V. GUINZBURG.

HOSE SUPPORTER CLASP.

APPLICATION FILED MAR. 3, 1908.

916,304. Patented Mar. 23, 1909.

Fig. 1

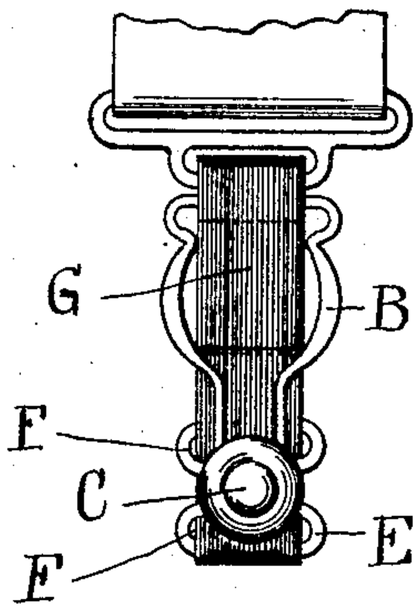


Fig. 2

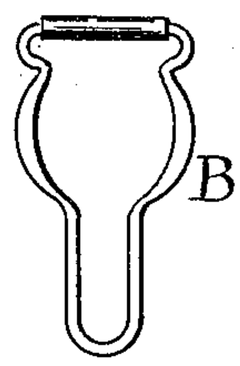


Fig. 3

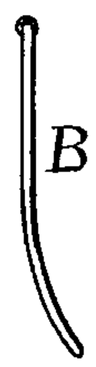
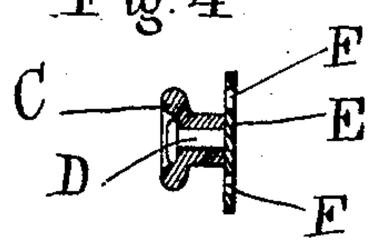


Fig. 4



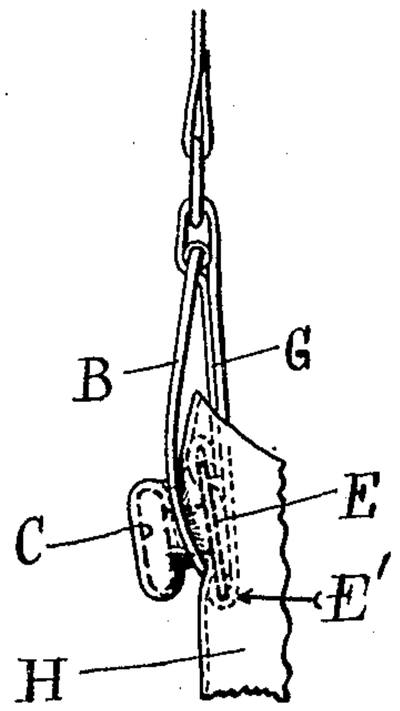
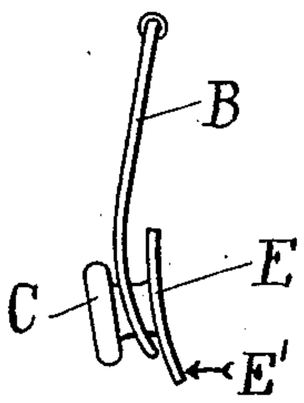


Fig. 5

Fig. 6



Witnesses
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UNITED STATES PATENT OFFICE.

VICTOR GUINZBURG, OF NEW YORK, N. Y., ASSIGNOR TO I. B. KLEINERT RUBBER COMPANY, A CORPORATION OF NEW YORK.

HOSE-SUPPORTER CLASP.

No. 916,304. Specification of Letters Patent. Patented March 23, 1909.

Application filed March 3, 1908. Serial No. 418,921.

To all whom it may concern:

Be it known that I, VICTOR GUINZBURG, a citizen of the United States, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Hose-Supporter Clasps, of which the following is a specification accompanied by drawings.

The invention relates particularly to the button-and-loop type of hose supporters, and its object is to lessen the tendency of tearing or injuring the hose where the supporter is used under great strain, as is frequently the case.

In many forms of button-and-loop supporters now in use the hose fabric is held by the confining pressure between the lower end of the loop and the under-surface of the button head.

It is the object of the present improvement to distribute the forces at work higher up between the surface of the loop and the surface of the button, and by a better distribution of the gripping pressures and strains, subject the fabric to less severe strain at any one point. This I accomplish by means of an arched loop and a coöperating button and back-plate, as hereinafter described and claimed.

In the drawings: Figure 1 is a front view of the hose supporter clasp. Fig. 2 and Fig. 3 are face view and edge view of the loop. Fig. 4 is a section of the button member. Fig. 5 is an edge view, partly diagrammatic, showing the clasp in position for use. Fig. 6 is a view, partly diagrammatic, showing the clasp with a slightly modified form of button for exaggerating the improved action.

