May 26, 1936. G. METZGER 2,041,852

VAPOR BATH APPARATUS

Filed Jan. 13, 1936

Fig. 1.

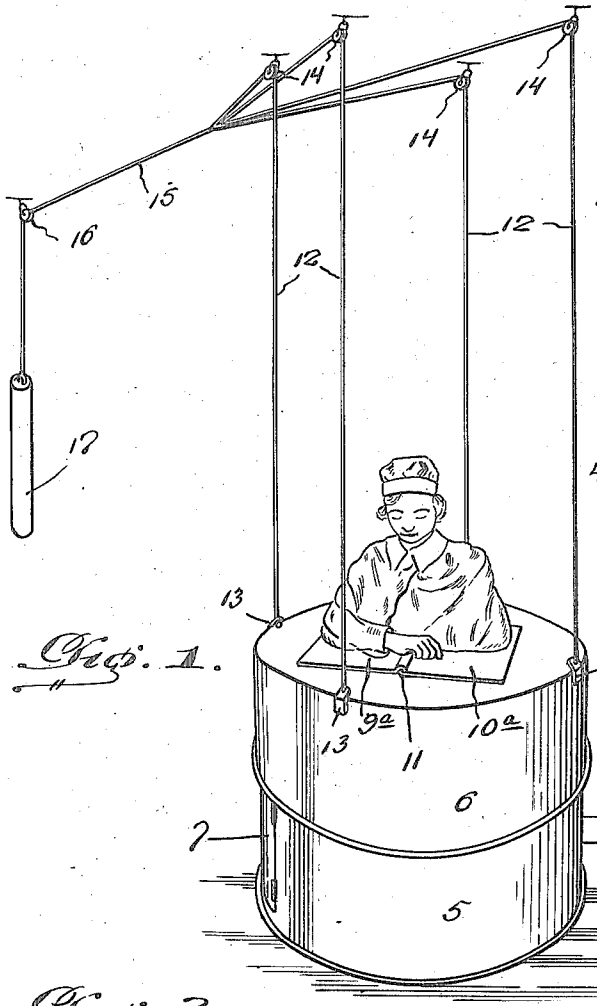
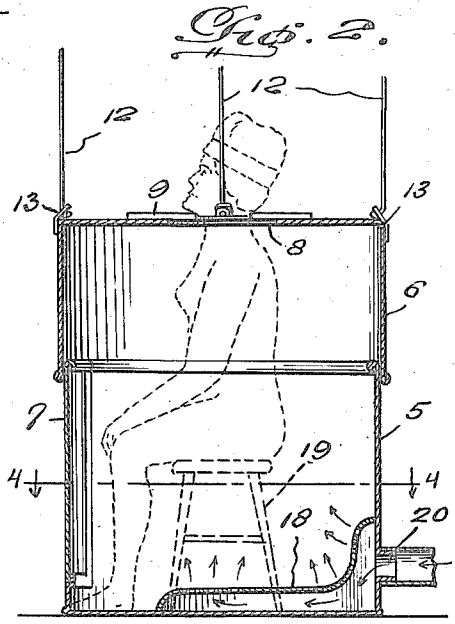



Fig. 2.



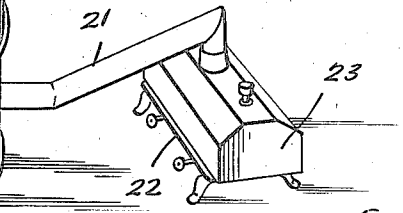




Fig. 3.

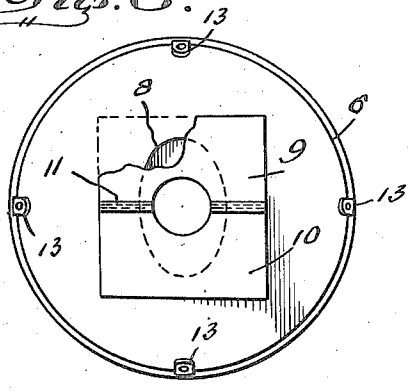
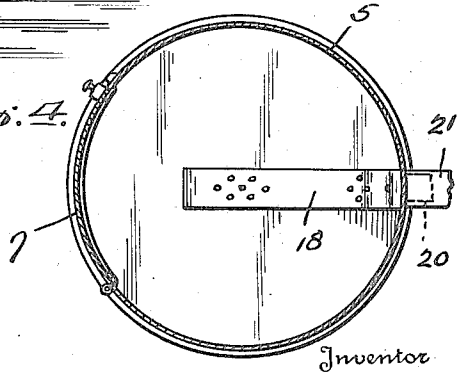



Fig. 4.




