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FASTENER FOR USE IN WEARING APPAREL

Filed Jan. 16, 1931

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This invention relates to improvements in fasteners and has particular reference to fasteners for use upon wearing apparel.

In certain types of garments it is the practice to provide an elastic band or strap in the hem provided therein to contract the garment about the waist of a wearer. In ladies' undergarments such as bloomers, step-ins, and the like, wherein such elastic straps are threaded through a hem at the waist portion, the elasticity of the strap becomes bent after being repeatedly subjected to water during washing of the garment. This requires frequent replacement of the elastic strap which necessitates the removal of the worn strap and the threading of new ones through the hem. It is the purpose of this invention to provide separable coacting fastening elements by which the ends of the elastic strap may be connected, and means attachable to one of the fastening elements which will enable quick and easy threading of the strap through the hem. Such features will enable the removal of the elastic strap from the garment before washing to prolong the life of the same, or if the strap is permitted to remain in the garment during washing, the invention facilitates the quick removal of the elastic strap when worn and ready replacement by a new one.

Another feature resides in a pair of coacting fastening elements which when in fastened position will lie flat against the body of a wearer and are securely held engaged by the tension upon the strap, but which will not accidentally become separated should such tension be released by the body movement of the wearer.

Another object is to provide a separate fastener for the above mentioned purposes which is simple of construction, inexpensive of manufacture, and easy to connect and disconnect.

With these and other objects in view, the invention resides in the certain novel construction, combination and arrangement of parts, the essential features of which are hereinafter fully explained, are particularly pointed out in the appended claim, and are illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of a pair of ladies' bloomers equipped with my invention,

Figure 2 is a side elevational view of the ends of an elastic strap equipped with my improved fastener, the same being shown in separated position in full lines and in connected position in dotted lines,

Figure 3 is a top plan view of the fastening elements in connected position,

Figure 4 is a vertical sectional view through the female fastening element illustrating the manner in which the male element is inserted therethrough for connection therewith,

Figure 5 is a fragmentary elevational view showing the manner in which the threading member is connected to the male element of the fastener and inserted into the hem of a garment, and;

Figure 6 is a detail elevational view of the threading member per se with part broken away in sections.

Referring to the drawings by reference characters, I have illustrated in Figure 1 the invention as applied to a pair of ladies' bloomers 10 provided with a hem 11 at the waist portion thereof and which hem is provided with an opening 12 at the rear portion of the garment on the inner side thereof. Although I have shown a pair of bloomers in Figure 1 of the drawings, it will be understood that the same may be a ladies' step-in petticoat or any like garment.

An elastic fabric strap 13 is adapted to be threaded through the hem 11 and secured at its ends in order to contract the waist encircling portion of the garment about the waist of a wearer and fixedly attached to the respective ends of the strap 13 are male...
and female fastening elements 14 and 15 respectively.

The male element 14 is constructed of a single piece of flat bendable material and comprises a flat body portion 16 of a width substantially the same as the width of the strap 13 while bent from the body portion 16 and extending a portion of the length thereof are attaching flanges 17 which if desired may have tangs struck therefrom for penetration into the elastic strap 13. However, the flanges 17 may serve to securely fasten the element to the elastic strap. Extending from the outer free end of the body 16 is a substantially T-shaped head 18 which has its outer end rounded as at 19 and is joined to the body 16 through a reduced neck 20. By reference to Figure 3 of the drawings, it will be seen that the head 18 is in the same plane as the body portion 16 for a purpose which will be appreciated hereinafter.

The female element 15 above referred to is also constructed of a single piece of flat bendable material and includes an elongated body 21, one end of which has attaching flanges 22 bent therefrom for securely attaching the element to one end of the elastic strap 13. These flanges 22 may also have tangs struck therefrom to securely hold the element against accidental separation from the elastic strap. The outer end of the body portion 21 is rounded as at 23 and is bent or offset on one side to provide shoulders 24 and a lip 25.

The body portion is also provided with a substantially T-hole shaped slot which includes a relatively narrow elongated slot 26 extending lengthwise of the body member and which terminates at its outer end in an enlarged opening 27, which opening also extends into a portion of the lip 25.

Assuming that the fastening elements 14 and 15 are separated as shown in Figure 2 of the drawings and it is desired to bring the same into operative engagement with each other. In such cases, it is only necessary to insert the head 18 through the slot 26 and opening 27 from the underside of the female element, after which the neck 20 is disposed so as to enable the male element to be given a one-quarter turn, after which it is brought into the same general plane as the female element and by exerting a pull against the two fastening elements, the inner sides of the head 18 will engage the shoulders 24 which prevents accidental shifting of the elements latterly while the lip 25 overlaps a portion of the body 16 of the male element to lend strength to the joint between the interconnecting element. It will therefore be seen that a pull upon the coacting fastening elements in opposite directions will securely hold the said elements in locked engagement but upon the release of any pull against the elements in order to facilitate the separation of the same, it is only necessary to turn the male element 14 so as to position the head 18 in alinement with the slot 26, whereupon the two elements may be separated.

Assume that it is desired to thread the elastic strap 13 through the opening 12 and into the hem 11 of the garment 10. For this purpose I provide a needle member 28 which comprises a cylindrical body 29 which is pointed at one end as at 30 while one side of the blunt end of the body is provided with a transversely disposed recess 31 which opens onto the outer blunt end of the body through a restricted slot 32. The slot 32 forms a pair of spaced lugs 33 which have their inner wall notched as at 34. By reference to Figure 5 of the drawings, it will be seen that the T-shaped head of the male element 14 may be inserted into the recess 31 and slot 32 and after insertion therein, the shoulders of the head will seat in the notches 34 to prevent accidental separation of the male element from the blunt end of the threading member 28. With one end of the elastic strap 13 connected to the threading member, it will be seen that the pointed end 30 of the threading member may be easily inserted through the opening 12 in the hem and worked around the hem so as to completely draw the strap therethrough. After the elastic strap has been threaded into the hem 11, the threading member 28 is separated from the male element 14 and the said element 14 is then connected to the female element 15 in the manner hereinbefore explained. When the fastening elements are connected, they are disposed adjacent the opening 12 in the hem to be readily accessible when it is desired to disconnect them for the removal of the elastic strap should it be desired to replace the elastic when worn by a new one or if the owner wishes to preserve the elasticity of the strap during the washing of the garment so as to prevent the damaging effect of the water upon the elastic.

While I have shown and described what I deem to be the most desirable embodiments of my invention, I wish it to be understood that various changes in construction may be resorted to if desired, and I do not limit myself to the exact structural details herein set forth nor to anything less than the whole of my invention limited only by the appended claim.

Having thus described the invention, what is claimed as new, and what it is desired to secure by Letters Patent of the United States, is:

A separable fastener including a male member comprising a flat body formed with a T-shaped head having an outer rounded edge, a female member comprising a flat body, the outer end of said body being bent to provide an offset outwardly extending lip,
the outer edge of said lip being rounded, the offset portion constituting a shoulder, said flat body having a substantially keyhole shaped slot therein, the enlarged end of which extends into said lip, whereby said T-shaped head may be inserted through said slot and turned to cause the inner edges of said T-shaped head to abut said shoulder with said lip flatly overlapping one side of the neck of said T-shaped head.

In testimony whereof I affix my signature.

AUGUST J. GROH.