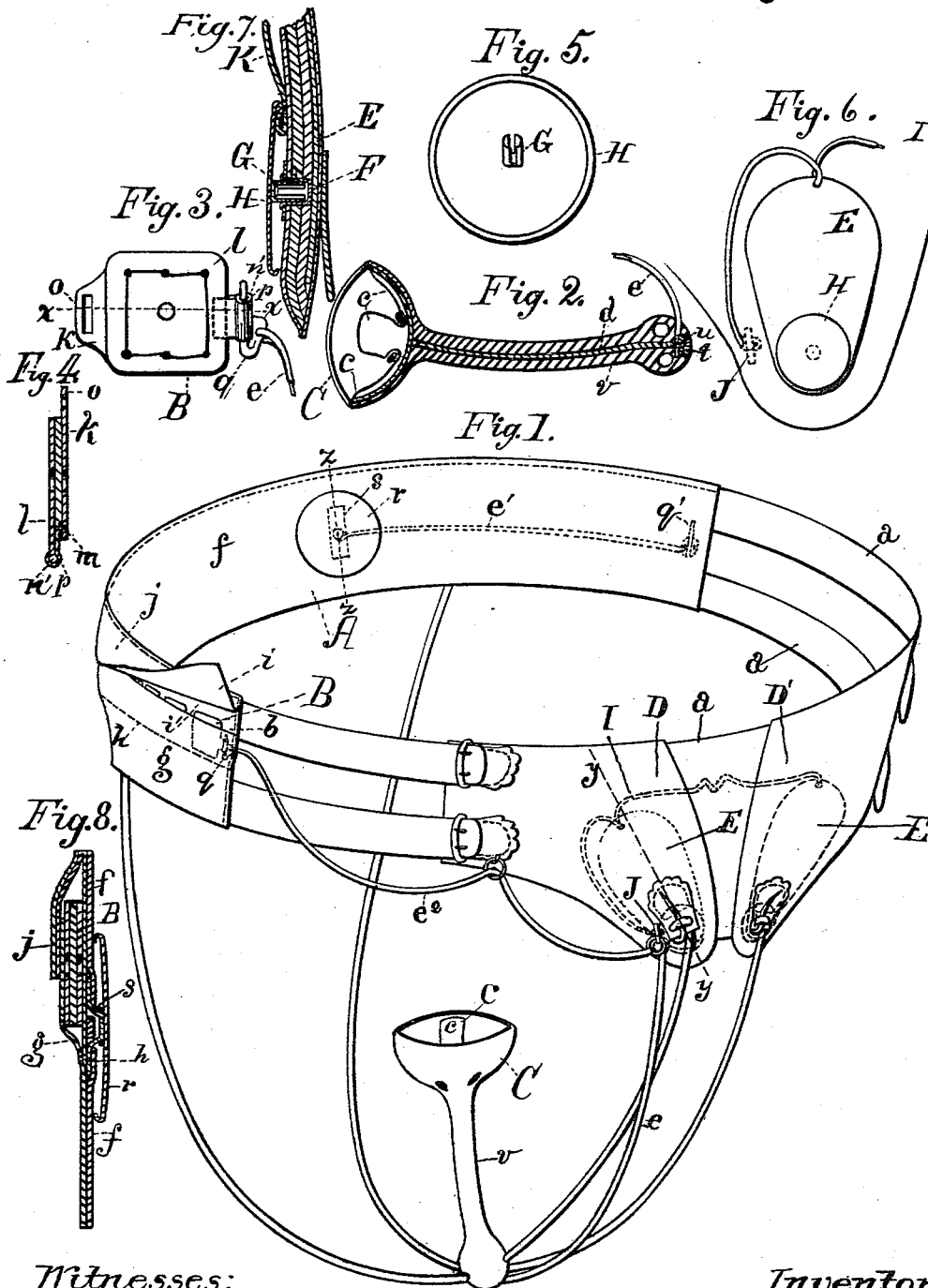


(No Model.)

