

D. LESTER.

DEVICE FOR ADMINISTERING BATHS.

No. 318,760.

Patented May 26, 1885.

Fig. 1.

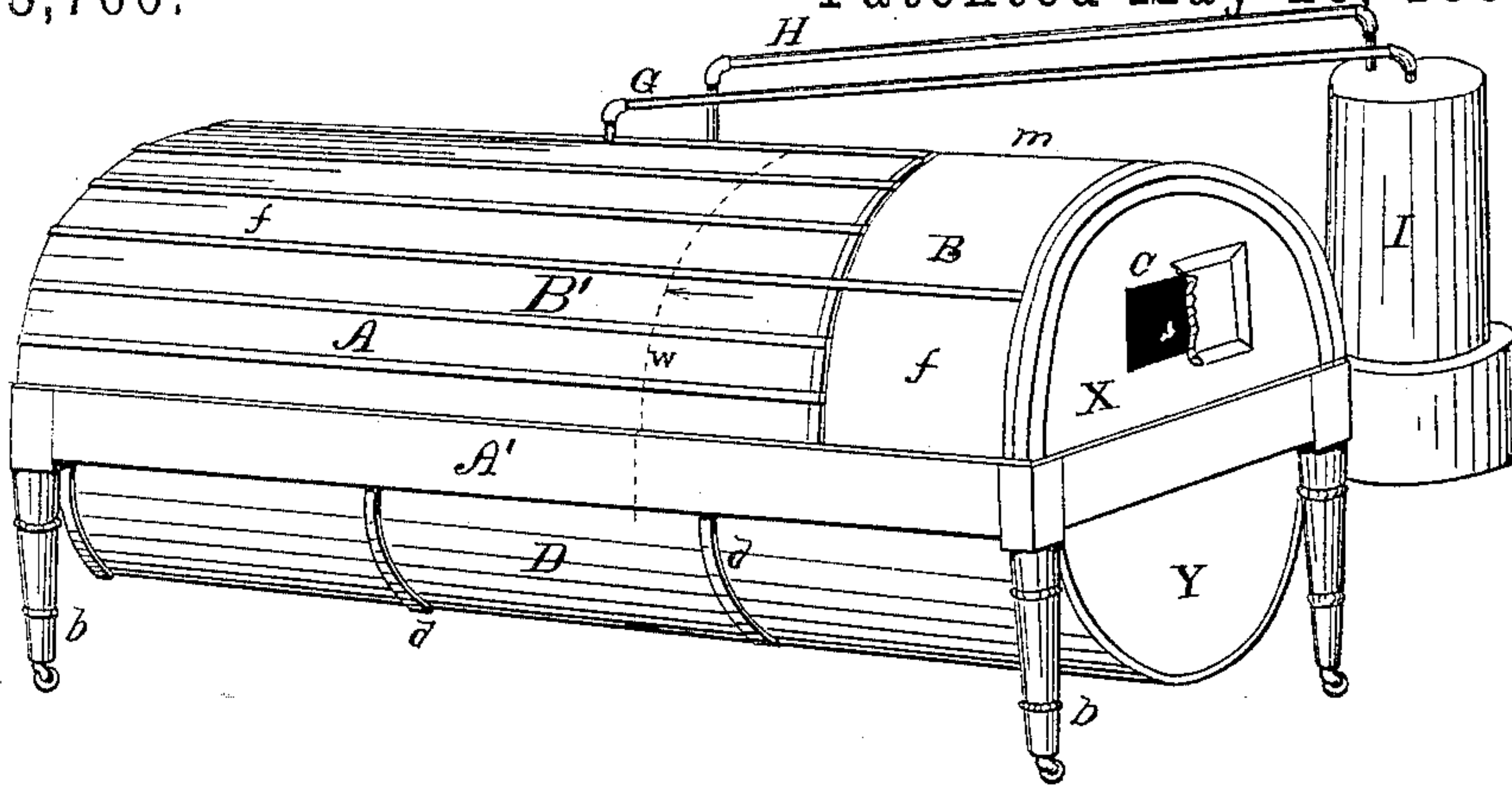


Fig. 2.

