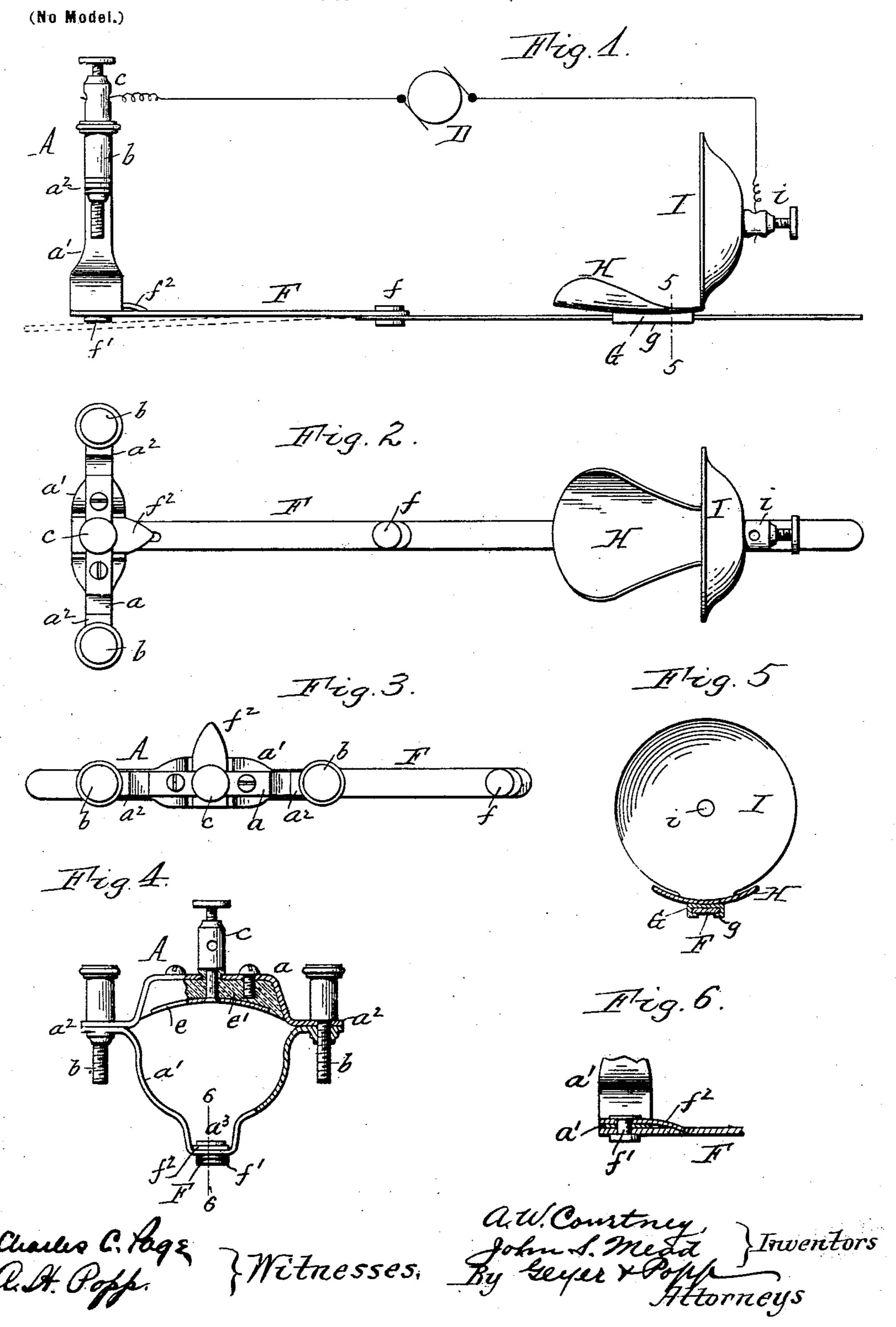
## A. W. COURTNEY & J. S. MEAD. ELECTROTHERAPEUTIC INSTRUMENT.

(Application filed Dec. 19, 1900.)



## United States Patent Office.

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## ELECTROTHERAPEUTIC INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 684,351, dated October 8, 1901.

