

(No Model.)

2 Sheets—Sheet 1.

C. W. DRAPER.

COMBINED VAPOR BATH AND INHALING APPARATUS.

No. 578,393.

Patented Mar. 9, 1897.

Fig. 1.

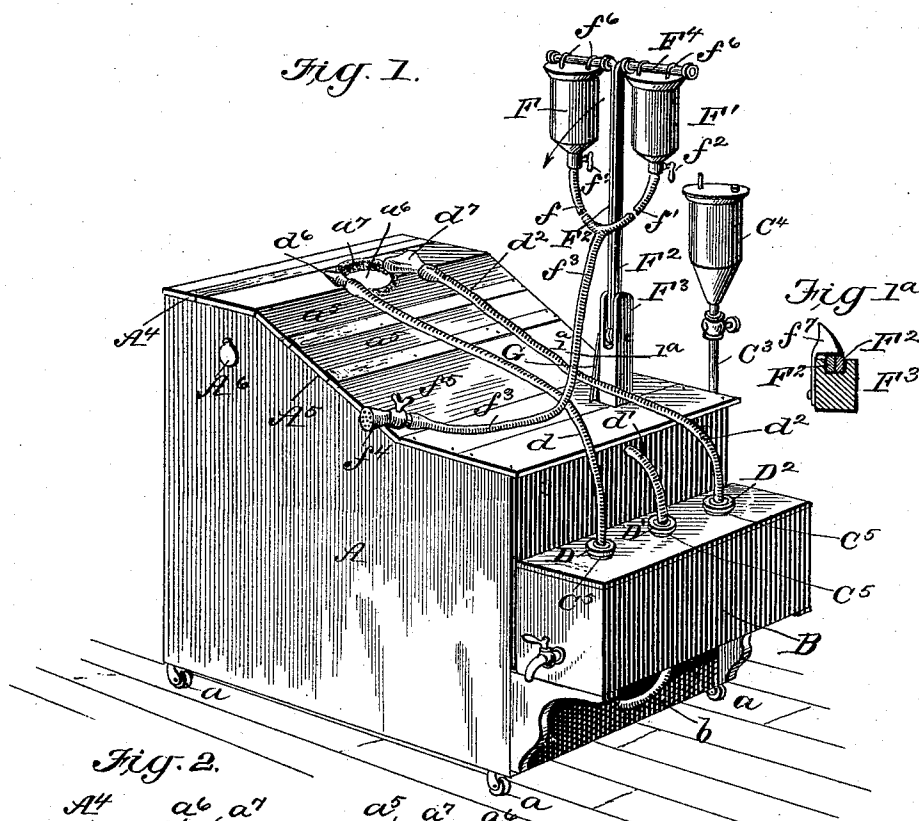
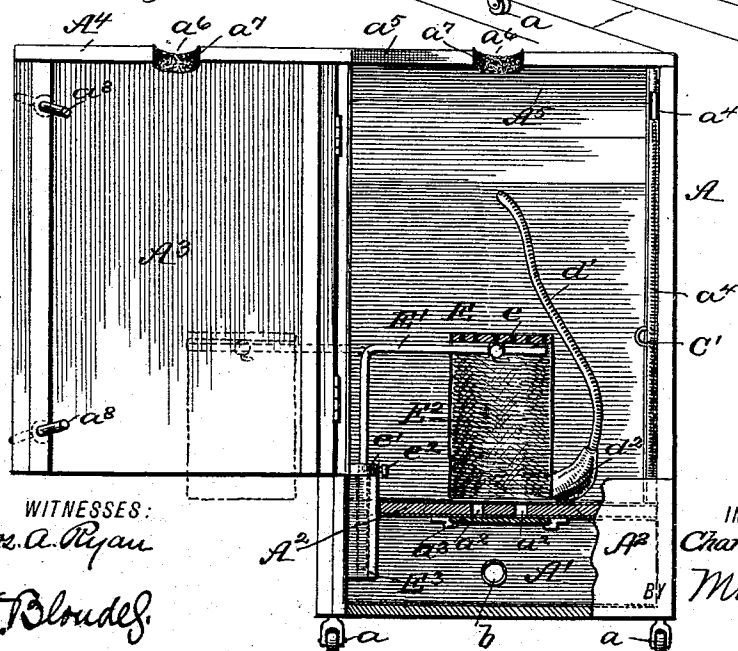


Fig. 2.



