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FLEXIBLE STRIP FOR PRODUCING
SLIDE CLASP FASTENERS
Filed April 2, 1940

Serial No.
327,513

Fig. 1.

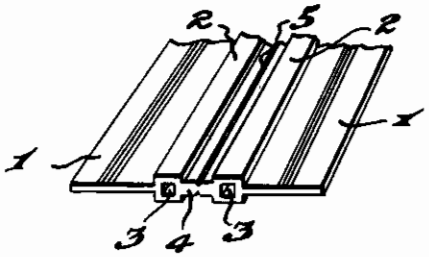


Fig. 2.

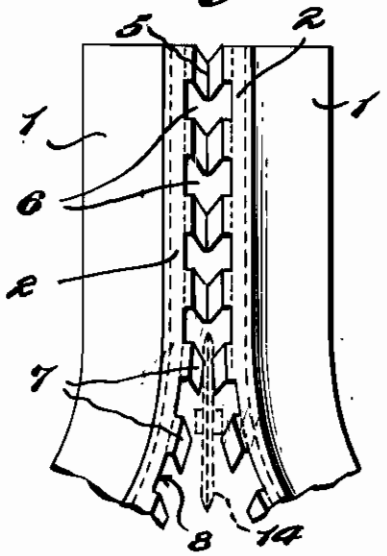
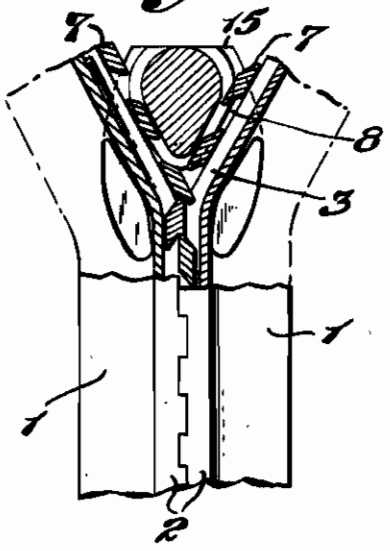


Fig. 3.



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ALIEN PROPERTY CUSTODIAN

FLEXIBLE STRIP FOR PRODUCING SLIDE CLASP FASTENERS

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The present invention relates to slide fasteners and particularly to the shape of a strip of flexible material from which slide clasp fastener elements may be formed integral with the stringers for such fastener elements. This application is a divisicn of my copending application Serial No. 254,965, filed February 6, 1939.

A slide clasp fastener of the usual type includes two stringers composed of fabric and the fastener elements which are separately secured to the stringers and the slide fastener elements usually consist of metal or other similar materials. In the production of slide clasp fasteners of this type it is necessary to attach the fastener elements to the stringers and apparatus has been provided to apply the metallic fastener elements in one continuous operation.

An object of the present invention is to provide a strip of flexible material from which the fastener elements together with the stringers may be simultaneously formed.

Other and further features and objects of the invention will be apparent from a consideration of the accompanying drawing and the following description wherein an exemplary embodiment of the invention is disclosed.

In the drawing:

Fig. 1 is a perspective view of a strip of flexible material from which the fastener elements and stringers may be formed.

Fig. 2 is a plan view of the strip shown in Fig. 1 illustrating the manner in which the fastener elements are formed from parts of the strip.

Fig. 3 is a plan view partly in section illustrating the manner in which the fastener elements may be interlocked.

Referring to the drawing there is shown in Fig. 1 a strip of flexible material shaped in such a manner as to provide the requisite characteristics to the finished fastener elements and the stringers. The parts of the strip shown in Fig. 1 at 1 are designed to provide the stringers for the fastener elements. The strip further includes hollow beads or enlargements 2 each of which is provided with a longitudinal passage 3 as shown in Fig. 1. The hollow enlarged portions 2 are spaced with respect to each other so as to leave between these beads a strip portion 4 having a slightly greater thickness than the stringer portions 1 of the strip. The central portion 4 however is not as thick as the bead portions 2.

The strip from which the fastener elements is produced may be formed of any suitable material such as synthetic resins, ebonate or suitably prepared rubber compounds or the like.

The strip may be preformed of any suitable flexible material for example by extrusion in dimensions and shape so as to provide the desired shape and appearance to the finished fastener elements.

The two cooperating parts of the slide fastener or the two appertaining series of fastener elements are produced simultaneously with the stringers from the strip shown in Fig. 1. The strip is initially of a double width and the two cooperating parts of the fastener are simultaneously formed from the strip which is thereafter severed along the groove 5 to form the two appertaining parts of the fastener.

In producing the fastener elements the strip shown in Fig. 1 is first provided with a plurality of openings or perforations 6 as shown in Fig. 2. These openings are formed in the central portion 4 of the strip and extend into the beads or hollow enlargements 2. After the strip has been thus perforated at spaced intervals the strip is separated along the groove 5 in any well known manner such as by means of a rotating knife 14.

In this manner the primary parts of the finished fastener are produced and the two stringers 1 having two series of fastener elements 7 provided with intermediate recesses 8 are simultaneously formed. Thus the transverse webs intermediate the opening 6 provide the fastener elements 7 and one series of the elements 7 can be made to engage the recesses 8 of the other series. To eliminate the possibility of sharp edges on the elements 7 the groove 5 in the central portion 4 is suitably rounded off along the edges thereof.

Thereafter the two stringers 1 having the fastener elements 7 formed from integral parts thereof may be interlocked as shown in Fig. 3 by means of a conventional type clasp 15. In other words the transverse webs which form the fastener elements 7 of one stringer are displaced so as to move within the recesses 8 of the other stringer and to interlock the two parts of the fastener elements.

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