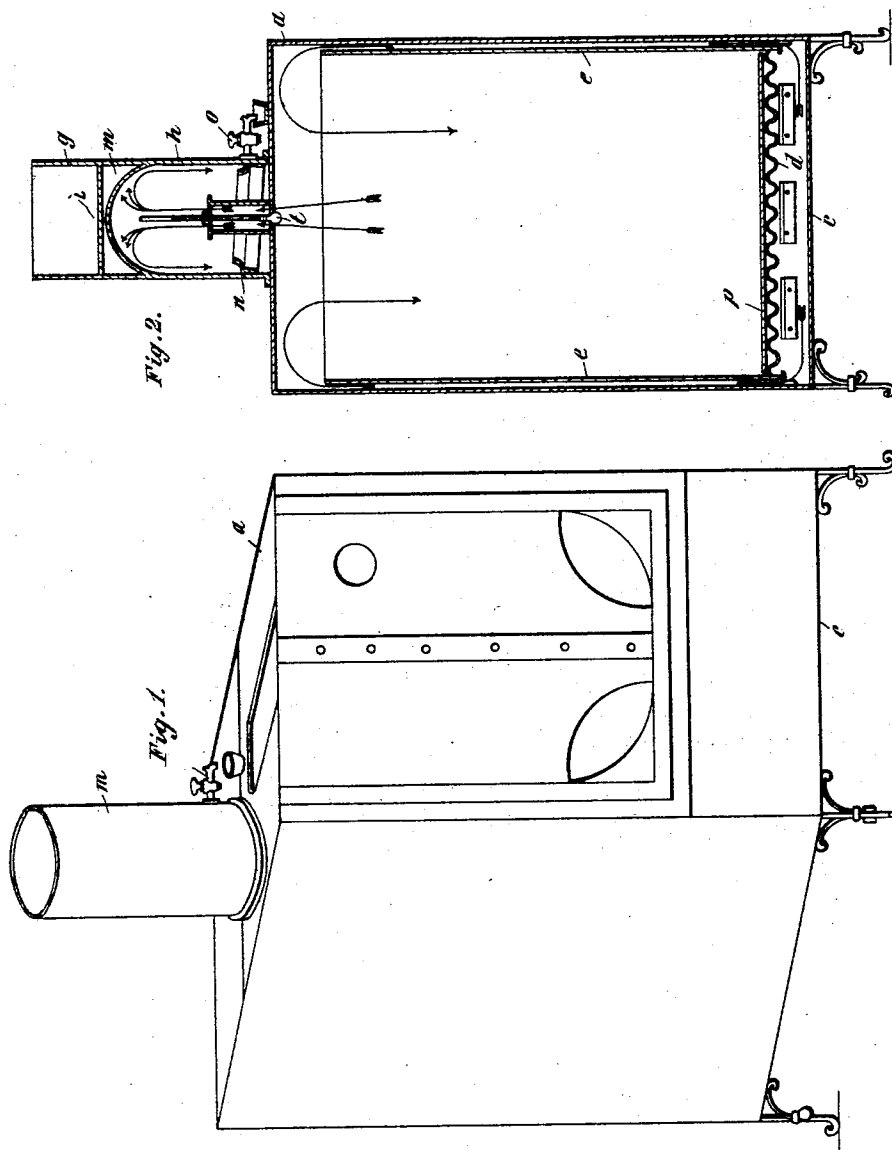


(No Model.)

K. L. SANDROWSKI.
DEPURATOR.

No. 588,092.

Patented Aug. 10, 1897.



Witnesses.
J. D. Kingsbury.
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UNITED STATES PATENT OFFICE.

KARL LUDWIG SANDROWSKI, OF BERLIN, GERMANY.

DEPURATOR.

SPECIFICATION forming part of Letters Patent No. 588,092, dated August 10, 1897.

Application filed June 22, 1894. Serial No. 515,420. (No model.) Patented in Germany May 31, 1894, No. 81,179; in Switzerland June 2, 1894, No. 8,719, and in England June 7, 1894, No. 11,054.

