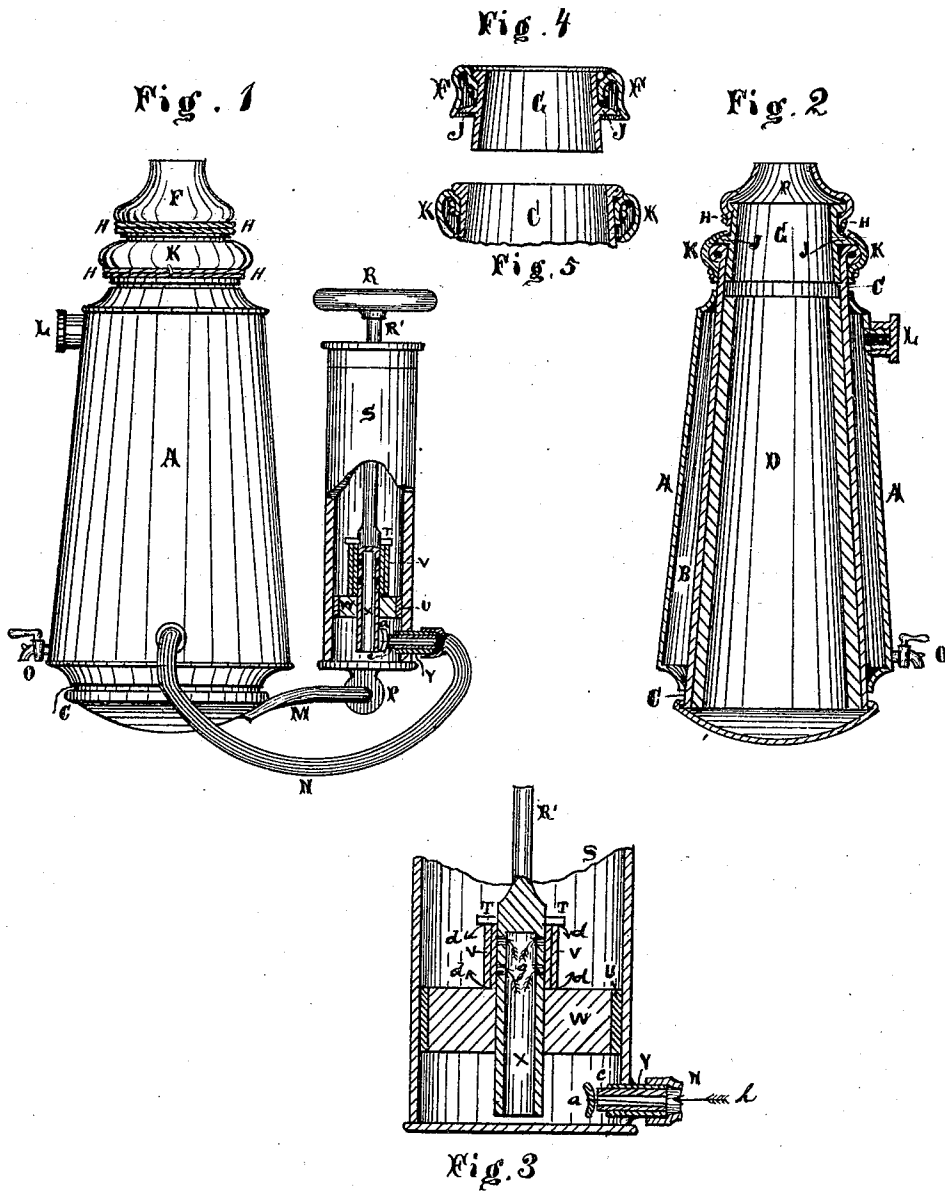


H. R. ALLEN.
LIMB-RECEIVER.

No. 170,217.

Patented Nov. 23, 1875.



Witnesses;
John W. Allen
John Haines

Inventor.
H. R. Allen
Per
C. H. Allen Atty

UNITED STATES PATENT OFFICE.

HORACE R. ALLEN, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN LIMB-RECEIVERS.

Specification forming part of Letters Patent No. **170,217**, dated November 23, 1875; application filed February 24, 1875.

To all whom it may concern:

Be it known that I, HORACE R. ALLEN, of Indianapolis, county of Marion, State of Indiana, have invented a new and useful Improvement in Limb-Receivers, for the treatment of diseased limbs by vacuum, of which the following is a specification, reference being had to the accompanying drawings.

My invention consists, first, of a jacket constructed and attached to a vacuum-receiver, in such a manner as to form an annular heating-space all around the receiver, except at the bottom, which projects below the jacket far enough to allow of repairs to the bottom of the vacuum-receiver; second, in the construction and arrangement of an adjustable extension section, to be used in connection with the receiver at its upper end, to form an extension to the vacuum-chamber, or an adjustable part to be secured on the limb before the main receiver is attached, the metallic joint between the two sections being made air-tight by means of a rubber band.

Figure 1 represents a view of the receiver complete, showing an air-pump attached. Fig. 2 is a sectional view of the receiver, annular heating-space, and jacket. Fig. 3 is an enlarged section of the pump. Fig. 4 is a sectional view of the upper section of the receiver, with the rubber band turned back for the purpose of allowing the section to be adjusted on the limb.

A represents the jacket, which surrounds the outside of the vacuum-chamber C, thus leaving the annular heating-space B between them, and allowing the bottom end of the receiver to project below the jacket sufficiently far as to allow repairs in case of leakage, which frequently occurs at this point by corrosion of the metal. The jacket A is provided with an opening, L, through which is introduced steam or hot water, for the purpose of warming the limbs that are inclosed in the vacuum-chamber C. The jacket A is also provided with a waste-cock, O, for the purpose of removing the water in the annular space B when required. The upper end of the receiver C is provided with a flange, around which is secured a rubber band, K, by means of the

cord H. The upper section or adjustable extension part G is made of any length desired, and is provided with a flange, J, which encircles the section, and rests upon the top flange of the receiver C when connected therewith, and the joint between the two sections is made air-tight by means of the rubber band K being turned up over the flange J. The section G is also provided with another flange at its upper end to hold the rubber band F, which is secured by the cord H', and operates to form an air-tight joint between the upper section G and the limb in treatment in the ordinary manner.

The section G is used either as an adjustable section to be placed on the limb before the receiver C is connected therewith, or as an extension to the receiver C, and can be made of any desired length and form, the object being to save the expense of having so many different sizes of receivers as would otherwise have to be made, and to economize time in adjusting the receivers on the limbs, which, in cases of deformity, would be of the utmost value, and some cases of deformed limbs could not be treated without the aid of the section G in some form.

What I claim as new, and wish to secure by Letters Patent, is—

1. The jacket A, surrounding the vacuum-chamber C, and united therewith at the top and bottom, leaving the bottom of the receiver to project below, as and for the purpose set forth and described.

2. The adjustable section G, provided with a flange, J, constructed and arranged to be used in connection with a receiver or vacuum-chamber, C, for the purpose of extension or adjustment, and made air-tight at the joint between the two sections C and G by the rubber band F, substantially as set forth and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HORACE R. ALLEN.

Witnesses:

SIMON P. STAHL,
JOHN W. COONS.