

No. 791,953.

PATENTED JUNE 6, 1905.

C. W. STIMSON.
LOOP FOR GARMENT SUPPORTERS.

APPLICATION FILED OCT. 12, 1904.

Fig. 1

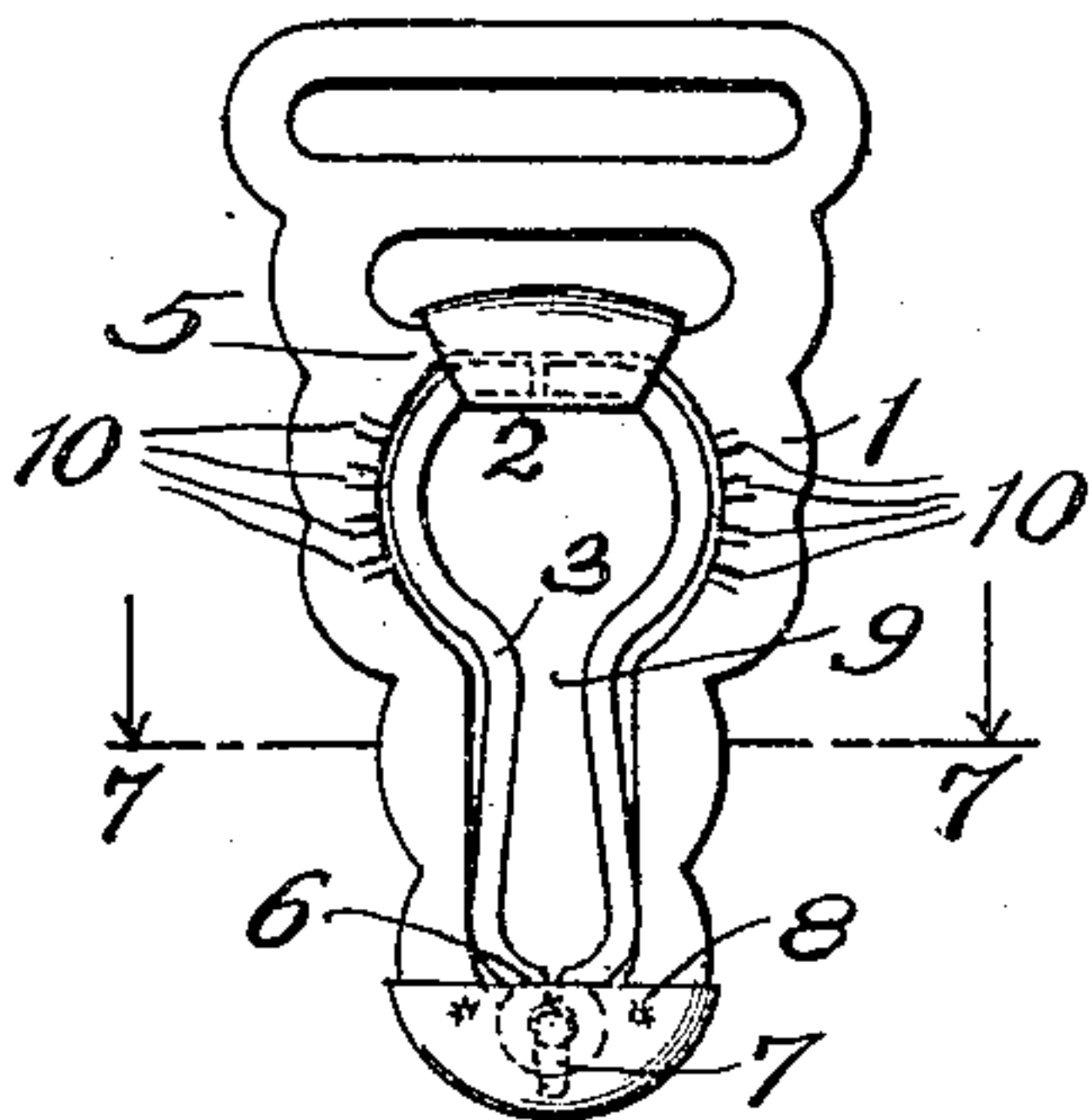


Fig. 2.