Application filed December 19, 1900. Serial No. 40,409. (No model.)

To all whom it may concern:

Be it known that we, Albert W. Court-NEY and John S. Mead, citizens of the United States, and residents of Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Electrotherapeutic Instruments, of which the following is a specification.

This invention relates to an electrothera-10 peutic instrument designed to be used in the

treatment of impotency.

The tonic effects of electricity are recognized as being valuable for increasing the excitability of the genito-spinal center, and faradization is especially beneficial in restoring the tonicity of the small blood vessels of the male genital organ and stimulating the circulation through the same, the effect being to improve nutrition and invigorate the sexual system.

The object of our invention is the provision of an efficient and convenient instrument for restoring strength and vigor to the impaired

tissues.

Our improved instrument comprises, essentially, a clamp or band adapted to embrace the organ near the body and having, preferably, a terminal which is connected with one of the poles of an electric battery or generator and a supporting-bar extending forwardly from the clamp and carrying, preferably, a terminal which is connected with the other pole of the generator.

In the accompanying drawings, Figure 1 is a side elevation of our improved instrument. Fig. 2 is a top plan view thereof. Fig. 3 is a similar view of the instrument, showing the same folded. Fig. 4 is an end elevation of the instrument, partly in section, the same being viewed from its rear end. Fig. 5 is a transverse section in line 55, Fig. 1, looking toward the cup. Fig. 6 is a fragmentary longitudinal section in line 66, Fig. 4.

Like letters of reference refer to like parts

45 in the several figures.

A is the clamp of the instrument, adapted to encircle the organ adjacent to the body. This clamp may be of any suitable construction, but preferably consists of metallic upper

and lower members a a', provided at their 50 meeting portions with outwardly-extending perforated ears  $a^2$ , through which pass vertical clamping - screws b. The upper clamp member a is provided with a binding post or terminal c, adapted to be connected with one 55 pole of a suitable battery or electric generator D. As shown in Fig. 4, the stem of this binding-post extends downwardly through the upper clamp member and is connected with a concave contact-plate e, adapted to 60 bear against the upper side of the organ. This contact-plate is insulated from the clamp A by a block e' of vulcanized fiber or other suitable material. The sides of the lower clamp member a' are curved to rest against 65 the sides of the organ, and the central bottom portion of said member is contracted and depressed below the plane of its curved side portions, as shown at  $a^3$ , to prevent the bottom of the clamp from pressing against the 70 under side of the organ and constricting the urethra.

F is a metallic horizontal supporting-bar which extends forwardly from the clamp A. This bar preferably consists of two or more 75 sections connected together by a vertical pivot f, so that the same can be folded one below the other, as shown in Fig. 3 and by dotted lines in Fig. 1, and its rear end is pivoted to the base of the clamp by a vertical 80 pin f' to permit the clamp to be turned in line with the bar, as shown in Fig. 3. The clamp is held in its normal position by a spring-catch  $f^2$ , secured to its base and engaging in an indentation formed in the supporting-bar F, as shown in Figs. 2 and 6, or by any other suitable means.

G is a slide mounted on the front portion of the supporting-bar F and provided with lips or flanges g, which embrace said bar.

H is a concave or spoon-shaped plate arranged horizontally on said slide and forming a rest for the front portion of the organ, and I is a vertical abutment or concave plate, also mounted on said slide in front of the rest H 95 and facing the clamp A. This abutment, which is preferably cup-shaped, is adapted to receive the head of the organ and is provided

with a binding-post or terminal i, adapted to be connected with the other pole of the battery or generator D. The cup I, the rest H, and the slide G are made of metal to form an 5 electrical connection between the bindingpost i and the supporting-bar F. As the rest H and cup I are mounted on the slide G they are adjustable toward and from the clamp. In the construction shown in the drawings 10 the slide is held in position by friction; but, if desired, it may be provided with a positive

holding device, such as a set-screw.

In the use of the instrument after applying the clamp A the cup I is properly adjusted 15 and the binding-posts c and i are connected with the poles of the battery or generator D, a small magneto-electric generator of comparatively low power being preferably employed for this purpose. The electric current 20 passes from one pole of the generator to the binding-post c, and thence through the contact-plate e, the genital organ, the rest H, the cup I, and the binding-post i to the other pole of the generator. The current has the effect 25 of first contracting and then dilating the blood vessels, stimulating the circulation of the blood, improving nutrition, and restoring tone and vigor to the muscles and tissues.

