

(No Model.)

C. E. BALDWIN.

ELECTRIC THERAPEUTIC INSTRUMENT.

No. 353,346.

Patented Nov. 30, 1886.

Fig. 1.

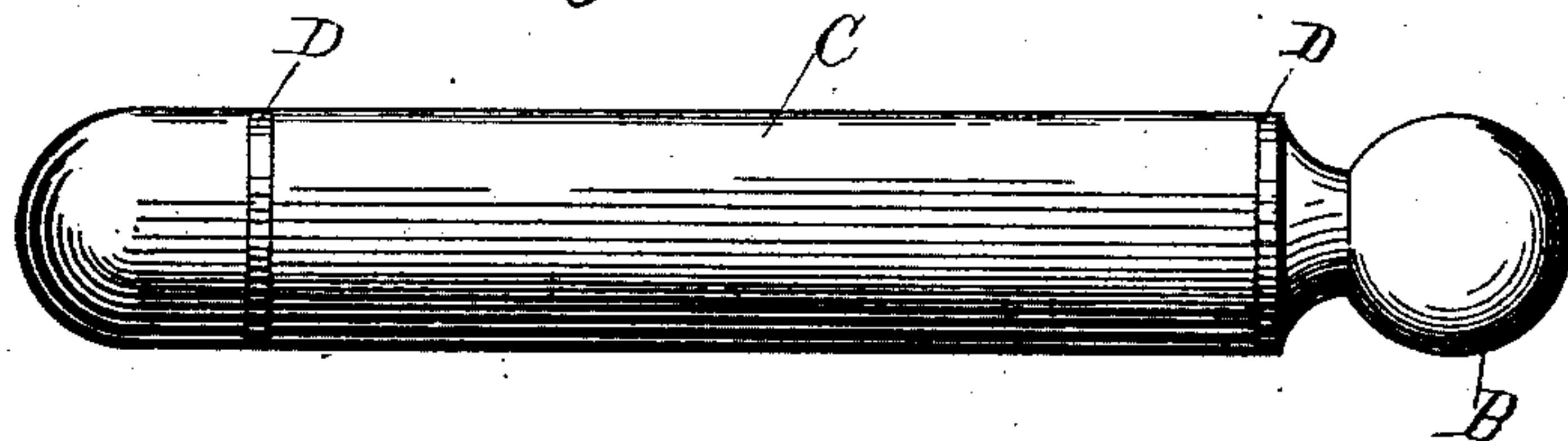
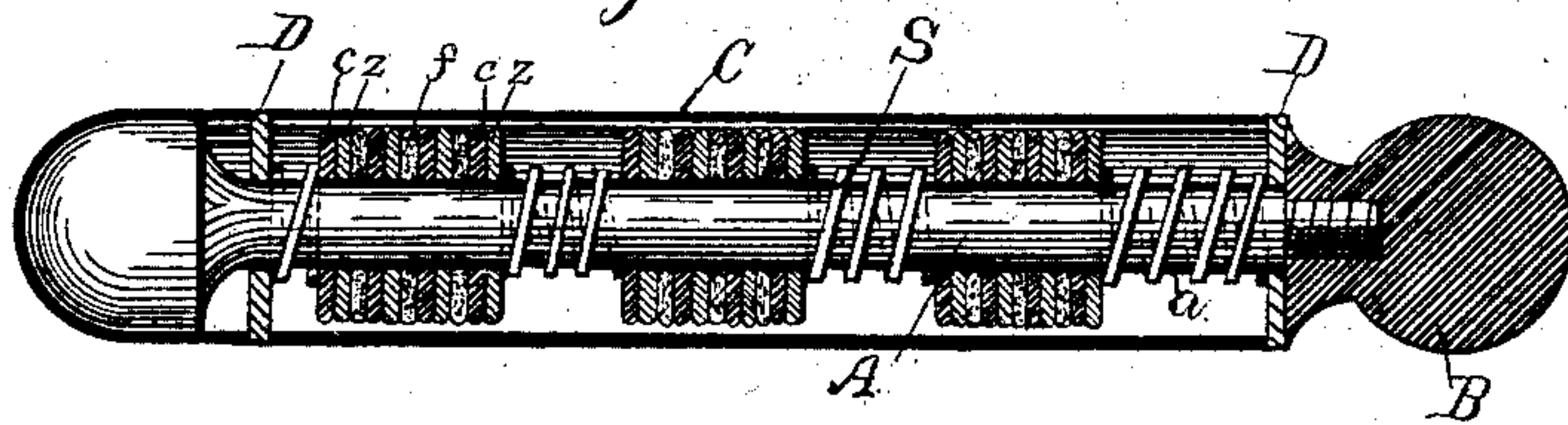


Fig. 2.