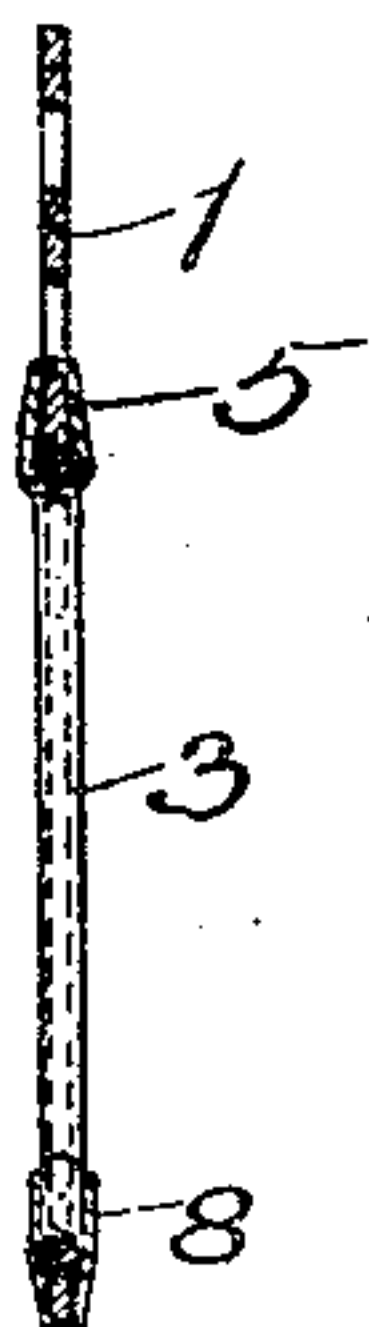


Fig. 3.

