

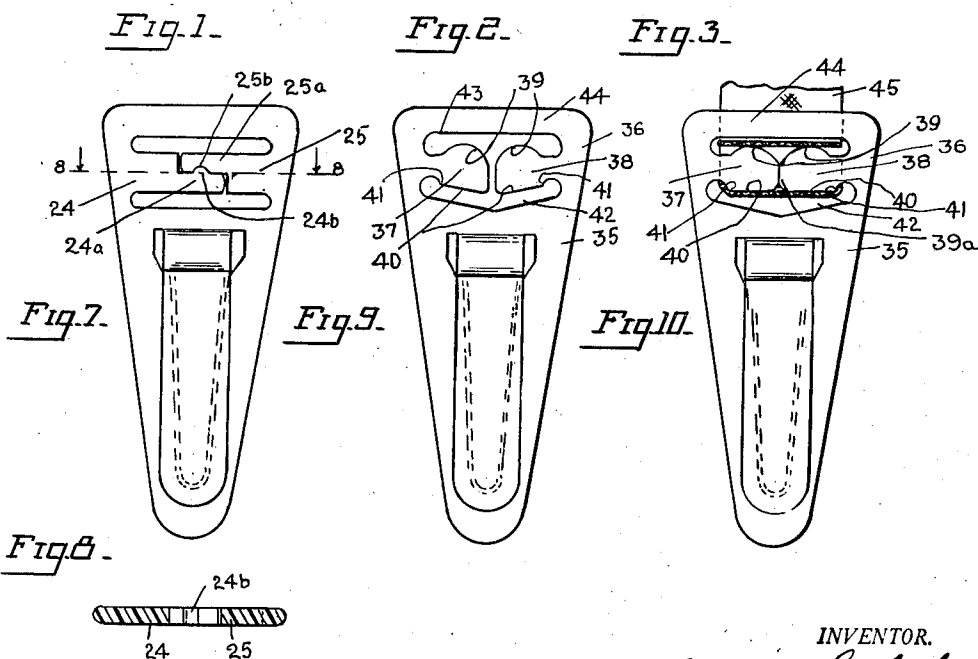
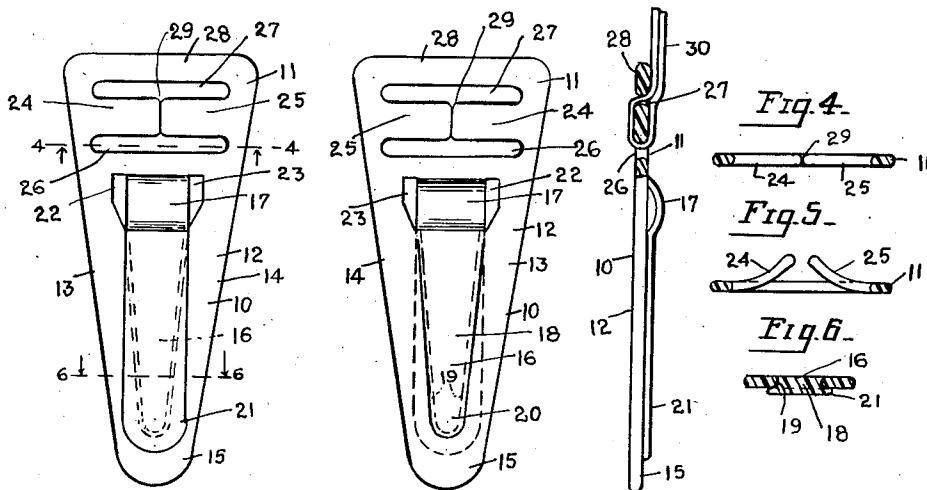
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QUICK COUPLING AND RELEASING GARTER CLASP

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QUICK COUPLING AND RELEASING GARTER CLASP

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6 Claims. (Cl. 24-246)

This invention relates to an improved garter clasp, and one of its objects is to provide a garter clasp with a head formed with parallel or adjacent slots to receive the elastic garter strap loop, and a divided bar separating the slots from each other and providing a quick means for assembling the garter loop and for removing the same from the clasp.

In the conventional garter clasp it is necessary to unbuckle the garter strap and to thread the free end through the receiving slot across the upper end of the clasp, after which the free end is extended through the buckle and retained in adjusted position. My invention is designed to permit the rapid coupling of the loop of the garter strap on the clasp, without unbuckling the end of the garter loop, and for quickly releasing the garter strap loop from the clasp, without unbuckling the end of the strap loop.