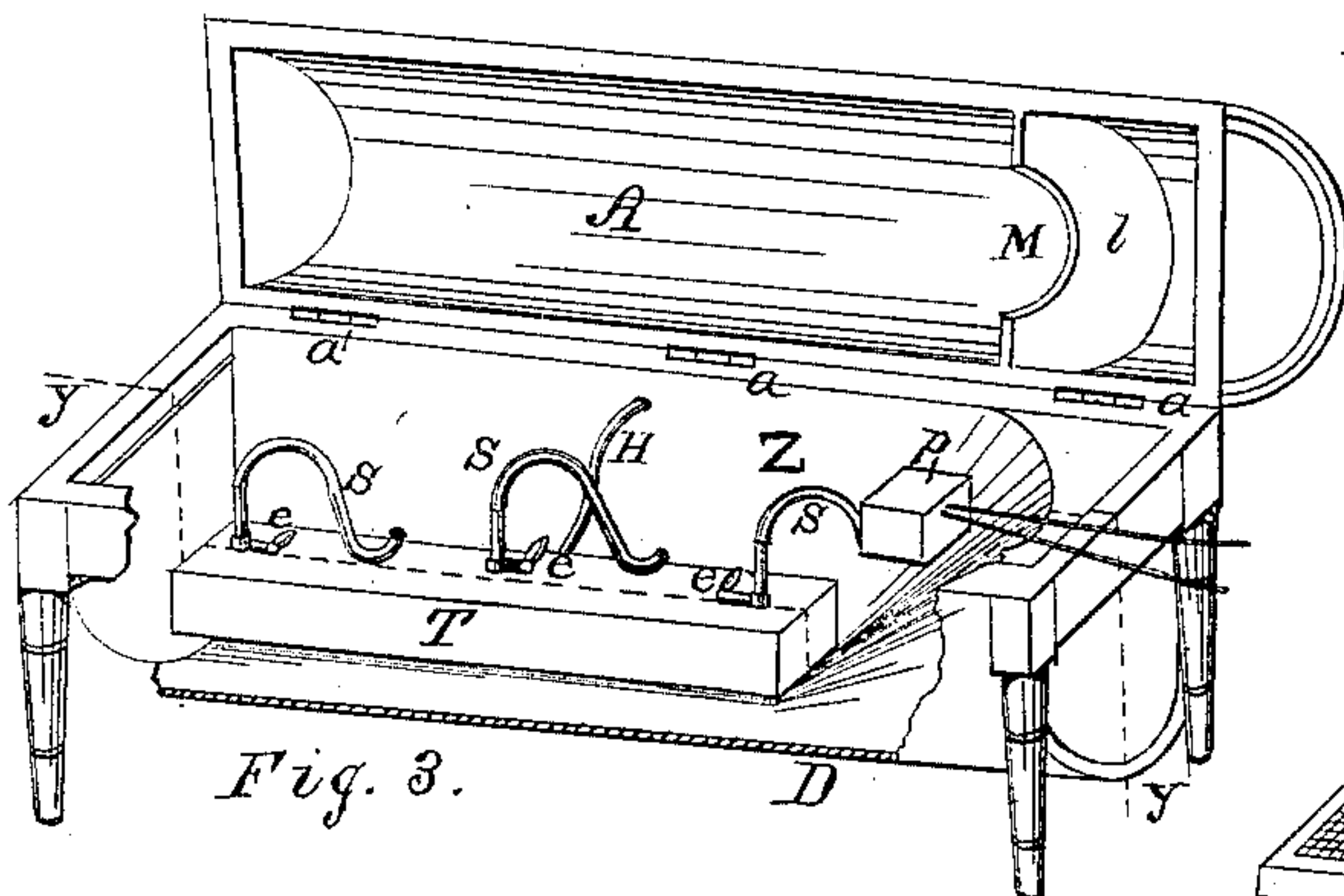