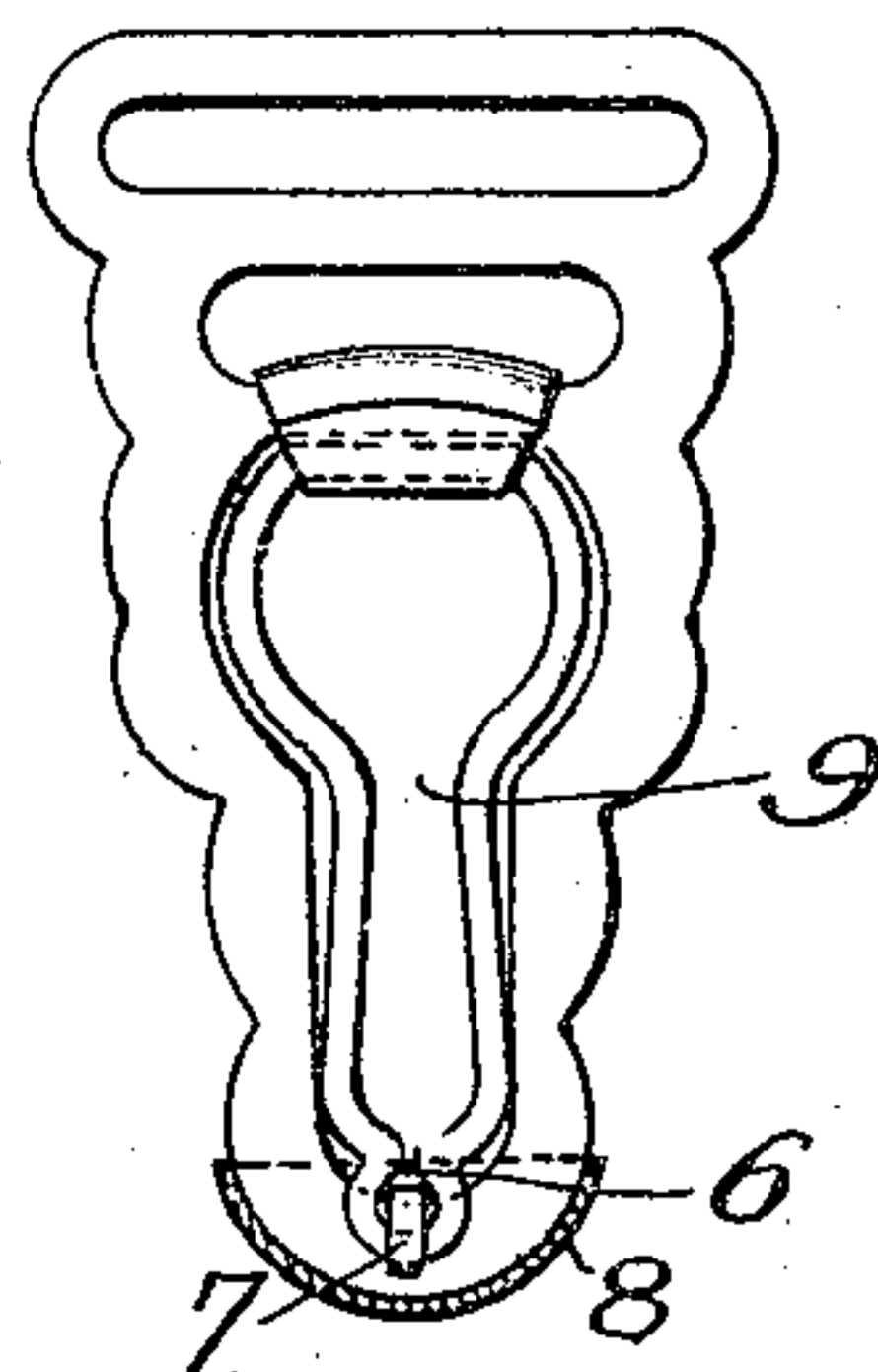


Fig. 7.



Fig. 4.

