No. 649,349. Patented May 8, 1900.

C. M. PLATT.

GALVANIC BATTERY.

(Application filed July 29, 1899.)

(No Model.)

Fig. 1.

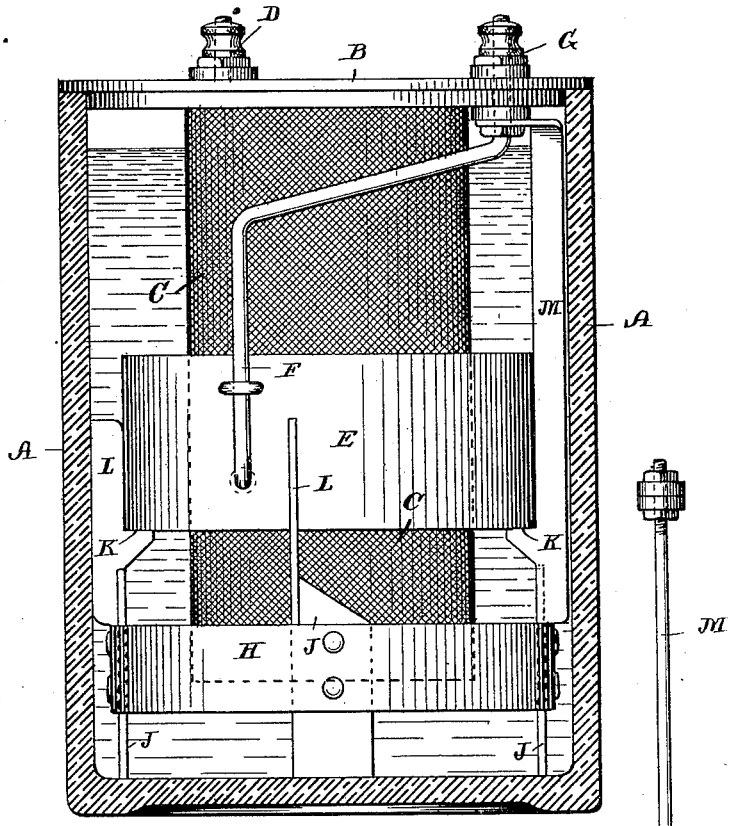
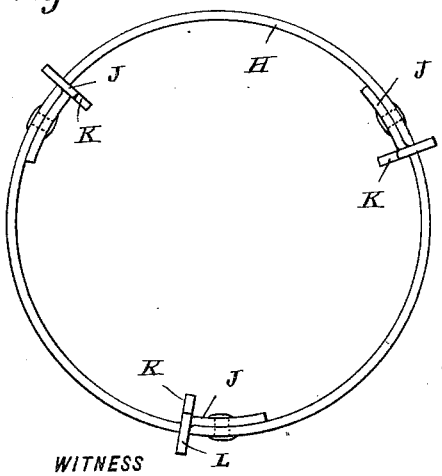


Fig. 2.



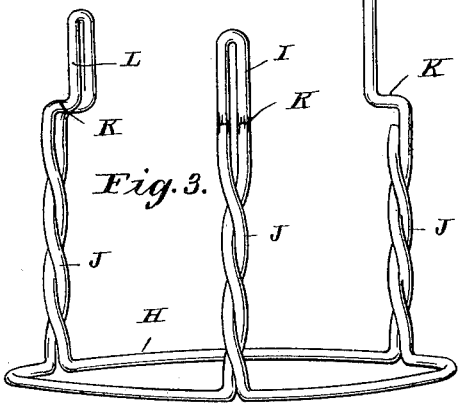


Fig. 3.

WITNESS

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CLARK M. PLATT, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE WATERBURY BATTERY COMPANY, OF SAME PLACE.

GALVANIC BATTERY.

SPECIFICATION forming part of Letters Patent No. 649,349, dated May 8, 1900.

Application filed July 29, 1899. Serial No. 725,482. (No model.)

To all whom it may concern:

Be it known that I, CLARK M. PLATT, a citizen of the United States, and a resident of Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Galvanic Batteries, of which the following is a specification.

My invention relates to new and useful improvements in galvanic batteries, and has for its object to provide novel means for supporting the zinc element irrespective of the basket. Heretofore the zinc or positive element of batteries of this class have usually been attached to the basket or suspended from the cover in various ways. In said prior constructions it is consequently difficult to remove the basket or negative element without first or simultaneously removing the zinc, which fact is objectionable. It is also undesirable to support the zinc on or by the negative element of the battery, since the two elements are very liable to become short-circuited through the accumulation of sediment due to the depolarization, which sediment is liable to cover the top edges of the supports connecting the two elements, thereby forming a metallic contact therebetween. I therefore provide novel means for separately and independently supporting the zinc element of a battery within the jar and independent of the basket. The zinc, as shown, is in the usual ring form, and consequently encircles the basket, as will later be more fully described, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows a central vertical section of a battery-jar with my improved zinc-holder shown therein in side elevation. Fig. 2 shows a detached plan view of the zinc-holder shown in Fig. 1. Fig. 3 shows a detail perspective view of a modified form of holder as it would appear when constructed of wire.

Referring to the characters of reference marked upon the drawings, A indicates a jar which may be of any of the usual or preferred designs, B its cover, C the basket or negative element, and D the binding-post for said element and by means of which a field-wire may be connected.

E represents the zinc element, which is in circular form, encircling the basket and having a wire connection F leading therefrom to its binding-post G, located upon the cover.

It will be obvious of course that both the binding-posts D and G would be properly insulated from the cover, thus preventing any possible electrical connection between the posts and said cover, thus avoiding short-circuiting.

The holder H for the zinc is preferably constructed of sheet metal and comprises a cylindrical band having vertical posts J, which may extend below said band and rest upon the bottom of the jar. The upper ends of these posts are provided with a shoulder K, upon which the zinc rests, and an extension L, which engages the side of said zinc, retaining it against lateral movement.

If desired, one of the extensions L may be carried up beyond the zinc, as at M, and connected with the wire F to provide an additional contact between the zinc and the binding-posts G, thus insuring a positive connection for the field-wire with the zinc element.

In Fig. 3 it will be seen that I have constructed a holder which in all essential particulars is the same as that shown in Fig. 1, but that it is formed of one piece of wire bent and twisted to produce the features necessary for the purpose to which it is applied and as are contained in the other construction.

My invention may be modified in other particulars without changing the essence thereof, as will be obvious to those skilled in the art to which it appertains, and therefore I do not confine myself to the details of construction herein shown and described.

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

1. A holder for a zinc element of a battery which comprises a sheet-metal ring adapted to rest upon the bottom of a jar, and having a series of vertical posts secured thereto and provided with shoulders to engage and support said zinc.

2. A holder for an element of a battery, the same comprising a series of posts provided with shoulders and a band to which said parts are secured and for retaining them in substantially a vertical position.

3. The combination with a battery, of a holder comprising a circular band having a series of vertically-disposed posts secured thereto and provided with a shoulder upon which the zinc may rest and with an extension to engage the side of said zinc.

4. The combination in a battery of the class described, of means for independently supporting the zinc element thereof, the same comprising a series of shouldered posts upon which the zinc rests, a binding-screw secured to one of said posts, and a ring for retaining said supports upon the bottom of the jar and at a relative distance from each other.

Signed at Waterbury, county of New Haven, State of Connecticut, this 5th day of July, A. D. 1899.

CLARK M. PLATT.

Witnesses:
JAY H. HART,
AGNES I. WALKER.