No. 665,673. Patented Jan. 8, 1901.

G. B. FRALEY.

HOT AIR APPARATUS.

(Application filed Feb. 12, 1900.)

(No Model.)

Fig. 1.

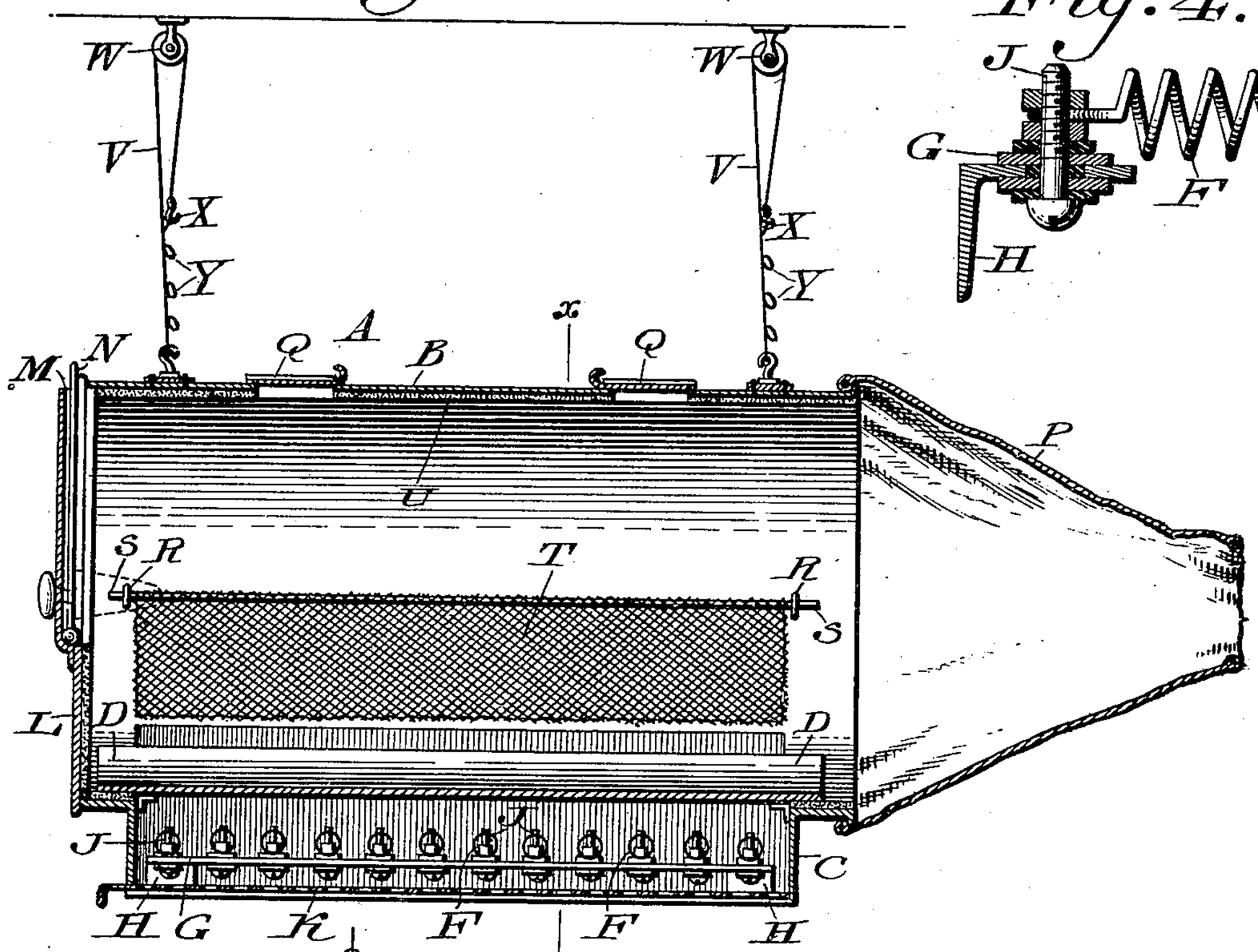


Fig. 4.

Fig. 2.