The loop B is arched or curved, as seen in edge view in Fig. 3. Its face view contour may be such as shown in Figs. 1 and 2, the width of the lower portion of the opening being proportioned to receive the shank of the button C, as well understood. The button may be of the usual type. The button C is preferably provided with a metal shank D secured to the back-plate E and surrounded by the enlarged head and sleeve of suitable composition, these features not being the essentials of my invention. I prefer to make both the head and shank of the button somewhat larger than those most generally in use at the present time, the loop of course being proportioned to suit the button. The arching of the loop presents the convex side to the rear face of the button, as seen in Fig. 5. This arching of the loop should be such that when the hose fabric H is in place in the clasp the button, and consequently its back plate E, will be inclined somewhat, as shown in Fig. 5, the hose fabric being closely confined between the arch of the loop and the under-face of the button head on either side of the head, gripping the fabric at these two places. In this position, as will be seen in Fig. 5, the back-plate by bearing against the surface of the limb on which the clasp is being used will tend to be tilted so as to aid in confining the hose fabric between the higher portions of the button head and the arched face of the loop, because the back-plate E being substantially parallel with the button head and lying at an angle to the general plane of the loop, will extend downward and backward from the loop, as shown in Fig. 5, so that the lowest extremity E′ coming against the limb will tend to tilt the back-plate, as indicated by the short arrow at E′. In referring to the general plane of the loop I mean an imaginary plane or line through the extreme ends of the loop, as seen on edge in Fig. 5. The fastener when in use is subjected to the upward pull of the hose supporter tape or fabric applied to the upper end of the loop, and secondly, to the downward pull of the hose toward the lower end of the loop and the outward tilting effect mentioned, and acting on the lower end E′ of the slightly inclined back-plate.

In Fig. 6 the back-plate is shown concave rearwardly, bringing the lower edge E′ still farther to the rear of the structure and exaggerating the tilting effect. The back-plate is but slightly curved and is substantially parallel with the head of the button. The flat back-plate, as shown in the other figures, being simple to manufacture and satisfactorily accomplishing the result, is preferable. The tape or fabric G of the supporter clasp may be applied in the well known manner to secure the button member to the loop. For this purpose I prefer to have the back-plate of the button contain two slots, as at F, through which the tape or fabric of the supporter may be passed and secured, as well understood.

My improved arched loop and button is

attached to or detached from the hose as readily as the usual forms. Owing apparently to the gripping of the material at higher points upon the loop and against the underface of the button than has heretofore been customary, the hose is gripped with less liability to be injured or torn than with the plane form of loop.

I desire it to be understood that the novelty of my invention does not repose in the bent or arched loop apart from its combination and coaction in the clasp. Such loops have been advantageously used for the purpose of preventing the accidental disengagement of the parts of a clasp as in Dossert's patent No. 594,132 Nov. 23, 1897.

I claim and desire to secure by Letters Patent the following:

1. In combination in a button-and-loop hose supporter clasp, a button, loop, and attaching fabric, said loop being arched and concave toward the back-plate of the button, and the said button having its back-plate substantially parallel with its head and a shank of such relatively short length that the said back-plate when in use, with the material of the hose between button and loop, lies at an angle with the general plane of the loop and diverges downward and backward therefrom, whereby the outer pressure of the limb of the wearer when in use tends to tilt the back-plate and thereby cause the head of the button at its upper portion to grip against the two sides of the arched portions of the loop.

2. In combination in a button-and-loop hose supporter clasp, a button, loop, and attaching fabric, said loop being arched and concave toward the back-plate of the button, and the button having a shank and back-plate proportioned so that when engaged by the lower end of the loop with the upper portion of the button head resting in contact with the arch of the loop and the back-plate substantially in contact with the lower end of the loop the back-plate lies at a slight angle to the general plane of the loop diverging downward and backward in respect thereto.

3. In combination in a button-and-loop hose supporter clasp, a button, loop, and attaching fabric, said loop being arched and concave toward the back-plate of the button, and the button provided with a shank and back-plate and engaging the loop when in clasped position at an angle to the general plane of the loop, thereby causing the material to be gripped at a higher point upon the loop.

4. A button and loop clasp combining a button, back plate and loop and comprising means actuated by pressure against the limb when in use for pressing the upper portion of the button head and the loop toward each other and relieving pressure lower down.

5. A button and loop clasp having a button provided with a back plate extending downward and inclined rearward when the button is engaged by the loop and fabric for which the clasp is adapted, the said loop being bent toward the back plate to an extent sufficient to give such inclination, whereby outward pressure of the limb against the back plate tends to grip the fabric between the upper portion of the button head and the loop, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses, the 15th day of February, 1908.

VICTOR GUINZBURG.

Witnesses:

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