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1,928,536

FASTENER

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Fig. 1.

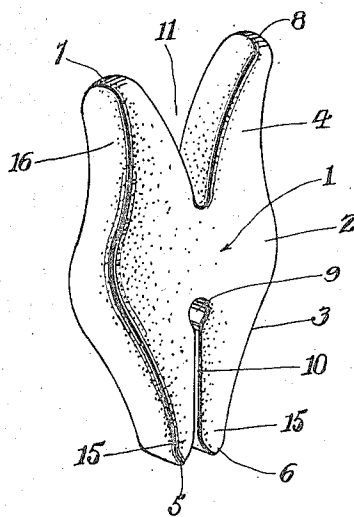


Fig. 2.

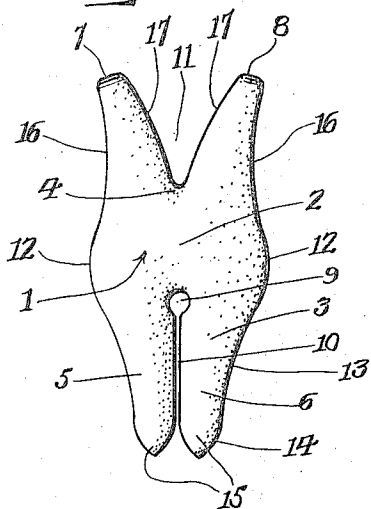
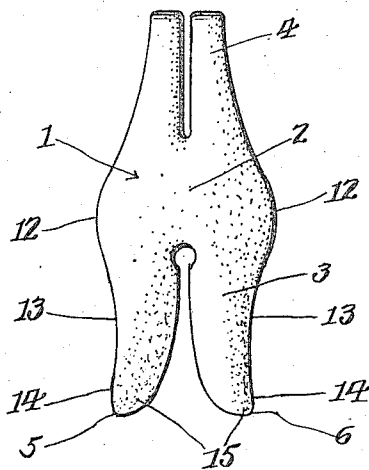


Fig. 3.



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FASTENER

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Application November 8, 1932. Serial No. 641,788

4 Claims. (Cl. 24—137)

This invention relates to a fastener designed primarily for detachably connecting by a clamping action, articles of wearing apparel to a line, such as a clothes line, but it is to be understood that a fastener, in accordance with this invention, may be employed for any purpose for which it may be found applicable, and the invention has for its object to provide, in a manner as hereinafter set forth, a fastener for the purpose referred to formed from a one-piece body of resilient material including normally closed resilient clamping jaws capable, when open to clamp against and attach the article to the line, and with said body including a pair of normally spaced fingers acting, when a pressure exerting means is applied thereto, for the purpose of moving them towards each other, to open the jaws, that is to say to move the jaws away from each other to receive the article therebetween.

A further object of the invention is to provide a fastener for the purpose referred to with a pair of normally closed resilient clamping jaws, and a pair of normally open resilient fingers acting when moved towards each other to exert a pulling action on the jaws to open the latter, and with the fingers so constructed whereby a selective point of location on the fingers of a pressure exerting means for the latter will control the extent of the opening movement of the jaws.

Further objects of the invention are to provide, in a manner as hereinafter set forth, a fastener for the purpose referred to, which is simple in its construction and arrangement, strong, durable, compact, thoroughly efficient for the purpose intended, conveniently operated, and inexpensive to manufacture.

To the above ends essentially, and to others which may hereinafter appear, the invention consists of such parts, and such combination of parts which fall within the scope of the invention as claimed.

In the drawing:

Figure 1 is a perspective view of the fastener.

Figure 2 is a side elevation of the fastener in its inactive position, the fingers being spaced away from each other and the jaws closed.

Figure 3 is a view similar to Figure 2 with the fingers moved towards each other and the jaws extended.

The fastener is formed from a one-piece solid resilient body 1 formed of any suitable material of the desired length, width and thickness, such as rubber.

