

(No Model.)

J. H. A. & A. H. B. FOLKERS.

GALVANIC BATTERY.

No. 244,875.

Patented July 26, 1881.

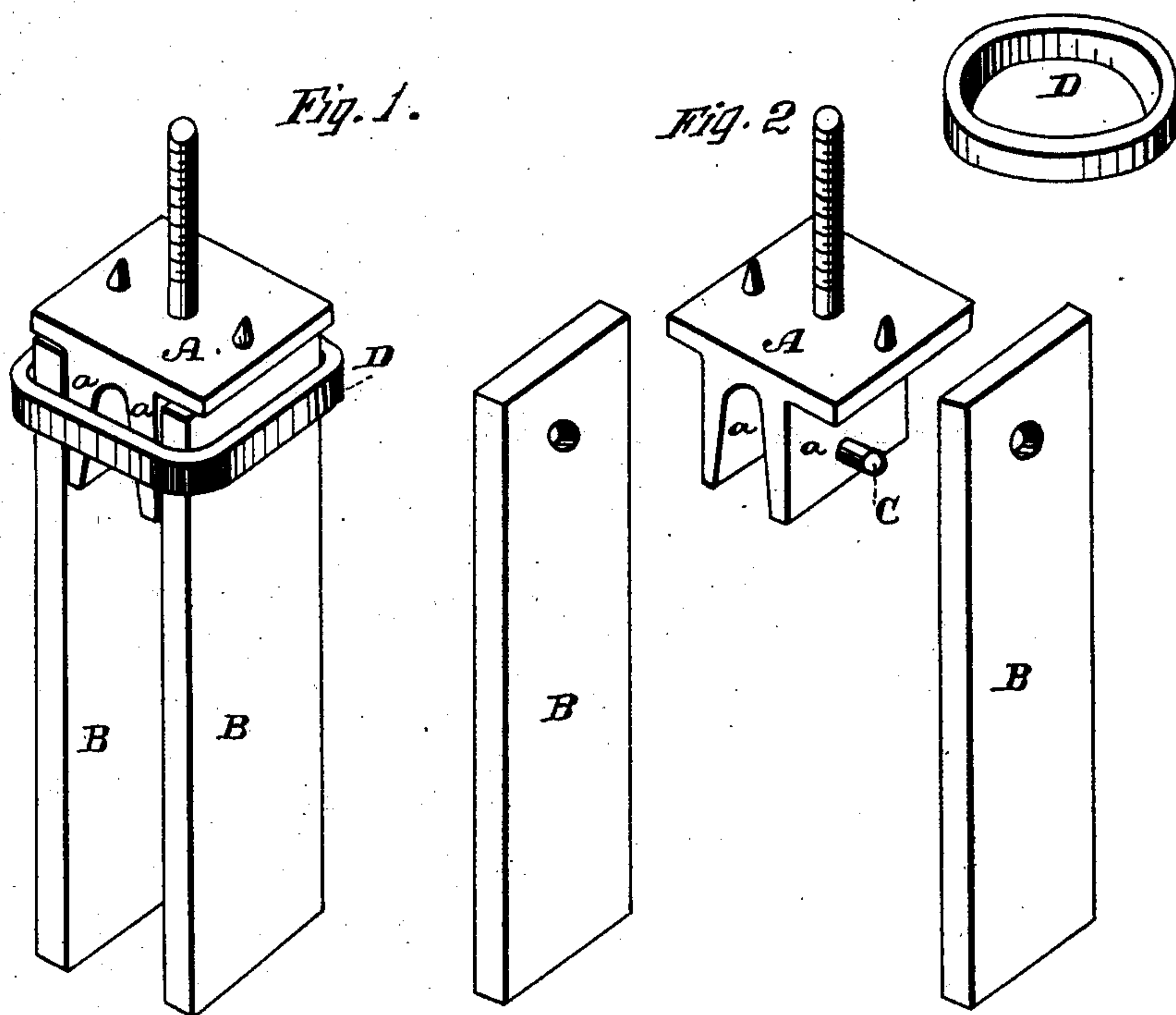
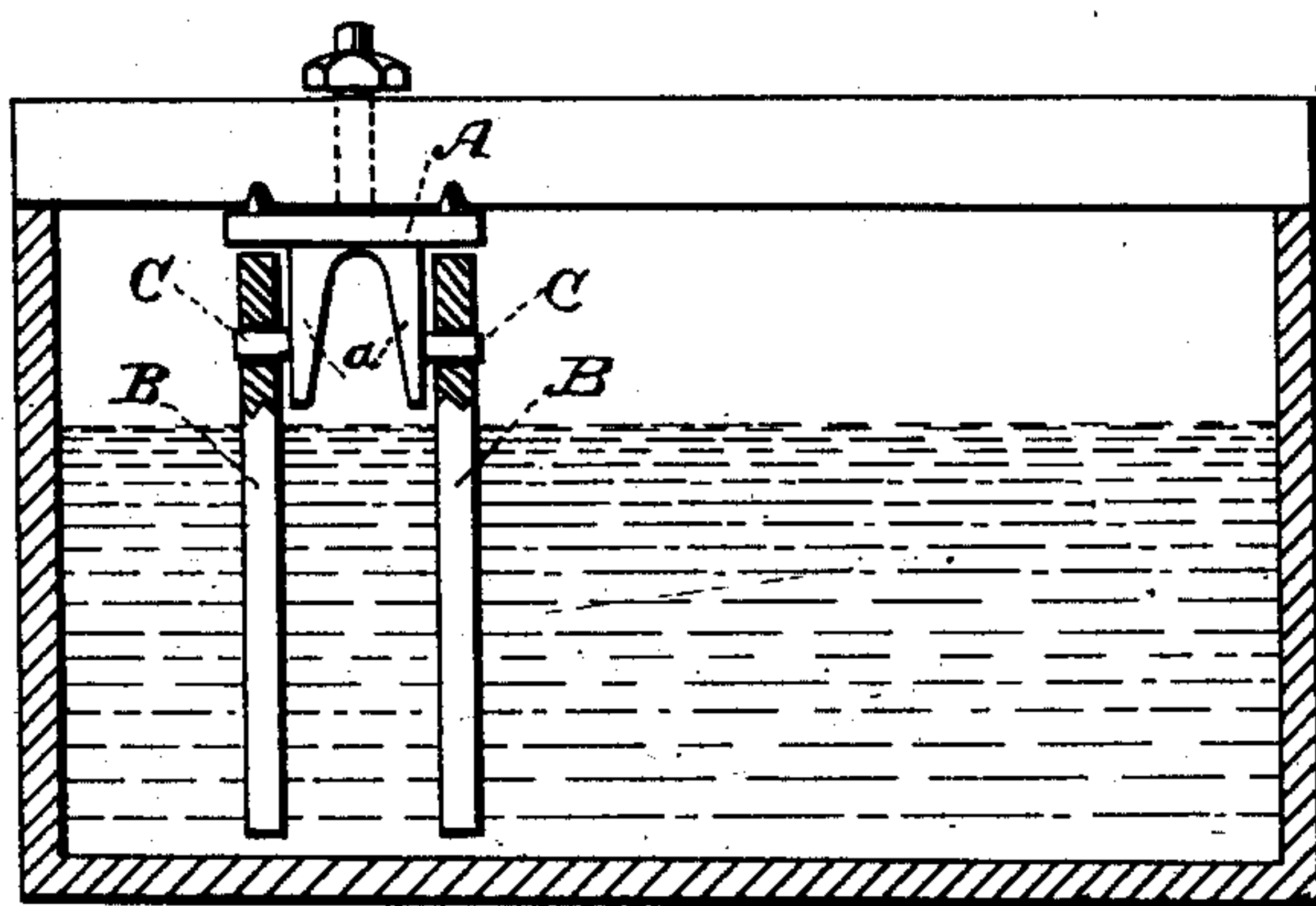


