No. 791,232. PATENTED MAY 30, 1905.

C. WOLPERS & T. F. BARRETT.

APPARATUS FOR TREATING RHEUMATIC OR OTHER DISEASES.

APPLICATION FILED OCT. 6, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

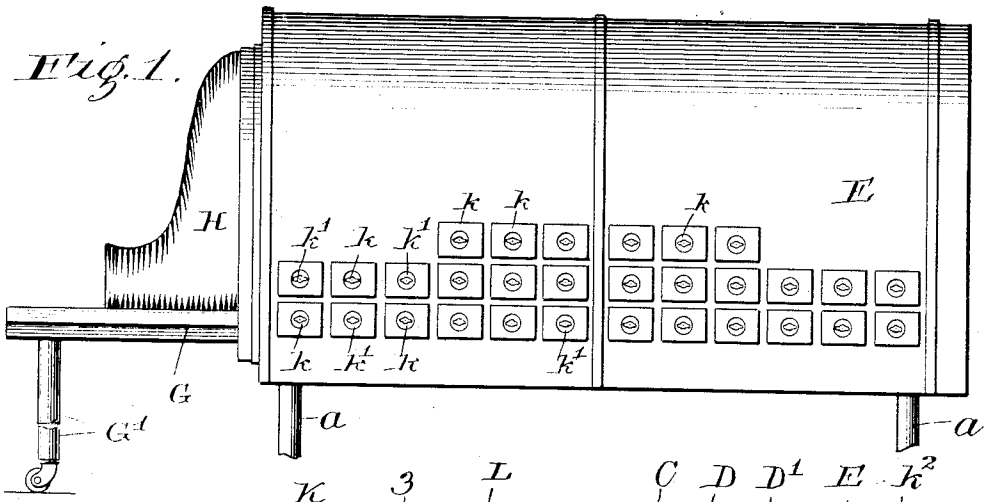


Fig. 2.

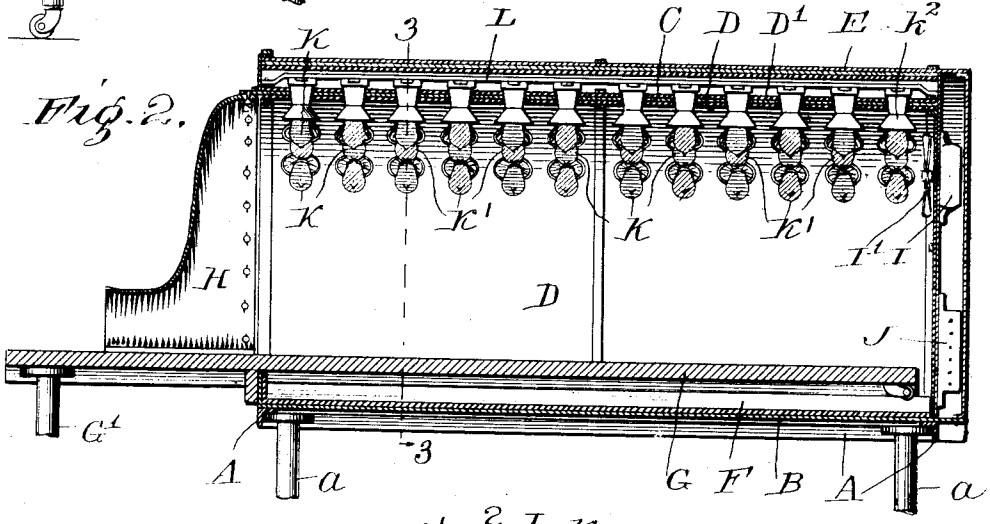
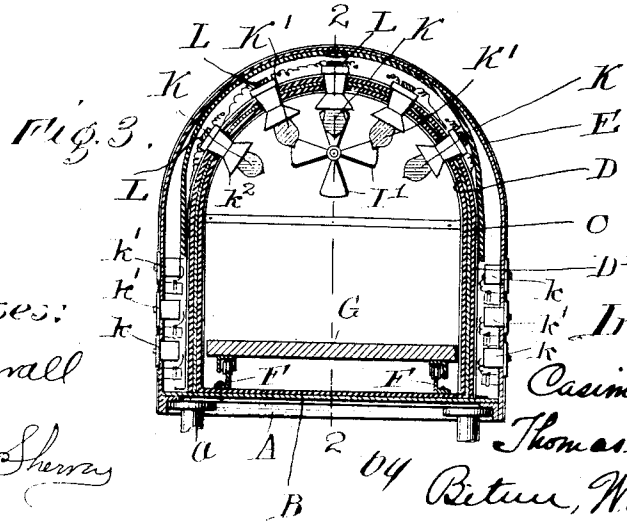


Fig. 3.



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Inventors:

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2 SHEETS—SHEET 2.

Fig. 4.

