No. 635,801. Patented Oct. 31, 1899.

T. N. McLEAN.

OBTURATOR.

(Application filed July 18, 1898.)

(No Model.)

Fig. 1

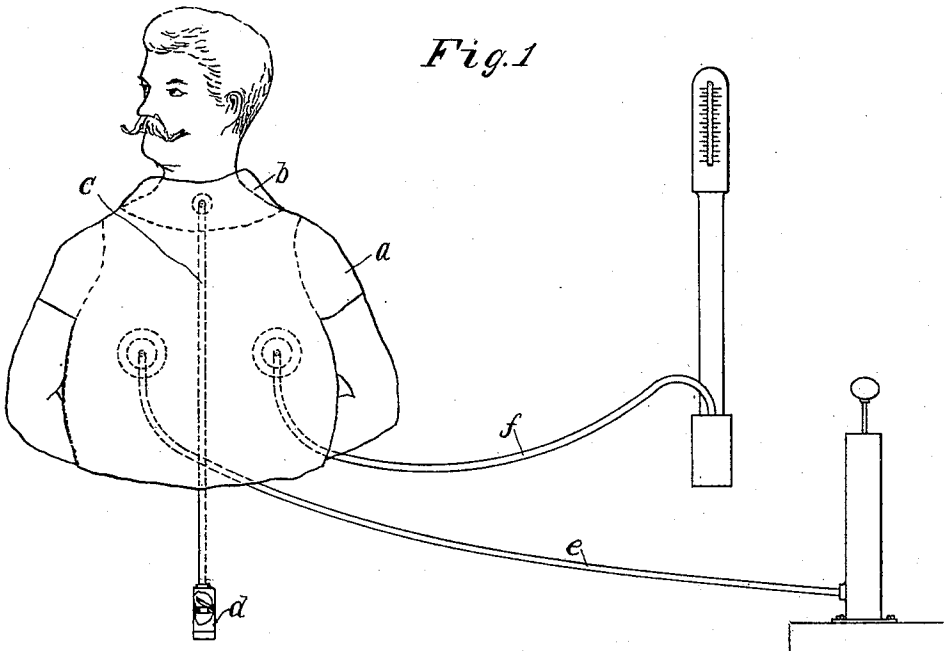
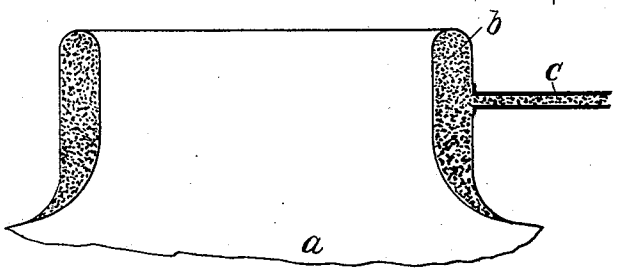


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS N. McLEAN, OF ELIZABETH, NEW JERSEY.

OBTURATOR.

SPECIFICATION forming part of Letters Patent No. 635,801, dated October 31, 1899.

Application filed July 18, 1898. Serial No. 686,240. (No model.)

To all whom it may concern:

Be it known that I, THOMAS N. McLEAN, a citizen of the United States of America, residing in the city of Elizabeth, county of Union, and State of New Jersey, have invented a certain new and useful Improvement in Obturators, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a front view of the upper portion of a human body bearing said improvement. Fig. 2 is a view, on an enlarged scale, showing a cross-section of the elastic inflatable endless tube, hereinafter described, with a central longitudinal section of a portion of the pipe by which the same may be inflated.

The object of the improvement is to provide an improved means for securing an air-tight connection between the human body and an air-tight garment for the treatment of disease inclosing a portion of that body. Such a device is shown in my Patent No. 594,961, dated December 7, 1897. Speaking in general terms, that patent shows an elastic garment or cover for the trunk of the human body supported upon a suitable frame and provided with means for effecting a vacuum of such degree as may be desired within said garment or cover. The object of the present invention is to provide improved means for effecting an air-tight connection of such a garment or cover with the body at the neck, the arms, or the like. So far as the human neck is concerned the problem of effecting this air-tight connection between the body and the garment has been a difficult one, because of the irregularity of the surface of necks, in some cases the emaciation of disease forming what might be termed "channels" or "ridges" therein.

In the accompanying drawings the letter *a* denotes an elastic garment for the chest and abdomen. It is intended to be supported by a framework, as described in said Patent No. 594,961. It is essential to the effecting of the vacuum between the human body and the elastic garment *a* that all its connections to the body should be air-tight, and, as has just been pointed out, this is a difficult problem in some instances, so far as the neck is concerned. I have shown the present improvement as applied to the neck.

The letter *b* denotes an elastic inflatable endless tube attached to the garment *a*, and *c* denotes a small pipe by which the tube *b* may be inflated after it is in place around the neck, which pipe is of sufficient length to reach to the mouth of the patient or an attendant. The letter *d* denotes a mouthpiece having an outwardly-closing valve for retaining the pressure producing the inflation. The letter *e* denotes a tube through which the necessary exhaustion of the air for the creation of the vacuum within the garment *a* can be effected, and *f* denotes another tube connected with a gage for registering the degree of that vacuum.

I claim as my improvement—

In a surgical garment of the character set forth, the combination with the body portion adapted to encircle the human trunk, and means for producing a vacuum therein: of a thin elastic tube attached to said portion and adapted to encircle the neck, a pipe connected with this tube and of a length to reach to the patient's mouth, and a valved mouthpiece on the pipe for permitting the production of air-pressure within said thin tube after it is applied in position, all substantially as described and for the purpose set forth.

THOMAS N. McLEAN.

Witnesses:
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