March 28, 1950 C. R. D. BURNS ET AL 2,501,989

APPARATUS FOR INDUCING PYREXIA

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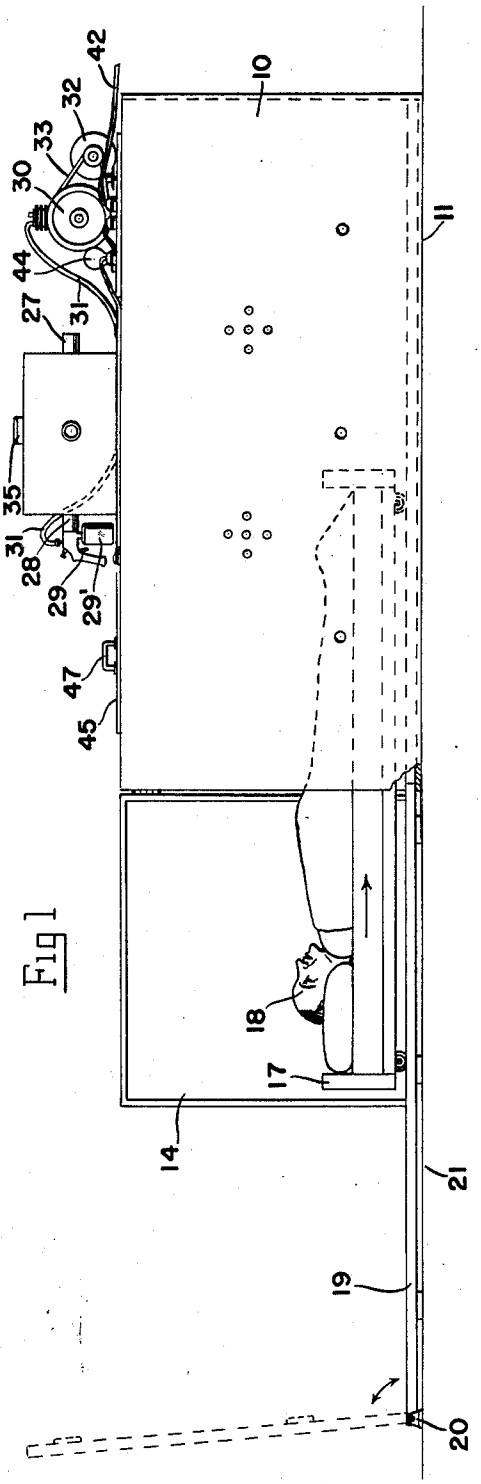


