

March 12, 1929.

E. A. TAYLOR

1,704,927

GARMENT SUPPORTER

Filed Jan. 10, 1927

Fig. 1.

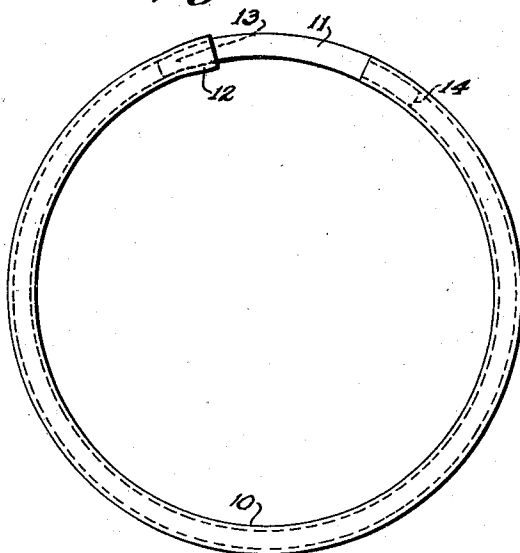


Fig. 2.

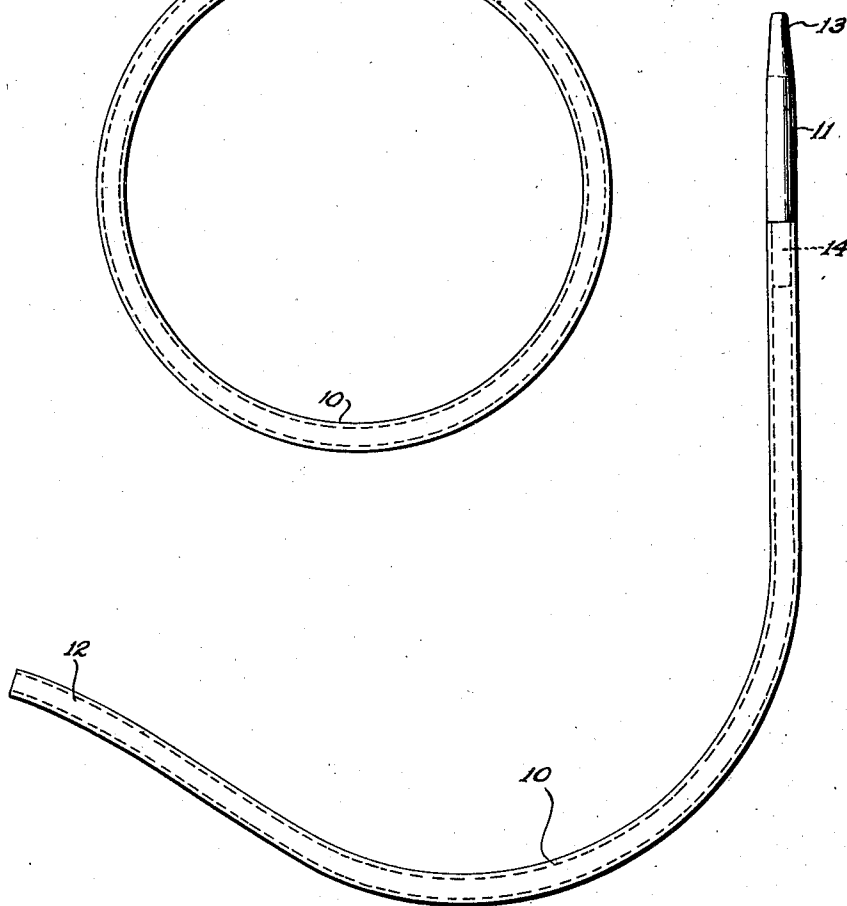


Fig. 3.

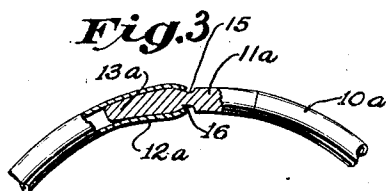
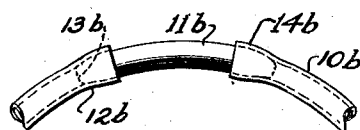


Fig. 4.



