

No. 875,142.

PATENTED DEC. 31, 1907.

H. BINNEY.  
HOSE SUPPORTER CLASP.  
APPLICATION FILED NOV. 30, 1904.

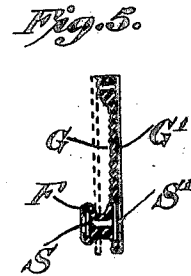
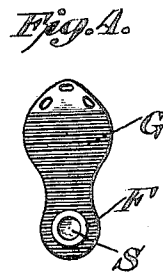
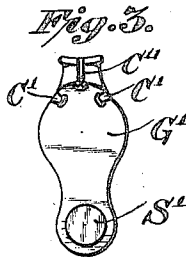
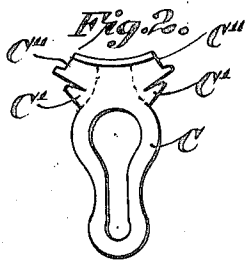
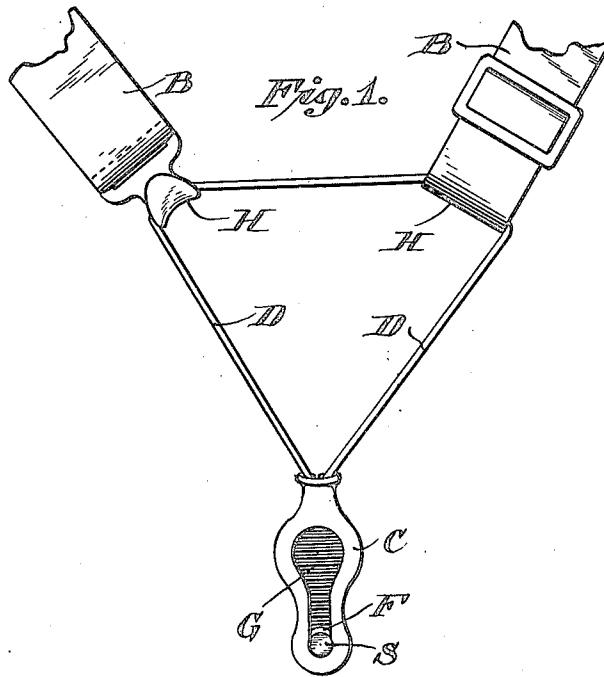


Fig. 6.

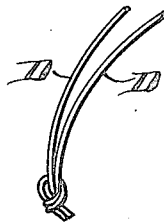
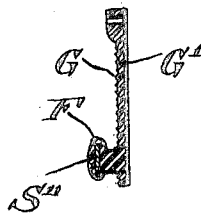


Fig. 7.



Witnesses  
*C. Mitchell*  
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Inventor  
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# UNITED STATES PATENT OFFICE.

HAROLD BINNEY, OF NEW YORK, N. Y., ASSIGNOR TO NEALON COMPANY, A CORPORATION OF NEW YORK.

## HOSE-SUPPORTER CLASP.

No. 875,142.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed November 30, 1904. Serial No. 234,906.

*To all whom it may concern:*

Be it known that I, HAROLD BINNEY, of the city of New York, post-office address 10 Lexington avenue, New York city, New York, have invented certain new and useful Improvements in Hose-Supporter Clasps, of which the following is a specification.

This invention relates to button and loop fasteners as exemplified in Gorton Patent No. 552,470, of Dec. 31, 1895. Its object is to produce an improved fastener of this type which shall be simple of construction and at the same time absolutely reliable in action, neat in appearance, and applicable alike to men's and women's garters.

The invention comprises in combination with a loop member a cooperating member consisting essentially of a homogeneous mass of flexible yielding material exemplified by rubber having a button portion the head at least of which is provided with a rigid or relatively rigid body or reinforcement which precludes the possibility of the button being drawn through the loop by the yielding of its head portion. Thus is provided for the first time a button head or body which cannot be drawn through the loop when in place, is cushioned against the loop, and at the same time flexibly secured to the other portions of the supporter by the yielding and flexible material of the back plate.

The accompanying drawings illustrate also another improvement in the metal parts of the clasp which forms the subject-matter of my separate application filed November 30th, 1904 Serial No. 234,907 and also show the combination of the button with a rubber or other similar backing secured directly to the clasp, thus utilizing the flexibility of the backing to permit the insertion of the stocking and doing away with any need of a hinge between stud and loop, or between the loop and the webbing.

In the drawings, Figure 1 shows in front view the invention in one preferred form, the button F being out of and behind the loop ready for inserting the fabric. Fig. 2 shows the metal blank from which the loop is made. Fig. 3 is a rear view of the clasp. Fig. 4 is a face view of the button and back plate. Fig. 5 is a central longitudinal section of Fig. 4. Fig. 6 shows the knotted and concealed end of the cord D of Fig. 1; and Fig. 7 shows a modification of the button and back plate.

In Fig. 1 the leg-band B and cord D are details not essential to the present invention, D being preferably of elastic cord and the band B being preferably of relatively non-elastic material as patented in the Nealon & Binney Patent No. 603,430 of May 3, 1898.