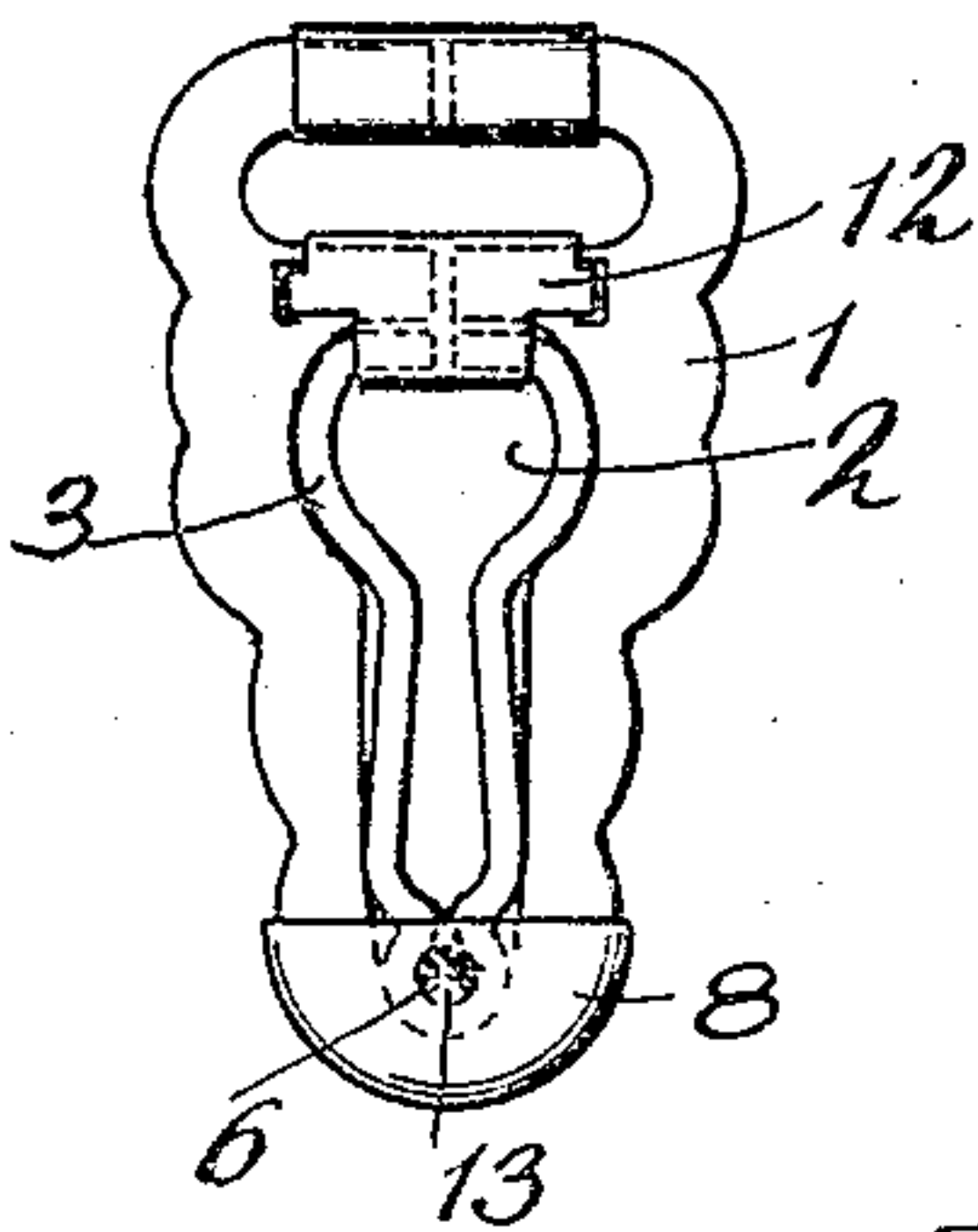


Fig. 5.

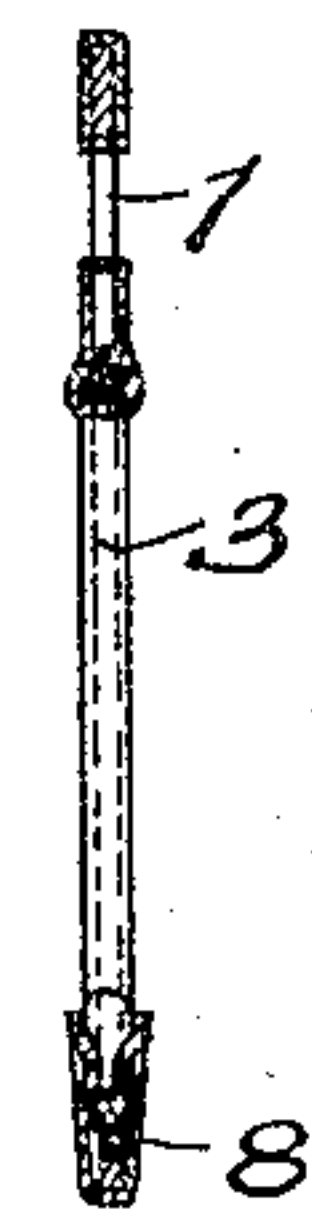


Fig. 6.

