Nov. 29, 1932. S. H. WALKER 1,889,716

HOSIERY PROTECTOR

Filed Aug. 12, 1931

Fig. 1.

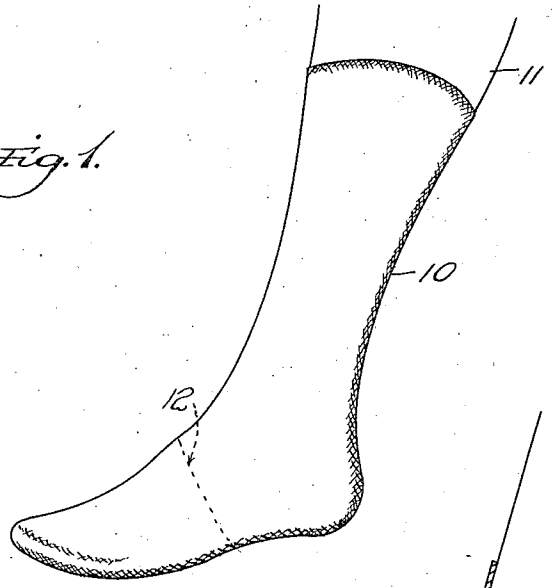
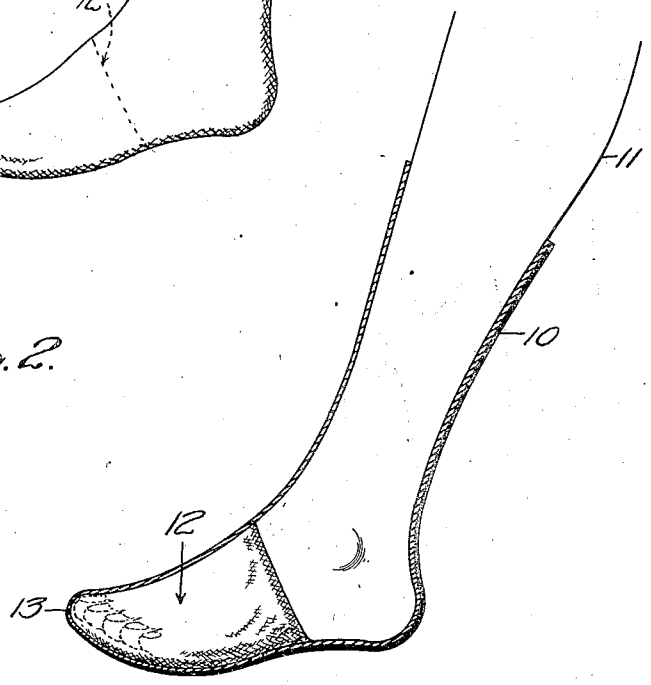


Fig. 2.



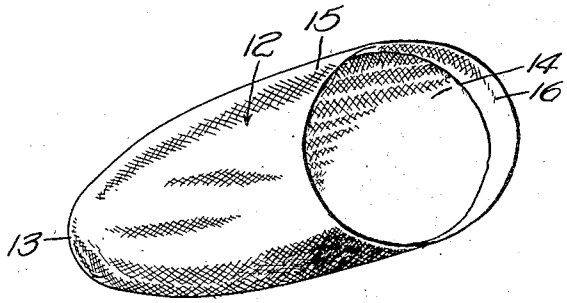


Fig. 3.

Inventor
SAMUEL H. WALKER

By G. M. Earnshaw
Attorney

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UNITED STATES PATENT OFFICE

SAMUEL H. WALKER, OF JOPLIN, MISSOURI

HOSIERY PROTECTOR

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This invention relates to hose protectors.

The ordinary wear and tear on hosiery occurs at fixed points, and usually at the toes, and the latter wear is caused mostly by the friction of the toes, and practically the nails, against the inner surfaces of the hosiery. Only a slight proportion of the wear occurs due to friction of the hosiery against the shoes since the inner surfaces of the latter are comparatively smooth. Moreover, when a hole is worn in the toe of a sock or stocking, the forward pressure exerted by the foot tends to stretch and thus greatly enlarge the hole which has been previously worn in the toe of the hosiery.

An important object of the present invention is to provide an inexpensive protector adapted to be worn on the foot and to protect the hosiery against the wear to which the latter is subjected adjacent the toes of the foot.

A further object is to provide an inexpensive device of the character referred to which may be worn without discomfort, and which is adapted to minimize the enlargement of holes worn in the stocking or other hosiery.

A further object is to provide a hosiery protector which is adapted to be worn beneath the hosiery and to conform perfectly to the shape of the foot to prevent discomfort, and which is adapted to be turned on the foot to different positions to distribute the wear to which it is subjected.

Other objects and advantages of the invention will become apparent during the course of the following description.