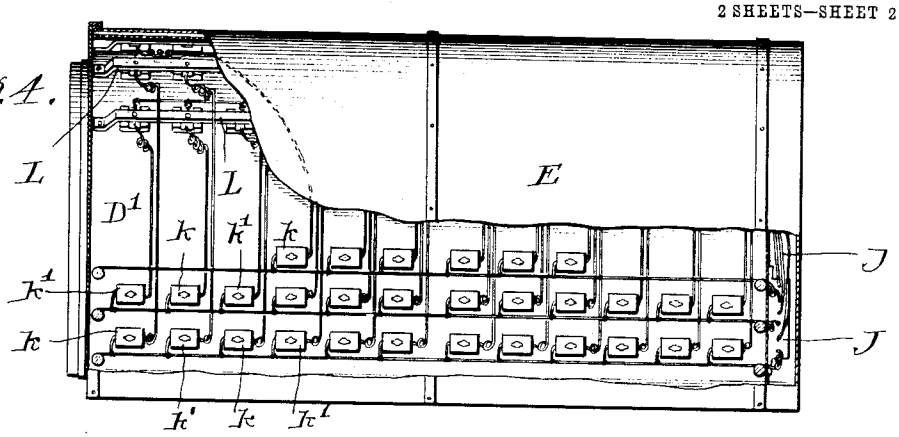


Fig. 5.

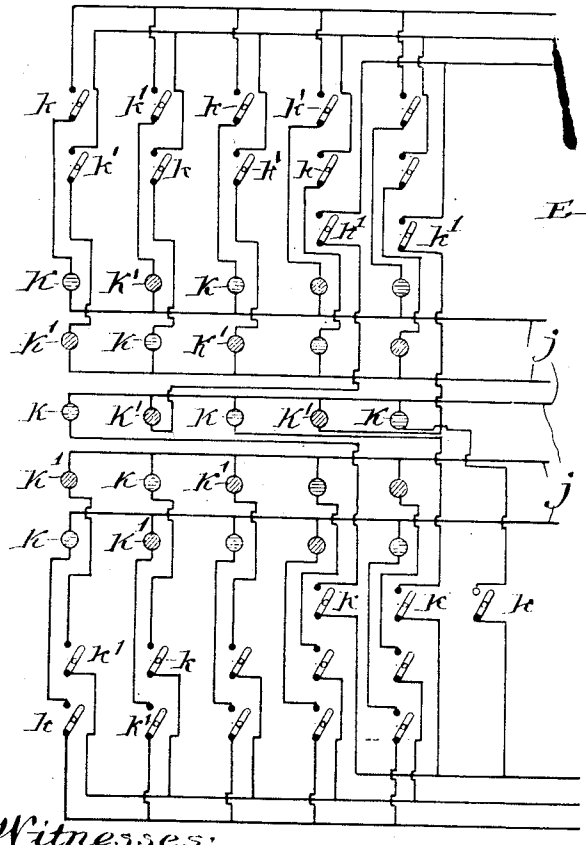


Fig. 6.

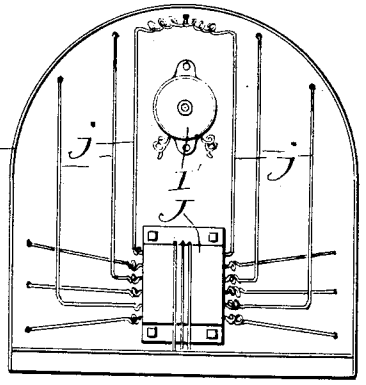
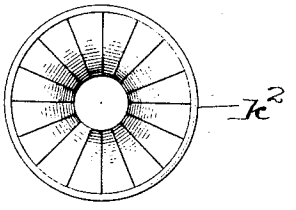


Fig. 7.



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No. 791,232. Patented May 30, 1905.

UNITED STATES PATENT OFFICE.

CASIMIR WOLPERS AND THOMAS F. BARRETT, OF CHICAGO, ILLINOIS

APPARATUS FOR TREATING RHEUMATIC OR OTHER DISEASES.

SPECIFICATION forming part of Letters Patent No. 791,232, dated May 30, 1905.

Application filed October 6, 1904. Serial No. 227,341.

To all whom it may concern:

Be it known that we, CASIMIR WOLPERS and THOMAS F. BARRETT, citizens of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Apparatus for the Treatment of Rheumatic or other Diseases, of which the following is a specification.

Our invention relates to certain improvements in apparatus for the treatment of rheumatic and other diseases; and its object is to produce a device of this class which shall have certain advantages, which will appear more fully and at large in the course of this specification.

To this end our invention consists in certain novel features, which are shown in the accompanying drawings and described herein.