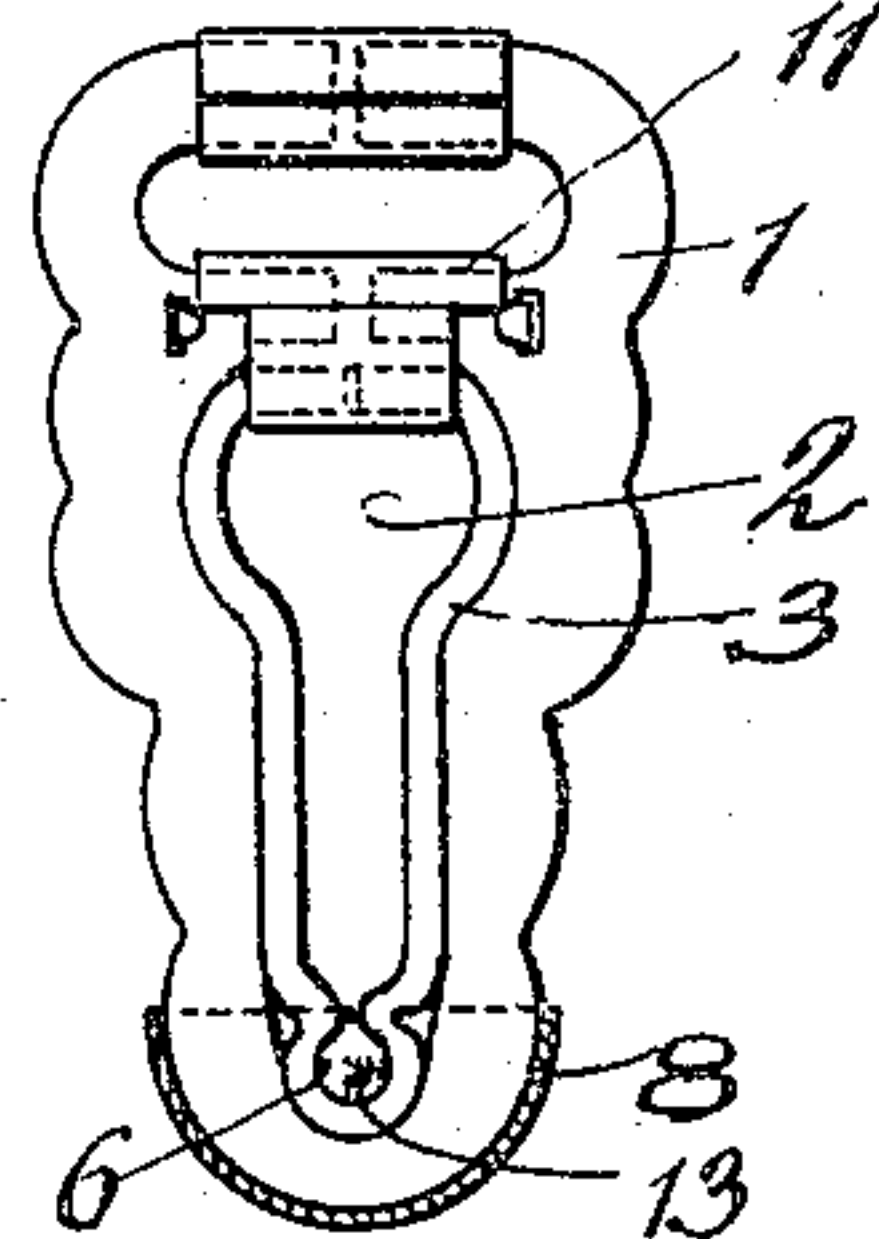


Fig. 9.