In the treatment of impotency beneficial 30 effects have been obtained by partly constricting the veins on the upper side of the organ near the body so as to check the flow of blood from them. The upper member of the clamp A can be nicely adjusted by means 35 of the screws b to exert the necessary gentle pressure to constrict said veins, and by providing the clamp with the depressed base portion  $a^{3}$  this pressure can be applied without danger of constricting the urethra.

A suitable nutritive emulsion or unguent may be used with advantage in connection with our improved instrument. The emulsion, of which landlin may be the base, is used by saturating a quantity of cotton-batting there-45 with and placing it between the head of the or-

gan and the cup I. By this treatment the nutritive emulsion is absorbed, building up and invigorating the impaired muscles and tissues, and the absorption thereof is aided and so stimulated by the use of the electric current simultaneously with this treatment. The instrument is used from once or twice a week

to once or twice daily, as may be required,

and each treatment may occupy from five to 55 twenty minutes. While this combined electrical and emulsion treatment is preferred, in some cases either the electrical treatment or the emulsion treatment may alone be used. When the latter treatment is used alone, the

60 band A and the bar F serve as an attachment

for supporting the cup I.

By constructing the supporting-bar F of pivoted sections and pivoting the clamp A to the same the instrument can be folded into

a small compass and conveniently carried in 65 the pocket or compactly shipped.

We claim as our invention—

1. An electrotherapeutic instrument, comprising a band or clamp, a supporting-bar extending forwardly therefrom, and terminals 70 or binding-posts connected with said clamp and said supporting-bar, substantially as set forth.

2. An electrotherapeutic instrument, comprising a band or clamp, a supporting-bar ex- 75 tending forwardly from the base of the clamp, and terminals or binding - posts connected with opposite ends of the instrument, sub-

stantially as set forth.

3. An electrotherapeutic instrument, com- 80 prising a clamp having a contact-terminal, a supporting-bar extending forwardly from the clamp, and an upright plate mounted on the front portion of said supporting-bar and provided with a terminal or binding-post, sub- 85 stantially as set forth.

4. A therapeutic instrument, comprising a band or clamp, a supporting-bar extending forwardly therefrom, and an abutment-plate mounted on said bar, substantially as set go

forth.

5. A therapeutic instrument, comprising a band or clamp, a supporting-bar extending forwardly therefrom, and a cup-shaped abutment mounted on said bar and adjustable 95 toward and from said clamp, substantially as set forth.

6. An electrotherapeutic instrument, comprising a clamp having a contact-terminal, a supporting-bar extending forwardly from the 100 clamp, an adjustable slide mounted on the bar, and an upright cup mounted on said slide and provided with a terminal or binding-post,

substantially as set forth.

7. An electrotherapeutic instrument, com- 105 prising a clamp having a contact-terminal, a supporting-bar extending forwardly from the clamp, an adjustable slide mounted on said bar and provided with a horizontal rest, and a terminal or binding-post electrically con- 110 nected with said rest, substantially as set forth.

8. A therapeutic instrument, comprising a clamp, a supporting-bar pivoted at its rear end to said clamp and composed of folding 115 sections, and terminals or binding-posts connected with said clamp and said supportingbar, substantially as set forth.

9. In an electrotherapeutic instrument, a clamp comprising a lower section, an upper 120 section provided with an insulated contactplate and a terminal or binding-post connected with said plate, and clamping-screws

connecting said upper and lower sections, substantially as set forth.

10. An electrotherapeutic instrument, comprising a clamp composed of an upper section, a lower section having its lower central

portion depressed below the adjacent bottom portions of the section, for clearing the urethra, and clamping devices connecting said sections, of a supporting-bar extending forwardly from said clamp, and terminals or binding-posts connected with said supporting-bar and said clamp, substantially as set forth.

Witness our hands this 7th day of December, 1900.

ALBERT W. COURTNEY. JOHN S. MEAD.

Witnesses:

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JNO. J. BONNER, CARL F. GEYER.