

(No Model.)

DE VER H. WARNER.
HOSE SUPPORTER.

No. 562,504.

Patented June 23, 1896.

Fig. 1.

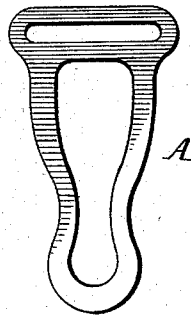


Fig. 2.

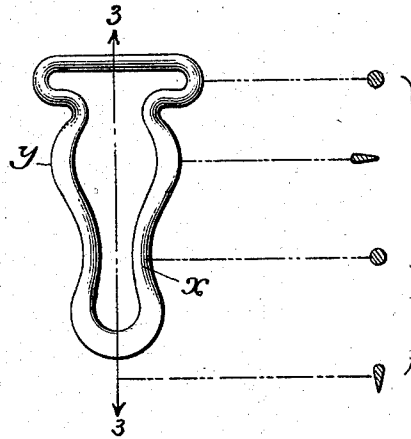
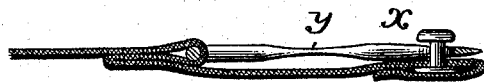


Fig. 4.

Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

DE VER H. WARNER, OF BRIDGEPORT, CONNECTICUT.

HOSE-SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 562,504, dated June 23, 1896.

Application filed January 16, 1896. Serial No. 575,808. (No model.)

To all whom it may concern:

Be it known that I, DE VER H. WARNER, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Hose-Supporters, of which the following is a specification.

My invention relates to that class of garment-supporters having loops widened at the top and contracted at the bottom; and my invention consists in so constructing the said loops as to secure the desired strength and rigidity, while avoiding the use of heavy material and maintaining a better hold upon the garment.

In the accompanying drawings, Figure 1 is a view illustrating the ordinary construction of loop cut from flat metal. Fig. 2 is a face view illustrating my improved loop. Fig. 3 is a longitudinal section on the line 3 3, Fig. 2. Fig. 4 represents the sectional forms of the loop at different points, as indicated by dotted lines.

It is desirable that the metallic loops of stocking-supporters shall be as light in weight as possible, and to this end they are frequently cut from thin metal of about the shape of the loop A, Fig. 1 of the drawings. While this secures the desired light weight, it is attended with two disadvantages: first, that it is weak and liable to spring or bend in forcing the usual stud with the fabric upon it into the narrow portion of the slot, and, second, it is liable to cut the garment. In order to avoid cutting the garment and secure the desired rigidity, the loops are frequently made of thicker material, which makes them heavy and clumsy. Whether made of thick or thin metal of uniform thickness, there is always more or less tendency of the stud to rise from the narrow to the wider portion of the slot, and sometimes to become detached. To overcome these objections, I make the loop of different thickness at different points. Thus, the loop is made thin at the upper and lower ends, where less rigidity is required and where the fabric does not slide upon the edges of the slot, but at the points *x*, where the slot is contracted to the greatest extent, and where

the fabric is carried upon the stud as it passes into the narrower portion of the slot, I make the sides of the loop of greater thickness. This not only secures greater rigidity and stiffness at this point, but also on account of the thickness permits the formation of wider rounded edges not liable to cut the fabric, and is attended with the further advantage that after the stud with the fabric upon it has been carried down to the lower end of the loop the increased thickness at the points *x* tends to a certain extent to prevent the stud from riding upward, and renders the supporter more certain and reliable as a fastening.

The loops may be made of plate or wire or otherwise of different forms and dimensions, but I prefer to make the same of wire of proper thickness, bent to correspond to the general outline of the loop, and then compressed above and below the points *x*. By this means the sides of the loop at *y y* above the points *x* are flattened and reduced in thickness, but they are at the same time widened, thereby giving them lateral stiffness resisting the tendency to spread apart, while the lower end is also flattened, but widened, so as to maintain the proper rigidity at that portion while leaving the intermediate portions at *x x* almost round and of the thickness of the wire employed, so as to secure thick, smooth inner edges at this point and the desired rigidity.

Without limiting myself to the precise construction and arrangement of parts shown, I claim as my invention—

1. A loop for garment-supporters having an opening wide at the top and contracted toward the lower end, and of increased thickness at the points *x, x* on opposite sides of the contracted portion of the opening, substantially as and for the purpose set forth.

2. A loop for garment-supporters enlarged at the top and contracted toward the lower end, the side portions at the top and bottom being reduced in thickness and expanded in width, and the intermediate portions at *x x* being thicker and narrower than the adjacent portions, substantially as and for the purpose described.

3. A loop for garment-supporters, consisting of wire bent to form a widened upper and contracted lower portion, and flattened and widened at the upper and lower parts while
5 maintaining substantially the original thickness of the wire at the intermediate parts, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DE VER H. WARNER.

Witnesses:

F. S. ANDREWS,
G. S. HILL.