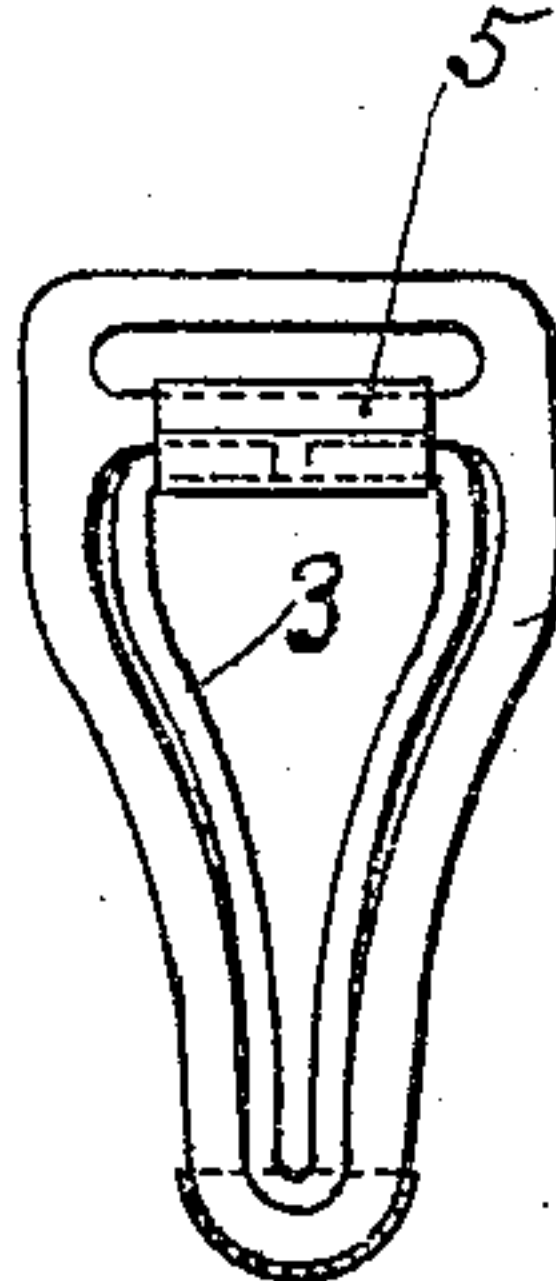


Fig. 10.



Fig. 11.



Fig. 12.



WITNESSES:

Lyman S. Andrews, Jr.

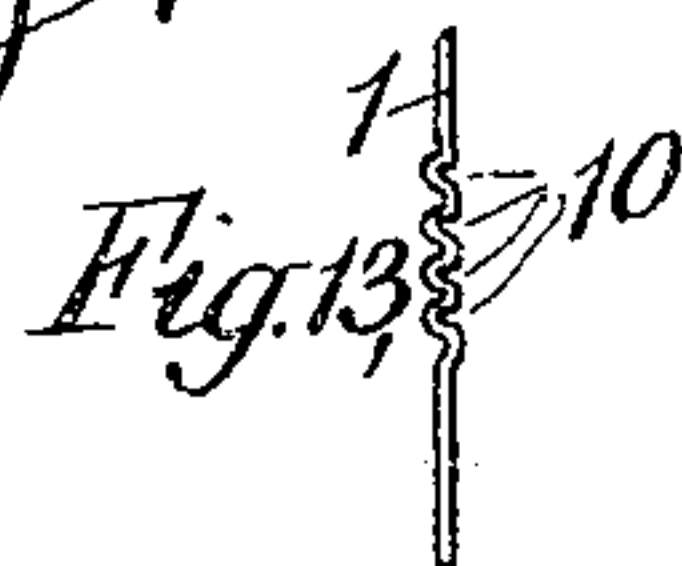
C. F. Carrington

INVENTOR

Charles W. Stimson

BY

Chapman Hayward & Marks
ATTORNEYS



UNITED STATES PATENT OFFICE.

CHARLES W. STIMSON, OF NEW YORK, N. Y.

LOOP FOR GARMENT-SUPPORTERS.

SPECIFICATION forming part of Letters Patent No. 791,953, dated June 6, 1905.

Application filed October 12, 1904. Serial No. 228,123.

To all whom it may concern:

Be it known that I, CHARLES W. STIMSON, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Loops for Garment-Supporters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in loops such as are employed in stocking-supporters and the like, either alone or in connection with a headed button, for grasping the stocking or other garment to be supported; and my invention consists in novel and improved means for attaching to such a loop a wire or similar lining for the edges thereof and in other features of invention hereinafter described, and particularly pointed out in the claims.

The objects of my invention are to improve the construction of garment-supporter loops, to attach a wire or similar lining to such loops in an improved manner, to improve the spring action of such loops and permit free spring action of the lining, and generally to provide a loop which while accomplishing the above objects is simple in construction, cheap, strong, thin, and attractive in appearance.

I will now proceed to describe my invention with reference to the accompanying drawings, in which certain forms of garment-supporter loops embodying my invention are illustrated, and will then point out the novel features in claims.

In the said drawings, Figure 1 shows a front view of one form of garment-supporter loop embodying my invention. Fig. 2 shows a longitudinal section thereof, and Fig. 3 shows a rear view thereof. Fig. 4 shows a front view of another form of garment-supporter loop embodying my invention. Fig. 5 shows a longitudinal section thereof, and Fig. 6 a rear view thereof. Fig. 7 shows a transverse section of one of the said loops on a larger scale and in particular shows the wire of the loop covered with a cushioning material, such as rubber or a fabric, the section being taken on

the line 7 7 of Fig. 1, but showing the wire lining spread so that its flat sides rest against the edges of the loop. Fig. 8 shows a side view of a loop such as shown in Figs. 1 and 4 and the headed button and fabric connecting the button and loop, the whole arranged as such parts are customarily arranged in practice. Fig. 9 shows a front view of a loop of the type intended to be employed without a headed button, said loop constructed in accordance with my invention. Figs. 10, 11, and 12 show different sections of wire which may be employed. Fig. 13 is a detail view illustrating the offsetting of different portions of the edge of the sheet-metal loop to prevent the wire from slipping past the same.