Fig. 3.



Witnesses  
Geo. H. Strong,  
Frank A. Brooks

Inventors  
John H. A. Folkers &  
Anton H. B. Folkers  
By Dewey & Co  
Attys

# UNITED STATES PATENT OFFICE.

JOHN H. A. FOLKERS AND ANTON H. B. FOLKERS, OF SAN FRANCISCO,  
CALIFORNIA.

## GALVANIC BATTERY.

SPECIFICATION forming part of Letters Patent No. 244,875, dated July 26, 1881.

Application filed May 10, 1881. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN H. A. FOLKERS, and ANTON H. B. FOLKERS, of the city and county of San Francisco, State of California, have invented an Improvement in Galvanic Batteries; and we hereby declare the following to be a full, clear, and exact description thereof.

Our invention relates to certain improvements in electric batteries; and it consists in a new and useful means for securing the plates to the attachments by which they are supported within the device, all of which will hereinafter more fully appear.

Referring to the accompanying drawings, Figure 1 is a view of my invention. Fig. 2 shows the parts separated. Fig. 3 shows its application to a battery.

Let A represent the head or attachment, which is supported within the casing of the device in the usual manner. It has two downwardly-projecting flanges, *a a*, outside of which and to which are attached the electric plates B B, one being usually of carbon, the other of zinc. In the ordinary method these plates are secured to the head A by means of screws or bolts, which pass through them into the flanges of the head. The objection to this mode of attachment is the difficulty of removing the plates. The carbon plate is liable to break easily, and in fact does break frequently. In order to take it off the screw or bolt must be

removed, and this operation is somewhat difficult. To obviate this difficulty we form with the flanges *a a* on the head A small projecting pins or lugs *c c* on their outer faces. The plates B B are provided with corresponding holes near their tops, into which the lugs *c c* fit. An elastic band, D, is then slipped over the plates and binds their tops to the flanges *a a* of the head A. This forms for them a tight and secure fastening. By slipping off the rubber band the plates can be readily removed. The band will not be affected by any action of the battery, and can be used a long time.

This mode of connection will be principally useful in physicians' batteries.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In an electric battery having the supporting-head A, with flanges *a a*, the combination of the projecting pins or lugs *c c* on said flanges, the electric plates B B, having holes near their tops adapted to fit over said lugs *c c*, and the elastic band D, when arranged substantially as and for the purpose herein described.

In witness whereof we have hereunto set our hands.

J. H. A. FOLKERS.  
A. H. B. FOLKERS.

Witnesses:

J. W. ROACH,  
JULIUS TIENCKEN.