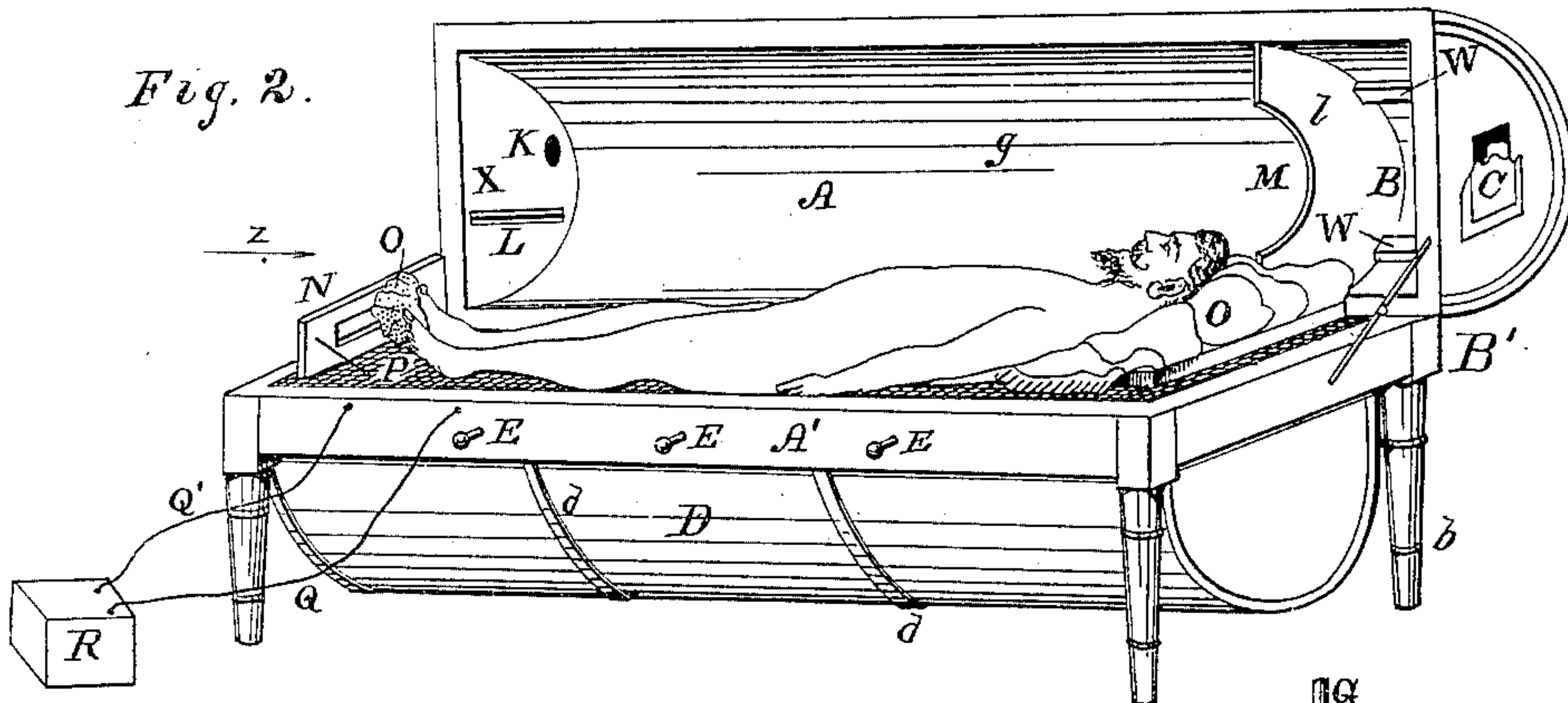


