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No. 804,484. PATENTED NOV. 14, 1905.

C. O. LINDSTROM.

THERAPEUTIC APPARATUS.

APPLICATION FILED FEB. 20, 1905.

2 SHEETS—SHEET 1.

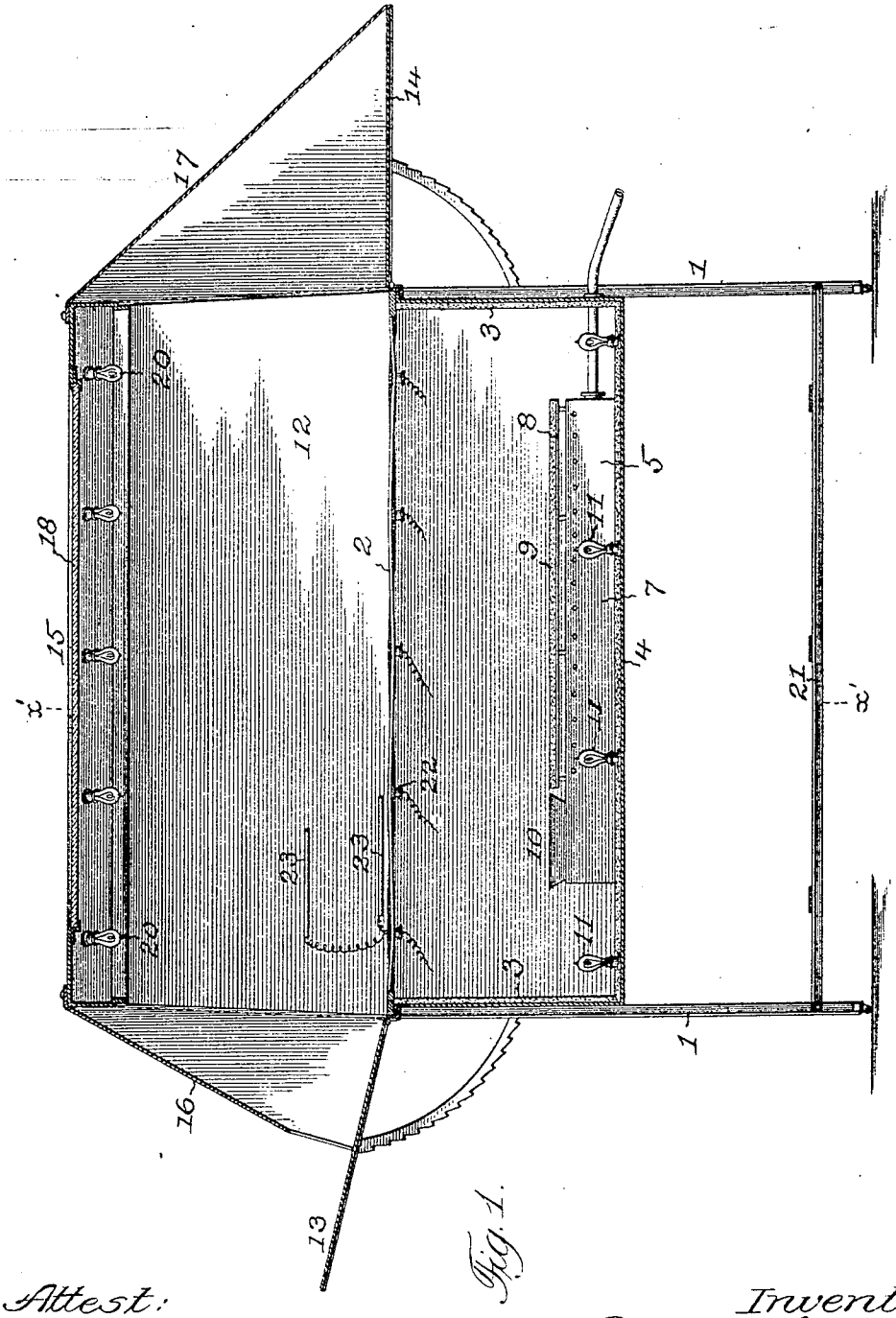


Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

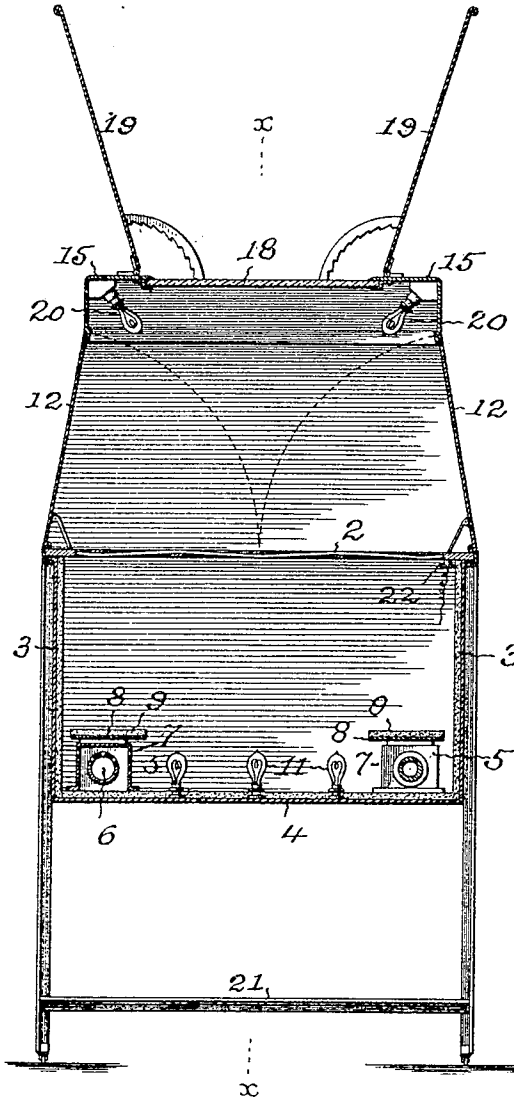


Fig. 4.

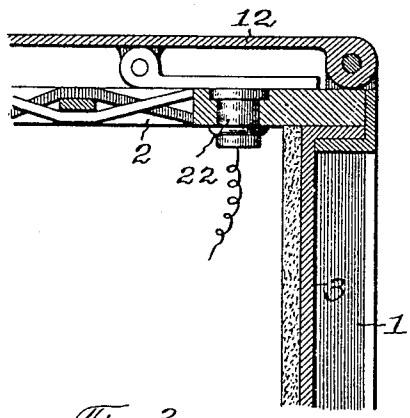
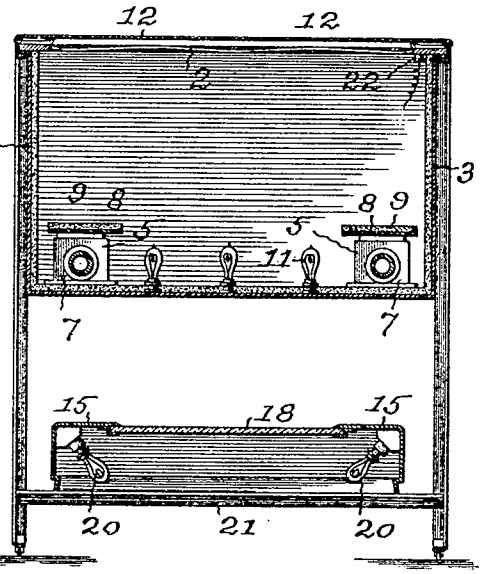


Fig. 3.



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THERAPEUTIC APPARATUS.

No. 804,484. Specification of Letters Patent. Patented Nov. 14, 1905.

Application filed February 20, 1905. Serial No. 246,422.

To all whom it may concern:

Be it known that I, CARL O. LINDSTROM, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Therapeutic Apparatus, of which the following is a specification.

This invention relates to therapeutical apparatus, and has for its object to provide a simple and efficient structural arrangement and combination of parts whereby the apparatus is adapted for adjustment and rearrangement as an operating-table, as a vapor or other bath, and other allied uses, and adapted to receive and support the entire body of the patient or portions or members of the same in the treatment of the entire body or a particular member of the same, all as will hereinafter more fully appear and be more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal sectional elevation at line $x\ x$, Fig. 2, illustrating the general arrangement of the present invention with the parts adjusted with relation to each other for light, vapor, and like baths or treatment. Fig. 2 is a transverse sectional elevation partly on line $x'\ x'$, Fig. 1. Fig. 3 is a similar view with the parts adjusted for use as an operating-table or the like. Fig. 4 is an enlarged detail transverse section of the parts arranged the same as in Fig. 3.

Similar numerals of reference indicate like parts in the different views.

Referring to the drawings, 1 is a skeleton frame, preferably of the rectangular form shown, and which forms the support for the other parts of the apparatus.

2 is a perforated member or panel, preferably formed by a marginal frame and woven fabric of cane fiber, as shown in Fig. 4, secured in a horizontal position at the upper end of the frame 1 to constitute a rest or support for the body of the patient in a manner to permit of the upward passage of heat, light, or vapor in the therapeutical treatment of the patient.

3 represents vertical walls, and 4 a bottom plate secured to the frame 1 to form a depending chamber, forming an open top for said chamber.

