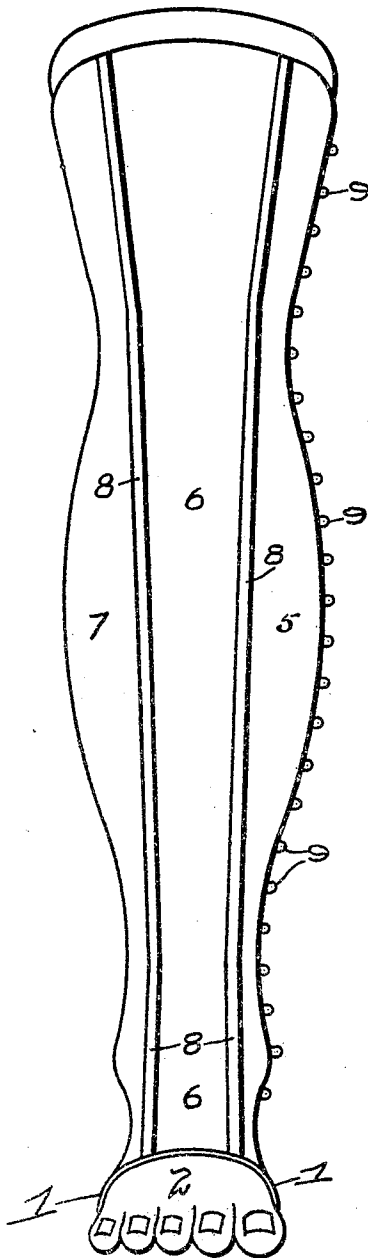
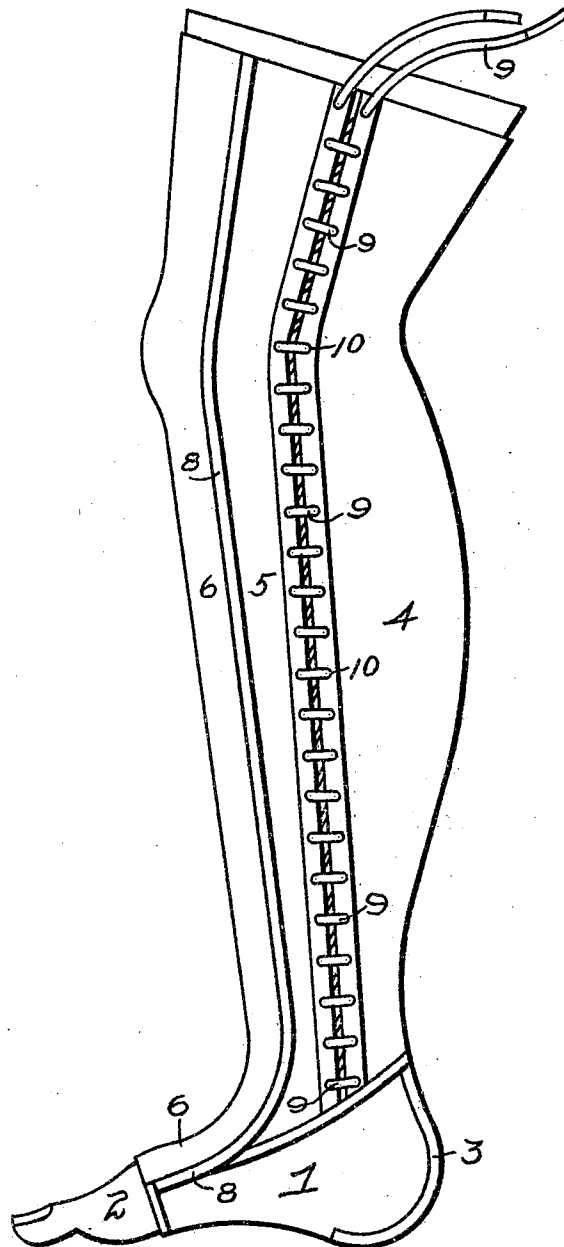


932,066.

Patented Aug. 24, 1909.



- Fig. 2 -



- Fig. 1 -

F. W. Smith.
 Inventor

Witnesses

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By

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UNITED STATES PATENT OFFICE.

FLOYD W. SMITH, OF UNION, OHIO.

SURGICAL STOCKING OR CASING.

932,066.

Specification of Letters Patent. Patented Aug. 24, 1909.

Application filed June 4, 1906. Serial No. 320,072.

To all whom it may concern:

Be it known that I, FLOYD W. SMITH, a citizen of the United States, residing at Union, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Surgical Stockings or Casings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in surgical elastic bandages, and comprises a semi-elastic casing adapted to inclose the affected limb or other part and which is susceptible of being adjusted at any part of its length to relieve the pressure at any point of the affected limb or member.

The objects of the invention are first—to provide a surgical elastic bandage or casing the elasticity of which is wholly on one side and extends throughout the length of the casing; secondly, to provide such semi-elastic casing with a lacing means throughout its length whereby it may be adjusted so as to fit comfortably the part of the limb or member inclosed therein, thereby making equal pressure throughout its length; thirdly, to provide such device with a capacity to fit the limb or member as the latter increases or decreases in size, during the course of the disease, thereby avoiding the necessity of getting new bandages or casings; and fourthly, to provide such device with characteristics which enable it to be placed on the affected part without causing pain.

