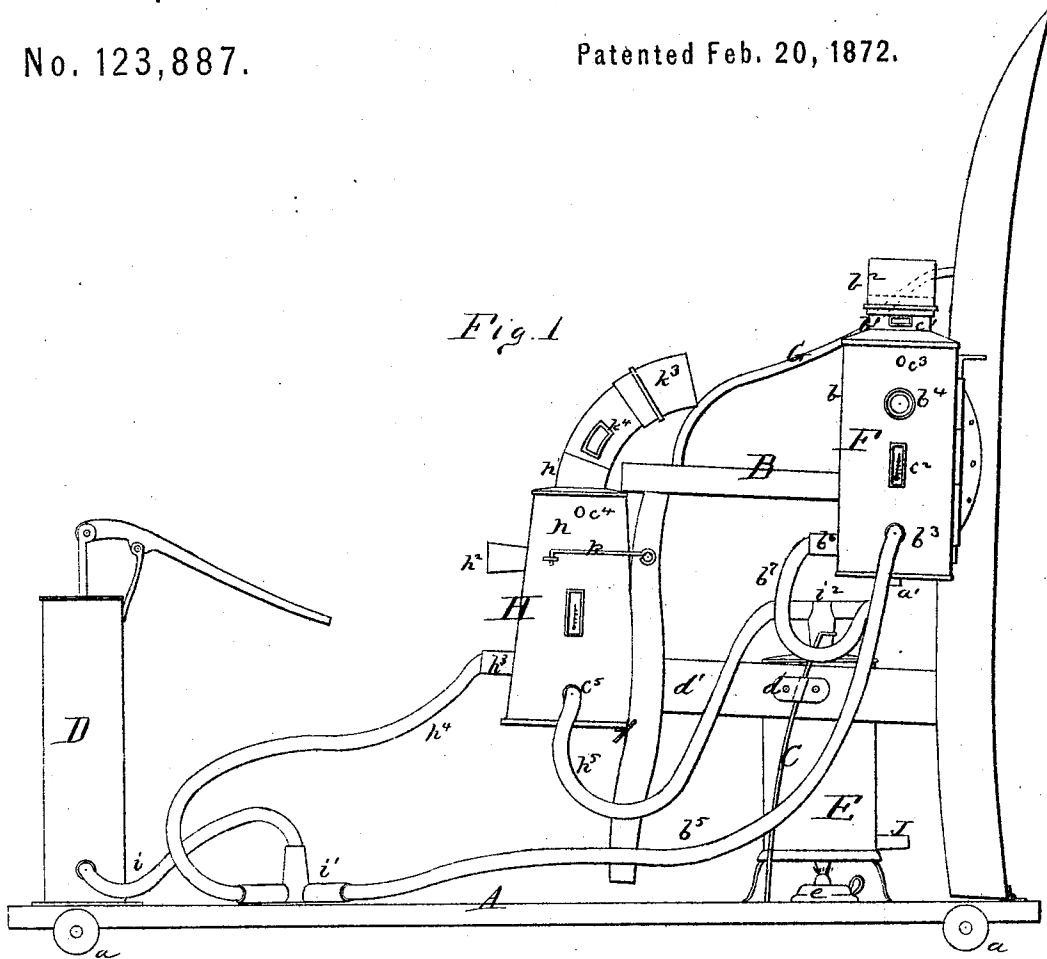


R. S. GEE.

Improvement in Apparatus for Treating Diseases in Vacuo.

No. 123,887.

Patented Feb. 20, 1872.



Witnesses
S. C. Upham.
E. A. Bates

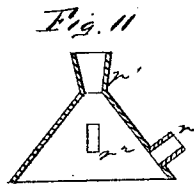
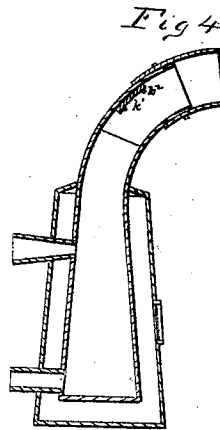
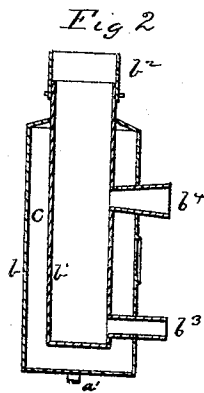
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UNITED STATES PATENT OFFICE.

RODMAN STODDARD GEE, OF DELAVAN, WISCONSIN.

IMPROVEMENT IN APPARATUS FOR TREATING DISEASES IN VACUO.

Specification forming part of Letters Patent No. 123,887, dated February 20, 1872.

To all whom it may concern:

Be it known that R. STODDARD GEE, of Delavan, in the county of Walworth and State of Wisconsin, has invented a new and valuable Improvement in Equalizers; and he does hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon, in which—

Figure 1 of the drawing is a representation of a side elevation of my improved equalizer complete. Figs. 2, 4, 11 represent, respectively, sectional views of double-cased arm-receiver, single-case arm-receiver, double-case leg-receiver, single-case leg-receiver, breast-cupping apparatus, head-cupping apparatus, penis-cupping apparatus, combined vulvacup and uterine instrument, cupping apparatus for general use, and spinal cupping apparatus.

