(No Model.)

R. M. BACHE.

BIPOLAR PROSTATIC ELECTROLYZER.

No. 420,710. Patented Feb. 4, 1890.

FIG. 1.

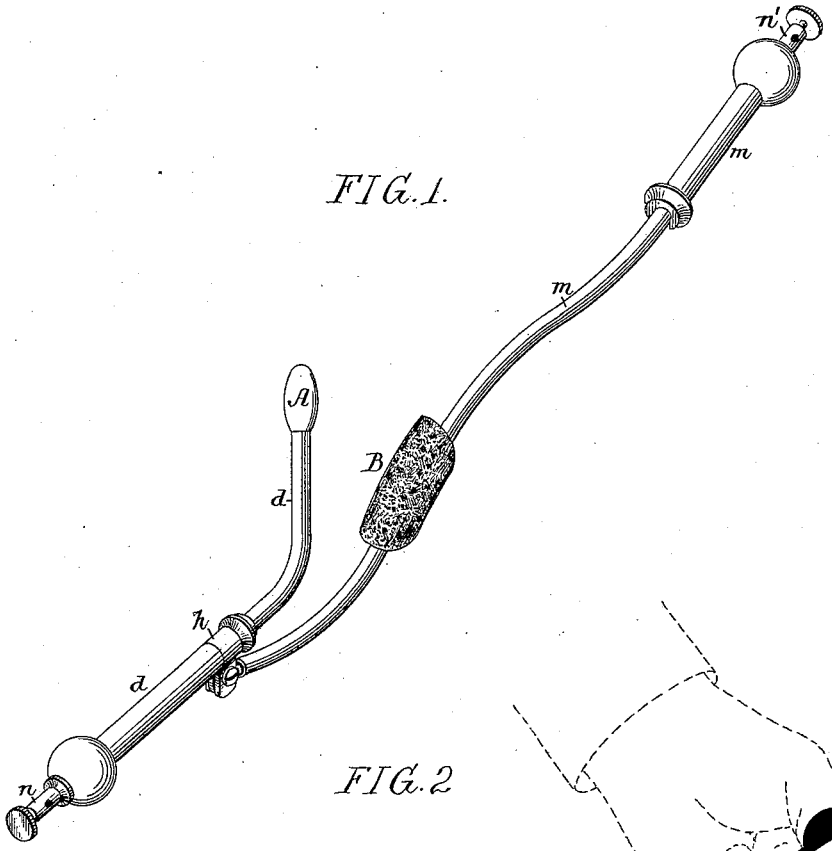
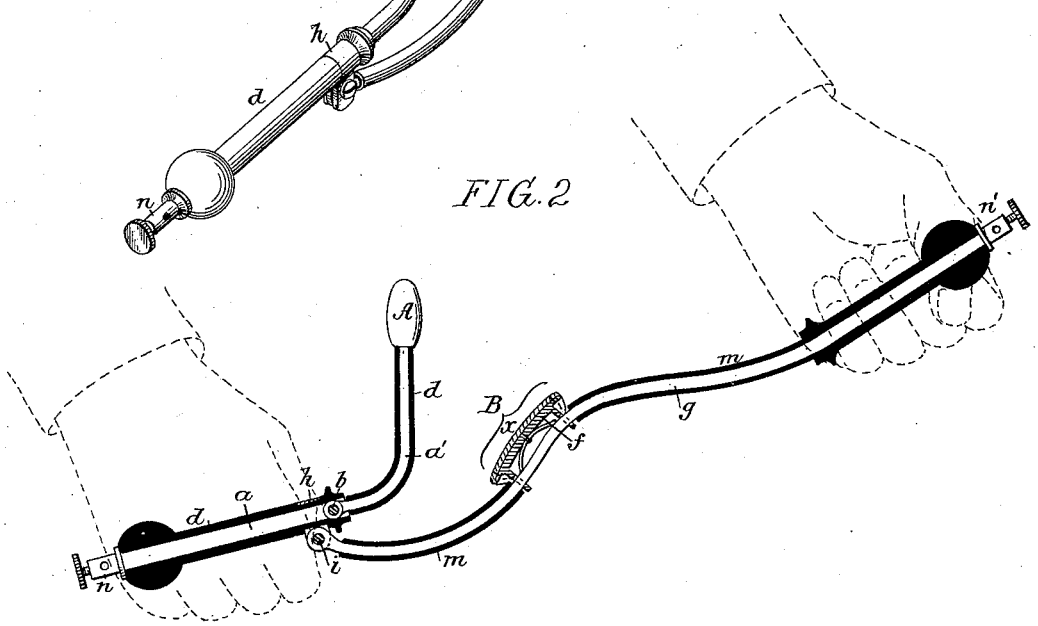


FIG. 2.



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UNITED STATES PATENT OFFICE.