Fig 1

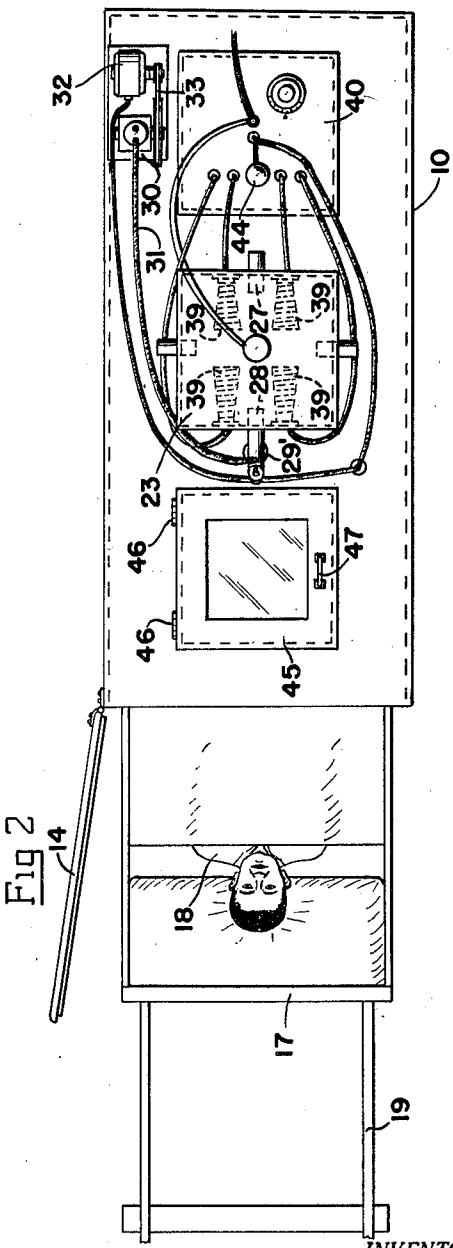


Fig 2

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Fig 3

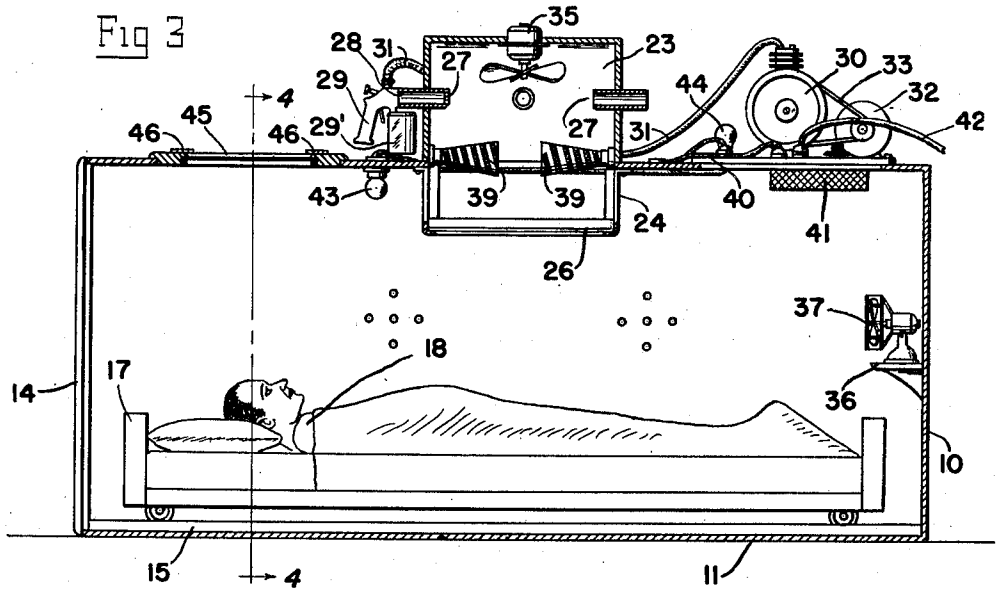
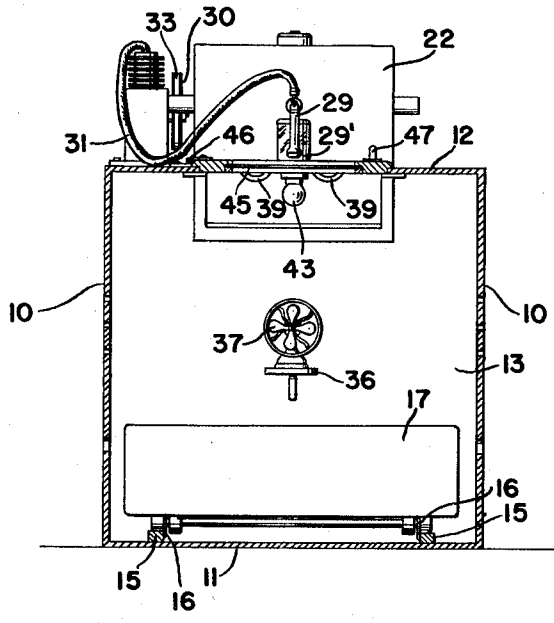


Fig 4



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APPARATUS FOR INDUCING PYREXIA

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2 Claims. (Cl. 128—373)

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The invention relates to a human body treating apparatus, and more especially to an apparatus for inducing pyrexia in the treatment of various diseases and disorders of the body.

The primary object of the invention is the provision of an apparatus of this character, wherein pyrexia is produced by circulating about and bringing in contact with the patient's body confined within the apparatus suitably heated water nebulized or atomized that a more or less soothing effect is had upon the peripheral nerve endings through elevating the body temperature.

Another object of the invention is the provision of an apparatus of this character, wherein the heat and humidity therein is controlled by a system of fans and electric resistance coils, these being regulated by thermostatic action, whereby accuracy in the working thereof is had automatically for the raising or lowering artificial fever conditions as may be required in the proper treatment of a patient within a determined period of time.

A further object of the invention is the provision of an apparatus of this character, wherein the patient can be rolled into and out of the same, without discomfort, and while the said patient is lying down or reclining, the apparatus being of novel construction and is unique in the assembly of its parts.

A still further object of the invention is the provision of an apparatus of this character, which is simple in construction, thoroughly reliable and efficient in operation, strong, durable, compact, possessed of few parts, automatic in the working thereof, readily and easily accessible, and inexpensive to manufacture and install.

With these and other objects in view the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings, which disclose the preferred embodiment of the invention, and pointed out in the claims hereunto appended.

In the accompanying drawings:

Figure 1 is a side elevation of the apparatus constructed in accordance with the invention with the end closure opened and a patient being partially admitted thereto.

Figure 2 is to top plan view;

Figure 3 is a vertical longitudinal sectional view through the apparatus with the same occupied by a patient;

Figure 4 is a sectional view taken approximately on the line 4—4 of Figure 3, looking in the direction of the arrows.

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Similar reference characters indicate corresponding parts throughout the several views in the drawings.

Referring to the drawings in detail, the apparatus constituting the present invention, comprises an elongated or rectangular shaped box-like cabinet denoted generally at A, including vertical flat side walls 10, bottom 11, top 12, one permanently closed end 13, and a horizontally swinging door 14, for opening and closing the other end opposite the said end 13 respectively, while built within this cabinet upon the bottom 11 thereof in its longitudinal direction is a raised track, involving the spaced parallel rails 15. On the rails 15 is adapted to travel the traction wheels 6 of a movable cot 17, for occupancy by a patient, to be treated within the apparatus, the patient being identified at 18.