Inventor
Edward A. Taylor

Barton A. Bean Jr.
Atty.

UNITED STATES PATENT OFFICE.

EDWARD A. TAYLOR, OF BUFFALO, NEW YORK.

GARMENT SUPPORTER.

Application filed January 10, 1927. Serial No. 160,095.

This invention relates to garment supporters of the type to encircle the limb of the wearer.

Heretofore garment supporters of the limb-encircling type have been generally of two classes; first, a non-adjustable class, that is a supporter of fixed diameter, it being necessary in this type for the manufacturer to supply a range of sizes; second, the adjustable supporter which embodies a clasp or buckle and which may be adjusted to any desired size within a reasonable range. In the first of these classes, a proper fitting of the supporter is not assured as the sizes are more or less arbitrary and the manufacturer and retailer are compelled to make up and stock a range of sizes. In the second of these classes, the devices are relatively expensive to produce and the buckle or fastening means tends to wear or tear the stocking or other garment on which it bears. Further, with this second class, the buckles or fastening means prevent a proper rolling of the stocking upon the supporter and results when rolled in an uneven positioning of the supporter on the stocking and in unsightly bunching at the point of the buckle.

The objects of the present invention are to provide a supporter of the type referred to which is of substantially even diameter throughout; which is readily adjustable to the finest degree; and which has no buckle or protruding part. A further object is to provide a supporter of the type referred to which may be manufactured at a very small expense. A further object is to provide a supporter of the type referred to which consists of few, simple parts readily available and which requires no assembly investment or expense. A further object is to provide a supporter of the type referred to which may be readily adjusted by the wearer to insure a proper fit of the device and will insure steady and even pressure upon the garment and upon the person of the wearer. A further object is to provide a supporter of the type referred to which will maintain the garment in proper position at all times and which will not restrict circulation.

Further objects are to provide an article of the type referred to which will form

with the stocking or garment a very smooth roll without ridges or projections.

In the drawings:

Fig. 1 is a plan view of a device embodying the present invention in its assembled form.

Fig. 2 is a side elevation of the device before it is assembled.

Fig. 3 is a plan view with a portion in section of a part of the device illustrating a modification thereof.

Fig. 4 is a partial plan view with a portion in section showing a modified form of connecting member.

Referring to the drawings, the body portion of the supporter is constructed of a substantially tubular portion 10 of resiliently flexible material. In the particular embodiment of the invention shown, this portion 10 is made of a section of very good grade of rubber tubing.

Means are provided for connecting the ends of the tubing together to form an annulus in such manner that the diameter of the material forming the annulus is not increased substantially at any point, and so that the device will be firmly held together in annular form. In the preferred form shown, in order to accomplish this one end of the tubing is provided with the connecting member 11. This connecting member may be of desired form or material, in the embodiment shown the connecting member consisting of a portion of rubber, preferably solid, which is adapted to lend itself to the annular form of the completed article. These articles may be made up with one standard or universal length of tubing 10. It will be seen that they may be readily adjusted to substantially the correct size required by the wearer by cutting off as much of the free end of the tube as is desirable. All that is necessary to be done here is for the wearer to place the article in position and determine by actual measurement on the limb on which the article is to be used the proper size. The excess portion of the tube is then readily cut off with shears or scissors and the article is formed to the annular shape shown in Fig. 1 by inserting the conical or tapered free end 13 of the connecting member in the free end 12 of the

tube. In order to get a very fine and accurate adjustment it will be seen that the end 13 of the connecting member may be projected a greater or lesser distance into the tube and in this manner a very accurate adjustment as to size may be obtained. The fixed end 14 of the connecting member, which is shown inserted in the tube in Fig. 2, may be, if desired, secured therein during the course of manufacture with suitable rubber cement or other means.