RICHARD MEADE BACHE, OF PHILADELPHIA, PENNSYLVANIA.

BIPOLAR PROSTATIC ELECTROLYZER.

SPECIFICATION forming part of Letters Patent No. 420,710, dated February 4, 1890.

Application filed December 6, 1889. Serial No. 332,792. (No model.)

To all whom it may concern:

Be it known that I, RICHARD MEADE BACHE, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented a Bipolar Prostatic Electrolyzer, of which the following is a specification.

The instrument which I have termed a "bipolar prostatic electrolyzer" is intended for the application of the electric current to the prostate gland in the treatment of prostatitis and prostatorrhea, the object of the invention being to so construct the instrument that both its position and the strength of the current can be controlled by the patient under treatment and a current of any required degree of strength caused to pass directly through the prostate gland.

In the accompanying drawings, Figure 1 represents a perspective view of the instrument, and Fig. 2 represents a longitudinal sectional view of the same.

While the value of the electric current as a means of treating disorders of the internal organs is now universally recognized, the devices employed for treating a patient by means of the current are not always of an effective character. For instance, in treating the diseases of the prostate gland known as "prostatitis" and "prostatorrhea" two detached electrodes are generally employed, the negative electrode being secured to a stem or shank for introduction into the rectum, and the positive electrode consisting simply of a plate covered with cloth or sponge, to be applied to some convenient portion of the person. Two separated electrodes of this character cannot conveniently be handled by the patient so as to insure the most effective course for the current and properly govern its strength; hence I have devised an instrument for overcoming this objection.

The instrument consists, fundamentally, of an electrode applied to the rectum and one applied simultaneously to the perinæum, the two electrodes occupying such relation to each other as to represent the anatomical relation to each other of the parts of the body to which they should accommodate themselves—the rectal electrode inserted in the rectum and the perineal electrode applied to the perinæum, respectively, constituting, in the order named, the negative and positive poles, so that when the parts are properly adjusted the current is caused to pass directly through the prostate gland.

A is the negative or rectal electrode, which is carried by a two-part stem or shank a a', these two parts being hinged together by a pin b, so that one part is free to move in respect to the other, the stem or shank being provided with an insulating-covering d, the outer portion of which forms a handle which can be conveniently grasped.

The positive electrode B consists of a plate f, covered with cloth, sponge, or equivalent absorbent material x, this plate being mounted upon a stem or shank g, which is hung by a pin i to a clip h, mounted upon the insulating-covering of the stem a, so that said stem g can move freely in a vertical plane in respect to the stem a, said stem g being likewise provided with an insulating-covering m, except where the plate f is attached thereto, and this insulating-covering m forming at the outer end of the stem a handle, as shown in Figs. 1 and 2. The stem a has at the outer end a binding-post n, and the stem g has a similar binding-post n'.

The instrument is used as follows: The terminals of the flexible rheophores of a galvanic battery set to a current strength of about one millampère are attached to the binding-posts of the instrument, the positive pole of the battery being associated with the binding-post of the perineal electrode and the negative pole with that of the rectal electrode. The sponge of the perineal plate being moistened and the bulbous head constituting the rectal electrode being slightly oiled, the patient, holding the instrument with the perineal part forward, passes it from the front under the crotch and introduces the rectal electrode to its limit into the rectum, and then, seizing the handle of the perineal electrode while still retaining hold of the other, brings the sponge of said perineal electrode gently in contact with the perinæum, increasing or diminishing the electric current at pleasure by exercising more or less pressure, such movement being permitted by reason of the joint between the stems of the two electrodes.

The use of a yielding joint between the two parts of the stem of the rectal electrode permits the latter to readily accommodate itself to the direction of the rectum as it is being inserted therein.

While a pivot-joint between the two parts of the stem of the rectal electrode is preferred for this purpose, it is not absolutely necessary, as the stem may be made in one piece, reduced in thickness, or otherwise so constructed at the point *b* as to possess the desired flexibility, and a rigid connection between the stems of the rectal and perineal electrodes may also be used in cases where the stem of said perineal electrode possesses such flexibility or elasticity as will permit of the desired movements of said stem in respect to that of the rectal electrode.

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

1. A bipolar prostatic electrolyzer consisting of rectal and perineal electrodes and stems carrying the same and connected together, but capable of movement in respect to each other, substantially as specified.

2. A bipolar prostatic electrolyzer consisting of rectal and perineal electrodes and stems carrying the same and pivoted together so as to be free to move in respect to each other, substantially as specified.

3. A bipolar prostatic electrolyzer consisting of rectal and perineal electrodes and stems carrying the same and connected together, but capable of movement in respect to each other, the stem of the rectal electrode being itself jointed or flexible, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

RICHARD MEADE BACHE.

Witnesses:

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HARRY SMITH.