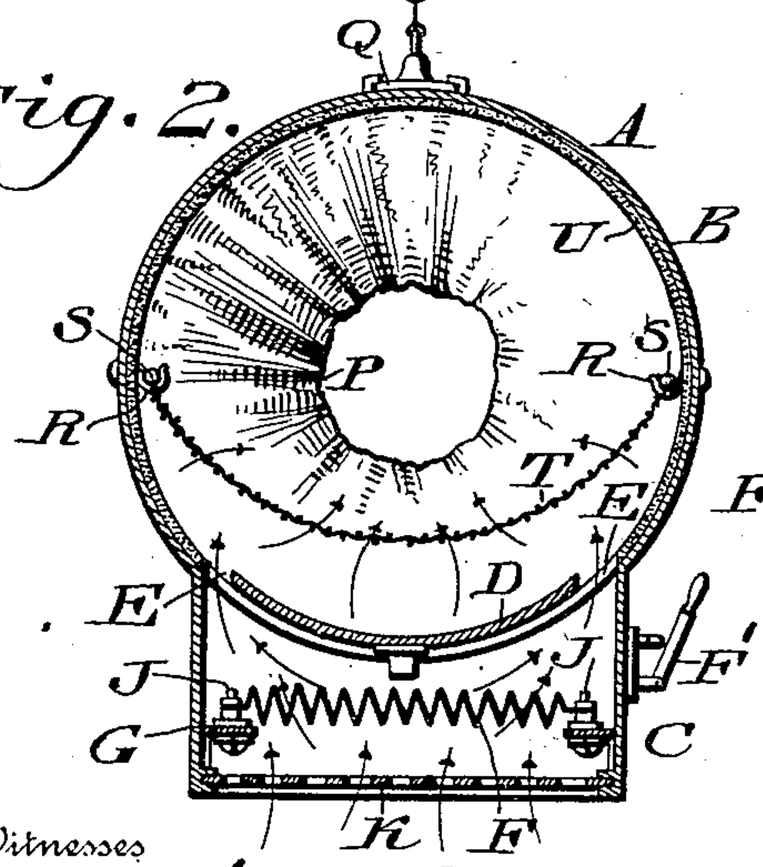
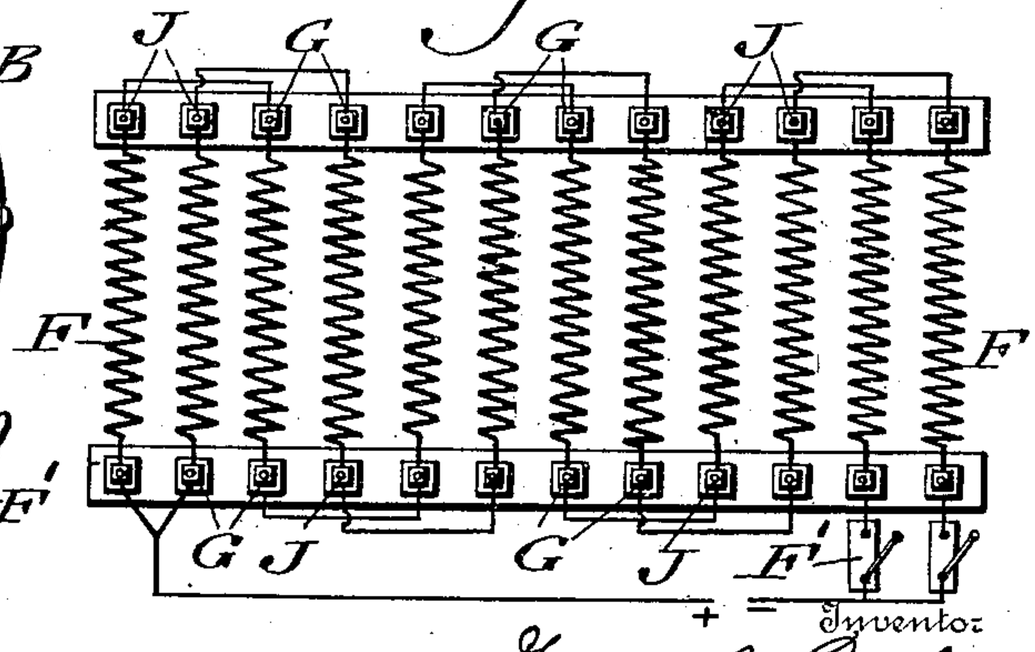


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE B. FRALEY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE FRALEY ELECTRO THERAPEUTIC COMPANY, OF NEW JERSEY.