This invention has relation to the treatment of diseases *in vacuo*; and it consists in the construction and arrangement, as hereinafter described, of certain improved apparatus adapted for use in the topical treatment of the particular diseased parts or members.

Referring to the accompanying drawing, A represents a movable platform supported on casters *a*. B represents the patient's chair, having its hind legs hinged to the platform, so as to keep it attached thereto while allowing it to tilt back for the comfort and convenience of the patient. C designates curved braces, secured to the platform at the sides of the chair and passing through staples *d* attached to the rounds *d'*. D represents an air-pump conveniently located on the platform A. E is an air-heater, placed underneath the chair and heated by means of a spirit-lamp, *e*. F designates arm-receivers hinged to the side of the chair at the back. Said receivers are cylindrical in form, and consist of two concentric casings, *b b'*, separated by a surrounding air-chamber, *c*. The inner casing extends above the top of the outer, and is provided at its upper end with an elastic band, *b²*. The interior of the casing *b'* receives the arm of the patient, and, being designed to be air-tight, is rendered so by means of the band *b²*, which adapts itself to any sized arm. *b³ b⁴* represent two tubes

leading from the outside into the interior of the casing *b²*. To the former is coupled an exhaust-tube, *b⁵*, connected with the air-pump. The other is of a funnel shape, and is designed for the insertion of a syringe-tube. When not in use, it is closed by an air-tight cap. *b⁶* represents a pipe leading into the air-chamber *c*. To said tube is coupled a flexible tube, *b⁷*, leading to the air-chamber E. *c¹* represents a glass-covered opening, through which the operator may observe the effect of the treatment on the patient's arm. *c²* is a thermometer for testing the heat within the receiver. The receivers F are so arranged that the patient may keep his arms therein while supporting them, at the shoulders, upon the arm-rests G. *c³* represents openings in the outer casings of the arm-receivers, for the passage from the air-chambers of the heated air. H represents leg-receivers, hinged to the front of the chair in the most convenient position for the patient. Like the arm-receivers, the leg-receivers consist of two casings, which are designated *h h'*. The inner casing *h'* is extended above the top of the outer, and is thence made with a knee-bend, to adapt it to the shape of the leg. This knee-bend may be constructed with one or more movable joints, which are to be made air-tight by means of India-rubber bands. The leg-receivers should be of a tapering form, being enlarged at their lower ends to give room for the feet. Tubes *h² h³* lead from the outside into the interior of the inner casing *h'*. The former is funnel-shaped, to receive the syringes. The other connects with the air-pump by means of flexible tubing *h⁴*. *c⁴* indicates the opening for the escape of the hot air. *c⁵* shows a tube leading into the air-chamber and, by means of flexible tubing *h⁵*, connecting it to the air-chamber E. The air-pump has a tube, *i*, leading to a manifold, *i¹*, from which the exhaust-tubes lead to the different receivers. A manifold, *i²*, is also attached to the air-chamber E, and from it the hot-air tubes lead to the air-chamber of the receivers. J is a tube to admit air to the chamber E. The leg-receivers are held in an upright position by means of hooks and staples *k*. When the apparatus is to be used the leg-receivers are unhooked and tilted forward, allowing the limbs to be readily inserted. India-rubber bands *k³* surround the upper parts of the casings *h'*, so as to adapt them to vari-

ous sized limbs. k^1 represents limb-guards placed within the knee-bends of the leg-receivers and there held by staples k^2 . Their object is to prevent the limbs from being burned. k^4 indicates glass-covered openings, through which the effect of the operation may be observed.

The operation of this apparatus is as follows: The patient being seated and everything in readiness, the hot air is admitted to the limb-receivers from the chamber E. After the proper temperature is obtained, as indicated by the thermometer, the air-pump is put in motion, and the air drawn from around the limbs. The effect of this operation is seen through the glass-covered openings, which are very essential, in order to prevent the application of too much force to the limbs. While the vacuum is being created the syringe-tube to each receiver is necessarily closed. It may be afterward opened and the syringe inserted, in order to allow of the topical application of medicaments while the limb is *in vacuo*, and thus in a condition to receive the greatest benefit from them. After the insertion of the syringe, the air should be again exhausted.

The limb-receivers may be used all together or else separately and apart from the chair.

Thermometers should be used with all the double-cased instruments.

The India-rubber bands surrounding the tops and joints of the limb-receivers, &c., may be securely fastened by a clamping-ring.

The manifolds used with the air-pump and

heater E may be dispensed with, and a tube having a number of outlets substituted, the same being connected directly to the air-pump.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The hinged chair B supporting the limb-receivers of an apparatus for the topical treatment of diseases in vacuum, said receivers being arranged as specified, and employed in combination with the air-pump D and heater E, or its equivalent, as and for the purpose set forth.

2. The limb-receivers H F hinged to the chair B and adapted for combined or separate use, substantially as specified.

3. A vacuum apparatus for the treatment of diseases, constructed with a double casing inclosing a heat-space, for the passage and circulation of heated air or steam, said space being distinct from the vacuum-chamber, substantially as described.

5. A vacuum apparatus for the purpose specified, provided with an opening for the insertion of a syringe, in addition to openings for the admission of hot air or steam, and the use of an exhauster, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

RODMAN STODDARD GEE.

Witnesses:

SILAS W. MENZIE,
D. W. STEVENS.