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M. F. GAUNT

HOSE SUPPORTER

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Fig. 1.

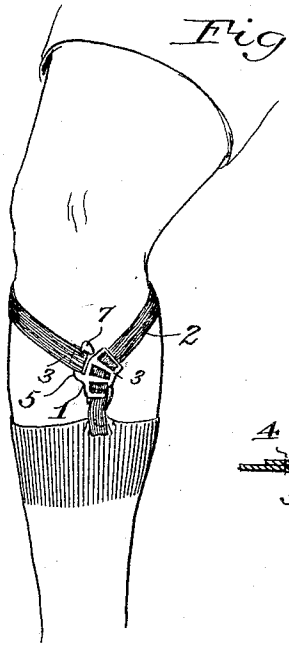


Fig. 2.

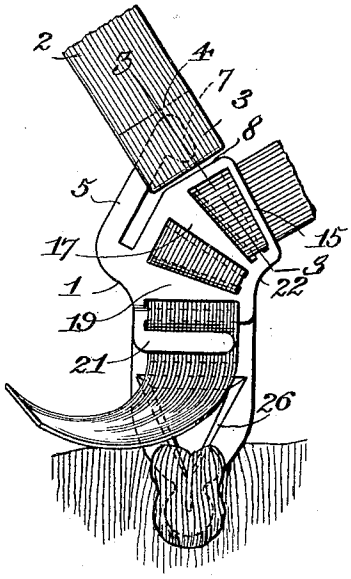


Fig. 3.

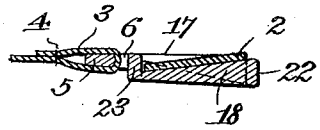


Fig. 5.

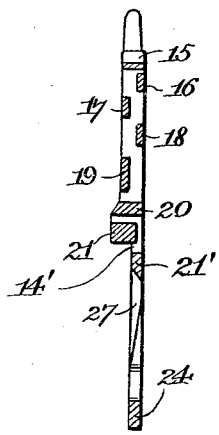
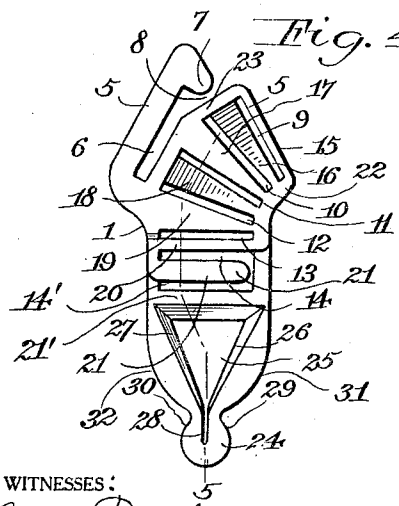


Fig. 4.



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UNITED STATES PATENT OFFICE.

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HOSE SUPPORTER.

Application filed July 29, 1924. Serial No. 728,968.

To all whom it may concern:

Be it known that I, MARTIN F. GAUNT, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Hose Supporter, of which the following is a full, clear, and exact description.

This invention relates to supporters for hose and other purposes and has for an object to provide an improved construction adapted to be used either with elastic or inelastic bands for engaging and supporting a hose.

Another object of the invention is to provide a supporter wherein the body is so formed as to present a tortuous passage-way structure which will permit an encircling band to be adjusted and locked in any adjusted position.

A further object of the invention is to provide a hose supporter in which an encircling member is used, the structure being such that the encircling member may be quickly and easily removed without the use of implements and also applied or adjusted while in use without the use of implements.

A still further object of the invention is to provide a hose supporter wherein the hose engaging part is formed to pinch part of a hose and at the same time to cause a looped portion of the hose to grip the supporter.

In the accompanying drawing—

Figure 1 is a perspective view of a hose supporter embodying the invention, the same shown applied.

Figure 2 is an enlarged elevation showing the structure illustrated in Figure 1, part of the encircling band being broken away.

Figure 3 is a sectional view through Figure 2, approximately on line 3—3.

Figure 4 is a plan view of the supporting body illustrated in Figure 1.

Figure 5 is a sectional view through Figure 4, approximately on line 5—5.

Referring to the accompanying drawing by numerals, 1 indicates the body of a supporter and 2 the encircling band which may be of elastic material or may be inelastic, as for instance, ribbon or tape. The encircling member or band 2 is looped at one end for forming a loop 3 which is held in proper position by the line of stitching 4. The loop 3 is adapted to be passed over the bar or arm 5 which is separated from the body 1 by the slot 6. An enlarged rounded end 7 is provided on bar 5, said end projecting to a point near the body 1 so as to present a restricted passage-way 8 offset in the slot 6. This structure permits the loop 3 to be placed in position as shown in Figure 2 but prevents the loop from accidentally becoming disengaged whenever there is any tension on member 2.

The body 1 is provided with slits 9, 10, 11, 12, 13 and 14 which results in bars 15, 16, 17, 18, 19, 20 and 21. The bar 15 is preferably reduced on its upper surface as indicated in Figure 5 while bar 16 tapers from the edge wall 22 to the edge wall 23. The bar 17 tapers or is chamfered on the opposite side but in the same direction. The bar 18 is tapered similar to bar 16 while the bar 19 is formed similar to bar 17. The bar 20 is reduced on the lower surface, namely, on the surface opposite to the reduced surface of bar 15. The bar 21 is preferably wider than bar 20 and the slot 14 is open at one end whereby the encircling member 2 may be inserted laterally at any time and drawn tight.

