

(No Model.)

H. J. BREWER.
GALVANIC BATTERY.

No. 291,871.

Patented Jan. 15, 1884.

Figure 1.

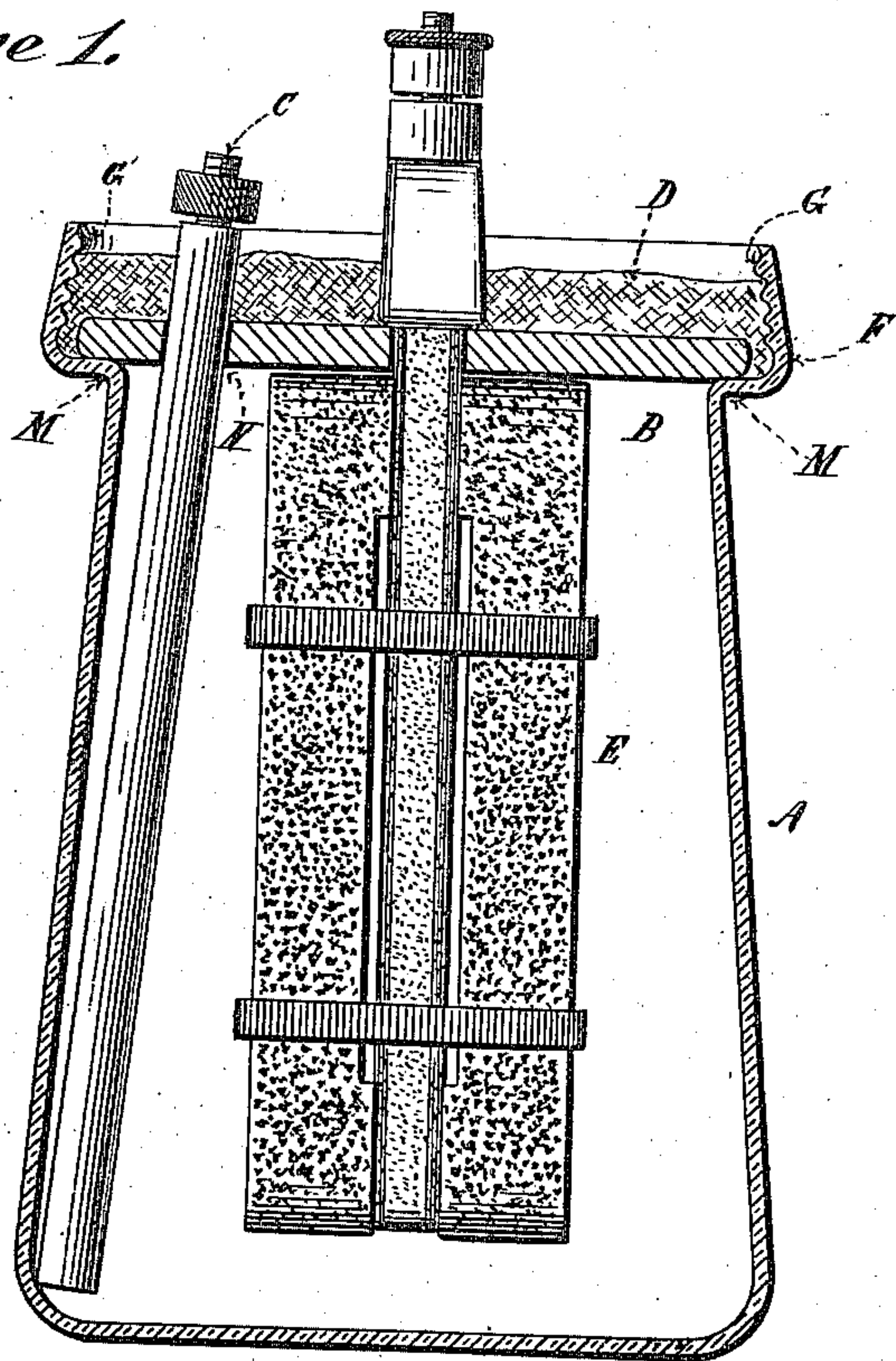
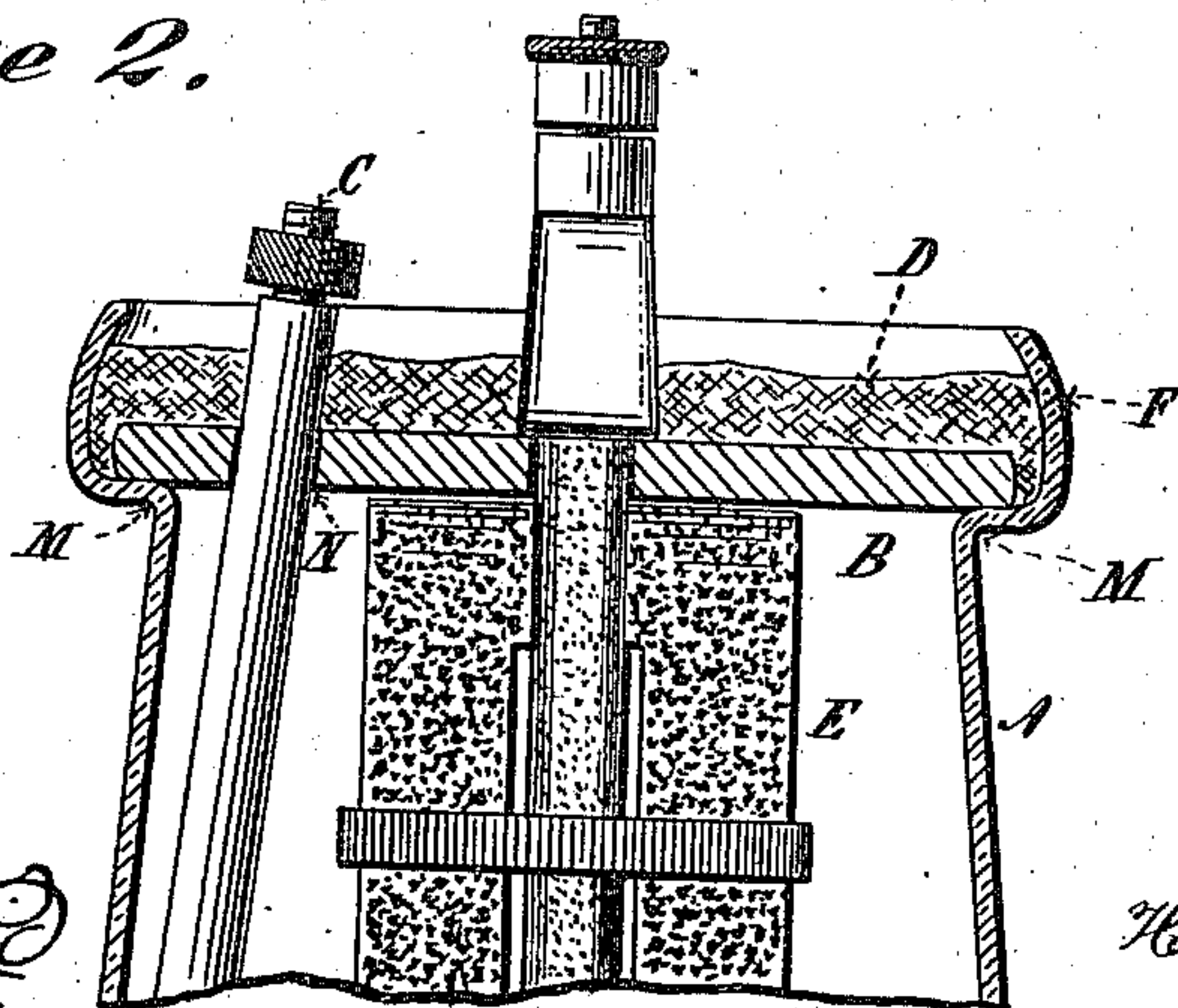