WITNESSES:

Jos. A. Ryan
W. S. Bloudey.

INVENTOR

Charles W. Draper

Munn & Co.

ATTORNEYS.

(No Model.)

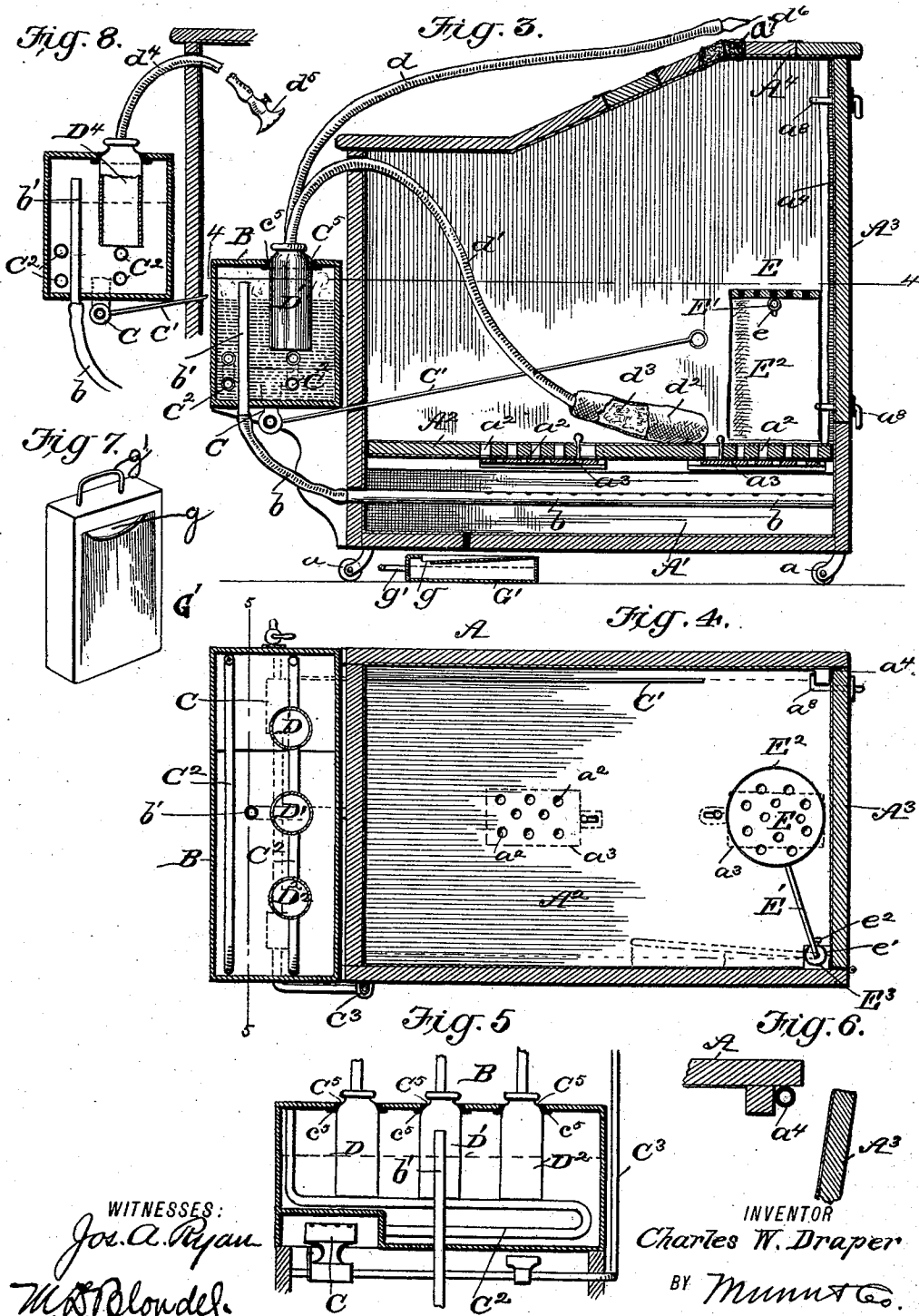
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UNITED STATES PATENT OFFICE.

CHARLES W. DRAPER, OF HERINGTON, KANSAS.