Witnesses

T. E. Robertson.

E. H. Bond.

Inventor

Charles E. Baldwin

By his Attorney *T. W. Robertson*

UNITED STATES PATENT OFFICE.

CHARLES E. BALDWIN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
MARTIN V. WAGNER, OF MARSHALL, MICHIGAN.

ELECTRIC THERAPEUTIC INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 353,346, dated November 30, 1886.

Application filed July 3, 1886. Serial No. 207,113. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BALDWIN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Electric Therapeutic Instruments, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 represents an elevation of my instrument, and Fig. 2 a central longitudinal section of the same.

This improvement relates to a battery, principally designed to be used as a therapeutic agent, but it may be used for other purposes; and the invention consists in the peculiar combinations and construction and arrangement of parts, hereinafter described, and then more particularly pointed out in the claims.

Referring now to the details of the drawings, which represent one form of my instrument, A indicates a spindle covered with rubber or other insulating material, as shown at *a*, and having one end enlarged to form a head and the other end preferably threaded to screw into the knob B, which is bored and tapped to receive it. Arranged on this spindle are several voltaic batteries, each consisting of pairs of plates or washers *c z*, with a washer, *f*, of felt or some textile fabric between each two pairs. The plates in each pair should be of opposite electrical character, as copper and zinc. Between each two piles I place a spiral spring, S, which will not only form an electrical connection between them, but will tend to keep the plates in contact with each other and the felt. Around these piles is placed a thin casing, C, preferably of hard rubber or gutta-percha, which casing is shown in two parts, one of which is firmly attached to the head, and the other preferably loose. I place two disks, D, on the spindle, one at each end of the loose casing, which disks may be made of any suitable character, but preferably of a non-oxidizable character, or I may plate them with some non-oxidizable metal, or at least not readily oxidizable, which disks should be of about the diameter of the casing, although they will do if made smaller.

I prefer to make the disks forming the piles of such a size that they will readily pass into

the casing; but the exact size is of no consequence, and I sometimes nickel-plate the spindle to prevent oxidization.

The operation is as follows: The knob being unscrewed, the casing may be removed, and if necessary the parts may be cleansed, and then a little common vinegar is dropped into each pile, after which the casing is put in its place and the knob screwed on. The instrument is then ready for use, and may be inserted in the vagina when used for diseases of that part. The disks now being in contact with the flesh, an electrical circuit will be completed, of which that part of the vagina between the disk D will form one portion, and an electric current generated by the piles will thus pass from one disk to the other through the parts of the vagina surrounding the casing.

I do not limit myself to the exact construction shown, as it is evident that this may be varied without departing from the spirit of my invention.

What I claim as new is—

1. The combination, with the spindle A, of the perforated voltaic piles *c z f*, a casing inclosing the same, and contact-surfaces, as the disks D D, at or near each end of the casing, substantially as described.

2. The combination of the spindle A and a series of voltaic piles with a spring-connection between two of the piles, a casing surrounding the same, and contact-surfaces, as D D, at or near each end of the casing, substantially as described.

3. The combination of the voltaic piles, consisting of plates *c z* and the fibrous material *f*, with two disks in electrical connection therewith and an insulating-casing between said disks, substantially as described.

4. The combination of the voltaic piles, consisting of the perforated plates and fibrous material and the spindle A, with two disks in electrical connection with the piles and an insulating material between the disks, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 19th day of June, 1886.

CHARLES E. BALDWIN.

Witnesses:

GEORGE THOMPSON,
EDWARD TOBIN.