Fig. 3.

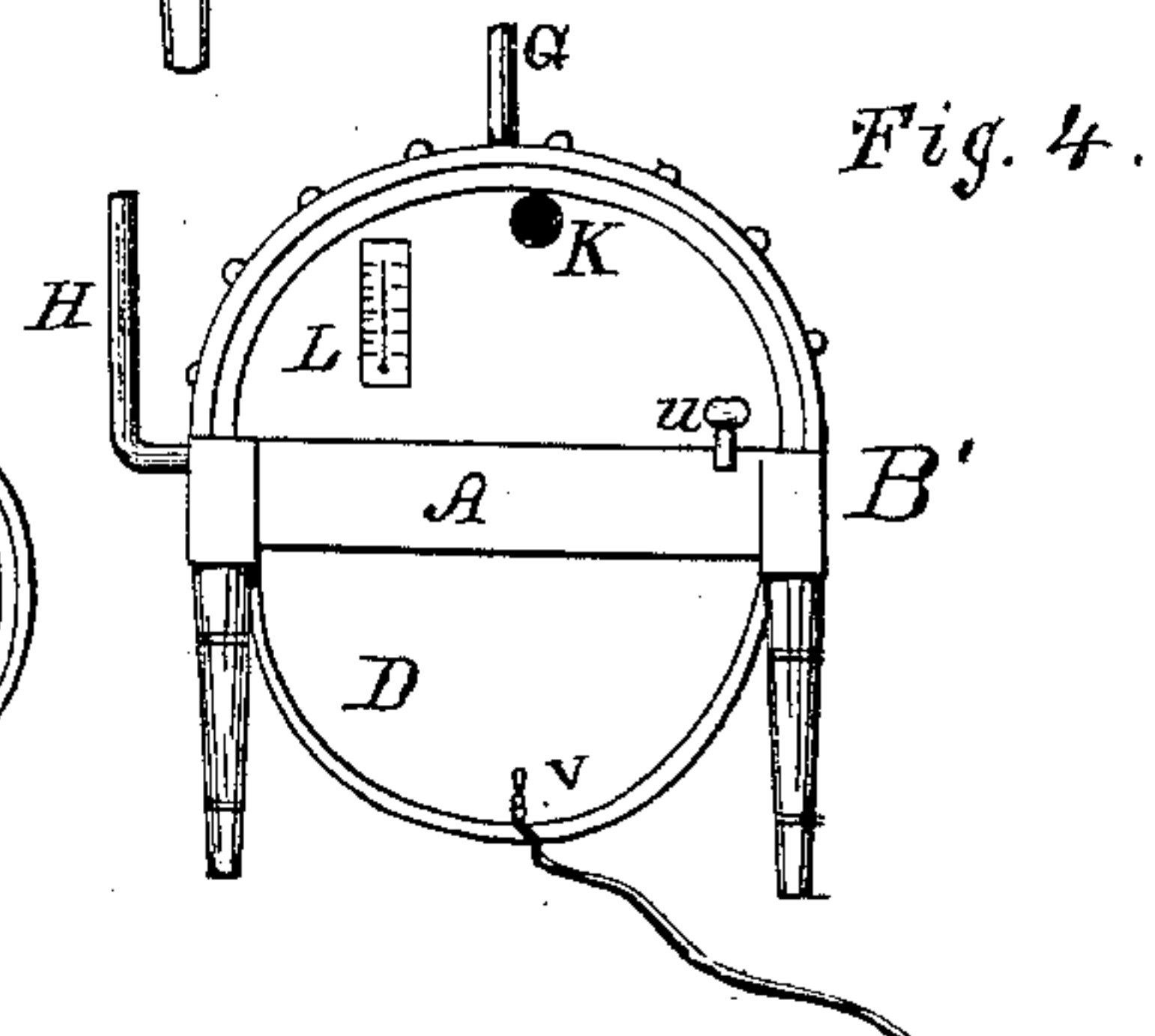


Fig. 4.

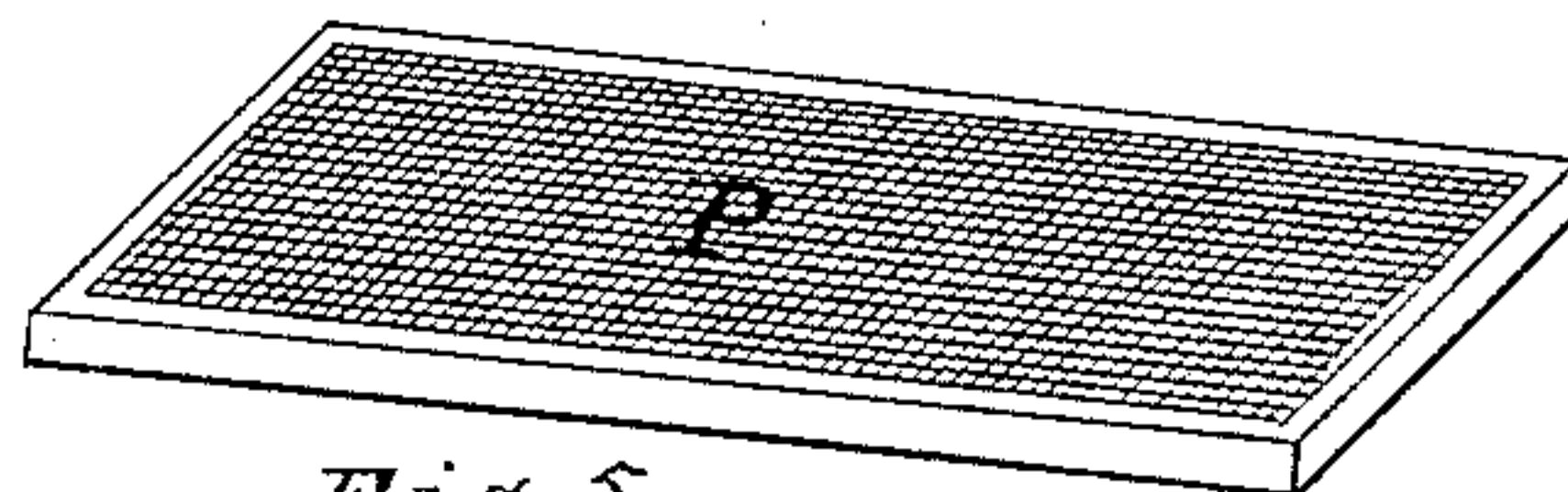


Fig. 5.

Attest:

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John McManis

Inventor:

D. Lester.

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Att'y

(No Model.)