5 represents a pair of heaters arranged longitudinally in the chamber aforesaid and in adjacent relation to the side walls of the same. Such heaters will be of any usual and ordinary construction found most convenient for a particular use of the apparatus. In the drawings such heaters are shown as comprising a longitudinal perforated burner-pipe 6, located within a rectangular casing 7, having a horizontal series of outlet-apertures near its top for the escape of the heated products of combustion into the chamber aforesaid.

8 is a baffle-plate arranged above the heater-casing 7 for the purpose of deflecting the heated products of combustion in a lateral direction to insure a more even distribution of the same within the chamber and through the open top of said casing and by preventing the direct upward passage of such heated products relieve the patient from any inconvenience arising from a direct upward radiation or passage of such products.

9 represents layers of asbestos paper secured to the top of said baffle-plates to prevent direct upward radiation of heat therefrom, and thereby attain corresponding efficiency of the operation of the heating means.

10 is a vapor-generator arranged within the chamber aforesaid, and preferably in close proximity to a heater 5, so as to utilize the heat therefrom in the generation of the vapor.

11 represents a series of electric lamps removably arranged on the bottom of the chamber aforesaid and adapted for use in giving an upward-light treatment to the body of a patient reposing upon the perforated member or support 2 of the apparatus.

12 represents a pair of leaves hinged at the opposite sides of the horizontal top member of the frame 1 and adapted when adjusted to a horizontal position, as illustrated in Fig. 4, to meet at the mid-length of the frame or stand and form an even and level top for the same adapted for use as a surgeon's operating-table and the like and when adjusted to a substantially vertical position to form the side walls of a chamber or inclosure for the reception of more or less of the body of the patient, as illustrated in Figs. 1 and 2 and as hereinafter more fully described.

13 and 14 are a pair of leaves hinged at the opposite ends of the horizontal top member of the frame 1 and adapted when adjusted to substantially horizontal position to constitute longitudinal extensions of the table-top, so as to conveniently support a very lengthy pa-

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tient in a supine and extended position, as illustrated in Fig. 1, and when adjusted to a substantially vertical position to form end walls for the chamber or inclosure above referred to in connection with the pair of side leaves 12. Both pairs of leaves will be provided with the usual ratchet-sectors or like well-known appliances, by means of which they can be conveniently secured at their different adjustments and as usual in operating strands or tables.

15 is a removable top or canopy adapted to rest upon the edges of the respective leaves 12 13 14, as illustrated in Fig. 2, and in connection with said leaves form a chamber or inclosure for more or less of the body of the patient.

16 and 17 are curtains of rubber cloth or like flexible fabric secured to the respective ends of the top or canopy 15 and which are adapted for use in effecting a closure of either end of the chamber aforesaid when one or the other or both the end leaves are lowered to constitute an extended rest or support for the patient.

18 is a transparent panel forming the main part of the horizontal portion of the top or canopy 15 and adapted to permit the passage of light down into the chamber or inclosure aforesaid.

19 represents longitudinally-arranged and pivotally-adjustable reflectors at the sides of the top or canopy 15 and adapted to reflect the rays of the sun or other source of light down upon the patient within the chamber aforesaid in the employment of the apparatus in giving sun or like reflected-light baths.

20 represents longitudinal series of electric lamps arranged in the interior of the top or canopy 15 for use in the treatment of the patient with electric-light rays, such lamps working in conjunction with the electric lamps 11, before described.

21 is a horizontal shelf arranged near the base of the main frame 1 and adapted to receive and store the top or canopy 15 when not in use.

22 represents a series of electrical sockets let into the marginal frame of the perforated member 2 aforesaid and adapted to receive the flexible conducting connections of pairs of terminal plates or electrodes 23, used in electrotherapeutic treatment of a patient. Such sockets are in turn electrically connected to a suitable source of electric energy adapted to supply an electric current of the intensity and quality required in the various phases of such treatment.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member on said frame, a casing forming a chamber beneath said top member, means for forming an inclosure above said top member and consisting in part of leaves hinged at the sides of the frame, and heating means arranged in the casing beneath the top member, substantially as set forth.

2. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member on said frame, a casing forming a chamber beneath said top member, means for forming an inclosure above said top member and comprising leaves hinged at the sides and ends of the frame and a removable canopy resting upon said leaves, and heating means arranged in the casing beneath the top member, substantially as set forth.

3. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member on said frame, a casing forming a chamber beneath said top member, means for forming an inclosure above said top member and consisting in part of leaves hinged at the sides of the frame, and heating means arranged in the casing beneath the top member and comprising a rectangular casing having exit-orifices near its upper end, a perforated burner-pipe in said casing and a baffle-plate arranged above said casing, substantially as set forth.

4. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member on said frame, a casing forming a chamber beneath said top member, means for forming an inclosure above said top member and comprising leaves hinged at the sides and ends of the frame and a removable canopy resting upon said leaves, and heating means arranged in the casing beneath the top member and comprising a rectangular casing having exit-orifices near its upper end, a perforated burner-pipe in said casing and a baffle-plate arranged above said casing, substantially as set forth.

5. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member on said frame, a casing forming a chamber beneath said top member, means for forming an inclosure above said top member and consisting in part of leaves hinged at the sides of the frame, and a series of electric lamps arranged in the casing beneath the top member, substantially as set forth.

6. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member on said frame, a casing forming a chamber beneath said top member, means for forming an inclosure above said top member and comprising leaves hinged at the sides and ends of the frame and a removable canopy resting upon said leaves, and a series of electric lamps ar-

ranged in the casing beneath the top member, substantially as set forth.

7. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame having a horizontal top, a pair of leaves hinged at the upper side margins of the frame, and a casing or inclosure the canopy of which is supported on the inner ends of said leaves, substantially as set forth.

8. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame having a horizontal top, a pair of leaves hinged at the upper side margins of the frame, and a casing or inclosure formed by said leaves, a canopy resting upon the upper ends of said leaves and curtains attached to the end of said canopy, substantially as set forth.

9. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame having a horizontal top, a pair of leaves hinged at the upper side margins of the frame, and a casing or inclosure the canopy of which is provided with a transparent panel and supported upon the upper ends of said leaves, substantially as set forth.

10. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame having a horizontal top, a pair of leaves hinged at the upper side margins of the frame, a casing or inclosure the canopy of which is provided with a transparent panel and supported upon the upper ends of said leaves, and adjustable reflectors arranged in adjacent relation to said transparent panel, substantially as set forth.

11. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame having a horizontal top, a pair of leaves hinged at the upper side margins of the frame, a casing or inclosure the canopy of which is provided with a transparent panel and supported upon the upper ends of said leaves, and a pair of adjustable reflectors arranged in longitudinal and adjacent relation to said transparent panel, substantially as set forth.

12. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, a series of leaves hinged to the upper side and end margins of the frame, and a removable canopy adapted to rest upon the upper ends of said leaves in one adjustment of the same to form a chamber or inclosure above the top of the frame, the said leaves being adapted for adjustment to a substantially horizontal position to form portions of the top of the supporting-frame, substantially as set forth.

13. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member on said frame, a casing forming a chamber beneath said top member, means for forming an inclosure above said top member and consisting in part of leaves hinged at the sides of the frame, and heating means and a vapor-generator arranged in the casing beneath the top member, substantially as set forth.

14. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member on said frame, a casing forming a chamber beneath said top member, means for forming an inclosure above said top member and comprising leaves hinged at the sides and ends of the frame and a removable canopy resting upon said leaves, and heating means and a vapor-generator, arranged in the casing beneath the top member, substantially as set forth.

15. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member comprising a marginal frame and a woven center of cane fiber, a casing forming a chamber beneath said top, means for forming an inclosure above said top member and consisting in part of leaves hinged at the sides of the frame, and heating means arranged in the casing beneath the top member, substantially as set forth.

16. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member comprising a marginal frame and a woven center of cane fiber, a casing forming a chamber beneath said top, means for forming an inclosure above said top member and comprising leaves hinged at the sides and ends of the frame and a removable canopy resting upon said leaves, and heating means arranged in the casing beneath the top member, substantially as set forth.

17. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member comprising a marginal frame and a woven center of cane fiber, a casing forming a chamber beneath said top, means for forming an inclosure above said top member and consisting in part of leaves hinged at the sides of the frame, and heating means arranged upon said leaves, and a series of electrical sockets secured to said marginal frame and adapted to receive the conducting connections of electrotherapeutical electrodes or terminal plates, substantially as set forth.

18. In a therapeutic apparatus of the character herein described, the combination of a supporting-frame, an orificed top member comprising a marginal frame and a woven center of cane fiber, a casing forming a chamber beneath said top, means for forming an inclosure above said top member and com-

prising leaves hinged at the sides and ends of the frame and a removable canopy resting upon said leaves, and a series of electrical sockets secured to said marginal frame and adapted to receive the conducting connections of electrotherapeutical electrodes or terminal plates, substantially as set forth.

Signed at Chicago, Illinois, this 15th day of February, 1905.

CARL O. LINDSTROM.

Witnesses:
ROBERT BURNS,
M. H. HOLMES.