Figure 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

HORATIO J. BREWER, OF NEW YORK, N. Y.

GALVANIC BATTERY.

SPECIFICATION forming part of Letters Patent No. 291,871, dated January 15, 1884.

Application filed March 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, HORATIO J. BREWER, of the city, county, and State of New York, have invented a new and useful Improvement in Galvanic Batteries, of which the following is a full, true, and exact description, reference being had to the accompanying drawings.

This invention relates to an improvement upon the battery patented to G. L. Leclanché November 16, 1880, and numbered 234,413; and it consists in providing a jar of a peculiar shape, by means of which the cover may be readily sealed in the jar, by means of which likewise the zinc is automatically prevented from coming in contact with the electro-negative element.

My invention will be readily understood from the accompanying drawings, in which Figure 1 represents a section showing the parts in position; Fig. 2, a slight modification of the upper part of the cup.

A represents a glass cup or receiver; B, the cover. In this is suspended the electro-negative element E and the zinc C. The jar is of a peculiar shape, swelling outward at the bottom, allowing the zinc C to project away from the electro-negative element, and at the same time enabling a larger supply of liquid to be contained in a vessel having a given opening at the top. The cover B is preferably made of glass or similar material. The upper part of the cell A, in which the cover is placed, is provided with the inwardly-projecting shoulder M, upon which the cover B rests.

D represents a bed of paraffine, which is poured upon the cover in a melted condition, and by reason of the cup-shaped form F of the upper end of the cell is prevented from flowing into the cell beneath and forms a secure and perfect seal.

In the form shown in Fig. 1 the cup F is provided with flutings G to firmly hold the paraffine in place. In Fig. 2 the cup F is curved inwardly at the top, serving to prevent the withdrawal of the cover. The hole cut in the cover B is cut on an angle with the axis of the cell, so as to cause the rod C to project away from the electro-negative ele-

ment E, which it is allowed to do by reason of the peculiar shape of the glass cell.

It is obvious that in certain cases the shape of the glass cell may be varied and its sides may be parallel without detracting from the value of my invention as regards the paraffine seal.

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

1. A cell for galvanic batteries, which consists of a vessel decreasing in size from the bottom upward, and then increasing in size, forming a lip for the cover to rest on, and then again decreasing in size, thereby enabling the cover to be locked in position by a seal, substantially as described.

2. The battery-cell A, decreasing in size from the bottom upward, and provided with the shoulder M, and with cup-shaped recess F for holding a paraffine seal, in combination with said paraffine seal and with a cover locked in such recess thereby, substantially as described.

3. A galvanic cell consisting of the cup A, provided with shoulder M, cover B, in which the elements E C of the battery are suspended, and the paraffine seal D, surrounding said elements and sealing them in position, substantially as described.

4. The combination of the cell A, cover B, provided with perforation N, cut at an angle to the axis of the cell, and zinc C, held away from the electro-negative element by reason of said hole or perforation, thereby preventing accidental contact between the zinc and the carbon by reason of the proximity of the free end of the zinc to the carbon, substantially as described.

5. A cell for galvanic batteries, which consists of a vessel provided at its upper extremity with a shoulder formed of the material of the cell, and projecting inward to support the battery-cover and to permit the same to be sealed by a paraffine or equivalent seal set above the cover, substantially as described.

HORATIO J. BREWER.

Witnesses:

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