In order to prevent the free end of the tube being accidentally displaced from the connecting member, in the modification shown in Fig. 3 the connecting member 11^a, connected to the tube 10^a which connecting member has a free end 13^a adapted to be received by the free end 12^a of the tube, is provided with an annular depression or recess 15. This depression or recess 15 receives the exposed edge of the free end 12^a of the tube. As shown at 16, the sides of the connecting member are preferably inclined rearwardly toward this depression, thus providing a shoulder portion on which the end 12^a of the tube clamps, the exposed edge of that end portion of the tube resting in the groove or depression and thereby not being exposed beyond the periphery of the tube or structure generally. This prevents likelihood of the exposed edge being accidentally lifted and forms a relatively tight lock for the end of the tube.

The fixed end of the connecting member preferably forms a substantially air-tight seal for the end of the tube in which it is placed. It will be noted by referring to Figs. 1 and 3 that the connecting member preferably extends a distance into the free end of the tube. As the tube in its unassembled condition is filled with air, it will be obvious that when the free end of the connecting member is placed in the free end of the tube and the tube is forced over the connecting member, the air in the tube will be compressed. This serves to assist in maintaining the device in tubular form and prevent collapse or adhesion of the walls of the tube.

In the modified form shown in Fig. 4, the connecting member 11^b is formed with similar tapered ends 13^b and 14^b, these being received in the tube ends as explained hereinabove.

It will be seen that there is provided a device that may be readily and accurately adjusted to any desired size and which forms an annulus of substantially uniform diameter. This form and the uniform diameter of the annulus greatly facilitates the use of the article in rolling stockings wherein the upper edge of the stocking is placed over the supporter and the stocking and supporter are then rolled downwardly over the limb of the wearer. The provision of rub-

ber tubing forming the body of the annulus insures a relatively tenacious contact with the material of the garment which the article supports. There are no metal parts or buckles to irritate the skin or flesh of the wearer or to cause any restriction of circulation.

I claim as my invention:

1. In a limb-encircling garment supporter, a tube of elastic material, a solid, limb-conforming plug connecting and sealing the ends of said tube to form an annulus, said plug being readily removable from one end of said tube and normally closing the tube to the egress of air therefrom.

2. In a garment supporter of the limb-encircling type, a tube of elastic material, a connecting member projecting from one end of said tube, said connecting member sealing said end of said tube, the other end of said tube being adapted to be readily cut off by the wearer to achieve proper size of the article, the connecting member having a conical free end insertible into the free end of said tube to seal the same and thereby trap the air therein to assist in rendering the tube self-sustaining.

3. In a garment supporter of the limb-encircling type, a tube of elastic material, a two-ended connecting member connected at one end to one end of said tube and sealing the same, the other end of said tube being adapted to be readily cut off by the wearer to achieve proper size of the article, the connecting member having the opposite end closed and adapted for insertion into the free end of said tube, said connecting member being of resilient material to bend in conformity to the encircled limb and of substantially cylindrical shape and of substantially the same diameter as said tube.

4. In a garment supporter of the limb-encircling type, a tube, a connecting member connected to one end of said tube, the free end of said tube being adapted to be readily cut off to the desired extent by the prospective wearer of the device, the connecting member having a relatively free end adapted for insertion in said end of said tube, said connecting member being provided with a shoulder over which the tube is passed under tension to engage behind the same to maintain said end of said tube connected to said connecting member.

5. In a garment supporter of the limb-encircling type, a tube, a connecting member connected to one end of said tube, the free end of said tube being adapted to be readily cut off to the desired extent by the prospective wearer of the device, the connecting member having a relatively free end adapted for insertion in said end of said tube, said connecting member being provided with a groove adapted to receive the exposed edge of said tube to prevent said edge of

said tube from being accidentally lifted and displacing said end of said tube from said connecting member.

5 6. An annular limb-encircling garter comprising a thin-walled elastic tube, and a limb-conforming connecting member connecting the ends of said tube by engagement

with the inner walls of each of said ends, whereby the air in said tube will be closed to egress therefrom, said connecting member being pliable so as to conform to the limb of the wearer. 10

EDWARD A. TAYLOR.