In the drawings I have shown my improved elastic casing applied to a lower limb and which is shown to be laced throughout its length. It is obvious that a casing having the same features of continuous lacing and elasticity on one side may be applied to a casing adapted to receive the arm.

In the annexed drawings—Figure 1, is an illustration of my improved semi-elastic casing in the form of a stocking applied to a lower limb. Fig. 2, is a front elevation of the same.

In a detail description of the invention, similar reference characters indicate corresponding parts.

The main body of the casing or stocking is constructed of a suitable textile fabric or

woven goods, such for example, as cotton, silk, or linen which is cut to the desired shape to conform to the limb or member which it is designed to incase.

As shown in the drawings, 1 designates the bottom and side portions which inclose the foot 2, the toes projecting through; this foot portion is constructed of a fabric material such as hereinbefore indicated and the sides thereof are united at the back by means of a tape 3 extending below the heel upwardly to a point where said foot portion is united to the leg portion and overlapping the seam. The leg portion or upper part of the stocking consists of a similar textile fabric in four parts 4—5—6 and 7; the parts 4—5 and 7 are united by seams which are covered by tape 8.

Interposed between the portions 5 and 7 of the textile fabric and in the front of the casing or stocking is an elastic strip 6 extending the entire length of the stocking and which forms the elastic portion of the casing or stocking as hereinbefore indicated. This elastic portion 6 may consist of rubber cloth such for example, as a fabric consisting of silk or cotton interwoven with rubber, elastic webbing, or it may be of sheet rubber unmixed with any material. This portion of the stocking or casing provides the necessary elasticity confined to one portion of the stocking and it enables the stocking to yield at any point where the pressure may be increased. The elastic strip 6 is united by seams to the adjacent fabric portions 5 and 7 and the seams are inclosed by tape 8. The stocking or casing is laced throughout its length on one side by means of a string or lacer 9 which is passed through eyelets 10, beginning at the foot portion and lacing upwardly. By means of this continuous lacing the amount of pressure at any particular point can be controlled by tightening or loosening the lacing at that particular point or points as the case may require, and the stocking or casing on either side of the points of undue pressure can likewise be laced to conform to the limb.

The stocking is easily applied by opening or loosening the lacing so that any pain or discomfort that might be due to the drawing on of said stocking is obviated; in other words, by unlacing or loosening the stocking from the foot portion to the upper end, the entire stocking may be thrown open or enlarged to receive the affected limb and thus

the pain and discomfiture incident to stretching a stocking in drawing it onto the limb, is avoided. The elastic portion extends down to the foot portion and incloses the top of said foot portion, so that the elasticity is uniform throughout the length of the stocking including the foot portion.

It may be stated that owing to the lacing being extended throughout the length of the stocking, the pressure may at any time be relieved and thus ventilation may be obtained by admitting air on the interior of the stocking and any chafing of the skin may thus be avoided.

I am aware of the patent to Alvord for improvements in leggings granted Dec. 16, 1902. This is for a legging constructed of non-elastic fabric joined in the rear and throughout the length with a series of transverse elastic bands; the legging is laced in the front throughout its length and the elasticity is confined wholly to the rear of the legging, the front portion as before stated, being drawn together by means of eyelets and lacing. I am also aware of the patent to Master for an elastic stocking granted November 29, 1881. This is for a non-laceable elastic stocking which is placed in position or drawn onto the limb by the limb itself acting to expand the stocking. The present invention differentiates from those of the patents referred to in the following particulars. First—the desirable feature of a bandage or stocking for hospital uses, comprising means whereby the stocking may be opened throughout its length and placed in position upon the limb after which it is laced to maintain it in position and the lacing is regulated by the size and according to the

condition of the sore or injured member. The painful operation of causing the stocking to be expanded by the limb itself in drawing it in position onto the limb is avoided. And secondly—when the stocking or bandage is placed about the limb by opening the lacing and then re-lacing the same, the elastic portion of the stocking which is necessary to compensate for the movement of the limb, such as is brought about by the bending of the knee, lies throughout the length of that portion of the stocking which is first called upon to yield or expand, namely—in the front, the elastic portion of the stocking being extended throughout the length of the stocking and in the front thereof.

I therefore claim.

A new article of manufacture comprising a stocking for hospital use, consisting of non-elastic textile fabric which forms the side and rear portions of the stocking leg, and the foot portions, the leg portions being joined on one side throughout their lengths by a lacer, and the front portion of the stocking consisting of elastic cloth which extends from the upper end of the stocking to the extreme end of the foot, and whereby said stocking may be opened from one end of the leg to the other in placing it upon an injured limb, and the strain due to the stretching of the stocking after it is on the limb, in bending said limb is borne principally by the knee.

In testimony whereof I affix my signature, in presence of two witnesses.

FLOYD W. SMITH.

Witnesses:

R. J. McCARTY,
C. M. THEOBALD.