2 Sheets—Sheet 2.

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Fig. 7

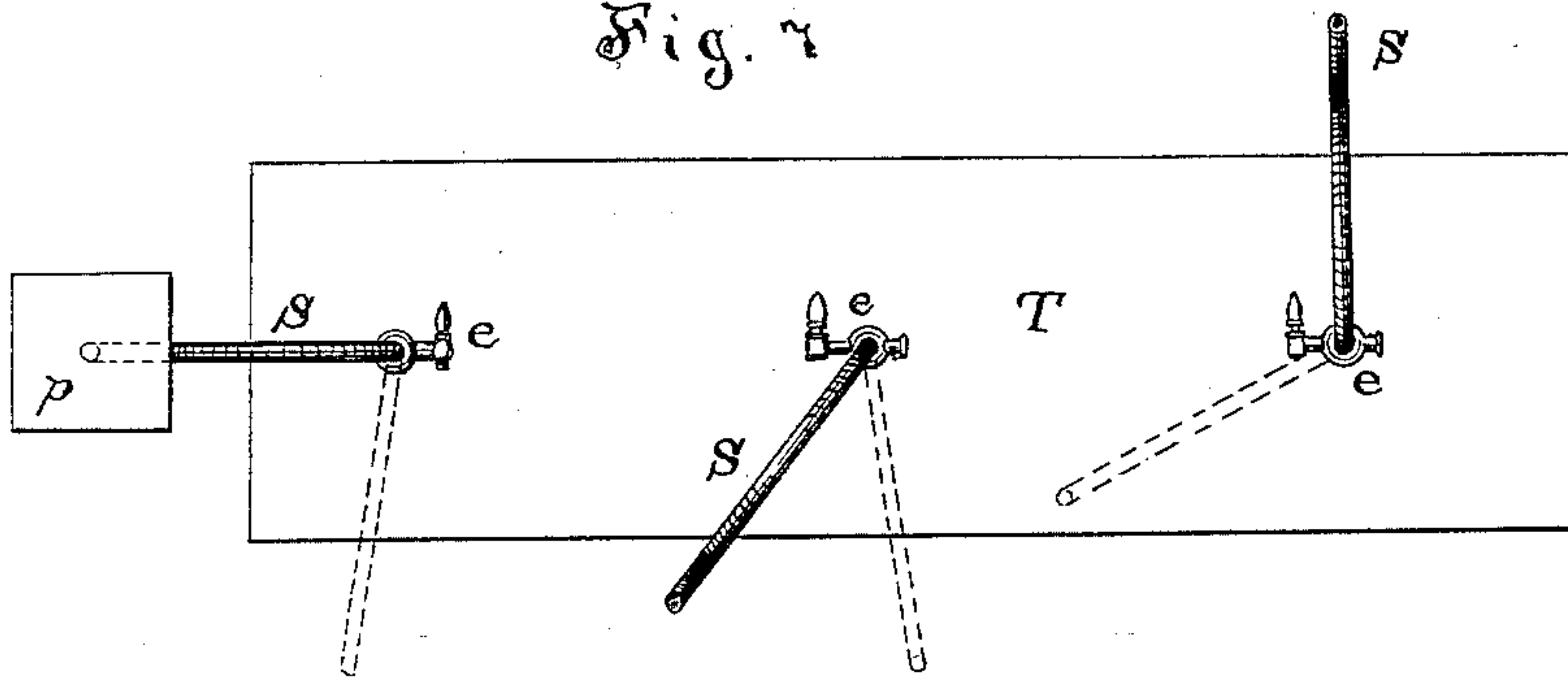


Fig. 8

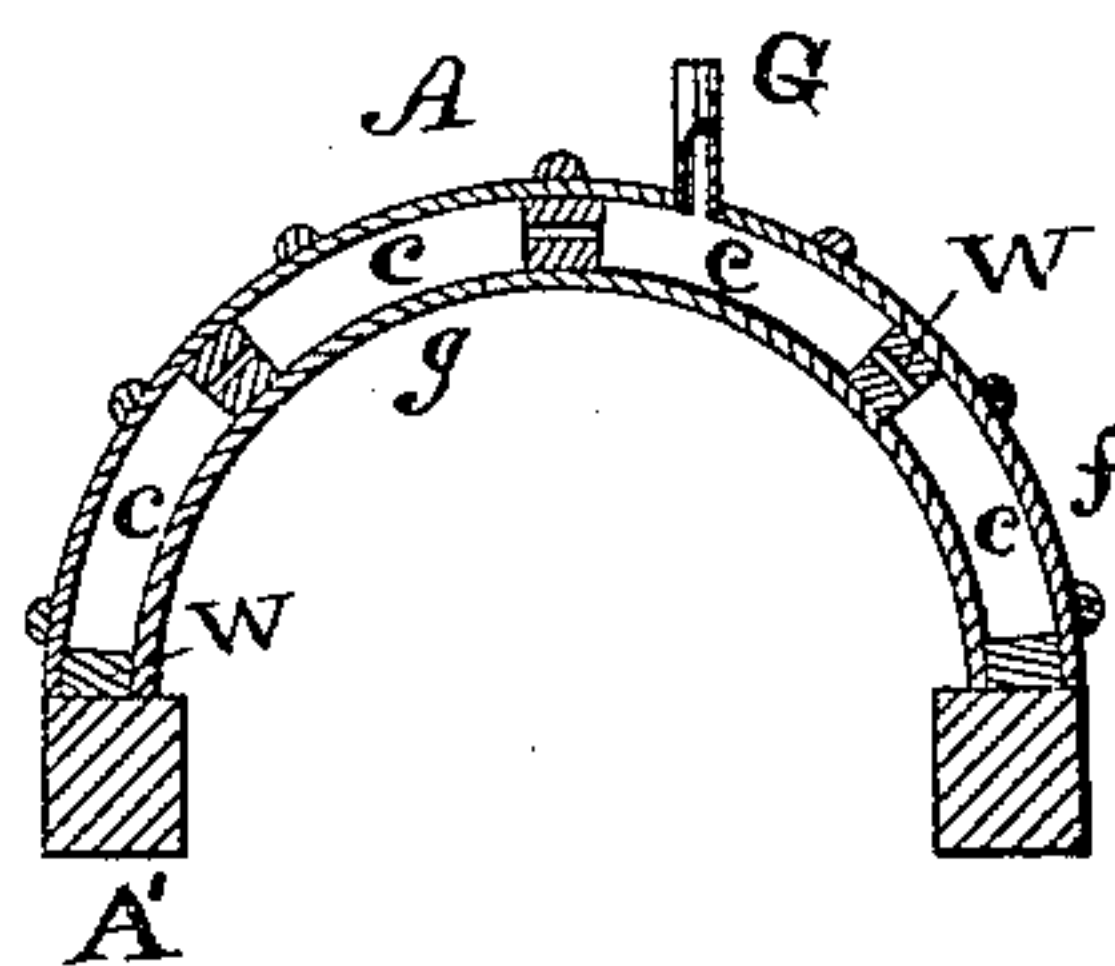