G. F. MOHN.
ELECTRIC UTERINE SUPPORTER.

No. 458,536.

Patented Aug. 25, 1891.



Witnesses:

Alfred L. Townsend
H. H. H. H. H.

Inventor:

George F. Mohn
by Hazard & Townsend
his Attys.

UNITED STATES PATENT OFFICE.

GEORGE F. MOHN, OF LOS ANGELES, CALIFORNIA.

ELECTRIC UTERINE SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 458,536, dated August 25, 1891.

Application filed March 26, 1891. Serial No. 386,436. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. MOHN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Electric Uterine Supporter and Therapeutic Appliance, of which the following is a specification.

One object of my invention is to provide means for the support of displaced wombs, which will cause the ligaments whose office it is to support the womb to perform their proper function, thereby effecting a permanent cure.

A further object is to so construct such means that they may conveniently be used for electrical treatment of suppressed and painful menstruation, ovarian inflammation and pains, and all lesions of the abdominal organs in which the use of electricity is indicated. I accomplish this object by means of the appliance described herein, and illustrated in the accompanying drawings, in which—

Figure 1 shows my invention in position for use. Fig. 2 is a longitudinal mid-section of my improved supporting-cup and stem. Fig. 3 is a detail of one of the battery-cells. Fig. 4 is a longitudinal section of one of the cells on line *x x*, Fig. 3. Fig. 5 is a view of the inner side of one of the detachable electrodes. Fig. 6 is a view of one of the pads at the front of the belt, with the inner padding and the lining of chamois-skin removed. Fig. 7 is an enlarged mid-section of the pad on line *y y*, Fig. 1. Fig. 8 is a cross-section on line *z z*, Fig. 1.

I will now explain the principle of my invention. Womb displacements result from the debility and relaxation of the ligaments whose office it is to sustain the womb in position, and I propose as a proper remedy to supply sufficient stimulus to such ligaments to cause such contraction thereof as may be necessary to retain the parts in their proper position. My device is designed to accomplish this purpose.

A is a belt, partially formed of elastic webbing *a* and provided with a pouch *b* to contain the chain of battery-cells B.

C is the supporting-cup, which is of the same form as those in ordinary use, but is

provided with a metallic lining C, which is connected with the battery B by the wire *d* and the insulated tinsel cord *e e'* or other suitable conductor. The pouch portion of the belt consists of an inside lining *f* of chamois-skin, of the full width of the belt, the leather pouch-strip *g*, secured to the lower part of the outside of the lining by a line of stitching *h* near the mid-line of such strip, leaving the upper portion of the strip free to form the pouch, and the flap and cell-cover *i*, formed of a double fold of oil-cloth or some other material impervious to moisture, stitched at the upper fold to the top of the lining. The lower edge of the rear member *i'* of the cell-cover is secured by the line of stitching *h*, and the front member or flap *i* is faced on the outside with felt *j*, which is of a yielding nature, and while giving sufficient firmness and strength to the outside of the belt will not cause the chamois lining *f* to wrinkle.

The battery-cells B are formed of the copper plate *k* and zinc plate *l*, with an interposed sheet *m* of felt between them, the whole being secured together. One of the plates is provided with the hinge-pin *o* at one end of the cell, and the other plate is provided with the hinge-eye *n'* at the other end of the plate, and is formed integral with the plate, so that the connections between the cells are strong.

In practice the eye is formed of the member *p* of the material of the plate bent upon itself and interposed between the main body of the plates *k* and *l*, thus preventing it from unbending. The tinsel cord E is connected with a hook *q*, which is fastened at the end of the pouch and is arranged to receive the eye *n'* at the end of the battery-chain. The two ends of the chain are connected with their respective tinsel cords or other suitable conductors in like manner, and the conductor *e* is connected with the rear negative electrode *r*, applied to the back of the patient. This electrode is secured to the belt by means of the strip *s*, of malleable metal, riveted or otherwise secured at its inside to the back of the electrode and having its ends free to be inserted through holes in the lining *f* and then spread out and extended between such lining and the pouch-strip *g* or cap-strip *i*,

lying next thereto. The conductor e' is secured at one of its ends to the metallic strip s and is disposed between the lining and such cap-strip or pouch-strip, which prevents its contact with both the battery and the body of the patient. The insulated cord e is secured to the stem-conductor d by the circular nut t , which is seated in the socket u in the end of the hollow stem v and secured upon the stem-conductor. The end socket u is filled with putty or some other insulating material. The metallic lining c in the cup is preferably formed with a series of leaves or arms, so that they can be easily made to conform to the inside of the cup.