The cot 17 occupied by the patient 18 is admitted to the cabinet through the open end, when the door 14 is swung to a position for opening such end, as best seen in Figures 1 and 2 of the drawings. At the open end of the cabinet is a vertically swingable railed tracking section 19, it having pivotal connection at 20 to a foundation 21 so that the section when in a lowered position forms a continuation of the track rails 15 within the cabinet while the door 14 is in an opening position, whereby the cot 17 can be rolled into and out of the cabinet on a level common to both the section 19 and the track rails 15 within the said cabinet, thus relieving any jolting of the patient when making the admission or exit to and from the cabinet, as is best seen in Figures 1 and 2 of the drawings. The section 19 is raised to the position indicated by dotted lines in Figure 1 of the drawings when the patient has been fully admitted into the cabinet A, so that the door 14 can be closed for shutting or closing the open end of the said cabinet.

At the top 12 of the cabinet A, approximately at the longitudinal and transverse center thereof, is a dome 22 creating a chamber 23 therein, which at its open bottom has confronting it, a suspension rack 24, the top 12 at the open bottom of the dome being cut away, for the depending of the rack 24 into the compartment 25 created by the cabinet. This rack 24 is of skeleton framework to be open at the sides and end thereof, and held within the rack is a moisture tray or pan 26, while carried by the sides and ends of the dome 22, midway thereof, are horizontally disposed ventilator tubes 27, any one of which is adapted for the detachable

coupling of the atomizer nozzle 28 of a spray gun 29 therein, the latter being manually operated and trigger controlled, so that water or other liquid can be sprayed from its container 29', under pressure therein, to the interior of the dome 22, whence the compartment 25 within the cabinet will become vaporized or humidified thereby. The other tubes 27 not coupled with the spray gun 29 will function as ventilators for the dome 22 and cabinet A at the chamber 23 and compartment 25 respectively.

Suitably supported upon the top 12 of the cabinet A to one side of the dome 22 is an air compressor 30, having a supply hose 31 leading therefrom to the container 29' of the spray gun 29, so that when the compressor is operating the content of the container will be subjected to air pressure for the spray action of the gun, the compressor 30 being powered by an electric motor 32 having the driving connections 33 therewith.

Hung within the chamber 23 in the dome 22 from the top thereof is an electric fan 34, its bladed wheel 35 directing downward draft within the said chamber. Within the compartment 25 in the cabinet A on a shelf 36 is an electric fan 37, while each side wall 10 of the said compartment has formed therein ventilating holes 38.

Protruding inwardly from opposite ends of the dome 22 are plural electric heating units 39, of the coil type, and arranged in parallel in an electric circuit 40, including a manually adjustable thermostat 41, leading from a source of electric current supply 42.

The cabinet A within its compartment 25 is equipped with an electric light 43 which is in electrical connection with the source of current supply 42, which also has connected therewith an external electric light 44 at the top 12 of the said cabinet without the same.

The top of the cabinet A in proximity to the head occupying end of the cot 17 within the compartment 25 is located a transparent paneled window 45, which is hinged at 46 to the said top, and by this window observation of the patient within the compartment 25 may be had from without the cabinet A. On the opening of the window 45 access can be had to the patient for whatever purposes desired, the window being provided with a hand knob or grip 47, for the handling thereof.

In the use of the apparatus the temperature treatment to the body of a patient when occupying the cabinet can be controlled automatically, the temperature ranging from external environmental temperature to that of 175° F., within $\frac{1}{10}$° indefinitely, and humidity can be controlled to any desired percentage, as well as subjecting the patient's respirating system to internal temperature of the apparatus thereby increasing the general body temperature in a shorter duration of time.

What is claimed is:

1. An apparatus of the kind described, comprising a cabinet open at one end only and forming an accessible compartment within, trackage at the bottom of the compartment, a wheeled cot movable on the trackage and admitted into the compartment through the open end thereof, a dome rising from the cabinet and forming a chamber opening into the compartment, said dome having an open bottom, electric heating elements within the dome projecting into its chamber, a rack depending from the top of the cabinet for suspension beneath the chamber of said dome, a tray in the rack, a plurality of ventilating tubes, leading into the dome chamber, a manually controlled atomizer gun coupled to one of the ventilating tubes for atomizing liquid within the dome chamber, an adjustable electric thermostat in circuit with the electric heating elements for controlling the heat activity thereof, and electric fans arranged within the chamber and compartment respectively.

2. An apparatus of the kind described, comprising a cabinet open at one end only and forming an accessible compartment within, trackage at the bottom of the compartment, a wheeled cot movable on the trackage and admitted into the compartment through the open end thereof, a dome rising from the cabinet at approximately the longitudinal and transverse center thereof and forming a chamber opening into the compartment, electric heating elements within the dome projecting into its chamber, a rack depending from the top of the cabinet for suspension beneath the chamber of said dome, a tray in the rack, a plurality of ventilating tubes leading into the dome chamber, a manually controlled atomizer gun coupled to one of the ventilating tubes for atomizing liquid within the dome chamber, an adjustable electric thermostat in circuit with the electric heating elements for controlling the heat activity thereof, electric fans arranged within the chamber and compartment respectively, and an air compressor operatively connected to the gun.

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