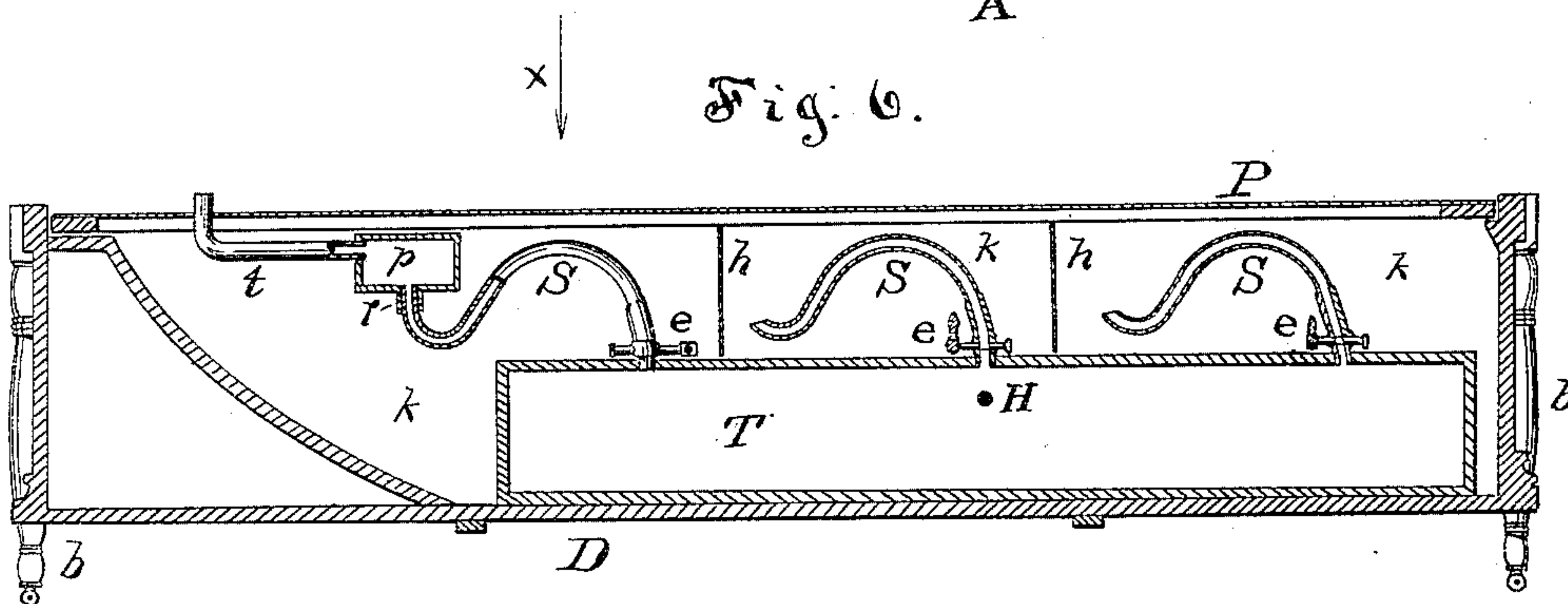


Fig. 6.



Attest:

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UNITED STATES PATENT OFFICE.