COMBINED VAPOR-BATH AND INHALING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 578,393, dated March 9, 1897.

Application filed February 11, 1896. Serial No. 578,886. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. DRAPER, a citizen of the United States, residing at Herington, in the county of Dickinson and State of Kansas, have invented certain new and useful Improvements in a Combined Vapor-Bath and Inhaling Apparatus, of which the following specification contains a full, clear, and exact description, reference being had to the accompanying drawings, forming part thereof, in which—

Figure 1 is a perspective view of my improvement. Fig. 1^a is a detail cross-section taken on the line 1 1, Fig. 1. Fig. 2 is a front view showing the door open and parts broken away. Fig. 3 is a central vertical longitudinal section. Fig. 4 is a horizontal section taken on the line 4 4, Fig. 3. Fig. 5 is a detail section taken on the line 5 5, Fig. 4. Fig. 6 is a detail view. Fig. 7 is a perspective view of the drip-pan 8, showing the modified form of generator.

The invention relates to that class of vapor-baths in which the patient is placed within a cabinet and subjected to a vapor treatment therein.

The invention will first be described and then specifically pointed out in the claims.

A is the cabinet, preferably mounted on casters *a* to permit it to be moved from place to place, though it may be stationary, if so desired. The front end of the cabinet is higher than the rear end, and an inclined portion intervenes and connects the front and rear portions of the top, which are made flat to receive various articles, such as a bowl, &c. The bottom of the cabinet is formed with a vapor or steam chamber A', the removable perforated top A² of which forms the floor of the cabinet. The perforations *a*² in the top A² are controlled from within the cabinet by means of slides *a*³, so that steam or vapor may be shut off from the interior of the cabinet and dry heat employed. Steam or vapor is supplied to the chamber A' from a generator B at the rear end of the cabinet through the medium of a foraminated tube *b*, which connects with the lower end of a vertical pipe *b'* in the generator, the upper end of the pipe *b'* extending above the water-line into the steam-space. The generator B is heated by a burner C, controlled from within the cabi-

net by an operating-rod C', and flues C² extend back and forth through the generator from the burner, so that only a single burner will be necessary to heat the water in the generator, but another burner may be employed, if desired, as shown. Where a gasolene or other hydrocarbon burner is used, the upper ends of these flues C² will connect with an offtake-pipe, (not shown,) leading to the exterior of the room in which the cabinet is placed.

C³ and C⁴ represent the supply-pipe and tank for the burner. The top of the generator is provided with three round holes C⁵, provided with vulcanized-rubber bushings *c*⁵, and in these bushings are held frictionally the three jars or vessels D D' D², which contain any suitable medicaments to be vaporized. From the jars lead the tubes *d d'*, which are long enough to extend to the front end of the cabinet. The middle tube *d'* enters the cabinet and is provided with a pervious pad, formed of a bag *d*², filled with loose material *d*³, so that the hot medicated vapor may pass through and reach the affected part, against which the pad is laid. The pad may be of any desired shape. If desired, the tube *d'* and its jar D' may be removed and a bottomless jar D⁴ inserted, which jar has a tube *d*⁴ and a sprayer *d*⁵, so that steam may be sprayed on any particular part of the body to be treated. These jars or receptacles D D' D² may be adjusted up and down, so as to be heated to a greater or less extent. The tube *d* is provided with a nasal-nozzle *d*⁶, while tube *d*² has a mouthpiece or inhaling-nozzle *d*⁷.

As the head of the patient will be exterior to the cabinet, he may be treated through the medium of any desired nozzle while his body is being subjected to the hot air or vapor treatment within the cabinet, or any portion of his body may be treated by the direct application of steam or vapor from sprayer *d*⁵. The generator is provided with suitable cocks for drawing off its contents when desired.

The front end of the cabinet is formed as a hinged door A³, provided with suitable fastenings *a*⁴, and the joints are packed with tubular gaskets *a*⁴, so that no steam or vapor can escape or cold air enter. The upper flat portion A⁴ of the top is hinged to and carried by the upper edge of the door, and the in-

elined porton A⁵ of the top is formed in hinged sections a⁵. These sectional portions A⁴ a⁵ are adapted to be swung over out of the way when the patient desires to stand up right, and the adjacent edges of parts A⁴ A⁵ are provided with registering recesses a⁶, which form the opening for the patient's neck. These recesses are lined with some soft material a⁷ to fit the neck closely and prevent escape of heat or vapor.