Referring now to the drawings, and at first to Figs. 1 to 3, inclusive, 1 designates the main portion of the loop or loop proper. Such main portion comprises a metal plate which customarily is stamped out of sheet metal and is for that reason termed hereinafter the "sheet-metal" loop or plate to distinguish it from the wire loop, which lines the inner or working edge of the sheet-metal loop. Such sheet-metal loop contains a central slot or opening 2, the upper portion of which is relatively large and which tapers from such large upper portion to a much narrower lower portion. In loops such as shown in Fig. 1, which are designed to be used in connection with a headed button, the upper portion of the opening in the loop is large enough to permit the passage of the head of the button, and the lower portion of the opening is narrow enough to press the fabric to be held tightly against the shank of the button. In loops such as shown in Fig. 9 the lower portion of the opening is still narrower, so that the fabric may be held by being wedged into the opening in the loop.

It is exceedingly desirable to be able to line the inner or working edges of such loops with material, such as rubber or a fabric, which holds fabrics more firmly than does smooth metal and which, moreover, is soft, even having a cushioning action, so that the fabric held may not be cut, torn, or injured in any way. To so line the inner edge of my improved loop, I employ an inner loop 3, formed

of wire covered with the selected material, which inner loop or lining is secured in a suitable manner to the sheet-metal loop 1.

In the drawings numeral 4 designates the rubber, fabric, or other covering material with which the wire loop is provided.

Various means may be employed for holding the sheet-metal loop and the wire loop together. According to the method illustrated in Figs. 1, 2, and 3 a sleeve 5 is provided which embraces the ends of the wire forming the wire loop and a portion of the sheet-metal loop. In this way the two loops are connected at one end. For connecting them at the other end I may form in the wire loop an eye 6, which eye may be formed by bending the wire as shown, and through this eye I pass a tongue 7, formed on the sheet-metal loop and which is bent over after being passed through said eye, so that the loops are held together securely at the lower end also. Preferably the said eye and the tongue 7 are covered and concealed from view by a cap 8, which is held in place by being pressed tightly upon the sheet-metal loop.

It is desirable that the loop shall grasp the fabric between itself and the button by spring action. Figs. 1 and 3 illustrate one method of accomplishing this, the spring action being exerted by the wire loop, which is formed of spring metal. This wire loop in its normal condition is narrowest at an intermediate point 9. The ends of said wire loop, although covered by the sleeve 5, are free to separate, and hence the sides of the loop may be sprung apart somewhat to permit the passage of an object somewhat wider than the width of the wire loop at such point 9. Such object once past such point 9 is held by the spring action of the wire loop, since it cannot return except by spreading apart the sides of the loop slightly.

To prevent the wire loop from spreading beyond the edges of the sheet-metal loop when so spread apart, I preferably corrugate or offset the sheet-metal loop at points such as 10, so that the effective thickness of the sheet-metal loop at such points is sufficient to prevent the wire from spreading past the inner edge of the sheet-metal loop. The same object might be accomplished by making the sheet-metal loop relatively thick at points 10; but this is objectionable, because of the increased weight and cost of the resulting article. This corrugating, embossing, or offsetting of the sheet-metal loop is illustrated particularly in Fig. 13.

As previously stated, loops such as shown in Fig. 1 are customarily employed in connection with a headed button, being connected with the button by a strip of webbing in the manner shown in Fig. 8, in which 11 designates the button. The particular button there shown is constructed in accordance with Patent No. 603,517, granted to me on May 3,

1898, and comprises a head and shank composed of felt or similar fibrous elastic material. By employing such a button and by employing a wire loop covered with thread, rubber, or the like the maximum holding power may be obtained, coupled with practical immunity from cutting or injuring the fabric held.

