as described.

3. As a new and improved article of manufacture, the hereinbefore-described battery-cell, consisting of a cup-shaped cell forming one element of the battery and inclosing another element centrally located therein, the open end of the cell being closed by a sealing of insulating material separating the said elements, the cell being surrounded by an annulus electrically connected to the outer element, and a button upon the upper end of the centrally-located element, the button being substantially flush with the annulus, from which it is separated, substantially as described.

4. The hereinbefore-described battery-cell having two elements, and having upon one end thereof a centrally-disposed point and a surrounding annulus, substantially as described, connected respectively to the several elements of the cell, the point and annulus forming terminals of the respective elements of the cells and being adapted to bear upon terminals of an external circuit, and to electrically connect the elements of the cell therewith, as and for the purpose set forth.

5. As a new and improved article of manufacture, the hereinbefore-described battery-cell with positive and negative elements, having a centrally-disposed contact-point and a surrounding contact-plate upon one end thereof, the surrounding contact-plate being formed by an annulus, the central point and the surrounding annulus being connected one to the positive and the other to the negative element of the cell, and forming terminals of the said elements, substantially as described.

Signed at New York city March 29, 1901.

CONRAD HUBERT.

Witnesses:
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