The body 1 includes a one-piece intermediate

portion 2 and a pair of outer or end portions 3, 4. The portion 2 is formed of two parts 5, 6 constituting resilient clamping jaws which are normally closed. The portion 4 comprises two parts 7, 8 constituting a pair of normally extended fingers.

The body 1 to one side of its transverse median line and in proximity to one end of portion 2, is formed with a circular opening 9, extending from one side face to the other side face thereof. The body 1 at its longitudinal median line and in portion 3 is provided with a lengthwise slit 10, extending from one end edge thereof to and communicating with said opening. The width of slit 10 is materially less than the diameter of the opening 9, the latter being intersected by the longitudinal median line of body 1. The opening 9 and slit 10 provide the body 1 with the resilient normally closed jaws 5, 6. The body 1 adjacent the other end of portion 2 and in portion 4 is formed with a V-shaped cutout 11 which provides the normally extended resilient fingers 7, 8.

The walls of slit 10 at the outer ends thereof are oppositely and outwardly curved. Each side edge of the portion 2 is of convex curvature, as at 12. The outer side edge of each jaw is of concavo-convex curvature, as at 13, 14 respectively. The convex part of such edge of each jaw is of less length than the concave part, is arranged at the outer end of the jaw and coacts with the curved part of a wall of the slit to provide each jaw with a tapered outer end portion 15. Each finger has its outer side edge throughout of concave curvature, as at 16 and its inner side edge flared outwardly as at 17. The inner ends of the edge portions 13, 16 merge into the ends of edge portions 12. The intermediate portion 2 of body 1 is of less length and of greater width than the portions 3, 4.

It will be assumed that a pressure exerting means is applied to the fingers 7, 8 at the outer ends of edges 16 for the purpose of moving the fingers together. This will cause a pulling action on the jaws to move them slightly apart. Now if the pressure exerting means be moved further inwardly upon edges 16, the pulling action will be such as to move the jaws further apart, and if the pressure exerting means is applied against the inner end portions of edges 16 and partly upon edges 12, the pulling action on the jaws will be such as to extend them widely apart with respect to each other. The jaws have a permanent tendency to move towards each other to bind, grip or clamp upon the article inserted

between them. The fingers have a permanent tendency to move away from each other.

What we claim is:—

1. A fastener formed of a one-piece body of rubber material having an intermediate solid body portion and end portions, one end being in the form of a pair of resilient clamping jaws normally tending to move toward each other when spread apart and its other end in the form of a pair of resilient fingers normally spaced away from each other, the inner ends of said jaws being spaced from the inner ends of said fingers by said solid body portion, said fingers providing when moved toward each other by a pressure exerting means applied thereto a pulling action on the jaws for moving the latter apart.

2. A fastener formed of a one-piece body of resilient material having a solid intermediate body portion and a pair of end portions, one of said end portions being in the form of a pair of resilient clamping jaws tending to move towards each other when spread apart and the other end portion being in the form of a pair of resilient fingers permanently tending to move away from each other when they are compressed, the inner ends of the jaws being separated from the inner ends of the fingers by said intermediate

portion, said fingers providing when moved towards each other by a pressure exerting means applied thereto a pulling action on the jaws for moving them apart.

3. A fastener formed entirely of a single body of rubber material, comprising a solid intermediate body portion and end portions, said body cut out at its ends to provide respectively, a pair of clamping jaws and a pair of fingers, said jaws extending in an opposite direction with respect to said fingers, and said jaws and said fingers projecting from said solid intermediate portion of said body intermediate the inner termini of said fingers and jaws, said material being of such nature as to cause the jaws to spread apart when said fingers are squeezed together.

4. A fastener formed entirely of rubber, having a solid intermediate body portion, a pair of fingers and a pair of gripping jaws, said jaws and said fingers extending longitudinally from opposite ends of and spaced apart at their inner termini by said body portion, said rubber being of such nature as to cause said jaws to be spread apart for engagement upon a pressure being exerted on said fingers to squeeze the latter together.

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