

(No Model.)

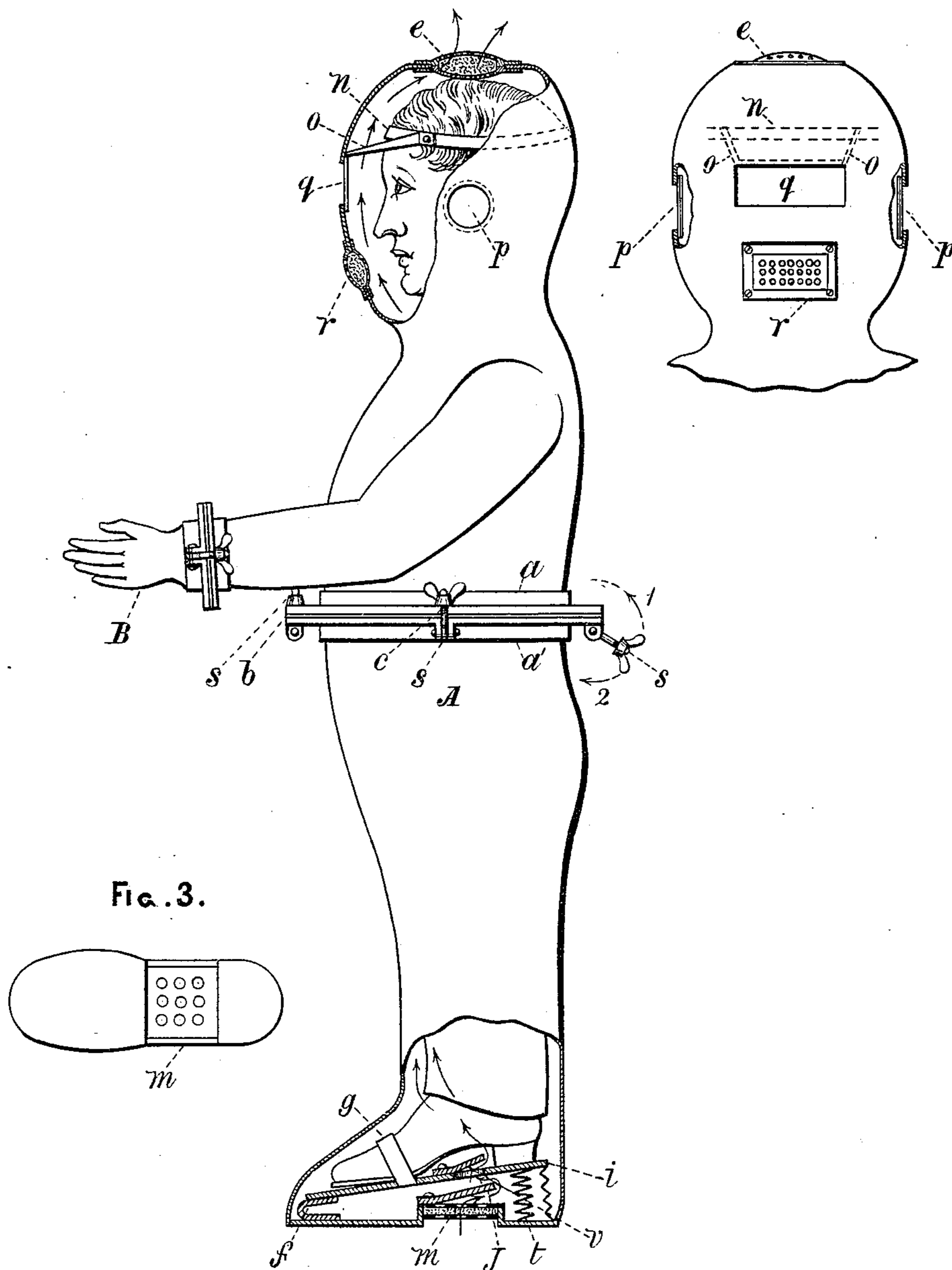
J. L. ROLLINS.
ASEPTIC SUIT.

No. 405,850.

Patented June 25, 1889.

FIG. 1.

FIG. 2.



Witnesses

A. W. Newton.
F. Lewis.

Inventor

Jarrot L. Rollins.

By his Attorney F. S. Davenport.

UNITED STATES PATENT OFFICE.

JARROT L. ROLLINS, OF GREENFIELD, ILLINOIS.

ASEPTIC SUIT.

SPECIFICATION forming part of Letters Patent No. 405,850, dated June 25, 1889.

Application filed January 28, 1889. Serial No. 297,784. (No model.)

To all whom it may concern:

Be it known that I, JARROT L. ROLLINS, of Greenfield, in the county of Greene and State of Illinois, have invented a new and Improved Aseptic Suit; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of an aseptic suit or dress, my object being to provide means for protecting physicians and others against contagion while attending persons afflicted with contagious diseases.

My device consists, essentially, of a suit or dress adapted to be readily adjusted over the ordinary clothing, so as to entirely cover the wearer, said dress being made almost entirely of material impervious to atmospheric air, such parts as do admit the passage of atmospheric air consisting of germ-proof material, as hereinafter fully explained.

