June 28, 1938. M. HANSEN 2,122,138

GARMENT CLASP

Filed Nov. 25, 1935

Fig. 4.

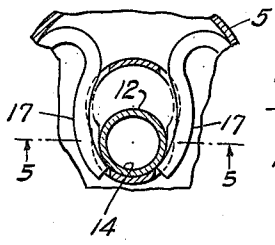


Fig. 1.

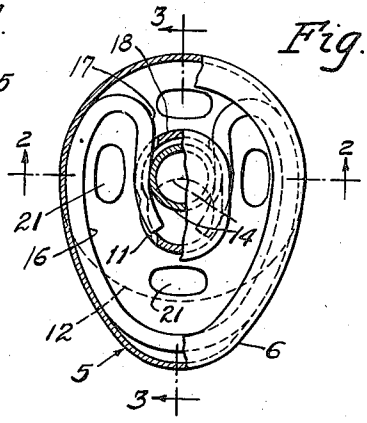


Fig. 2.

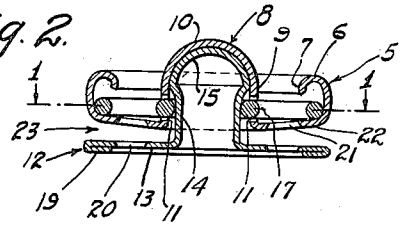


Fig. 3.

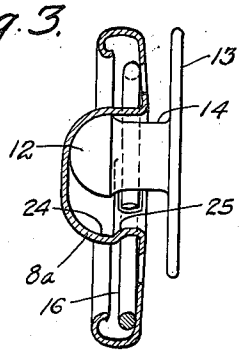


Fig. 5.

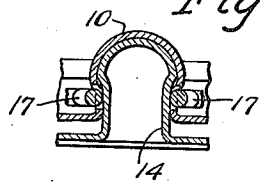
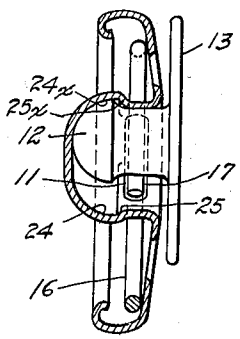


Fig. 6.



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GARMENT CLASP

Martin Hansen, Ventura, Calif.

Application November 25, 1935, Serial No. 51,497

1 Claim. (Cl. 24—224)

This invention relates to a garment clasp of a type wherein the clasp, when in use under tension, tends to lock itself automatically in the clasping position.

Among the objects of the invention are to provide a garment clasp which combines extreme simplicity of construction and ease of operation; which consists of a male and a female member yieldingly secured together by an improved resilient retaining means; and to combine with other improved features means to indicate the proper position in which to place the applied clasp.

Still other objects, advantages and features of the invention will hereinafter appear.

Referring to the accompanying drawing, which illustrates what is at present deemed to be a preferred embodiment of the invention,

Fig. 1 is a plan view of the complete clasp, a portion of the members being sectioned on line 1—1 of Fig. 2 in order to disclose the underlying structure.

Fig. 2 is a cross section on line 2—2 of Fig. 1.

Fig. 3 is a part sectional view on line 3—3 of Fig. 1.

Fig. 4 is a fragmental sectional view on line 1—1 of Fig. 2, with the male member in its tension or locked position.

Fig. 5 is a fragmental sectional view on line 5—5 of Fig. 4.

Fig. 6 is a view similar to Fig. 3, but differs therefrom in that it shows a slight modification.

Referring in detail to the drawing, the female part consists of a saucer-shaped or plate-like member 5 which, however, is preferably not circular but of an ovoid shape. Said member is furnished with a peripheral flange 6 that is directed laterally, inwardly and downwardly, as well shown in Fig. 2, where the downwardly directed part or lip is designated 7.

Near its center said member 5 is furnished with a lateral extension or hollow stud 8 having a neck portion 9 and a convex head 10, the space or recess within said stud being adapted to receive part of a male member 12.

