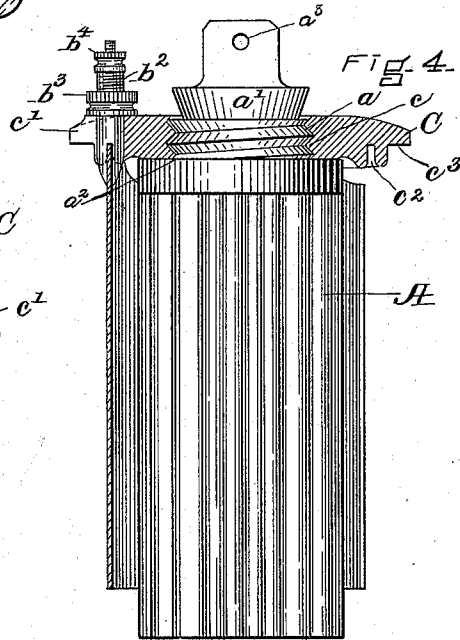
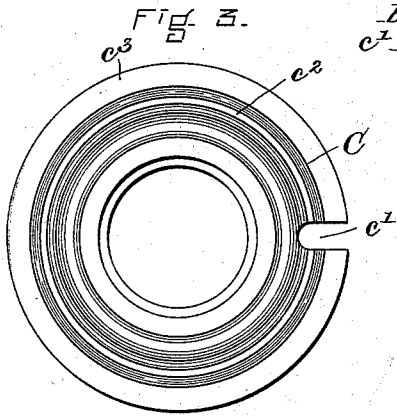
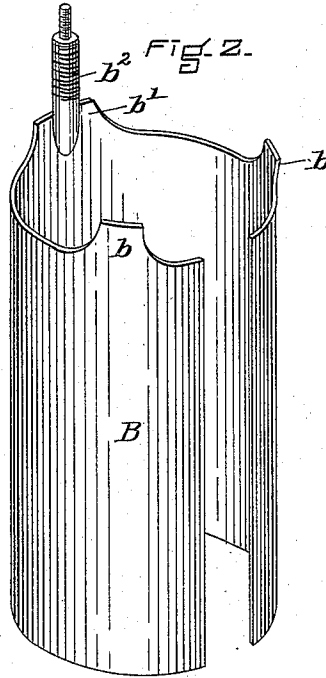
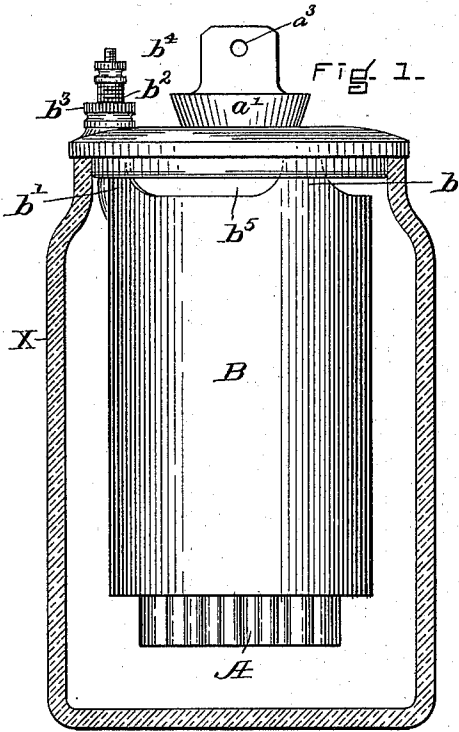


(No Model.)

H. C. THOMSON.
ELECTRIC BATTERY.

No. 568,007.

Patented Sept. 22, 1896.



WITNESSES.

A. D. Moust.
Fred L. Chamberlin.

INVENTOR-

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UNITED STATES PATENT OFFICE.

HENRY C. THOMSON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE
ELECTRIC GAS LIGHTING COMPANY, OF SAME PLACE.

ELECTRIC BATTERY.

SPECIFICATION forming part of Letters Patent No. 568,007, dated September 22, 1896.

Application filed June 25, 1896. Serial No. 596,827. (No model.)

To all whom it may concern.

Be it known that I, HENRY C. THOMSON, of Boston, Massachusetts, have invented a new and useful Improvement in Electric Batteries, of which the following is a specification.

My improvement relates to that class of batteries which contains a carbon element and a zinc element which it is desired to hold separated from each other, and both of which are placed in a containing-jar.

The purpose of my invention is to hold the two elements constantly and always separated from each other without the use of plugs or rubber rings, as has heretofore been usual, and also at the same time to secure such assembling of the zinc, the carbon, and the cover for the containing-jar as will facilitate the handling, transportation, and use of the battery.

Referring to Letters Patent to W. W. Burnham, No. 520,033, it will be seen that a method of obtaining some of the above-mentioned results was thereby obtained; but that patent necessitated the use of the rubber ring therein described, as well as the peculiar formation of the head of the carbon element.

I accomplish the objects above mentioned and effect my improvement by changes in the construction, form, and methods of connecting the several parts of the battery.

My invention will be more fully understood by reference to the drawings, in which—

Figure 1 is a sectional elevation of the jar-cover, carbon, and zinc. Fig. 2 is a perspective view of the cylindrical zinc element. Fig. 3 is an inverted plan of the cover, showing the way in which the same is grooved. Fig. 4 is a sectional view through the cover, the carbon, the cylindrical zinc, and the supporting-screw therefor.

I will now more particularly describe my improvement. The top of the carbon element A (shown in Fig. 4) will be seen to be constructed with a screw-thread a immediately below the top a' of the carbon. The cover C will be seen to have a corresponding thread c , which,

when brought into connection with the carbon, holds these two elements rigidly together, the cover also having a slot c' and the annular groove c^2 and seat c^3 for use hereinafter mentioned. The cylindrical zinc B has two projections from its upper part $b b$ and a third similar projection b' , to which is attached a screw-rod b^2 , over which fits a screw-nut b^3 , above which is the retaining-nut b^4 , one circuit-wire being placed below this nut b^4 , the other in a screw (not shown) at a^3 . To assemble these elements, the cover C is placed over the top of the carbon A, resting upon the shoulder a^2 , while the screw-rod b^2 of the cylindrical zinc B fits into the slot c' , and the projections $b b b'$ will pass up into the annular groove c^2 of the cover, still leaving the space b^5 between the rest of the top of the cylindrical zinc and the cover. Upon turning the screw-nut b^3 these parts, namely, the carbon, the zinc, and the cover, will be assembled and appear as in Figs. 1 and 4, and, owing to the firmness with which they are thus held together, will be in a condition to be handled as a unit without affecting the relative position of any of these parts. Thus assembled they may be placed in the outer jar X, upon the top of which will rest the seat c^3 of the cover C. After being thus placed they will also remain in a firm fixed position.

Having described my invention, what I claim is—

In an electric open-circuit battery, the combination of a carbon element A, having the neck a screw-threaded, the cylindrical zinc B, having the projections $b b b'$, screw-rod b^2 , and nut b^3 , the perforated cover C, having the thread c , slot c' , groove c^2 , and seat c^3 ; all substantially as and for the purposes described.

In witness whereof I have hereunto subscribed my name this 24th day of June, 1896.

HENRY C. THOMSON.

In presence of—

FRED C. CHAMBERLIN,
W. H. LEONARD.