Aug. 9, 1932. E. W. RUTHERFORD 1,870,873

FASTENER ELEMENT

Filed March 20, 1931

Fig. 1.

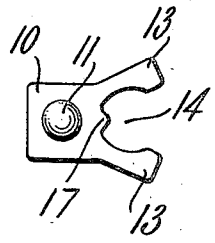


Fig. 2.

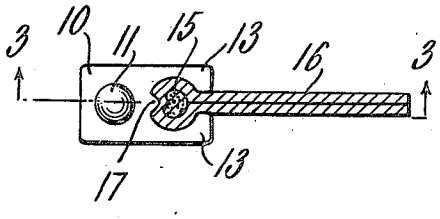
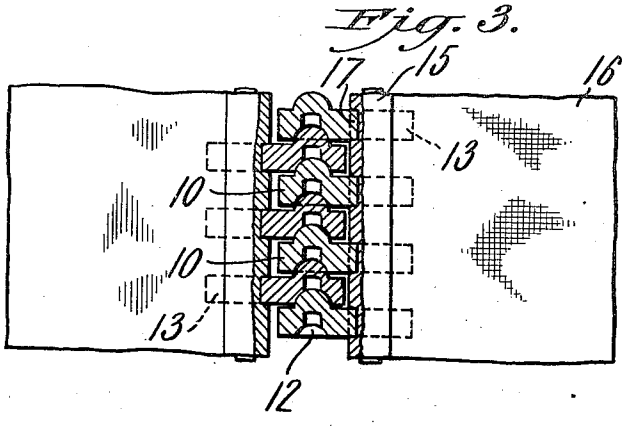


Fig. 3.



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UNITED STATES PATENT OFFICE

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FASTENER ELEMENT

Application filed March 20, 1931. Serial No. 523,989.

My present invention relates to multiple fasteners, and more particularly to an improved slide fastener element.

Multiple slide fasteners are employed in a large number of cases for detachably connecting two or more elements, the detachable elements being secured in staggered relation to the abutting edges of a tape or other element secured to the devices that are to be detachably secured together. The fastener elements are ordinarily attached to the corded edge of a tape by means of gripping jaws formed integrally with the fastener element, and it is necessary that not only such fastener elements be securely spaced along the edge of the tape but also that they be securely attached in position to prevent movement thereof along the tape and thus destroy the relation of the elements with respect to each other and with respect to the fastener elements on the associated tape. At the present time such fastener elements are invariably attached to the corded edge of the tape by jaw members which engage with the beaded edge of the tape and depend on their holding of the elements in position on the gripping action of the jaws on such corded edge. The elements are subjected to considerable strain in use and to prevent unauthorized displacement of such elements on the tape various means have been resorted to, such for example as the formation of gripping teeth on the jaw members. This method of fastening, however, has been practically discarded because of the difficulty of putting the element in position on the corded edge of the tape and of the liability of tearing the same.

In my present invention I have overcome the objections to prior constructions of this type and have devised an improved slide fastener element which may be accurately and easily positioned on a tape and which when the jaws are clasped about the corded edge of the tape firmly holds the element in position against movement along the tape. In carrying out my invention I provide an element or projection integral with the body of the element and at the end of the recess remote from the jaws, which element or projection is forced into the corded edge of the tape in substantially the plane of the tape when the jawed member is clasped about the corded edge of the tape.

The object of my invention, therefore, is an improved slide fastener element.

In the accompanying drawing illustrating the preferred embodiment of my invention,

Figure 1 is a plan view showing the clasping jaws in open position;

Fig. 2 is a plan view showing the clasping jaws clasped about the corded edge of a tape such tape being shown in section and illustrating the clasping projection indented into the edge of the tape; and

Fig. 3 is a short strip of tape showing a plurality of fastener elements having my invention incorporated therein attached to the tape.

Referring to the drawing, 10 designates the body member of a slide fastener element provided at one end with a projection 11 on one face and a depression 12 on the opposite face, such projection and depression being in alignment with each other. At the end of the body member 10 remote from the projection 11 and depression 12 are arranged spaced jaws 13; such spaced jaws being ordinarily extending outward as shown in Fig. 1 and defining a passage 14 into which ordinarily fits the corded edge 15 of a tape or other suitable member 16. Formed integrally with the body 10 and extending into the passage 14 formed by the jaws 13 is a projection or tooth 17, which when the jaws 13 are clasped about the corded edge 15 of the tape 16 will extend into the corded edge 15 in the plane in which the body of the tape 16 lies.

In Fig. 3 there is shown a plurality of the elements 10 attached to the corded edge 15 of the tape 16 by the jaws 13 and showing the teeth 17 of such members 10 extending into the corded edge 15 and it will be obvious from the inspection of such Fig. 3 that the tooth 17 will assist not only in holding the element 10 on the tape 16, but will prevent movement of such elements 10 along the corded edge 15 of such tape.

The tooth or projection 17 is preferably formed in the body member 10 in the position shown in Figs. 1 and 2, as it is found

that in this position it is easier to bring the elements 10 into proper relation with the corded edge 15 of the tape 16.

It is to be understood that I do not intend to limit myself to the exact position as shown otherwise than as is set out in the appended claim.

Having thus described my invention, what I claim and desire to protect by Letters Patent is:

An element for multiple fasteners of a type adapted to be engaged and disengaged by the operation of a slider, said element having a body with compressible jaws defining a space for surrounding and clamping the edge of a tape, and a member integral with the body extending midway into the space between the jaws.

Signed at Waterbury, county of New Haven, State of Connecticut, this 11th day of March, 1931.

EUGENE W. RUTHERFORD.