In practice I charge or excite the battery by soaking it in vinegar diluted or not, as may be required, to produce the current desired. The battery is then placed in the pouch and connected with the hooks q q' . The belt is then secured about the waist and the cup is placed in position in the customary manner. The current then passes to the electrode r from the metal lining c through the weakened parts, thus supplying to the nerves the energy necessary to contract the ligaments to hold the parts in their normal position. I provide in the front of the belt the abdominal pads D D' , each provided with a steel stiffening-plate E , to which is soldered or otherwise secured a metallic socket F , arranged to receive the stem G of the abdominal electrode H . The steel stiffening-plates E E are connected with each other and with the conductor e through hooks J by the conductor I , one end of which is secured to the hook J , and when it is desired to employ the apparatus in the treatment of general abdominal diseases the electrodes H are secured in position, as indicated in Fig. 7, and the detachable conductor e is released from the snap-hook J , thus allowing the current to pass through the abdomen from the abdominal electrodes H H to the negative electrode r . Thus my improved appliance is adapted for use as a womb-supporter, with or without an electrical current passing through the womb, and the belt may be used either with or without an electrical current passing through the abdomen.

It is desirable to detach the electrodes H H when the current is to be passed through the supporter, and to facilitate their attachment and removal I provide each of such electrodes with the spring-stem G , which consists of a longitudinally-divided sheet-metal spring-cylinder slightly larger at its base than the socket F . The electrode is retained in place by friction between such socket and the spring-stem.

K is a non-conducting flap arranged to

cover the socket when the electrode is withdrawn.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the belt, the battery, the uterine supporter provided with the metallic lining connected with one pole of the battery, and the rear electrode connected with the other pole of the battery and arranged to be applied to the back of the patient.

2. The appliance comprising the belt, the battery, the uterine supporter provided with the metallic lining, the steel stiffening-plates, the abdominal electrodes connected with such plates, the fastening-hook secured to the belt, the conductors connecting such plates and hook, the conductor connecting the hook with one pole of the battery, the rear electrode connecting with the other pole of the battery, and the detachable conductor connecting the metallic lining of the cup with such hook.

3. The pouch portion of the belt, consisting of the inside lining f , the leather pouch-strip g , secured to the lower part of the outside of the lining f by a line of stitching near the mid-line of such strip, leaving the upper portion of the strip free to form the pouch, and the flap and cell-cover i , formed of a double fold of impervious material stitched at the upper edge of the fold to the top of the lining.

4. The combination of the belt provided with the lining-strip, pouch, and cap, the battery and electrode provided with the strip of metal secured to the back of the electrode and having its free ends inserted through such lining and the strip lying next thereto, and the conductor e' , disposed between the lining and such strip and connecting the electrode and the battery.

5. The combination of a battery, the womb-supporter cup provided with the metallic lining, and the hollow stem having the end socket u , the stem-conductor d , the insulated cord secured to the stem-conductor, the nut t , fixed on such conductor, and the insulating material in the socket.

6. The womb-supporting cup having the metallic lining formed with a series of leaves, substantially as and for the purpose set forth.

7. The combination of the stiffening-plate, the metallic socket secured thereto, and the electrode provided with the spring-stem consisting of the longitudinally-divided sheet-metal spring-cylinder G .

GEORGE F. MOHN.

Witnesses:

JAMES R. TOWNSEND,
ALFRED I. TOWNSEND.