In operation, when it is desired to use the supporter, a length of elastic, ribbon or other material is formed with a loop 3 and this loop is passed over the bar 5 as shown in Figure 2. The loose end is then threaded through the various slits 9 to 13 inclusive, as shown in Figures 2 and 3 and the device is ready for use. In case it should be desired to enlarge or restrict the encircling portion of the member 2, the end is grasped and pulled laterally so that it will move out of the slot 14. The band then may be slid longitudinally with some effort and the desired adjustment secured, after which, the parts are arranged as shown in Figure 2 and this extra looping of the band in through the slots 14 and 14′ around bar 21 will cause a locking effect. In forming the tortuous passage-way on an arc as shown in the drawing it is aimed to provide a structure which will change the lateral curve of

the encircling member 2 to a downward direction when in use or at an angle to the part of the member 2 at the other end of the passage-way or bar 15, thus affording greater convenience in making the constrictive adjustment of the encircling member. This structure also presents in a small restricted space, means for obtaining considerable surface contact and the resultant friction, which, together with the snubbing effected by the abrupt bending of member 2 at the inside of the curve or the edge wall 22 as it passes in alternating directions around the successive bars 16, 17, 18 and 19. The positioning of the end of the encircling member 2 in this manner binds and holds the encircling member sufficiently firm to afford tension and support for a hose, stocking or sock and yet allows the automatic counter-constrictive adjustment of member 2 to the size of the leg as well as speedy and convenient voluntary or manual adjustments. It will also be noted that this structure permits an adjustment without the necessity of disconnecting or detaching the supporter or removing it from the leg. Whenever desired, the end portion of the encircling member 2 may be placed beneath the bar 21. This bar is open or free at one end whereby the unattached end of member 2 may be readily inserted laterally and drawn tight for locking or making the same secure by the locking or pinching effected between bars 21 and 21'. This locking or pinching effect is augmented by the snubbing effect of member 2 over bar 20 and the increasing pinching effect between bars 20 and 21 as the tension from an upward pull is applied, which pull has a tendency to swing bar 21 slightly toward bar 20.

As indicated more particularly in Figure 3, it will be noted that the edge of the encircling member 2 nearest to wall 23, extends through the device in a plane parallel to the surface of the device on a substantially true curve while the opposite edge of the encircling member in the device passes upwardly and over the various bars as a succession of small but distorted bends following a general curving direction. The head 24 is then placed on top of the upper part of the hose, the upper edge of the hose drawn through the opening 25 and then looped over the head 24 so as to enclose the same as illustrated in Figure 2. The hose is then pulled downwardly so that it will slide down the inclined surfaces 26 and 27 and become pinched in the restricted slit 28, which pinching action prevents the hood or enclosing part overlapping the head 24 from becoming loose. The edges of opening 25 are beveled as shown in Figure 4 at the upper part to facilitate the grasping of the hose by the fingers of the operator in order to draw it through the opening and then downwardly over head 24. During this action, the two rounded edges or shoulders 31 and 32 serve to guide and in a certain sense, force the edges of the looped hose downwardly against shoulders 29 and 30 when tension is applied.

What I claim is:

1. A hose supporter, comprising a body formed with a bar spaced from the body, an encircling member provided with a looped end adapted to be slipped over said bar, said body being provided with a plurality of spaced slots and arranged to receive the free end of said encircling member which is fitted into said slots so as to assume a serpentine structure, and means projecting from the lower end of the body for connecting the hose to the body.

2. In a hose supporter, a body formed with means for adjustably receiving the encircling band, and means for receiving the upper edge of the hose, said last mentioned means including a head having shoulders, and a slit, said slit merging into diagonally arranged supports.

3. In a hose supporter, a body provided with a bar for receiving one end of an encircling member and a plurality of slits accommodating the opposite end, and a structure for interlocking with a hose, said structure including a partially rounded head having a slit, and a pair of diagonally arranged supporting arms extending from the vicinity of said slit whereby when part of the hose is forced against said supports the hose will be guided toward said slit.

4. In a hose supporter, a body formed with a plurality of means for receiving the opposite ends of an encircling member, one of said means being a hook-shaped arm, a pair of converging arms extending from the body, said arms merging together and forming a partially rounded head, the opening between said arms merging into a slit in said head.

5. In a hose supporter, a body formed with means for engaging the top of a hose, and means for receiving the opposite ends of an encircling member, said means including a bar for receiving one end of said encircling member, and a plurality of converging spaced bars for receiving the other end.

6. In a hose supporter, a body provided with a plurality of spaced converging bars, each of said bars having one surface arranged at an angle to the opposite surface, the inclined surface of one bar extending at the opposite angle to the next adjacent bar.

7. In a hose supporter, a body provided with a plurality of spaced bars having their ends connected whereby there is presented a series of slots through which an encircling band is adapted to extend, each of said bars

being beveled or chamfered on one surface, the inclination of the chamfered surface on adjacent bars being at opposite angles.

8. In a hose supporter, a body formed with means for receiving the opposite ends of an encircling member, a pair of converging arms extending from the body, said arms on the inner edges being beveled and on the outer formed with rounded shoulders, said arms merging together and forming a partially rounded head at the point of merging, said head having shoulders substantially facing the first mentioned shoulders, the opening between said arms merging into a slit in said head.

MARTIN FOX GAUNT.