July 1, 1930. M. D. EALY 1,768,977

FASTENER

Filed Jan. 21, 1929

Fig. 1.

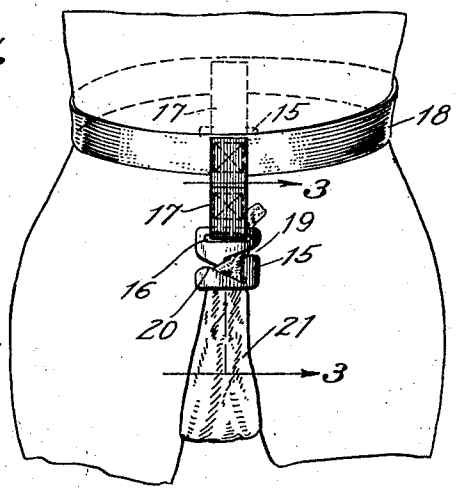


Fig. 2.

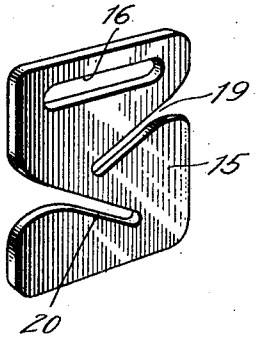


Fig. 5

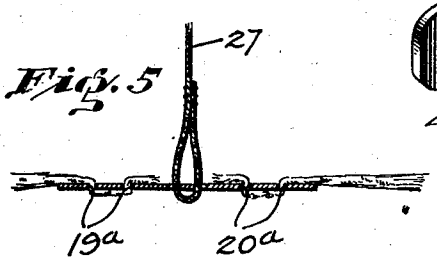


Fig. 4.

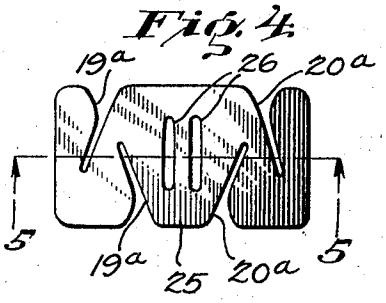
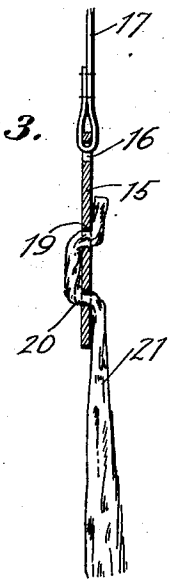


Fig. 3.



INVENTOR.

Milton D. Ealy

Patented July 1, 1930 1,768,977

UNITED STATES PATENT OFFICE

MILTON D. EALY, OF LOS ANGELES, CALIFORNIA

FASTENER

Application filed January 21, 1929. Serial No. 333,790.

My invention relates to fasteners, and has for a purpose the provision of an extremely simple and inexpensive fastener which is particularly adapted, although not necessarily, for fastening the ends of a catamenial bandage to the supporting belt in substitution of the more expensive and complicated fasteners heretofore employed and found to be particularly unsatisfactory because they produce enlargements clearly discernible over thin garments.

It is also a purpose of my invention to provide a fastener which is characterized by its extreme thinness and flatness, and by at least two slots into which any flexible element may be extended and trained successively through the slots, the slots being functionally related to secure the flexible element against withdrawal from the slots transversely by reason of an angular arrangement of the slots.

I will describe only two forms of fastener embodying my invention, and will then point out the novel features thereof in claims.

In the accompanying drawing:

Figure 1 is a view showing one form of fastener embodying my invention in applied position to a catamenial bandage and supporting belt;

Fig. 2 is an enlarged detail perspective view of the fastener shown in Fig. 1; and

Fig. 3 is a vertical sectional view taken on the line 3—3 of Fig. 1.

Fig. 4 is a view showing in side elevation another form of fastener embodying my invention.

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 4 and showing one manner of using the fastener.