The invention is embodied in a garter clasp constructed of pliable plastic material of high load strength, which is capable of being displaced from its molded condition and of returning to its original state, and includes a cross bar formed on the head of the clasp, which is split to provide confronting bars, the confronting ends of which are spaced apart to admit the garter strap between, so that the garter strap loop may be placed astride both bars, the plastic material permitting the displacement of the bars laterally from the plane of the clasp and having sufficient resiliency to return to normal strap loop retaining position, in the plane of the clasp.

Another object of the invention is the provision of a garter clasp with a cross bar divided to form confronting bars, which are arranged in overlapping relation to each other and interlocked, so that the garter strap loop will develop a tensional pull on each cantilever arm when connected thereto.

A still further object of the invention is to provide confronting bars which have inclined inner edges and are constructed so that the garter loop will have an interlocking action on these arms when placed astride of the same.

With the above and other objects in view the invention comprises certain new and useful constructions, combinations and arrangements of parts, clearly described in the following specification, and clearly illustrated in the accompanying drawings, in which:

Fig. 1 is a plan view of the garter clasp, enlarged, showing the bars of the cross bar in normal position.

Fig. 2 is a similar view showing the reverse side of the clasp.

Fig. 3 is a vertical sectional view thereof, showing a garter loop in service position on the bars of the cross bar.

Fig. 4 is a cross sectional view, taken on line 4-4 of Fig. 1, looking in the direction of the arrows.

Fig. 5 is a similar view, showing the bars laterally displaced to admit or release the garter loop.

Fig. 6 is a cross sectional view taken on line 6-6 of Fig. 1, looking in the direction of the arrows.

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Fig. 7 is a plan view showing a modified form of the invention.

Fig. 8 is a cross sectional view, taken on line 8-8 of Fig. 7, looking in the direction of the arrows.

Fig. 9 is a plan view of still another form of the invention.

Fig. 10 is a plan view of the form shown in Fig. 9, showing the cantilever arms in the upper position which would result from the pull of the garter loop upon them, the latter being shown partly in section.

Referring to Figs. 1 to 6 of the drawings, 10 designates a wedge or triangular shaped frame forming a closed loop and having a head part 11, and a loop part 12, providing the downwardly converging clutch side bars 13 and 14, united by the integral tip portion or bend 15.

The male locking tongue 16 is connected to the head part 11 by means of the flexible and relatively thin hinge web 17, and is provided with a wedge shaped body 18 which is formed with an edge groove 19, extending along the sides thereof and around the convex curved tip 20 of the same. This tongue is further provided with a pressure plate 21, which has parallel side edges, and which overlaps the meeting edges of the tongue wedge and the loop wedge.

The frame loop 10 is formed with narrow slots 22 and 23 on opposite sides of the hinge web 17, to permit surplus fabric of the stocking to be gathered to take up excessive length.

The male locking tongue 16 has a pressure fit in the loop part of the frame 10, and the edge groove of the male tongue snugly receives the inner edges of the frame loop.

The present application is directed to the construction of the head part of the garter clasp. In this invention the head part 11 is formed with confronting bars 24 and 25, disposed in axial alignment with each other, at right angles to the main axis of the garter clasp, and having widths which provide a lower transverse slot 26 and an upper or outer transverse slot 27, parallel to the end cross bar 28 of the frame 10. The inner ends of the bars 24 and 25 are spaced slightly apart to provide the vertical or longitudinal and central slot 29, which provides an entrance to the slots 26 and 27, and is located midway of the outer ends of these slots.

The garter loop 30 is inserted in the vertical slot 29 and shifted horizontally on the bar 24 until the entire garter strap loop has been shifted into both slots 26 and 27, when the garter strap loop is then shifted on the other bar 25, thus straddling both bars.

In Figs. 7 and 8 I show the same general construction, with the exception that each bar is formed with an end extension which overlaps and interlocks with the end extension of the other companion bar. The cantilever arm 24 is formed with the end extension 24a, which is formed with a lateral or upstanding side lug 24b, and is one half the width of the bar itself. The bar 25 is formed with an end extension 25a which overlies the end extension 24a and is provided with a small edge recess 25b which snugly receives the edge lug 24b of the opposing bar.

The end extensions may be shifted laterally to admit the garter strap loop, and when the garter strap loop has been placed in straddling relation to both bars, the end extensions which are at the center of the head, will be forced by the pull of the garter into effective interlocked relation, and this pull, due to this interlock, will subject the two bars of the divided cross bar to tension, instead of to shear alone.