In the drawing I have shown one embodiment of the invention. In this showing:

Figure 1 is a perspective view of a foot with the device in position beneath the hosiery,

Figure 2 is a similar view, the hosiery being shown in section, and

Figure 3 is a perspective view of the device detached showing its normal shape.

Referring to the drawing the numeral 10 designates the hosiery, shown in the present instance as a sock, in normal position on the leg 11 of the wearer. The hosiery forms no part of the present invention, and may be of any desired type.

The present invention comprises a body indicated as a whole by the numeral 12, and is preferably formed of elastic knitted material. The body 12 is of uniform or normally circular cross-section, and is adapted to be placed on the foot in the position indicated in Figure 2. One end of the body is relatively small and is closed as at 13, while the opposite end is substantially larger, and is open as indicated at 14.

Obviously the cross sectional area of the foot increases rearwardly from the toe, and the body 12 increases in diameter toward its open end in the same manner except that the end portion 15 of the body is either substantially cylindrical in shape or is similarly altered so that the rear edge of the body snugly fits around the foot. This rear edge of the body is reinforced by a preferably flat tape 16 to limit its circumferential elasticity. The device accordingly is adapted to snugly hold its position on the foot, and this action is assisted by the hosiery, which is worn over the device as indicated. Obviously, the device may be made of any suitable length, and it is not limited to such a length as to place the rear end of the body around the instep of the foot as shown in the drawing.

The operation of the device is as follows:

As previously stated, the body 12 is formed of knitted or other elastic fabric and is of substantially circular normal cross sectional shape. Accordingly, when the device is drawn snugly upon the foot, its elasticity permits it to conform to the irregular shape of the forward portion of the foot and to fit snugly thereagainst. The altered shape of the rear end of the device permits it to fit snugly around the foot, and when the stocking is drawn up on the foot, it assists the tape 16 in holding the device snugly in position so that the device is substantially invisible, and may be worn without any discomfort whatever.

The device may be made far more cheaply than hosiery and of more durable material, and is adapted to be subjected to more wear before being punctured than the hosiery, and

the toe end of the device is subjected to the wear of the toes and toe nails instead of such wear taking place against the hosiery. In actual practice therefore it has been found that the life of the hosiery is substantially treble.

When a hole is worn in the toe of the hosiery after a considerable length of time, the device minimizes the tendency of the foot to enlarge the hole. While walking the foot slides forwardly and rearwardly to some extent, and it is the forward movement of the foot which tends greatly to enlarge an opening worn in the toe of the hosiery, and the toe portion of the present device tends to absorb the pressure to which the hosiery normally is subjected, and thus minimizes the enlarging of an opening worn in the toe of the hosiery. The device may be made to correspond in color to the hosiery so that a hole worn in the latter will be substantially invisible.

One of the important features of the device is the fact that it is made of circular cross sectional shape rather than of a shape corresponding to that of the portion of the foot which it covers. The use of the shape referred to permits the device to be turned or rotated around the foot to different wearing positions to distribute the wear to which the device is subjected, thus greatly lengthening its life, the elasticity of the material permitting it to alter its shape when drawn upon the foot to permit it to accommodate itself to the shape of the foot and to fit snugly thereover without discomfort.

The circumference of the rear end of the device is preferably made to correspond substantially exactly to the circumference of the portion of the foot which it surrounds, while all of the remaining portions of the body of the device are preferably elastic in all directions to permit the device to accommodate itself to the shape of the foot, as stated above. Accordingly the rear end of the device serves to hold the device snugly in position, and this action is facilitated by the placing of the hosiery over the device.

It will be apparent that the device may be cheaply manufactured, particularly in view of its uniform cross sectional shape, no special machinery being required for its manufacture. The device accordingly can be marketed at a low price, and affords great economy in expenditures for hosiery.

As previously stated the device may be of any desired length, and when made of the approximate length shown in the drawing, it tends to keep the feet of the wearer warm in cold weather since it protects the portion of the foot which comes closest to the ground. The device, because of its advantages, is particularly adapted for use by pedestrians, golfers, farmers, and other persons who are required to do a considerable amount of walking. The device has the additional advantage of being easily laundered.

While I have described in detail the preferred embodiment of my invention it is to be understood that various changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claim.

I claim:

A protector for hosiery comprising a body formed of a fabric having a substantial degree of elasticity in all directions and being of normal substantially circular cross sectional shape throughout its length, said body having one end closed and the other open to receive the forward end of the foot, said body being tapered to increase in diameter from its closed end to a point adjacent and spaced from its open end and being substantially cylindrical from such point to its open end, and a band carried by and entirely encircling said body at its open end to reinforce the latter and reduce its circumferential elasticity.

In testimony whereof I affix my signature.

SAMUEL H. WALKER.