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Patented May 26, 1936 2,041,852

# UNITED STATES PATENT OFFICE

2,041,852

## VAPOR BATH APPARATUS

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Application January 13, 1936, Serial No. 58,962

9 Claims. (Cl. 4—160)

This invention relates to improvements in vapor bath apparatus of the type embodying a cabinet within which the patient may sit in an erect position with his or her head or with the upper portion of his or her body disposed outside the cabinet, and means to discharge steam or other vapor into the cabinet at the bottom of the latter so that the portion of the patient's body within the cabinet will be subjected to the action of the vapor or steam rising therein.

The primary object of the present invention is to provide a vapor bath apparatus of the above kind which is extremely simple in construction, efficient in use, and convenient and easy to use.

A more specific object of the present invention is to provide a bath apparatus of the above kind including a novel cabinet which is composed of telescopically associated sections so as to be adjustable in height for accommodating persons of different heights and to permit use of the apparatus for the treatment of patients with either part of the body and the head or with the head alone disposed outside the cabinet.

Still another object of the present invention is to provide means for suspending the upper section of the cabinet and facilitating the ease of vertically adjusting the same.

Other objects will become apparent from the following description when considered in connection with the accompanying drawing, and the invention consists in the novel form, combination and arrangement of parts hereinafter more fully described, illustrated in said drawing, and claimed.

In the drawing:

Figure 1 is a perspective view of a bath apparatus embodying the present invention, and illustrating one manner of using the apparatus.

Figure 2 is a fragmentary view showing the cabinet in vertical section and illustrating its use in a different way or manner.

Figure 3 is a top plan view of the cabinet as shown in Figure 2, partly broken away; and

Figure 4 is a horizontal section on line 4—4 of Figure 2.

Referring more in detail to the drawing, the present bath apparatus includes a cabinet, preferably of cylindrical form and constructed of sheet metal, and composed of a lower section 5 and an upper section 6 slidably telescoped over said lower section 5. It will thus be apparent that by raising and lowering the upper section 6, the cabinet may be adjusted as to height. The body portion of the lower section 5 is provided at the front with a door 7 hinged to swing outwardly to open position, and the upper section 6 of the cabinet may be completely removed from and elevated some distance above the lower section 5 so as to permit opening of the door 7 and facilitate entrance of the patient into the cabinet.

The upper section 6 of the cabinet is provided with a relatively large opening through which the head or the upper portion of the patient's body may project when the upper section 6 of the cabinet is lowered and partially telescoped onto the lower section 5, as illustrated respectively in Figure 2 and in Figure 1. A device is provided to partially close the opening 8 and snugly embrace the patient's neck or body, so as to prevent undue escape of vapor from the cabinet when in use. This device preferably consists of a pair of plates adapted to be simply laid upon the top of the upper cabinet section 6 in edge to edge relation and provided in their adjacent edges with mating notches which cooperate to form the desired restricted opening. The plates used to provide a neck opening when only the patient's head is disposed outside of the cabinet as illustrated in Figure 2, are shown at 9 and 10 in Figures 2 and 3, while the plates used to provide a larger opening for the body of the patient when the latter is disposed with a portion of his or her body outside the cabinet as in Figure 1, are indicated at 9a and 10a in Figure 1. The adjacent edges of these plates may be provided with hooked flanges so that the plates may be detachably interlocked as generally indicated at 11, thereby preventing accidental separation of the plates and thereby insuring their retention in snug relation to the neck or body of the patient. An advantage of this closure is that it permits the patient to readily rise for allowing excess heat or hot vapor to rapidly escape from the cabinet and prevent injury to the patient if necessary under abnormal conditions. Obviously, should the patient rise, the plates 9 and 10 or 9a and 10a will simply be lifted up from the top of the upper cabinet section 6 so as to fully uncover the relatively large opening 8 in the upper cabinet section.