C is the metallic loop which for the purposes of the present invention may be of any suitable form to cooperate with the button.

F is the button and G its back plate. The back plate G is preferably of the same comparatively soft rubber composition as the button F and molded integrally with the button but is faced on the rear as in G' (Figs. 5 and 7) with fabric so as to reinforce the rubber while permitting it to be thin and consequently very flexible without resilience.

In Figs. 3, 4, and 5 a metallic body of stud-like form, S, S' is shown embedded in or molded within the rubber button. The front end S of this stud-like body is within the head of the button F and serves to prevent the possibility of the head being drawn through the loop under strain. The shank and the rear plate S' of the stud-like body within the button may be employed to give internal support to the entire button and as it is the principle of operation of such buttons that they are to float freely as it were, or in other words, travels up and down with the movements of the fabric in the loop, the back plate G serving merely as a means of attachment and not as a means of sustaining any pull of the hose, it follows that such a button as shown in Figs. 3, 4, and 5 is particularly well adapted to the purpose of securing the hose and at the same time by reason of the flexibility of the back plate G it may be conveniently attached and detached from the hose.

In Fig. 7 a modification is shown wherein a metallic disk S'' is embedded in the head only of the button F and located transversely of its longitudinal axis. As the disk S'' in this form of the invention is entirely covered by the rubber, the button becomes indistinguishable in appearance from an all-rubber button, while nevertheless having the functions of a rigid stud surrounded by rubber and of therefore standing greater strains than would be possible with the pure soft rubber, so as to enable women to use this desirable form of the fastener without any fear of their hosiery slouching about their heels and with-

out any uncertainty of operation. It will be seen that this interiorly rigid feature is the cause of preventing the head from collapsing and being drawn through.

5 The invention is distinguished from Phelps Patent 538,383, in addition to other differences, by having an interior reinforce in the enlarged portion or head of the button.

10 It will be noted that the reinforcing plate or portion within the head of the button is of sufficient diameter to prevent the button F being drawn through the lower part of the loop C. While it may be a little larger or a little smaller than the width of the loop, it is 15 advantageously approximately equal thereto.

The back plate G is preferably directly secured to the clasp so that the mere flexibility of the rubber G is relied upon to permit the clasp opening to insert and withdraw the fabric of the garment, there being 20 no hinge between the loop and the back-plate. For this same reason it is desirable that the back-plate be very flexible and it may therefore with advantage be corrugated horizontally so as to permit it readily 25 to bend to insert and withdraw the stud and to prevent its being at all stiff and resilient or having any tendency to push or pull on the stud when in the loop. This flexibility is 30 preferably made very great and the backing of fabric G' while tending to prevent any resilience or elasticity also toughens the back piece as is well known to those familiar with this type of garter, wherein it has been 35 quite common to back the rubber with a non-resilient fabric.

The transverse corrugation of the rubber as described will of course minimize any tendency to longitudinal stiffness and is distinguished 40 widely in this respect from the prior invention set forth in Phelps Patent 538,384.

The object of the rubber back plate G in the present invention is to form the direct 45 and immediate attachment of the button to the metallic parts.

It will be seen that I make no claim to a rubber covered metal stud by itself, so also I make no claim to combining in a single 50 member or element a button and a back-plate, but

What I do claim is the following:

1. In a clasp or fastener of the type having an embracing and an embraced member, the 55 said embraced member comprising an inte-

gral yielding button head, shank and base, a relatively rigid reinforcement located wholly within said head.

2. In a clasp or fastener of the type having an integral yielding button and back member 60 and an embracing external member between which members the fabric is engaged, a reinforcing plate within the head of the button portion of the said first named member and disposed transversely of its longitudinal axis. 65

3. In a clasp or fastener of the type having a yielding button member and an embracing external member between which members the fabric is engaged, a relatively rigid reinforcing portion located entirely within the 70 head of said button for increasing its resistance to lateral displacement.

4. In a clasp or fastener of the type having an integral yielding button and back member 75 and an embracing external member provided with a loop portion, between which members the fabric is engaged, a reinforcing plate located within the button portion of said first-named member, the diameter of said reinforcing plate being approximately equal to 80 the width of the loop portion of said embracing member.

5. In a hose supporter clasp, a loop, a rigid disk for cooperating therewith as a button or button head, and a back plate member 85 of yielding material having an extension which extends through the loop and encircles, cushions and holds said disk.

6. In a clasp or fastener of the type having a yielding button member and an embracing 90 external member for embracing a fabric against the button member, the combination of an embracing member and a combined integral back plate and button member of relatively soft and flexible material and a reinforcing head cushioned in the button member 95 and secured thereto by a rivet or shank, the said head and adjacent soft material being of too great size to pass through the embracing member and the said back plate being secured 100 adjacent to the upper end of the said embracing member, for substantially the purposes set forth.

In testimony whereof I have signed this specification in the presence of two subscrib- 1 5 ing witnesses.

HAROLD BINNEY.

Witnesses:

E. VAN ZANDT,  
GEO. L. COOPER.