To all whom it may concern:

Be it known that I, KARL LUDWIG SANDROWSKI, of 114 II Friedrichstrasse, Berlin, in the Kingdom of Prussia and German Empire, have invented a new and useful Improved Hygienic Air-Drying Apparatus, (for which I have obtained Letters Patent in Great Britain, No. 11,054, dated June 7, 1894; in Germany, No. 81,179, dated May 31, 1894, and in Switzerland, No. 8,719, dated June 2, 1894,) of which the following is a specification, reference being had therein to the accompanying drawings.

The conditions of life of the human body are based on the collective effects of the chemical reactions occurring therein, and which are called tissue changes. These are the important factors which are conducive to health and to the well-being of the body. All the substances introduced into the body and serving to feed and support the same are assimilated or separated by reason of the said tissue changes. Thus water and carbonic acid are chiefly given off through the perspiration of the lungs and skin. To accelerate these separations during the growth of diseases, it is necessary to allow a high temperature and a dry heat to act upon the body, in order that by great perspiration so caused injurious substances can be removed. This exudation gives, from a physiological as well as from a chemical point of view, the most necessary and important materials for the future diagnosis and treatment of the case.

My invention has for its object to overcome the defects arising from one part of the body under treatment being subjected to a more intense heat than the rest, and thereby rendering the necessary temperature unbearable to the patient and preventing a cure.

The apparatus constituting my invention is constructed in accordance with the physical laws governing the distribution of heat, and it is designed to uniformly heat to the required temperature the whole of that part of the body of the patient which is to be acted upon.

On the accompanying drawings, which illustrate the invention, Figure 1 is a perspective view, and Fig. 2 a vertical section, of the apparatus.

The apparatus consists of a metal casing or box *a*, which is inclosed in a wooden shell or covering in order to diminish radiation of heat and to give a pleasant appearance. The box, which may be of any desired and suitable shape, has at its under side a metallic bottom *c*, above which is arranged a corrugated sheet-metal bottom *d*. The space between these two bottoms *c d* is used as a heat-generating chamber. The heated air from the generating-chamber passes up between the outer walls of the box and the inner parallel walls *e* and enters at the top of the large upper chamber *f*.

Upon the corrugated metal sheet *d* is laid an insulating-plate *p*, made of asbestos, the object of which is to retard the outflow of the hot air and to prevent its direct action on certain parts of the body.

In order that the temperature of the chamber may be readily ascertained, a thermometer *t* is fitted in its upper part.

When this dry-air apparatus is required for physiological purposes, a glass cylinder *m* is fitted to the lid of the casing. This cylinder is divided into two parts *g h* by a horizontal partition *i*. As shown, the lower part *h* is provided with a flange *n*, which extends around its inner circumference and forms a gutter. The contents of the gutter can at any time be drawn off by the stop-cock *o*.

In working with the apparatus that part of the body requiring to be acted upon is inclosed within it, and the bottom *c* is then heated by means of a spirit-lamp or gas-burner. The heat generated is communicated to the air in the space between the bottoms *c d*, and as a result it ascends between the inner and outer walls of the casing and enters at the top of the inner chamber. (See arrows.) The hot air evaporates the diseased substance or germs exuding from the body in the form of perspiration, and this vapor as it ascends in the glass cylinder *m* is cooled and deposited on its surface. This deposit collects in the gutter *n* and can be drawn off through the cock *o* in order to be subjected to further tests or experiments.

In the practical use of my invention the apparatus may be so constructed as to contain the entire body or parts of the same, as de-

sired. When it is desired to act upon the extremities, as the arms and legs, they will be inclosed, preferably, in small casings particularly constructed to inclose only the parts desired. The apparatus shown in the drawings is designed for the treatment of the whole body or the trunk of the same, in which latter case the head and legs (and arms, if desired) will be allowed to project through suitable openings provided in the casing.

What I claim, and desire to secure by Letters Patent of the United States, is—

In an apparatus of the class described the combination with the inclosing casing having an inner and an outer wall forming an air-space between them and provided with a cor-

rugated bottom, a removable bottom of non-heat-conducting material upon said corrugated bottom, a heating-chamber below said bottoms communicating with the air-space said air-space communicating with the interior of the casing at a point removed from said heating-chamber, and a condenser communicating with said casing having a liquid-retaining portion, a draw-off cock for said liquid-retaining portion, substantially as described.

Berlin, the 28th day of May, 1894.

KARL LUDWIG SANDROWSKI.

Witnesses:

PAUL FISCHER,

HANS BAUERLEIN.