The sheet-metal loop 1 may also have spring action similar to that of the wire loop as above described. Figs. 4, 5, and 6 illustrate such a loop constructed in accordance with Patent No. 542,211, granted to me on July 2, 1895, the sides of the loop being disconnected at the top, so that they may be spread apart and may draw together, the separation of the sides of the loop being limited by a link 12. The ends of the wire loop or lining 3 are embraced by a portion of this link corresponding to the sleeve 5 in Fig. 1.

Figs. 4, 5, and 6 also illustrate an alternative method of connecting the wire and sheet-metal loops at the bottom. As in Figs. 1, 2, and 3, an eye is formed at the bottom of the wire loop; but instead of employing a tongue 7 the metal of the cap 8 is crimped in at a point 13, so as to enter said eye and perform the function of the tongue 7.

The operation of the loop shown in Figs. 4, 5, and 6 is substantially the same as that of the loop shown in Figs. 1, 2, and 3. The wire lining may have spring action, or the sole spring action of the loop may be that of the sheet-metal loop.

It is not necessary that loops constructed in accordance with my invention shall be limited to use in connection with buttons. Fig. 9 shows a loop the opening at the lower end of which is contracted, so that fabric drawn into it will be held. This loop, like that shown in the preceding figures, is provided with a wire lining 3.

The wire used for lining the loops shown in the various figures above mentioned may have various sections. I prefer that it shall have a D-section, the flat side of the wire being placed adjacent to the edge of the sheet-metal loop and the rounded side of the wire placed so that it forms the working edge. This is illustrated in Fig. 7 and the section of the wire is shown in Fig. 10; but instead I may use wires of other sections, such as the round wire shown in Fig. 11 or the oval wire shown in Fig. 12.

It is obvious that my invention is susceptible of many variations and modifications; also, that certain parts may be used in connection with other parts of different construction. I do not limit myself, therefore, to the particular details of construction herein illustrated and described.

What I claim is—

1. In a garment-supporter loop, the combination with a wire loop comprising a piece of wire bent to suitable form and having dis-

connected ends, of a plate provided with an opening of which said loop forms a lining, said plate having means permitting the sides and disconnected ends of said wire loop to
5 move toward and away from each other, and means for securing said wire loop and plate together comprising a sleeve provided with means for holding in place the disconnected ends of the wire loop while permitting free
10 movement thereof toward and away from each other.

2. In a garment-supporter loop, the combination with a wire loop comprising a piece of wire bent to suitable form and having dis-
15 connected ends, said loop broad at one end and narrow at the other, of a plate provided with an opening of which said loop forms a lining, said plate having means permitting the sides and disconnected ends of said wire
20 loop to move toward and away from each other, and means for securing said wire loop and plate together comprising a sleeve provided with means for holding in place the disconnected ends of the wire loop while permit-
25 ting free movement thereof toward and away from each other.

3. In a garment-supporter loop, the combination with a plate, of a wire loop inclosing a space through which fabric may be passed,
30 and bent to form an eye substantially separated from said fabric-receiving space, and

means for securing said loop to said plate comprising means passing through said eye.

4. In a garment-supporter loop, the combination with a plate, of a wire loop secured
35 thereto and provided at one point with an eye, and means for covering said eye and securing the loop to the plate comprising a cap covering said eye and the adjacent portion of the plate and means entering the eye and thereby
40 holding the loop and plate together.

5. In a garment-supporter loop, the combination with a plate provided with an opening, of a wire lining for said opening, and means for securing the wire to said plate, the
45 edge of said plate adjacent to the wire being corrugated, and the portion of said wire loop adjacent to the corrugated portion of said plate being substantially plane.

6. In a garment-supporter loop, the combination with a plate provided with an opening, of a lining for said opening comprising
50 wire bent to conform to said opening, secured to said plate and having a flat side adjacent to the edge of said opening.
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In testimony whereof I affix my signature in the presence of two witnesses.

CHARLES W. STIMSON.

Witnesses:

H. M. MARBLE,
JOHN F. COLLINS.