March 19, 1929. V. P. BATTENFELD 1,705,467

APPLIANCE FOR HEAD THERAPEUTICS

Filed March 30, 1927

Fig 2

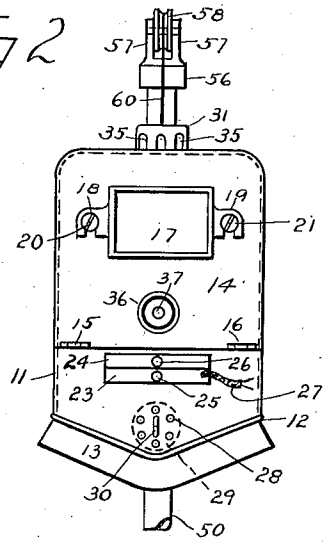


Fig 1

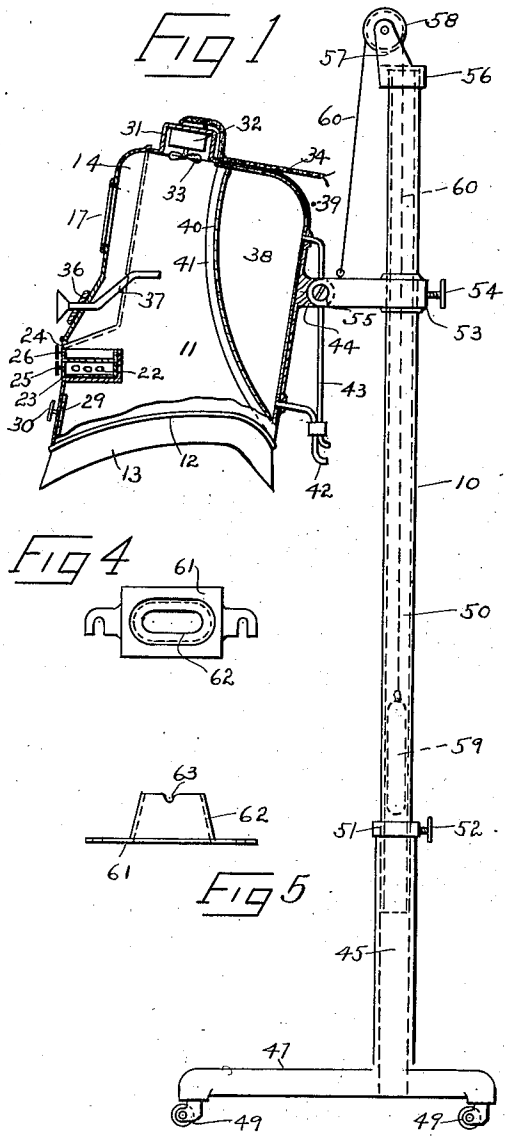


Fig 4

Fig 5

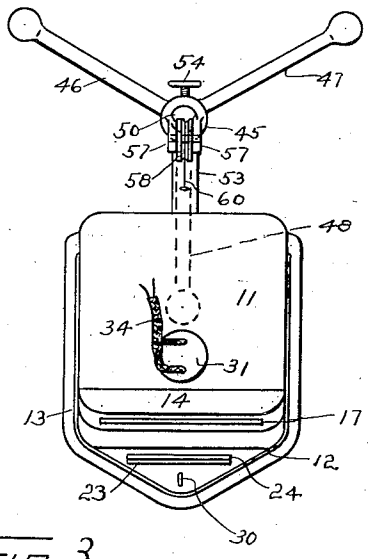


Fig 3

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APPLIANCE FOR HEAD THERAPEUTICS.

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My invention relates to an appliance for treating various diseases of the head, throat and lungs and has for its main object to provide a device whereby a great many ailments may be treated with the best results and the least inconvenience and discomfort to the patient.

A further object is to so construct the device that not only external diseases, such as eruptions on the face and scalp, may be treated, but that diseases, such as catarrhal and respiratory, may be treated as well.

A still further object is to provide an appliance of this character of simple construction, easy to adjust and manipulate, sanitary and comparatively inexpensive to manufacture.

These and various other objects and advantages will be readily understood from the following description and from the accompanying drawing of a preferred embodiment of the device, but it will be noted that various modifications might be made without departing from the scope of the invention.

In the drawing:

Fig. 1 is a side elevation of the device, shown partly in cross-section,

Fig. 2 is a front elevation, certain parts having been omitted,

Fig. 3 is a top view,

Fig. 4 is a front view of an auxiliary part, and

Fig. 5 is a top view of Fig. 4.

Referring now to Figs. 1, 2 and 3, the device consists of an adjustable stand 10 from which is suspended a hood 11 made of light metal or other suitable material. The hood is so constructed as to completely surround the head of a patient and terminates at the bottom in a rim 12 which fits around the patient's chest, shoulders and back. To insure a substantially air-tight joint, a rubber apron 13 is fastened to this rim.

A door 14 is provided in front of the hood. This door, which swings on the hinges 15 and 16, enables the physician to adjust the patient's head in the hood. A window 17 is also provided in this door so that the patient may be observed during the treatment. This window is removably attached by being provided with slotted lugs 18 and 19 and is secured to the door by screws 20 and 21.