A further object of my device is to provide said dress with mechanism adapted to be actuated by the wearer for supplying an ample quantity of filtered air for respiration; and a still further object of my device is to provide said dress with the necessary facility for using the stethoscope, and also with removable gloves or coverings for the hands, in addition to a suitable glass-protected opening in the front part of the head-covering, so that while protecting the wearer against contagion he may have the use of his eyes, ears, and hands.

With these ends in view my invention consists in certain details of construction and combinations of parts, fully explained in the following specification, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the suit or dress, showing the foot and face parts in section. Fig. 2 is a front elevation of the head part of the dress, and Fig. 3 is a plan view of the under side of the foot part of the dress.

Referring to the drawings, A represents the dress, which is preferably made of light rubber and in two parts joined together at the waist by flanges *a a'*, one of which is secured to the upper part of the dress and the other to the lower part thereof, said flanges being

secured to the dress by cement or otherwise and clamped together, preferably by swing-bolts S, pivotally secured to the under side of the lower flange *a'*, and provided with thumb-nuts, as shown, said bolts being adapted to swing upon their pivots, as indicated by the arrows 1 and 2, into slots provided for their reception in both flanges, as shown at *c*, Fig. 1, thus affording a ready means for clamping together or separating the two parts of the dress. A flat rubber or other elastic band *b* is interposed between the two flanges for the purpose of making an air-tight or germ-proof joint.

Each hand of the wearer of the dress is protected by a removable covering or glove B, secured to the sleeve of the dress by means analogous to that employed for securing together the two parts of the dress at the waist.

In the crown of the head-piece is secured a disk *e*, consisting of two perforated metallic plates made slightly concave toward each other, for the purpose of securing in position between them a wadding of cotton or other germ-proof material, a similar disk being secured opposite the mouth in the face part of the head-piece, as shown at *r* in Figs. 1 and 2.

Near the ear is a circular opening *p*, over which is cemented or otherwise secured a very thin disk of rubber backed, for the purpose of giving it the requisite strength, with a piece of woven silk or other equivalent material. This thin but air-tight disk, one of which is located on each side of the head-piece, as shown in Fig. 2, is to afford the required facility for using the stethoscope, which is done by simply pressing the latter against the disk and the disk against the ear.

For the purpose of admitting light to the interior of the head-piece, the upper front part thereof is provided with a glass-covered opening *q*, (shown in Figs. 1 and 2,) said glass cover being supported at the required distance from the face by a light metallic frame *o*, secured to a brow-band *n*, which fits the upper part of the head like a hat, of which the crown is the germ-proof disk *e*. (See Fig. 1.)

It will be observed that the part of the dress or suit below the waist is formed like a

pair of pants and boots combined—that is to say, all in one piece. In each foot part is a bellows, of which the upper movable board *i* is adapted to receive the foot of the operator, which is secured thereto by an instep-strap *g*. Said board *i* is hinged at *f* to the toe part of the dress, the rear part being free to vibrate upon said hinge in a vertical plane, the heel part resting upon the upper end of a spiral spring *t*, of which the lower end rests upon the internal heel part of the foot of the dress, a little in advance of which is a germ-proof disk *m*, similar to that in the crown of the head-piece and secured in the hollow of the foot part of the dress, as shown in Figs. 1 and 3. On the upper side of the germ-proof disk *m* is an inlet check-valve *J*, as shown in Fig. 1, and there is also a similar but smaller valve *v* on the upper side of the movable board *i*, just beneath the hollow of the foot of the operator. Matters being thus, the wearer of the dress can supply himself by an easy treading motion of the feet with an ample quantity of filtered air, drawn in from beneath the feet and forced upward, thus maintaining an upward current of purified air for respiration, as indicated by arrows, and also driving out, through the disks *r* and *e*, the air that becomes vitiated in the head part of the dress. The movable upper bellows-board *i* needs only to be pressed downward, the upward stroke being accomplished by the resilient action of the spring *t*.

It is obvious that numerous alterations in the construction and arrangement of the minor details of my device might be resorted to without departing from the spirit of my invention, and therefore I would have it understood that I do not limit myself to the exact construction of the parts shown and described, but consider myself at liberty to

make such changes as come within the spirit and scope of my invention.

I am aware that an air-tight suit or dress is not new, and therefore I do not broadly claim such; but

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

1. An aseptic suit or dress consisting, chiefly, of rubber or other air-proof material adapted to entirely cover the wearer and provided with germ-proof inlets and outlets for atmospheric air, all constructed and adapted to operate substantially as and for the purpose set forth.

2. The combination, with an aseptic suit or dress consisting, chiefly, of air-proof material adapted to entirely cover the wearer and provided with germ-proof inlets and outlets for atmospheric air, of bellows adapted to be actuated by the feet of the wearer for the purpose of supplying the interior of the dress or suit with a current of filtered air drawn through the germ-proof inlet in the foot part thereof, and to expel it as it becomes vitiated through the germ-proof disks in the crown and in front of the head part of the dress, all constructed and adapted to operate substantially as and for the purpose set forth.

3. The combination, with an aseptic suit or dress adapted to entirely cover the wearer, of germ-proof disks located in close proximity to the ears and adapted to admit the use of the stethoscope, said disks being constructed substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of January, 1889.

JARROT L. ROLLINS.

Witnesses:

A. D. ROLLINS,
J. HOWARD GRAY.