H. W. LAKIN.

GARMENT SUPPORTER.

APPLICATION FILED JAN. 28, 1921.

1,414,476.

Patented May 2, 1922.

FIG. 1.

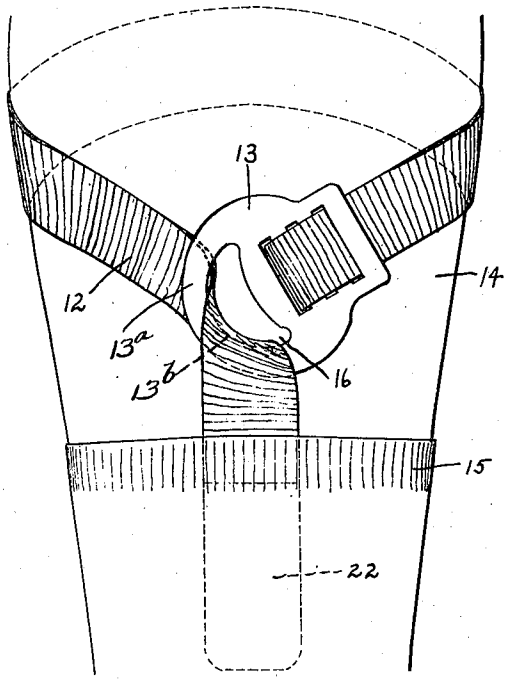


FIG. 2.

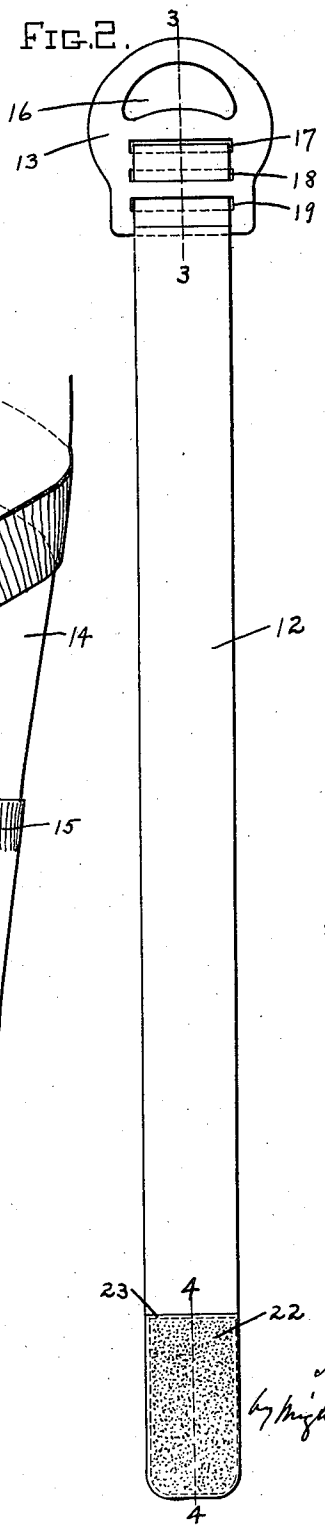


FIG. 3.

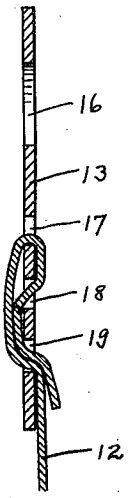
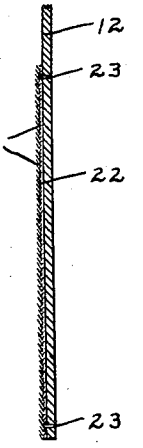


FIG. 4.



INVENTOR

H. W. Lakin

by Wright Brown Quinby & May

ATTORNEYS

UNITED STATES PATENT OFFICE.

HARRY W. LAKIN, OF BOSTON, MASSACHUSETTS.

GARMENT SUPPORTER.

1,414,476. Specification of Letters Patent. Patented May 2, 1922.

Application filed January 28, 1921. Serial No. 440,646.

To all whom it may concern:

Be it known that I, HARRY W. LAKIN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Garment Supporters, of which the following is a specification.

This invention relates particularly to a hose supporter adapted to embrace the wearer's leg above a hose leg and to engage the latter.

The object of the invention is to provide a supporter of extreme simplicity, adapted to be quickly applied and removed, and to be worn without discomfort to the wearer, and having hose leg-engaging means adapted to be interposed between the wearer's leg and a hose leg, and to engage only the inner surface of the latter without overlapping the outer surface, the construction being such that the supporter may be made wholly of non-metallic materials, so that the supporter may contact directly with the wearer's leg, without liability of injury to, or infection of the leg, such as is not infrequently caused by direct contact of metallic parts with the leg.

The invention is embodied in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification,—

Figure 1 is a front elevation showing a supporter embodying the invention applied to a leg.

Figure 2 is a side view showing the supporter extended.

Figure 3 is an enlarged section on line 3—3 of Figure 2.

Figure 4 is an enlarged section on line 4—4 of Figure 2.

The same reference characters indicate the same parts in all of the figures.

