No. 630,565.

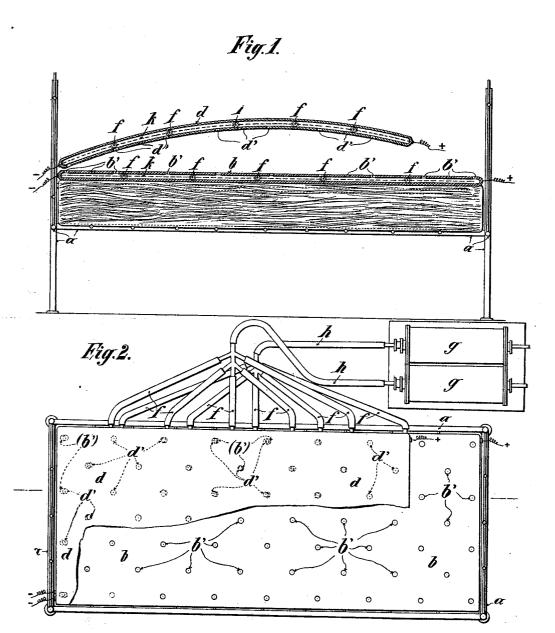
## S. SAFRAN.

Patented Aug. 8, 1899.

## APPARATUS FOR PRODUCING AND REMOVING TRANSPIRATION.

(Application filed Mar. 21, 1898.)

(Na Model.)



Witnesses: Mariney Marinean

Inventor Salle Safran, Y L.A. Osöhm Lis Attorny

## UNITED STATES PATENT OFFICE.

SALLE SAFRAN, OF LONDON, ENGLAND.

## APPARATUS FOR PRODUCING AND REMOVING TRANSPIRATION.

SPECIFICATION forming part of Letters Patent No. 630,565, dated August 8, 1899.

Application filed March 21, 1898. Serial No. 674,715. (No model.)

To all whom it may concern:

Be it known that I, SALLE SAFRAN, Ph. D., a subject of the Queen of England, and a resident of London, England, have invented cer-5 tain new and useful Improvements in Apparatus for Producing and Removing Transpiration, of which the following is a specification.

This invention relates to an improved apparatus for producing and removing tran-10 spiration, intended for treatment of rheumatism and other complaints, whereby the pores of the skin are opened and by transpiration the system is relieved from impurities.

The apparatus consists, essentially, of a 15 bed or couch, two hollow quilts, an electric heating device, an air-pump, and suitable connections between the pump and the quilts.

The apparatus is illustrated in the accompanying drawings, in which-

Figure 1 is a vertical section; and Fig. 2 is

a plan view, partly broken away.

The bed or couch a is usually made of metal. The leather quilts (of which b is the lower one, on which the patient rests, and d the 25 upper one, serving as a cover) are provided with a suitable number of openings b'd', permitting the air to enter the space between the quilts. A suitable number of tubes f are provided, serving to make connection between 30 the covers and the air-pump g. In the drawings five such tubes are shown for each leather quilt. Each set of five tubes is connected to a common tube h, connected to an air-pump g.

Each leather quilt is provided with an elec-35 tric heating device k, made, preferably, of wire-gauze, which may be connected to any suitable source of electricity. By this electric heating device the air within the quilts is heated to any desired degree, according to 40 the complaint and the constitution of the patient.

The operation of the apparatus is very simple. The patient to be treated rests between the quilts  $\bar{b}$  and d. Air is forced into the 45 quilts by the pump g and is heated by the electric heating devices k. The heated air enters the space wherein the patient rests

through the openings b' d', causing a profuse transpiration, and thus the air surrounding the patient is quickly saturated with mois- 50 ture. Now the air-pump used for pressing air into the quilts is reversed and is used for drawing off the air, and both operations are repeated, so that the air around the patient is continuously renewed, introducing hot dry 55 air and drawing off the moist air. By this artificially-produced profuse transpiration all the pores of the skin are opened and the impurities in the system causing sickness are expelled. The apparatus is therefore spe- 60 cially well adapted for treatment of rheumatism, skin complaints, and other sicknesses in the treatment of which a profuse transpiration has a curing or relieving effect.

Having thus described my invention, what 65 I claim therein as new, and desire to secure

by Letters Patent, is-

1. An apparatus for producing and removing transpiration consisting of a bedstead and a device composed of two independent parts 70 each constituting a hollow leather quilt one serving as a base to rest on and the other as a cover and each being provided inside with an electric heating device, a number of pipe connections for introducing and removing air, 75 and a number of openings communicating with the space between the quilts, substantially as described.

2. In an apparatus for producing and removing transpiration a device composed of 80 two independent parts each constituting a hollow leather quilt provided inside with an electric heating device of wire-gauze, a number of pipe connections for introducing and removing air, and a number of openings com- 85 municating with the space between the quilts,

as specified.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

SALLE SAFRAN.

Witnesses:

WILH. C. BERGEY, OTTO PÜLSER.