DAVID LESTER, OF LOCKPORT, NEW YORK.

DEVICE FOR ADMINISTERING BATHS.

SPECIFICATION forming part of Letters Patent No. 318,760, dated May 26, 1885.

Application filed May 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, DAVID LESTER, of Lockport, in the county of Niagara and State of New York, have invented a new and useful
5 Improvement in Devices for Administering Baths, which improvement is fully set forth in the following specification and accompanying drawings.

The object of my invention is to produce
10 an apparatus for administering various therapeutic baths to patients while comfortably lying; and it consists of a case inclosing a couch having parts and devices constructed and combined for the purpose of administering
15 steam baths, hot dry-air baths, medicated vapor baths, electro-thermal baths, &c., and also parts constituting an inhaler, all hereinafter fully described, and more particularly pointed out in the claims.

Referring to the drawings, Figure 1, Sheet 1, is a perspective view of the apparatus with the steam-generator connected in place, showing the general arrangement of the whole; Fig. 2, a perspective view of the bath opened
25 upon its hinges disclosing the interior thereof, with patient reposing in place to receive a bath; Fig. 3, a similar view to that shown in Fig. 2, drawn to a smaller scale with the mattress removed and a part of the lower
30 front side of the exterior shell broken away to show the interior of the bottom half of the device and the steam-box placed therein; Fig. 4, an end elevation at the foot of the bath, viewed as indicated by arrow *z* in Fig. 3; Fig.
35 5, a perspective view of the mattress upon which the patient lies while receiving the bath; Fig. 6, Sheet 2, an elevation in central longitudinal section of the lower half of the bath and contained parts, sectioned as on the
40 dotted lines *y* in Fig. 3; Fig. 7, a view of the steam-box and attached parts, serving to show more fully the operation of the latter, viewed as indicated by arrow *x* in Fig. 6; and Fig. 8, a transverse section of the upper part or cover
45 of the bath, taken on the dotted line *w* in Fig. 1.

Referring to the parts, B' is a case or inclosure forming the body of the bath, made of sufficient size in which to receive a patient
50 lying down, which I prefer to make substantially cylindrical in form, resting in a frame,

A', supported on casted legs *b*, so that it may be moved about the room. This case is made of a bottom part, D, and top part or cover, A, for the part D, each being substan-
55 tially semi-cylindrical, divided on a horizontal plane, and connected by hinges *a*, so as to be opened and closed like a trunk. The end pieces, X X and Y Y, of the case are made of wood and the convex shell of sheet zinc, the
60 bottom part, D, being strengthened by hooks *d*. The cover A is double walled, as shown in Fig. 8, inclosing a steam-space, *c*, between the outer shell, *f*, and inner shell, *g*. Longitudinal ribs W extend the whole length of the
65 cover A, through the steam-space *c*, which, in combination with the end boards, X X, form the frame of the cover to which the zinc walls *f* and *g* are secured.

The bottom part, D, contains a common bath-
70 tub, Z, with inclined end, in which, by removing the contained parts, hot or cold water baths may be taken at pleasure in the usual manner.

A mattress, P, which I prefer to be made
75 of woven wire, is fitted to rest upon the upper horizontal edge or surface of the part D within the frame A', as shown, which forms a comfortable couch upon which the patient lies while receiving the bath. 80

A steam or vapor for the bath is produced in the generator I, which may be any suitable boiler or vessel placed upon a stove or over a fire, connected to the bath-case by pipes G and H, the former, as shown, connecting with
85 the cover A, and the latter passing through the side of the shell D.

An imperforate steam-box, T, is placed in the tub Z under the mattress, into which the pipe H leads from the generator I. Leading
90 out at the top of this steam-box are three curved pipes, S S S, having their free ends pointing upward toward the mattress, which are attached to the box in such a manner as to be
95 swung around in horizontal planes to any position. By means of these adjustable pipes jets of steam may be projected against the neck, shoulders, spine, hips, knees, ankles, or any part of the system by changing the position of the patient on the couch. 100

Steam-cocks *e* serve to open and close the passages through the pipes S, which cocks

have handles E, reaching out at the side of the frame, so that the flow of steam under the mattress may be regulated at pleasure.

Partitions *h* pending from the mattress divide the space beneath the mattress into apartments *k*, each of which is occupied by a steam-pipe, S, by means of which partitions and steam-cocks either or all the apartments may be filled with steam, as may be desired.

A partition, *l*, cutting across the interior of the cover over the neck of the patient, forms a separate apartment, B, for the head, so that while a steam bath, for instance, is being administered the steam may, if desired, be excluded from the air breathed during the operation. The inner shell or sheet of zinc, *g*, and the steam-space *c* of the cover terminate at the partition *l*, the chamber B being covered only by the outer shell, *f*.