In the drawings, 12 represents a strip of elastic webbing of any suitable length. 13 represents a plate fixed to one end of the strip, said plate and strip being adapted to form a slip-noose adapted to embrace a leg 14 above the upper end of a hose leg 15.

The plate 13 is preferably formed from somewhat flexible flat-sided, non-metallic sheet material, such as celluloid, indurated fiber, or other suitable material, free from liability to cause infection by direct contact with the wearer's leg, the plate being provided with a strip-guiding orifice 16, through which a portion of the strip and the hose-leg-engaging device thereon may be freely threaded. I provide means for adjustably securing one end portion of the strip 12 to the plate 13, so that the operative length of the strip may be varied. To this end I form in the plate 13 a plurality of preferably three slots 17, 18 and 19, all located between one end of the plate and the aperture 16, the slots being parallel with each other, and forming edges of parallel cross bars.

As shown by Figure 3, one end portion of the strip 12 is folded across the cross-bar between the slots 17 and 18. One of the branches of the folded strip portion is threaded through the slot 18, and both branches are threaded through the slot 19. The strip is thus fixed to the plate in such manner that it can be longitudinally adjusted, the strip being held by its frictional contact with the said cross-bars in any position to which it may be adjusted.

One end portion of the plate 13 constitutes a transverse bar 13^a, having a reentrant inner edge 13^b, forming the outer edge of the orifice 16. The bar 13^a is joined at both end portions to the body of the plate and is thereby supported against distortion by pressure of the strip 12 on the reentrant edge when the supporter is in use. Said orifice is oblong, and sufficiently longer than the width of the strip 12, to permit the direction of the strip to be abruptly changed in passing through the aperture, as shown by Figure 1, so that when the fastener is in use, the free end portion of the strip depends from the plate. The free end portion is provided with a hose leg-engaging device, adapted to be threaded with said end portion through the orifice 16, and to be interposed between the wearer's leg and a hose leg 15, without overlapping the latter, said device being adapted to be engaged, and held in engagement, with the inner surface of the hose leg by an upward pull on the depending portion of the strip, and being so formed that there is no objectionable protuberance at the outer side of the hose leg, the portion of the supporter engaged with the hose leg being wholly within the latter. I preferably embody said leg-engaging device in a layer 22 of shagreen attached, by stitches 23, or otherwise, to the depending portion of the strip 12. Sha-

green is the dried skin of a dog-fish or shark, and its outer side is covered with minute closely set papillæ constituting teeth 24, which are inclined in one direction. I so apply the layer 22 that its teeth 24 are inclined upward from what is the lower end of the strip 12 when the supporter is in use.

The supporter is rendered operative by passing the free end of the strip and the layer 22 through the orifice 16 of the plate, and thus forming a leg-embracing noose, the strip being stretched until the embracing portion sufficiently hugs the leg to prevent it from slipping downward. The depending free end portion is at the same time stretched, and its end covered by the shagreen layer 22 is forced downward between the wearer's leg and the hose leg 15, the inclined teeth 24 slipping on the inner surface of the hose leg until released, whereupon the contraction of the strip exerts an upward pull on the teeth 24 and causes them to engage the hose leg, the engagement being maintained by the tension of the strip 12. The shagreen layer 22 suitably stiffens the portion of the strip 12 to which it is attached, so that said portion and layer may be conveniently threaded through the orifice 16, and interposed between the wearer's leg and a hose leg.

The reentrant form of the edge 13^b causes a slip-preventing engagement between the said edge and the portion of the strip 12 that is folded over the same, the fold of the strip conforming to the edge 13^b, as indicated by Figure 1, and being so bent that it cannot slip, to permit an enlargement of the leg-embracing portion of the strip when the supporter is in use.

It will be seen that the supporter shown and described is adapted to be conveniently applied and removed, has no metal parts liable to cause infection by direct contact with the wearer's skin, and as a result of the reentrant edge 13^b, is not liable to become accidentally loosened on the wearer's leg.

The union of both end portions of the cross-bar 13^a with the body portion of the plate imparts such resistance to pressure tending to distort the edge 13^b, that a plate of sufficient strength and durability may be made of non-metallic material, such as celluloid.

In my Patent No. 1,237,660, dated August 21, 1917, I disclose shagreen as an element of an elastic ligature. In this application shagreen is disclosed as the preferred hose-leg-engaging element of a slip-noose hose supporter.

I claim:

A hose supporter composed of a thin flexible plate, having a plurality of strip-engaging slots, a strip-guiding orifice, one end portion of the plate constituting a transverse bar having a reentrant inner edge forming the outer edge of said orifice; an elongated elastic strip threaded at one end portion through said slots and thus adjustably secured to the plate; and a hose leg-engaging device secured to the opposite end portion of the strip, and adapted to be threaded therewith through said orifice, and to depend from the outer edge thereof and engage a hose leg, the said transverse bar being joined at both end portions to the body of the plate, and thereby supported against distortion by pressure of the strip on the inner edge of the said bar when the supporter is in use, the reentrant form of said inner edge preventing the strip from slipping on the plate when the supporter is in use.

In testimony whereof I have affixed my signature.

HARRY W. LAKIN.