Dec. 10, 1940. H. MARCUS 2,224,626

FASTENER

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Fig. 1

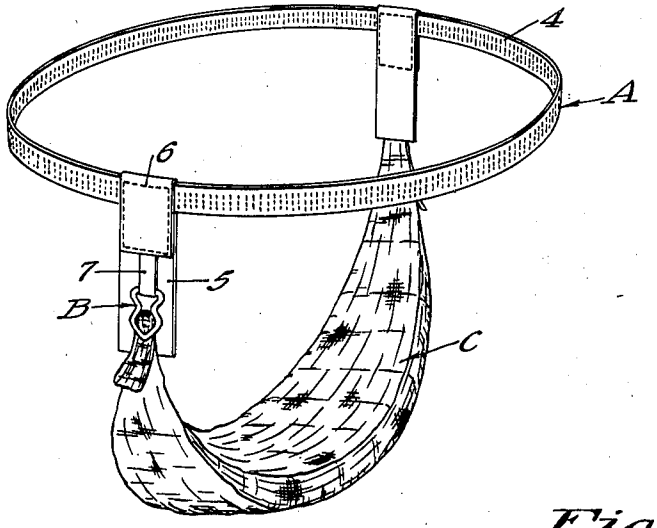


Fig. 3

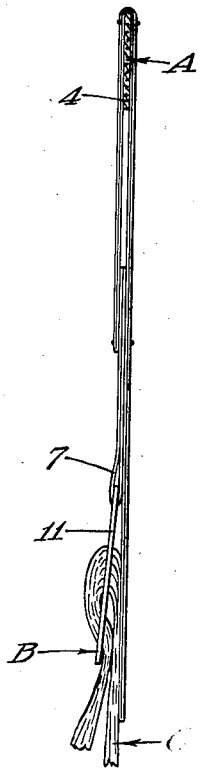
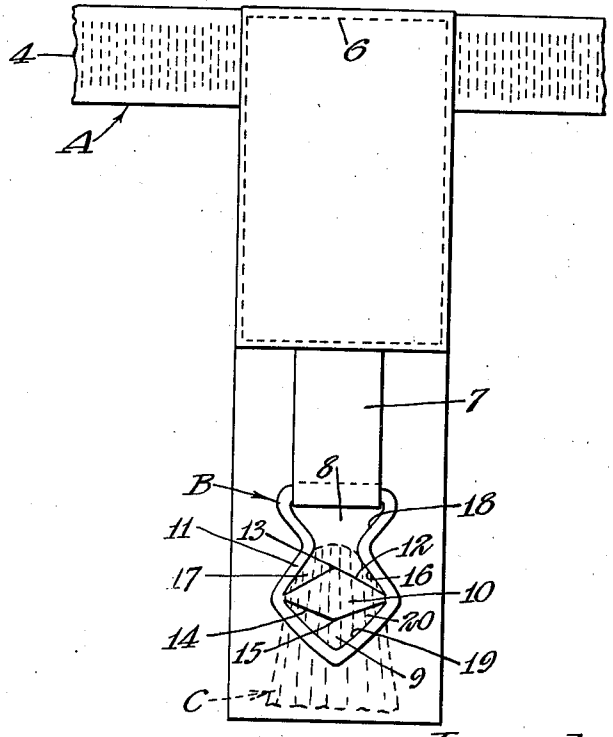


Fig. 2



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FASTENER

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3 Claims. (Cl. 24—200)

This invention relates to fasteners for fabric, and it relates particularly to fasteners for use on sanitary belts to take and hold the ends of catamenial pads or sanitary napkins.

It it the main object of this invention to provide a novel and improved fastener of cheap and simple construction which can be used as on sanitary belts to secure the ends of sanitary pads and which will be of a type that the napkin ends can be quickly and conveniently applied thereto.

The objects and advantages of the invention will more fully appear from the following description, made in connection with the accompanying drawing, wherein like reference characters refer to the same or similar parts throughout the various views and in which

Fig. 1 is a perspective view of a sanitary belt incorporating therein fasteners of the invention and illustrating a sanitary pad secured by the fasteners;

Fig. 2 is a front view in enlarged scale of a portion of the belt, the end of a sanitary pad being shown in dotted lines, and

Fig. 3 is a vertical sectional view through the belt showing the parts illustrated in Fig. 2 in side elevation.

There is illustrated a sanitary belt A to which a pair of the fasteners B of the present invention are attached, and a sanitary napkin C is shown as being attached to the fasteners B.

The belt A includes a waist encircling band 4 formed of elastic fabric material. Attached to the waist band 4 at diametrically opposite points are fabric tabs 5. Each of these tabs has an inner long arm depending downwardly from the waist band 4 at the inner side thereof, and it has a shorter arm depending downwardly from the waist band at the outer side thereof. The two arms of each tab 5 are secured together and attached to the waist band 4 as by stitching 6. Received between the two arms of each tab 5 and depending downwardly therefrom and attached to the tab as by the same stitching 6 is a looped strap 7 carrying a fastener B.