A door, C, through the end X of the cover admits external air to the patient, also openings (not shown) are made through the shell *f* at *m* over the face of the patient, through which to obtain a free circulation of air about the face when desirable.

A semicircular opening, M, is formed in the partition *l* to close over the neck of the patient, which, being padded about the neck, renders the partition complete between the chamber B and the remainder of the space within the case occupied by the patient.

The steam-space *c* in the cover is connected with the generator I by a pipe, G, suitable openings being formed in the ribs W to allow the steam to fill the whole space between the shells *f* and *g*. When the space *c* is thus filled with steam, heat is rapidly radiated into the space of the bath occupied by the patient, which, when the steam is wholly shut off from the pipes S below the mattress, gives to the patient a dry hot-air or Turkish bath. When the steam is stopped out of the cover A and let on from the box T, filling the whole interior space of the bath, excepting the head-chamber B, the occupant experiences a hot-vapor or Russian bath. By this arrangement of parts the person of the patient below the head may be subjected to the action of vapor or to heated dry air of any degree of intensity desired, while the ordinary air of the room is supplied for respiration.

A thermometer, L, at the foot of the bath opening into the interior thereof, serves to indicate the temperature of the interior of the inclosure to which the patient is exposed. An orifice, K, through the end of the bath-case is formed to receive the nozzle of a sprinkling-hose, so that a shower-bath may be given the patient while lying upon the couch P.

R is a galvanic battery, to be used in administering electro-thermal baths to the patient.

N is a foot-board, against which a saturated sponge, *o*, is held to be touched by the feet of the patient, which sponge is connected with one pole of the battery by a wire, Q', while a wire, Q, leading from the opposite pole of the

battery connects with a pillow, O, or similar device placed at the shoulders or neck of the patient.

The electric current may be used in connection with the heat or vapor, or singly, as may be desired.

A pipe connected to the lower part of the case at *v* serves to discharge the water from the tub Z of the case, and a cock at *u* serves to draw off the condensed water that forms in the steam-space *c* of the cover.

A box or vessel, *p*, Sheet 2, is provided, having a short pipe, *r*, at its under surface fitted to slip over the end or nozzle of the pipe S nearest the head of the couch. When placed upon the pipe, steam may blow into the box from the pipe, and a second pipe, *t*, leads from the upper part of the box up through the mattress at one side of the head of the patient, opening into the chamber B. By placing herbs or drugs in the box *p* and allowing steam to flow in upon them through the pipe S medicated vapor will be caused to fill the chamber B about the head of the patient for inhalation. This is desirable in the treatment of certain diseases of the throat and lungs.

I design to introduce a tube, V, through a simple orifice in the head end X of the case into the chamber B, to be used as an inhaling-tube by a person sitting near the case without entering the latter for a bath, the proper herbs or material having first been placed in the box *p* and steam turned thereon, as above stated, when such patients require only the inhalations.

The advantage of having a bath apparatus constructed so as to admit of the patient lying down while receiving treatment is great. Many patients are too weak to sit during the time required for a thorough bath, while the exhaustion brought on to others who do thus sit, goes far toward counteracting the beneficial effect of the treatment. Besides, the bath-case, being mounted on casters, may be drawn up along side of a bed or couch occupied by an invalid, and the bath-couch P being about the height of said bed or couch, the patient may with great ease be transferred from either to the other, as the case may be.

The pipes H and G are each provided with a simple coupling, (not shown,) so as to be readily connected or disconnected when the bath-case is to be moved about the room, as stated.

What I claim as my invention is—

1. A case or inclosure, B', in which to administer baths to a prostrate patient, consisting of a lower part, D, and a cover, A, for the part D, joined to the latter so as to be opened or closed over the patient, the part D being provided with a mattress or couch, P, and the space within the cover A divided by a partition, *l*, forming an apartment or chamber, B, for the head of the patient, separate from the remaining space in the cover, with an opening, C, from without into the chamber B, substantially as shown and described.

2. A case or inclosure, B', in which to administer baths to prostrate patients, consisting of a lower part, D, containing an ordinary bath-tub, Z, and mattress P, and a cover, A, 5 for the part D, the interior of said cover being divided by a partition, l, and made with a steam-space, c, substantially as set forth.

3. A case in which to administer baths, consisting of a lower part or body, an upper portion hinged thereto, a bath-tub placed in the 10 lower portion, a mattress placed on the upper

side of the tub, and a steam-box placed beneath the mattress, said steam-box being provided with curved exit-pipes S, having their outer ends upturned, said pipes being swiv- 15 eled or pivoted to the steam-box, so as to be capable of being swung around thereon, for the purpose set forth, substantially as described.

DAVID LESTER.

Witnesses:

E. B. WHITMORE,
S. S. CROSS.