The upper cabinet section 6 is disposed by a plurality of flexible members or ropes 12 attached to the top of the upper cabinet section 6 at equi-distantly spaced points about the periphery of the latter and by means of suitable brackets 13, said flexible members or ropes 12 passing upwardly over guide pulleys 14 attached to the ceiling or other suitable over head support, and all of the flexible members or ropes 12 in turn have their upper ends connected to a further

flexible member or rope 15 that extends laterally around a further guide pulley 16 where its depending end portion has a counterweight 17 secured thereto. The weight 17 simply counterbalances the upper cabinet section 6 so as to promote the ease of vertical adjustment of said cabinet section 6 and maintain it in any of its vertically adjusted positions. This is important because it permits direct movements of the upper cabinet section 6 to the desired vertically adjusted position with the expenditure of a minimum amount of effort, and so that one attendant may properly take care of the patient in an expeditious manner. No actuation of a distant winding drum is required for vertical adjustment or elevation of the cabinet section 6.

An L-shaped perforated manifold 18 is provided within the bottom of the lower cabinet section 5 to discharge steam or other vapor into the cabinet beneath and at the back of the patient who may be seated within the cabinet upon a stool or the like as indicated by dotted lines at 19 in Figure 2. The manifold 18 has a shorter vertical arm attached to the back of the body portion of the lower cabinet section 5, and a longer horizontal arm attached to the bottom wall of the lower cabinet section 5 and extending forwardly diametrically of said bottom wall as shown in Figure 4, so that the legs of the stool 19 may readily straddle said horizontal arm of the manifold. The lower cabinet section 5 is provided at the back with an inlet nipple 20 communicating with the vertical arm of manifold 18 and connected by a pipe or conduit 21 with a suitable source of steam or other vapor located outside of and a short distance from the cabinet. A suitable steam generator or source of supply of steam may consist of an ordinary gas stove 22 resting upon the floor near the cabinet, and a water tank 23 disposed on this stove and having a top steam outlet connected by the pipe or conduit 21 with the inlet nipple 20. Obviously, the heat from the burners of stove 22 will convert the water in the tank 23 to steam, which steam will in turn be conducted from the top of tank 23 to the manifold 18 by means of pipe 21, the steam ultimately escaping from the manifold 18 through the perforations in the arms of said manifold both at the back of and beneath the patient seated in the cabinet. The escaping steam will of course rise in the cabinet and the patient's body will be subjected to the action thereof. Any water of condensation settling within the bottom of the lower cabinet section 5 may be suitably withdrawn or removed when found necessary or desirable.

In using the present apparatus, the upper cabinet section 6 will be lifted clear of and some distance above the lower cabinet section 5, the operator being assisted in raising the upper cabinet section by means of the weight 17. The weight 17 will also maintain the upper cabinet section 6 in this elevated position, and upon opening the door 7, the patient may readily enter the lower cabinet section and assume a seated position upon the stool 19. The upper cabinet section 6 may then be grasped and readily lowered to the desired position, either as shown in Figure 2 or as shown in Figure 1 depending upon the desired manner of use. When the upper cabinet section has been telescoped onto the lower cabinet section with the door 7 closed, and adjusted to the desired position, it will remain in that position. The partial closure plates 9 and 10 or 9*a* and 10*a* are then applied about the patient's neck or body and allowed to rest upon the top of the upper cabinet section 6, whereupon the apparatus is ready for use. It is then simply necessary to supply the desired steam or vapor to the manifold 18.

What I claim as new is:

1. In a bath apparatus of the class described, the combination of a cabinet composed of a lower section and an upper section slidably telescoped onto said lower section, the upper section being formed with an opening in the top thereof, of cables suspending said upper cabinet section and having a counter weight connected thereto to facilitate elevation and vertical adjustment of said upper cabinet section by direct manipulation of the latter, and to maintain said upper cabinet section in any position to which it is elevated or vertically adjusted.