In the aforesaid drawings, Figure 1 is a side elevation of our improved device. Fig. 2 is a longitudinal section in the line 2 2 of Fig. 3. Fig. 3 is a transverse section in the line 3 3 of Fig. 2. Fig. 4 is a side elevation of our device, the outer wall being broken away to show a portion of the interior arrangement. Fig. 5 is a diagram of the wiring system. Fig. 6 is an elevation of the rear end of the device with the outer wall removed, and Fig. 7 is an elevation of one of the reflectors.

Referring to the drawings, A is a rectangular angle-iron frame supported by legs *a*. Upon this frame is a sheet-metal plate B, which forms the base of our device. An arched plate C, of sheet metal, forms the sides and top of an oven, of which the plate B is the bottom. This oven is lined with a sheet of asbestos D, and a second sheet of asbestos D′ lies outside the arched plate C. Outside this second sheet of asbestos D′ and separated therefrom by an air-space is an outer wall E, also of metal, so that the sides and top of the oven are double-walled and provided with an air-space which affords an effective heat-insulating means.

Two angle-irons F are secured to the base of the oven, the said irons forming rails upon which rests the rear end of a table G, the forward end of which is supported by legs G′, running upon suitable rollers. A hood H is provided at the front of the oven, which can be gathered about the neck of the patient to inclose the space within the oven.

The rear of the oven is also double-walled, as illustrated, and between the two walls is a fan-motor I, the shaft of which extends inside the inner wall of the oven and carries a fan I′, adapted to agitate the air within the same. The space at the rear of the oven also contains a cut-out box J, from which wires *j* extend to lamps K K′ in the upper portion of the oven. The lamps are arranged in a number of longitudinally-extending rows and are secured upon bars L, which are supported within the air-space surrounding the oven proper. The wall C is perforated, and the lamps extend through said perforations and into the oven. The conducting-wires are also confined in the air-space and are preferably covered with an asbestos insulation to prevent the insulation from burning off and the wires becoming exposed on account of the great heat which is employed in operating the device. No particular description of the wiring system will be necessary, as the same is fully shown in the drawings and is not claimed as an essential portion of our device. A plurality of switches *k k′* are provided which control the current passing to the lamps K K′. Reflectors *k²*, the construction of which is clearly shown in Fig. 7, surround each of the lamps and direct the light toward the center of the oven. It will be seen from the drawings that the lights K K′ are arranged in longitudinal and transverse rows and that the lights K are blue, while the lights K′ are violet. The lights K and K′ alternate in all the rows, both longitudinal and transverse. In this way a perfect admixture of the two lights can be obtained.

In using our improved device the patient is wrapped up, preferably in heavy cloth, placed on the table, which is pulled out to receive him, and pushed into the oven, the hood being drawn down about his neck. The lights are then turned on for various periods, as may be deemed best, the preferred method of using the device being to subject the patient first to the rays of light from either the blue or violet lamps, then to rays from the lamps of the other color, and subsequently to the mixed

rays from the lamps of both colors. This particular method is not essential, as the patient may be subjected to the influence of various proportions of blue or violet lights, as desired. The structure herein illustrated is particularly advantageous, because it is simple and comparatively inexpensive. The entire structure is designed to prevent as much as possible the loss of heat, and the fan provided gives a maximum heating effect from the power used.

We realize that considerable variation is possible in the details of this construction without departing from the spirit of the invention, and we therefore do not intend to limit ourselves to the specific form herein shown and described.

We claim as new and desire to secure by Letters Patent—

1. In a device of the class described, the combination with an oven, of a plurality of blue and violet incandescent lamps in the same, and means for turning on either sets of colored lamps independently of the others.

2. In a device of the class described, the combination with an oven, of a plurality of blue and violet incandescent lamps within the same and switches for turning on any desired number of either blue or violet lamps independently of the others.

3. In a device of the class described, the combination with an oven, of a plurality of blue and violet incandescent lamps within the same and switches for each lamp whereby any number of either the blue or violet lamps may be turned on independently of the others.

4. In a device of the class described, the combination with an angle-iron frame and a base-plate secured thereto, of an inner arch of metal, a non-conducting lining covering said base-plate and an inner arch, an outer arch inclosing an air-space outside said inner arch, a layer of insulating material between said arches, a plurality of incandescent lamps within the inner arch, a double rear wall inclosing an air-space, a fan-motor within said air-space, a fan within the rear wall, and means for closing the forward end of the oven.

5. In a device of the class described, the combination with an oven, an outer wall inclosing the fan and forming an air-chamber around the oven, supporting-bars secured in said air-space, lamps secured on said supporting-bars and extending through perforations in the wall of the oven and into the chamber thereof, and suitable switches for controlling said lamps.

In witness whereof we have signed the above application for Letters Patent, at Chicago, in the county of Cook and State of Illinois, this 28th day of September, A. D. 1904.

CASIMIR WOLPERS.
THOMAS F. BARRETT.

Witnesses:
CHAS. O. SHERVEY,
RUSSELL WILES.