E is the perforated seat, mounted on an angular tubular arm E', adjacent to the hinged edge of the door, so that the seat may be swung out exterior to the cabinet to permit of weak patients being seated thereon and swung into the cabinet for treatment. From the seat extends a pervious fabric tube or tubular valance E², adapted to register at its lower edge with a series of apertures a² in the floor of the cabinet, so that steam or vapor may be admitted into the tube E² and pass through the seat-perforations to the patient, or when steam is shut off through perforations a² it may be admitted through the tubular arm E', which communicates with the steam-chamber A' and has a stop-cock e under the seat. The vertical member of the tubular seat-carrying arm E' turns freely in a vertical tubular bearing E³, which extends down into the steam-space of chamber A', where it is cut away to admit steam. The seat E also turns on the horizontal member of the tubular arm E', so that it may be turned vertically edgewise and swung against the wall of the cabinet out of the way. The height of the seat may be adjusted by means of the collar e' and set-screw e².

It will be seen that after treatment the patient may be swung out, or partially out, of the cabinet for rubbing down and still be kept warm and that the attendant can readily rub down the patient or give him local treatment by opening the door and without removing him from the cabinet. It is also highly necessary in some diseases to use hot and cold water sprays in addition to the vapor-bath, and this I accomplish by means of the hot and cold water tanks F F', provided with outlet-tubes f f', each having a stop-cock f² and a common offtake-pipe f³, provided with a spraying-nozzle f⁴ and a stop-cock f⁵. Thus hot and cold water may be separately applied to the patient or the temperature may be gradually changed by means of the stop-cocks f². These tanks F F' are carried by levers F², pivoted to standard F³, their upper cranked ends F⁴ passing through eyes f⁶ on the tops of the tanks. By this means the tanks may be readily lowered for filling and then raised to a sufficient height to get the necessary pressure for spraying. The levers F² are held in their raised positions by means of spring-catches f⁷, mounted on the standard.

G is a thermometer at lower end of standard. The cabinet is provided at one side with a door A⁶, through which towels, &c., may be

passed to the person in the cabinet or excess of vapor pass out.

The bottom of the vapor-chamber A' is provided with a drip-aperture for the escape of the products of combustion, and G' is a drip-pan placed under this aperture. This pan is provided with a top which inclines downwardly toward one end of the pan, where an inlet-aperture g is provided, and at this end of the pan there is a handle g'. It will be seen, therefore, that when the pan is lifted by its handle it may be carried away just like a bucket, as its inlet-aperture will then be upmost.

It will be understood that the generator B may be placed at the side of the cabinet, if desired, and that its burner may be controlled from the exterior of the cabinet by the doctor or attendant; also, that all of the tubes leading from the jars may enter the cabinet through suitable openings, if desired, and that suitable pads may be applied to the inner ends of any or all of them, instead of to tube d' alone; also, that the boots or pads for the patient's feet will receive heat through the ports or holes in the floor.

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

1. A vapor-bath cabinet, having openings in its floor, a vapor-chamber thereunder, a perforated or pervious seat in the cabinet and a depending pervious tubular valance or extension to connect the seat with the floor-openings, substantially as set forth.

2. A vapor-bath cabinet, having a vapor chamber, or supply, and a perforated or pervious seat having a tubular supporting arm or standard connecting it with the vapor chamber or supply, substantially as set forth.

3. A vapor-bath cabinet, having a vapor-chamber thereunder, a vertical tube extending from the vapor-chamber up into the cabinet, and a seat having a tubular angular arm or standard to support it and supply it with vapor, the vertical member of the standard or arm entering and turning in the said tube, substantially as set forth.

4. A vapor-bath cabinet, having a vapor-chamber below it and valved openings connecting the two, a horizontally-swinging seat having a depending tubular portion to register with said valved openings, and a tubular supporting-standard communicating with the vapor-chamber and having a valve or cock, substantially as set forth.

5. A vapor-bath cabinet having openings in its floor, a vapor-chamber thereunder, and a perforated or pervious seat within the cabinet, which seat is provided with a depending tubular portion adapted to register with said openings, substantially as set forth.

CHARLES W. DRAPER.

Witnesses:

W. N. HAWLEY,
JONATHAN WOOD.