2. In a bath apparatus of the class described, the combination with a cabinet composed of a lower section and an upper section slidably telescoped onto said lower section, the upper section being formed with an opening in the top thereof, of cables suspending said upper cabinet section and having a counterweight connected thereto to facilitate elevation and vertical adjustment of said upper cabinet section by direct manipulation of the latter, and to maintain said upper cabinet section in any position to which it is elevated or vertically adjusted, said lower cabinet section having a front door, and a manifold for discharging steam or vapor into said cabinet including a vertical arm attached to the lower cabinet section at the back of the latter and a horizontal arm attached to the bottom of the lower cabinet section and extending forwardly diametrically of said bottom.

3. In a bath apparatus of the class described, the combination of a cabinet composed of a lower section and an upper section slidably telescoped onto said lower section, the upper section being formed with an opening in the top thereof, of cables suspending said upper cabinet section and having a counterweight connected thereto to facilitate elevation and vertical adjustment of said upper cabinet section by direct manipulation of the latter, and to maintain said upper cabinet section in any position to which it is elevated or vertically adjusted, and means for partially closing the opening in the top of the upper cabinet section comprising a pair of plates resting on the top of the upper cabinet section and detachably connected in edge to edge relation, said plates having mated notches in the connected edges thereof cooperating to form a restricted opening adapted to snugly surround a selected portion of the patient's body.

4. In a bath apparatus of the class described, the combination with a cabinet composed of a lower section and an upper section slidably telescoped onto said lower section, the upper section being formed with an opening in the top thereof, of cables suspending said upper cabinet section and having a counterweight connected thereto to facilitate elevation and vertical adjustment of said upper cabinet section by direct manipulation of the latter, and to maintain said upper cabinet section in any position to which it is elevated or vertically adjusted, said lower cabinet section having a front door, and a manifold for discharging steam or vapor into said cabinet including a vertical arm attached to the lower cabinet section at the back of the latter and a horizontal arm attached to the bottom of the lower cabinet section and extending forwardly

diametrically of said bottom, said lower cabinet section further having an inlet nipple at the back thereof communicating with the vertical arm of said manifold and providing means for connecting said manifold with a source of supply of steam or vapor located outside the cabinet.

5. In a bath apparatus of the class described, the combination of a cabinet composed of a lower section and an upper section slidably telescoped onto said lower section, the upper section being formed with an opening in the top thereof, cables suspending the said upper section, and a counterbalance means to facilitate raising and lowering of said upper section and to hold the latter in the various raised or lowered adjusted positions thereof.

6. A bath apparatus as described in claim 5 having a door in the bottom section, a steam distribution manifold within the lower section, and means for generating steam and conveying such steam to said manifold within the cabinet.

7. In a bath apparatus of the class described, the combination of a cabinet composed of a lower section and an upper section slidably telescoped onto said lower section, the upper section being formed with an opening in the top thereof, of cables suspending said upper cabinet section and having a counterweight connected thereto to facilitate vertical adjustment of said upper cabinet section by direct manipulation of the latter, and to maintain said upper cabinet section in any position to which it is elevated or vertically adjusted, and means for partially closing the opening in the top of the upper cabinet section.

8. In a bath apparatus of the class described, the combination of a lower section and an upper section telescopically engaging the lower section, the upper section being formed with an opening in the top thereof, of cables suspending said upper cabinet section and having a counterweight connected thereto to facilitate vertical adjustment of said upper cabinet in relation to said lower cabinet section and providing means to maintain said upper cabinet section in any position to which it is elevated or lowered vertically, said lower cabinet section having a door, a manifold for discharging and distributing steam or vapor into said cabinet, and means to generate and convey said steam or vapor to said manifold.

9. A vapor bath cabinet, formed of upper and lower sections telescopically arranged for relative vertical adjustment, the upper section having an opening in the top thereof, a means of entrance to and exit from the cabinet, a means for generating vapor and conveying and distributing such vapor into the cabinet, and a counterbalance means to facilitate relative vertical adjustment of said cabinet sections.

GRACE METZGER.