(No Model.)

T. W. BRYANT.

CARBON BATTERY.

No. 305,046. Patented Sept. 16, 1884.

Fig 1

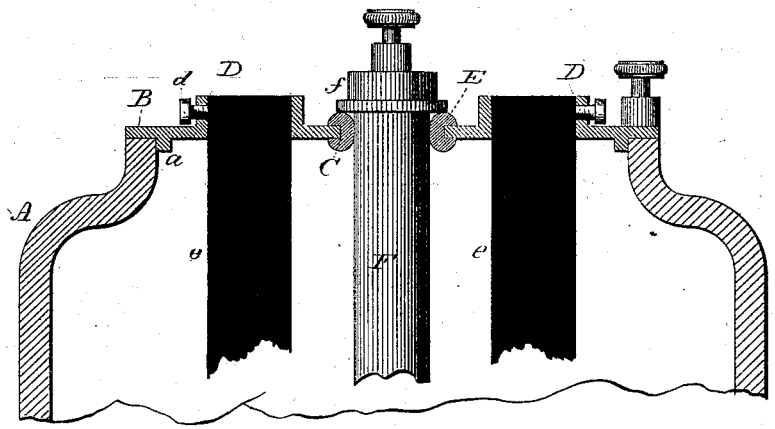
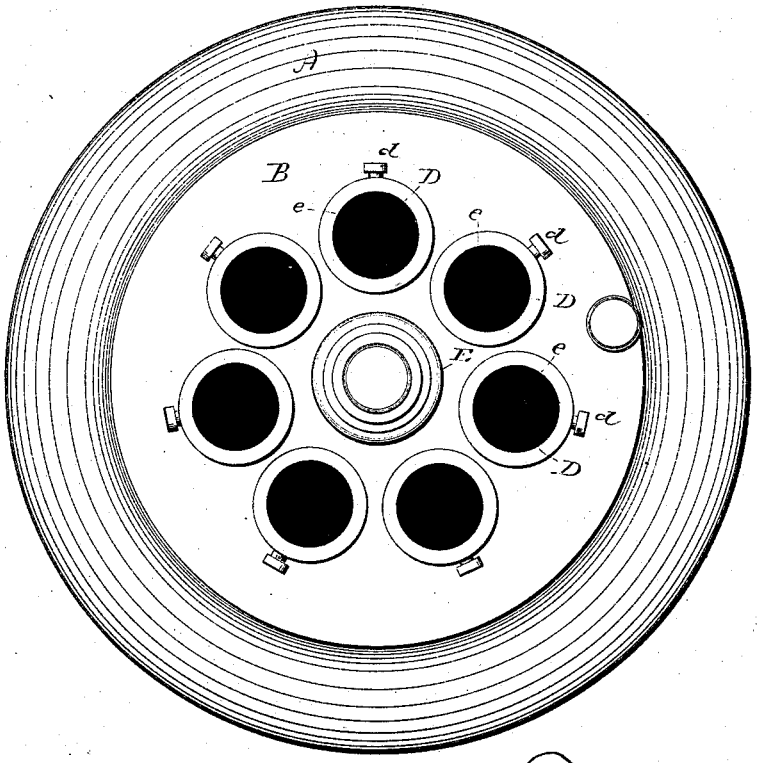


Fig. 2



Witnesses.
J. K. Shumway
Jos. C. Earle

Thomas W. Bryant.
Inventor
By Atty
Wm. C. Earle.

UNITED STATES PATENT OFFICE.

THOMAS W. BRYANT, OF ANSONIA, CONNECTICUT.

CARBON BATTERY.

SPECIFICATION forming part of Letters Patent No. 305,046, dated September 16, 1884.

Application filed April 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. BRYANT, of Ansonia, in the county of New Haven and State of Connecticut, have invented a new Improvement in Carbon Batteries; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a vertical central section of the battery; Fig. 2, a top or plan view.

This invention relates to an improvement in that class of carbon batteries in which a cover of insulating material has been employed to rest upon the neck of the jar with a central opening, through which the zinc is introduced, and openings surrounding that central opening, through which the carbons are introduced, the zinc supported on the insulated cover and the carbons by a metal holder resting on the top of the insulated cover.

The object of my invention is to dispense with the insulated cover and make the zinc and carbon holder substantially one; and it consists in a metal plate constructed to rest upon the top of the jar, and constructed with a central opening for the zinc, and surrounding openings for the carbons, the central opening provided with a fixed collar of insulating material, as more fully hereinafter described.

A represents the jar, of usual construction and any desirable shape; B, a metal plate, which may rest upon the neck of the jar as its support, and should be provided with a shoulder, *a*, inside or out, to properly locate it on the jar. At the center of this plate is an opening, C, and surrounding this opening, preferably in a concentric circle, is a series of openings, D, and these series of openings D are each provided with a set-screw, *d*, by which the carbons *e*, introduced therein, as seen in Fig. 1, may be clamped. Around the central opening is a collar, E, of insulating material. This is best made from porcelain, but may be made from glass or other suitable insulating material, cast in the plate, so as to become securely united therewith, and making a permanent part thereof, and so as to extend above and below the plane of the plate, so as to prevent possible contact of the zinc F with the plate, which is introduced through that opening, as seen in Fig. 1, the zinc supported by a collar, *f*, as shown. The plate and zinc are each provided with the usual posts for wire-connection, as shown. By this construction a covering-plate is made complete as a single piece or article, and supports both the zinc and carbon, and, being made of metal, is less liable to be broken than the usual glass cover. The insulating collar E, being supported by and made, substantially, a part of the metal cover, is not liable to fracture, and thus the carbon and zinc supporting devices of the jar are not liable to the usual breakage or derangement.

I claim—

The herein-described improvement in carbon batteries, consisting of the metal plate B, constructed with a central opening, and with a series of openings surrounding said central opening, each of said surrounding openings being provided with a clamping device to secure the carbon, the central opening being provided with a collar, E, of insulating material, attached to the plate B, so as to become, substantially, a part thereof, substantially as described.

THOS. W. BRYANT.

Witnesses:
JOS. C. EARLE,
J. H. SHUMWAY.