In Figs. 9 and 10 I show another form of the invention, which comprises the clasp 35 of high strength pliable plastic material, having a head part 36 formed with confronting cantilever arms 37 and 38, each of which is formed with an offset and rounded lug portion 39 on the upper

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edge thereof, and with an inclined inner edge 40, which terminates at its outer end in a shoulder 41. The inclined portions 41 are disposed in outwardly divergent angles and form the upper edges of the inner transverse slot 42 of the head portion 36. The inner edges of the cantilever arms 37 and 38 are spaced slightly from each other to provide a narrow or restricted entrance slot between the lugs 39. The upper or end cross bar 44 is normally spaced from the upper edges of the lugs 39 of the cantilever arms 37 and 38. When the garter strap loop 45 is placed astride and around both cantilever arms and a pull is applied, as in service use, to these arms by the garter strap loop, the confronting edges 39a of the lever arms 37 and 38 will be forced into contacting pressure engagement with each other and the upper rounded edges of the lugs 39 will be forced close to or against the end cross bar 44, which will limit further yielding of the lever arms.

The side edge portions of the garter strap 45 engage the shoulders 41 of the cantilever arms, and thereby exert a tensional pull on these arms, as shown in Fig. 10.

It is understood that various changes in the construction of the improved garter clasp and in the combination and variation of the parts thereof, may be resorted to within the scope of the invention, as defined by the claims hereof.

Having described my invention I claim as patentable:

1. A garter clasp of pliable plastic material having an upper portion formed with confronting cantilever arms disposed at right angles to the major axis of the clasp and provided with a cross slot above and below the arms said arms being displaceable laterally of the major plane of the clasp and returning to initial position by their own resiliency and with means interlocking the inner ends to each other when the arms are disposed in alignment with each other.

2. A garter clasp made of pliable plastic material having an upper portion formed with confronting bars of approximately of equal length disposed across the said upper portion and provided with a slot above the bars and with another slot below the bars, the inner end of each bar having an extension and one extension being disposed under the other extension in overlapping relation the arms being displaceable from the major plane of the clasp to separate said extensions from each other.

3. The garter clasp made of pliable plastic material having an upper portion formed with confronting bars disposed across said upper portion and provided with a slot above the bars and with a slot below the bars, one of the bars having an end extension formed with an offset lug and the other bar having an end extension formed

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with a recess to receive the offset lug, said extensions having a normal overlapping relation, said arms being displaceable from the major plane of the clasp to increase the distance between the arms when so displaced whereby a garter strap loop placed astride the bars and the extensions will cause said extensions to interlock and will transmit tension to said bars.

4. A garter clasp having a pair of confronting bars, a transverse slot inwardly of the bars, a cross bar and a second transverse slot outwardly of the bars, the bars having rounded lugs on their upper and inner portions and the inner ends of said bars being slightly spaced apart to admit a garter strap loop therebetween, the bars being adapted to yield under the tensional pull of a garter loop and to have abutting engagement with each other and with the outer cross bar to limit bending of the bars.

5. A garter clasp having a pair of confronting bars, a transverse slot inwardly of the bars and a cross bar and a second transverse slot outwardly of the bars, the bars having rounded lug portions on the inner ends thereof, said bars being adapted to receive the loop of a garter strap and to yield when subjected to a pull from the garter strap so connected and adapted to have abutting engagement with the cross bar when yielding under the pull of the garter strap loop.

6. A garter clasp made of pliable plastic material and formed with an integral cross bar at the upper end thereof and provided with integral confronting arms spaced inwardly from said cross bar to provide a slot, said arms being formed with oppositely inclined inner edges and with offset portions on the outer edges thereof spaced normally inwardly of the cross bar, said arms being displaceable laterally of the clasp, the clasp also having a slot inwardly of the arms, said slots being adapted to receive a holding strap and said arms being adapted to yield toward the cross bar to have pressure bearing with said cross bar and with each other at the confronting ends thereof.

References Cited in the file of this patent

UNITED STATES PATENTS

295,310	Tucker	Mar. 18, 1884
711,657	Eiseman	Oct. 21, 1902
761,956	Gorton	June 7, 1904
820,710	Ford	May 15, 1906
956,793	Burke	May 3, 1910
1,485,266	Hennah	Feb. 26, 1924
1,718,291	Guenther	June 25, 1929
2,098,821	Cook	Nov. 9, 1937