In carrying out my invention, I provide a fastener preferably constructed from a piece of rigid material, such as metal, to form an extremely thin and flat body 15 that is, in the present instance, of rectangular form, although it will be understood that its precise form does not enter into the proper functioning of the body as a fastener. As the invention is illustrated, the body 15 is formed along and adjacent its upper edge with an elongated opening 16 for the purpose of receiving a strap or tab 17 depending from a band or belt 18 which is adapted to encircle the waist when worn. The tab 17 is looped through the opening 16 as best shown in Fig. 3, and then stitched in loop form so as to permanently connect the tab to the fastener body and yet allow the fastener to depend from the tab.

As clearly illustrated in Fig. 2, the fastener body 15 is provided at points beneath the opening 16 with a pair of companion slots 19 and 20. These slots extend inwardly and downwardly from the vertical edges of the body and for such distances that the inner ends of the slots are in overlapped relation to each other at a point directly beneath the opening 16. Although both slots extend downwardly, they are inclined in opposite directions, their outer or entrance ends having relatively wide mouths to permit the easy entrance of any flexible article into the slots incident to attaching the article to the fastener. However, the slots decrease in width inwardly from the mouths in order that the flexible article may be properly gripped by the walls of the slots to effectively secure the article against removal transversely from the slots. Thus, the slots define wedge-shaped openings, although it is to be understood that the wedge form is not essential to secure a flexible article to the fastener body in view of the relation of the slots to each other and the manner in which the flexible article is trained through the slots.

In practice, with the fastener permanently attached to the tab as illustrated, a flexible article such as the catamenial bandage 21 may be secured to the tab by extending the free end of the bandage first through the upper slot 19, then over the front of the fastener body, and finally inwardly through the lower slot 20 from the bandage depends from the rear side of the fastener. With the bandage so applied, any pull exerted lengthwise of the bandage or tab will tend to jam or wedge the bandage into the slots by reason of their reverse inclination thus causing the walls of the slots to more securely grip the bandage against the possibility of disengagement. It is important to note that the relation of the opening 16 with respect to the slots 19 and 20 is such that the line of pull exerted by the

tab or the bandage is vertically of the fastener body and transversely of the slots, and this action coupled with the reverse inclination causes the fastener to effectively function in retaining the bandage against disengagement therefrom. It will, of course, be understood that in spite of the security with which the bandage is retained on the fastener, the bandage may be readily detached by moving the bandage longitudinally from first one slot and then the other.

While I have shown and described my fastener as applied to a supporting belt tab and catamenial bandage, it may be employed in any capacity where a looped element is adapted to be temporarily attached to a flexible element, I having elected this particular application of my invention to illustrate the advantage provided by reason of its extreme thinness and flatness, as it will be appreciated that in such use it lies flat against the body and forms no protuberance that could be discernible when covered by outer garments.

In Figs. 4 and 5 I have shown another form of fastener embodying my invention and which comprises a single piece of metal or other rigid material to form a relatively thin and flat body 25. Centrally the body is formed with two openings 26 that extend transversely of the body and in spaced parallelism to each other. At opposite sides of the slots, the body is formed with two pairs of slots, the slots of each pair being designated at 19ª and 20ª and identical in form and arrangement to the slots 19 and 20 of the fastener shown in Fig. 2.

The openings 26 provide a means through which a strap 27 or other flexible member may be extended and stitched to form a loop which permanently secures the strap to the fastener leaving the end portions of the fastener free to permit the extension of the ends of a cloth or other flexible element or the opposed ends of two separate pieces of cloth into the slots 19ª and 20ª in the same manner as described in connection with the first form of fastener and the bandage 21. Thus the cloth ends are detachably secured to the strap 27 through the medium of the fastener.

Although I have herein shown and described only two forms of fasteners embodying my invention, it is to be understood that various changes and modifications may be made herein without departing from the spirit of the invention and the spirit and scope of the appended claims.

I claim:

1. A fastener comprising a plate having slots therein arranged in pairs with the slots of each pair extending inwardly from opposite edges of the plate and at different points, said plate having openings therein between the pairs of slots.

2. A fastener comprising a plate having two slots extending inwardly from opposite edges thereof so that their inner end portions overlap, said slots being inclined in opposite directions so that the inner end portions extend along intersecting lines, and an elongated opening at one side of the slots extending transversely of the plate.

Signed at Los Angeles in the county of Los Angeles and State of California this 4th day of January, A. D. 1929.

MILTON D. EALY.