The fastener B of the invention is formed of flat material and is perforated to form an upper opening 8 and a lower opening 9. Between the two openings 8 and 9 there is formed a diamond-shaped portion 10 of elongated shape and the diagonally opposite corners of this diamond-shaped portion 10 join the outer or retaining portion 11 of the fastener. The bottom of the upper opening 8 is defined by the two upper edges 12 of the diamond-shaped portion 10 and it will be seen that these two edges join at an obtuse angle to form a central upwardly projecting peak 13 in the fastener. Similarly, the top of the lower opening 9 is defined by the two lower edges 14 of the diamond-shaped portion 10 and these edges 14 join at an obtuse angle to form a central downwardly projecting peak 15 in the fastener. The lower parts of the sides of the upper opening 8 are defined by inner edges 16 of the retaining portion 11 which converge upwardly for some little distance from the lateral ends of the edges 12. With this arrangement it will be seen that the edges 12 and the edges 16 form, laterally of the peak 13, a pair of downwardly diverging triangular-shaped notches 17. The angle between an edge 12 and an edge 16 is quite acute being preferably somewhat less than 30°, so that these notches 17 are quite pointed. The upper parts of the sides of the upper opening 8 are defined by edges 18 which respectively join the edges 16 and diverge upwardly to join the top of the retaining portion 11 which is received in the looped strap 7.

The lower part of the lower opening 9 is defined by edges 19 of the retaining portion 11 and these edges converge downwardly to join. The edges 14 and the edges 19 form, laterally of the peak 15, a pair of upwardly diverging triangular-shaped notches 20 very similar to the notches 17, previously described.

In securing a sanitary pad to one of the fasteners B, an end portion of the pad, as the pad C, is carried through the upper opening 8 from the inner side of the fastener; thereupon the end of the pad is carried from the outer side of the fastener down through the lower opening 9. The pad is then pulled away from its secured end to tightly secure it to the fastener. As the pad is pulled, the peak 13 at the lower part of the upper opening 8 cooperating with the edges 12, causes the fabric to be carried into the two notches 17 and the fabric crowds into these two notches. As the fabric works down into the two notches 17, it is caught and held securely by the pairs of edges 16 and 12 forming the notches. In much the same manner will the fabric be caught in the notches 20 of the lower opening 9 after the lower peak 15 has crowded the fabric into the notches 20.

After the sanitary napkin has been once attached at its two ends to the two fasteners B, the pad will be securely held and cannot slip or work loose from the fasteners in spite of the movements of the wearer. The pad is very easily detached from the fastener when this is desired by merely drawing the free end of the pad first

out of the lower opening 9 and then out of the upper opening 8.

It will be seen that a highly efficient fastener has been provided. Attention is called to the fact that the pad is not torn by the fastener nor are teeth employed which pass through the fabric of the pad, as in the case of many other fasteners now in use.

It will, of course, be understood that various changes may be made in the form, details, arrangement and proportions of the parts without departure from the scope of the invention which generally stated consists in the matter shown and described and set forth in the appended claims.

What is claimed is:

1. A fastener comprising a body having an opening therethrough to receive fabric, said opening being defined at an inner portion thereof by a peak and outwardly divergent edges of said body at either side of said peak and at outer portions thereof by acute angle notches at either side of and spaced from said peak and provided by spaced apart, outwardly divergent side elements of said body at opposite sides of said peak in cooperation with outer portions of said outwardly divergent edges, the angle of divergence of said outwardly divergent edges being greater than the angle of divergence of said outwardly divergent side elements.

2. A fastener comprising a body having spaced apart, oppositely disposed openings therethrough each adapted to receive fabric, each of said openings being defined at an inner portion thereof by a peak and outwardly divergent edges of said body at either side of said peak and at outer portions thereof by acute angle notches at either side of and spaced from said peak and provided by spaced apart, outwardly divergent side elements of said body at opposite sides of said peak in cooperation with outer portions of said outwardly divergent edges, the angle of divergence of said outwardly divergent edges being greater than the angle of divergence of said outwardly divergent side elements in the instance of each of said oppositely disposed openings.

3. A fastener comprising a body having spaced apart openings therethrough each adapted to receive fabric, one of said openings being defined at an inner portion thereof by a peak and outwardly divergent edges of said body at either side of said peak and at outer portions thereof by acute angle notches at either side of and spaced from said peak and provided by spaced apart, outwardly divergent side elements of said body at opposite sides of said peak in cooperation with outer portions of said outwardly divergent edges, the angle of divergence of said outwardly divergent edges being greater than the angle of divergence of said outwardly divergent side elements.

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