As shown in Figs. 1 and 4, the extension stud 8 is not circular as viewed in cross section but has a breadth greater than its width and the side wall thereof extends along the arcs of two circles which differ considerably in size. Said stud 8 is thus furnished with a side wall having a convex lateral protrusion 8a, the convexity of which lies in a circle of less diameter than the remainder thereof. An elongated transversely extending opening or slot 11 is cut through each side wall of the extension 8 of the female member below the convex outer portion thereof.

The male member 12 consists of a disk-shaped base portion 13 provided centrally with a laterally projecting tubular stud which consists of a neck 14 and a dome-shaped head 15, the base portion of which is of a greater diameter than said neck. Said head 15 is fully projectable into that portion of the extension 8 of the female member which is of the larger diameter, but cannot be projected into or withdrawn from the part thereof which has the smaller diameter, although the neck portion of the male member is of a sufficiently small diameter to permit it, after insertion, to be shifted laterally into the locking position shown in Fig. 4.

A wire retaining spring 16 is bent to fit within the ovoidal seat provided therefor by the flanged base of the female member. Said spring has at each end a rebent wire limb 17, said limbs both lying in the same plane and tending to spring laterally through the slots 11 into the recess contained within the extension 8 of the female member. The stock 18 at the upper ends of the slots 11 as viewed in Fig. 1 provides stop shoulders which limit the approach of the limbs 17 towards each other. Said limbs are slightly curved, their concavities being directed towards each other, and their free end portions converge somewhat even when the male member is spreading them apart as far as possible. Hence, when the male member is in the locked position shown in Fig. 4, said limbs will withdraw it into the unlocked position unless downward traction, as by a garment being supported, opposes the spring sufficiently to maintain the parts in the position shown in said view. The device therefore combines security of attachment during times of strain with easy manual detachment at other times.

The extension 8 of the female member, as viewed in cross section, may be said to be of a generally ovoid shape, or to be shaped somewhat like a keyhole, the narrow portion of which is convex at its sides and outer end. The external diameter of the neck portion of the extension of the male member is nearly as great as the internal diameter of the neck portion of the female extension 8. The laterally protruding part 8a of said extension is swelled outwardly at its center thus forming an internal recess 24 and shoulder 25 to cooperate with the head of the male member as an aid to locking the clasp in the assembled relation.

The circular base portion 16 of the male member is furnished with a bent-down peripheral reinforcing flange 19 and with sewing openings 20. The female member likewise has sewing openings 21, the latter openings being through the base portion 22 thereof. Said base part 22 is shown somewhat dished so that, in the assembled clasp, the space 23 between the two parts of the clasp will be widest throughout its outer portion. Also, in the assembled clasp, the wire spring engages the male member at all times.

In view of the statements in the foregoing description regarding the function of the various parts of the clasp the operation thereof will be readily understood.

The space 23 between the male and female members of the clasp permits of a slight tilting of these two members with relation to each other during use. This space may be made as narrow as desired without departing from the spirit of the claimed invention.

In the modification shown in Fig. 6 a recess 24x and shoulder 25x are shown opposite to the recess 24 and shoulder 25, said shoulder 25x, at times, aiding in holding the two members of the clasp together.

I claim:

In a clasp, a female member comprising a housing having a base provided with a keyhole slot, side and end walls extending from said base forming a part of the housing and defining said keyhole slot, said side walls having uninterrupted slots and the end walls being closed, a spring wire seated in said housing and having at each end a limb, said limbs extending through the wall slots into the wide part of said keyhole slot for resilient gripping engagement with a male member when inserted therein, said limbs converging toward the narrow portion of the keyhole slot and lying in said narrow portion whereby to grip a male member when disposed therein, and the closed end wall of the wide portion of the keyhole slot providing an abutment limiting the converging movement of said limbs.

MARTIN HANSEN.