HOT-AIR APPARATUS.

SPECIFICATION forming part of Letters Patent No. 665,673, dated January 8, 1901.

Application filed February 12, 1900. Serial No. 4,873. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. FRALEY, a citizen of the United States, residing in the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Hot-Air Apparatus, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to an apparatus adapted to subject the arms, legs, shoulders, hips, abdomen, and other portions of the human body to the action of dry hot air for the treatment of various forms of rheumatism, ankylosis, arthritis, synotis, &c., whereby absorption of effusion is caused and mobility is restored to the affected parts and pain immediately relieved.

To the above ends my invention consists of an improved apparatus whereby a high temperature of hot dry air is attained and means are provided for varying the same as required.

It further consists of novel details of construction, all as will be hereinafter fully described, and particularly pointed out in the claims.

Figure 1 represents a longitudinal sectional view of a hot-air apparatus embodying my invention. Fig. 2 represents a vertical sectional view on line *x x*, Fig. 1. Fig. 3 represents a plan view of the electric heating system employed. Fig. 4 represents, on an enlarged scale, a sectional view of a portion of the fastening means employed for the terminals of the electric conductors.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a hot-air apparatus having a casing or body B, which can be of any form, but in the present instance is preferably cylindrical and has the heating-chamber C depending therefrom, above which is supported a baffle or deflector plate D, so located as to provide the openings E for the upward passage of the hot air, as will be apparent. Within the chamber C are the electric circuits or heating devices, whose number may be varied according to requirements. Each circuit is provided with a switch F', so as to regulate the current, and consequently the heat, and consists of the wires F, mounted on bars G, which are supported by angle-irons H, the parts being held in assembled position by screws J, suitably insulated, as best seen in Fig. 4. The heating-chamber C is provided with a perforated slide K, which is removable or can be adjusted so as to admit varying quantities of air to said heating-chamber.

One end of the casing B is closed and is provided with a door L for access to the interior, said door having a recess M therein for the insertion of a thermometer N, the opposite end of said casing having a hood P, which is provided with a draw-string, whereby the limb or member to be treated is inclosed. On the upper side of said casing are slides Q, which when opened allow for ventilation. The interior of the casing is provided with hooks or similar supporting devices R, which sustain the rods S in proximity to opposite sides of the casing B, said rods supporting the hammock or netting T, upon which the member to be treated rests. The interior of the apparatus is lined with asbestos or similar non-conducting material U, whereby the heat is effectively retained within the apparatus. The apparatus is suspended by means of the cords V, which pass over the pulleys W, the hooks X on said cords engaging eyes Y, whereby the apparatus can be raised or lowered.

The operation is as follows: The portion of the body to be treated is inserted in the hood P, which is caused to engage the same. By manipulating the switches F the flow of electricity can be regulated and the internal temperature can also be regulated by adjusting the perforated slide K and the doors Q.

The height of the apparatus can be varied, and the electric wires or conductors are readily assembled for the purpose of inspection and repairing, and the hammock T can also be readily removed or replaced.

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

1. In a hot-air apparatus, a casing having an open bottom, a heating-chamber therein,

an electric heater in said chamber, a baffle-plate above said heater, openings intermediate the sides of said baffle-plate and said casing for the ascent of hot air, and an adjustable perforated slide below said heater, the latter being removably mounted on supports located within said chamber.

2. In a hot-air apparatus, a casing, an electric heater in the lower portion thereof, supporting devices oppositely located within said heater, rods sustained by said supporting devices, a hammock suspended by said rods, a baffle-plate intermediate said heater and hammock, and a perforated slide located below said heater.

3. In a hot-air apparatus, a casing, a door at one end thereof, a hood at the other end thereof, suspension devices for enabling said casing to be hung at different levels, a heating-chamber, a heater therein, a baffle above said heating-chamber, a support for the limb or member to be treated, and a perforated adjustable slide below said heater.

4. In a hot-air apparatus, a casing, an electric heater suitably sustained in the lower portion thereof, a support for the member to be treated, a perforated slide below said heater, and adjustable suspension devices for said casing.

5. In a hot-air apparatus, a casing, a hot-air chamber in the lower portion thereof, an electric heater, longitudinally-extending devices for supporting the wires of said heater, supports for said devices, means for securing said parts in assembled position, a baffle-plate above said heater and a perforated slide below said heater.

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