Below the door, a shelf 22 extends into the hood and on this shelf, an electric heater 23 and an evaporating tray 24 are slidably placed. The heater is provided with a knob 25 and the tray with a knob 26 by means of which they may be withdrawn. The heater is connected to an electric source by the wire 27. A ventilator is placed some distance below the electric heater and consists of a plurality of orifices 28 drilled in the hood and a rotatingly mounted, circular disc 29 having orifices aligning with the orifices in the hood. The disc is rotated by the handle 30.

A circular housing 31 extends upwardly from the top of the hood 11 and in this is contained a small electric motor 32 driving a fan 33. The current is supplied to this motor through the wire 34. A plurality of air outlets 35 are provided in the housing, as shown on Fig. 2.

A soft rubber bushing 36 is inserted in an opening in the door 14 and in this bushing a bent, trumpet-shaped, air tube 37 is placed. During certain treatments this tube is held in the mouth of the patient, enabling him to inhale the outside air. A similar, but inverted, tube is sometimes used in place of the tube shown; it is substituted to enable the patient to expectorate during the treatment. The opening in the bushing 36 also makes it possible to introduce curative media, as for example chlorine, into the hood.

A flexible water bag 38 is attached inside and in the rear of the hood. One wall 39 of this bag conforms to the shape of the hood, while the other wall 40 is loose and hangs down as shown. The walls are vulcanized together along the seam 41 to form a watertight bag. Water is admitted to the bag through the inlet tube 42 and flows out through the outlet tube 43. By circulating cold water through this bag, the patient's head and neck may be kept cool during treatment.

A lug 44 is formed on the rear of the hood and by means of this lug the hood is attached to the stand 10. The stand consists of an upwardly extending, tubular member 45 having three legs 46, 47 and 48, each provided with a caster 49. A tube 50 is slidably inserted in the tubular member 45 and held in place by a collar 51 having a clamping screw 52. An arm 53 is slidably mounted on the tube 50 and held in place by the clamping screw 54. The front end of this arm is bifurcated and connects with the lug 44, the screw 55 allowing angular adjustment of the hood. A collar 56, having upwardly extending bearings 57 in which a sheave 58 is mounted, is secured on the upper end of the tube 50. A

weight 59, sliding inside the tube 50 and connected to the arm 53 by a cord 60 which passes over the sheave, counterweights the hood.

As certain treatments would be irritating to the eyes of the patient, the auxiliary attachment shown at Figs. 4 and 5 is provided. This attachment, which when used is substituted for the window 17, consists of a frame 61 similar to the frame of the window and an elongated, tapered, tubular member 62 made of comparatively soft, vulcanized rubber and constructed to fit around the patient's eyes like a pair of goggles; the indentation 63 being provided to straddle the patient's nose.

The device is employed in the following manner:

After the patient is seated in a suitable chair, the hood is lowered over his head and the apron arranged around his chest, shoulders and back. Through the door 14 the wall 40 of the water bag 38 is arranged against the back of the patient's head and neck; as the water circulates through the bag, the wall 40 will conform to the contour of his head and neck. If the treatment requires it, the tube 37 is inserted in the patient's mouth. Medicine or medicated water is placed in the evaporating tray and heated by the heater 23 until the proper evaporation takes place. A flow of air is maintained through the orifices 28, hood 11 and fan 33. According to the nature of the treatment, the patient breathes through the air tube or inhales through the nose and exhales through the tube. In certain treatments only dry, hot air is employed, while in others the curative medium is drawn in through the soft rubber bushing placed in the door, as previously described.

Having described my invention and its operation, what I claim as new and wish to protect by Letters Patent is:

1. In a device of the class described, a rigid hood for enclosing the head of a patient, an aperture cut in the lower part of the front of the hood, a shelf extending inwardly from the lower edge of the said aperture, an electric heater slidably mounted on said shelf, an evporating tray slideably mounted on top of said electric heater, an air-intake regulator located in the hood below said electric heater, and an electric fan located on top of the hood.

2. In a device of the class described, a rigid hood for enclosing the head of a patient, an aperture cut in the lower part of the front of the hood, a shelf extending inwardly from the lower edge of the said aperture, an electric heater slidably mounted on said shelf, an evaporating tray slideably mounted on top of said electric heater, a larger aperture formed in the upper part of the front of the hood, and a frame having an inwardly extending eye protecting member insertable in said larger aperture.

3. In a device of the class described, a rigid hood for enclosing the head of a patient, an aperture cut in the lower part of the front of the hood, a shelf extending inwardly from the lower edge of the said aperture, an electric heater slideably mounted on said shelf, an evaporating tray slideably mounted on top of said electric heater, a flexible water bag attached in the rear of the interior of the hood and having one of its walls conformable to the shape of the head and neck of the patient, and an inlet and an outlet pipe connected to said water bag.

4. In a device of the class described, a rigid hood for enclosing the head of a patient, an aperture cut in the lower part of the front of the hood, a shelf extending inwardly from the lower edge of the said aperture, an electric heater slideably mounted on said shelf, an evaporating tray slideably mounted on top of said electric heater, and the hood adjustably suspended and counterbalanced on a height-adjustable, movable stand.

VICTOR P. BATTENFELD.