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2,205,570

TAPE FOR SEPARABLE FASTENERS

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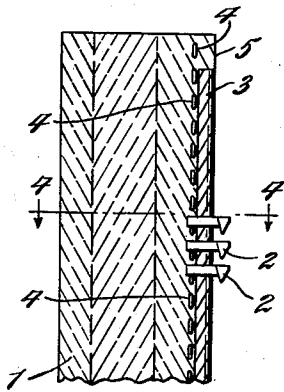


Fig. 1.

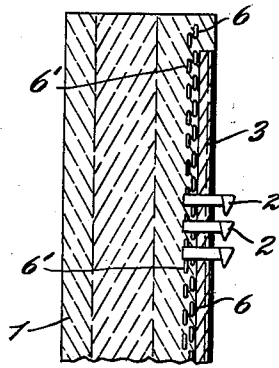


Fig. 2.

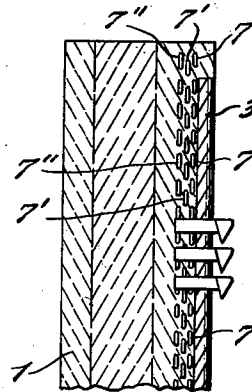


Fig. 3.

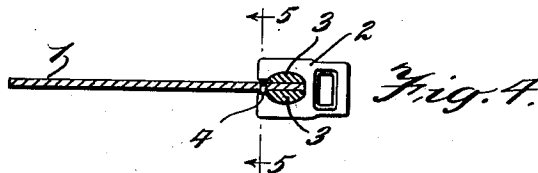


Fig. 4.

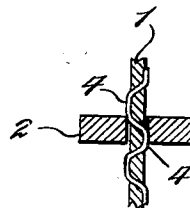


Fig. 5.

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TAPE FOR SEPARABLE FASTENERS

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6 Claims. (Cl. 28—1)

This invention relates to a novel and improved tape for separable fasteners, particularly of the slide operative kind. The novel features will be best understood from the following description and the annexed drawing, in which I have shown selected embodiments of the invention and in which:

Fig. 1 is a fragmentary view of a tape constructed according to the invention;

Figs. 2 and 3 are views corresponding to Fig. 1 showing different embodiments of the invention; Fig. 4 is a section approximately on the line 4—4 of Fig. 1;

Fig. 5 is a section approximately on the line 5—5 of Fig. 4.

In the drawing, I have illustrated pieces of tape 1 which may be of the usual woven fabric kind, such as used to support fastening elements 2. In fasteners of this general type, two tapes are used, each having a series of fastening elements which are caused to mesh and unmesh with the elements on the other tape by means of a sliding fastener. The fastening elements are usually of metal and may be either fastened to the tape after being formed or may be die cast thereon, in the manner described and claimed in the patent to Marinsky, 2,041,848, granted May 26, 1936. In Figs. 1, 2, and 3 the elements are shown in the relative positions they occupy after being cast thereon according to the teaching of said patent.

Usually the edge of the tape is provided with a beaded construction of some kind to receive the fastening elements and hold them in position to better advantage. In the present illustrations, each tape is shown as being provided with two beads 3, one on each side of the tape where they may be sewed in place or otherwise attached to the tape. This construction is well known in the art.

When the fastening elements are made of metal, it is often found desirable to plate them, and this has been done by electroplating according to the teaching of the patent to Morin, 2,063,515, granted December 8, 1936. According to the specific construction illustrated in that patent, the tape which has a bead woven integrally therewith, has one or more metallic strands woven into the material of the bead and exposed at the surface of the bead at closely enough spaced intervals so that the fastening elements or links are bound to contact with the strand, which is thus available for use as a conductor of electricity during the electroplating operation.

This patented arrangement has been found satisfactory in practice, but the weaving of a tape with an integral bead presents certain difficulties which are avoided by the use of separate beads sewed to the tape in the manner illustrated herein. The beads 3 are usually twisted rather than woven, and the incorporation of a metallic strand in those beads presents some difficulty. Such difficulty, however, is overcome by my invention, which consists in weaving one or more strands of metal into the body of the tape itself. For example, in Fig. 1 is shown such a strand which is woven back and forth through the body of the tape so that it appears alternately upon opposite surfaces of the tape at a multiplicity of closely spaced points which are indicated at 4. Between the points 4 the strand passes through the tape and appears on the opposite surface of the tape, as will be readily understood. That is to say, the points at which it appears on the opposite surface are also staggered with relation to points appearing in Fig. 1.

The metallic strand is closely adjacent to the edge 5 of the tape and parallel thereto, although spaced far enough therefrom so that the beads 3 may be secured to the tape between the strand and the edge 5. Then when the elements 2 are cast on or otherwise attached to the tape, they will extend over the strand, as plainly shown in Fig. 1, and it will be seen that the strand is bound to contact with each fastening element because the strand is exposed throughout substantially its full length, either on one surface or the other of the tape.

In Fig. 2 is shown a construction similar to Fig. 1 in all respects except that here two metallic strands are shown which appear at points 6 and 6'. Similarly in Fig. 3, three strands are shown which appear at points 7, 7' and 7''. In both Figs. 2 and 3 it will be seen that the points at which each strand appears are staggered with relation to the points at which an adjacent strand appears and therefore any fastening element is bound to contact with at least one strand, although actually with all strands. The arrangement shown in Figs. 2 and 3 may be used where larger size elements are to be employed or where for any other reason it is found desirable to use more than one strand.

Some of the advantages of the above arrangement have been brought out and others will be apparent to those skilled in the art. While the invention has been shown as embodied in certain forms, it will be understood that various changes may be made without departing from

the scope of the invention as defined by the appended claims.

I claim:

1. A separable fastener tape having a metallic strand woven therein and exposed at the surface of the tape at a multiplicity of closely spaced points, said strand extending parallel to and adjacent one edge of the tape, and a bead affixed to the tape between said strand and said edge.
- 10 2. A separable fastener tape having a metallic strand woven into the tape and exposed at opposite surfaces of the tape at a multiplicity of closely spaced points, with the points at one surface alternating with those at the other surface, 15 said strand extending parallel to and adjacent one edge of the tape, and a bead affixed to the tape between said strand and said edge.
- 20 3. A separable fastener tape having a plurality of metallic strands extending lengthwise of the tape and adjacent one edge thereof, each of said strands being exposed at a multiplicity of closely spaced points on one surface of the tape and said points of exposure of one strand being staggered with relation to those of another, and a 25 bead affixed to the tape between said edge and the nearest strand.
4. A separable fastener tape having a plurality of metallic strands extending lengthwise of the tape and adjacent one edge thereof, each of said strands being exposed at a multiplicity of closely spaced points on one surface of the tape, said points of exposure of one strand being staggered with relation to those of another and each of said strands exposed alternately on opposite surfaces of the tape, and a bead affixed to the tape between said edge and the nearest strand.
5. A separable fastener tape having a metallic strand woven therein and exposed at the surface of the tape at a multiplicity of closely spaced points, said strand extending parallel to and adjacent one edge of the tape, a bead affixed to the tape between said strand and said edge, and metallic fastening elements secured over said bead and each contacting with said strand at at least one of said points.
6. A separable fastener tape having a metallic strand woven into the tape and exposed at opposite surfaces of the tape at a multiplicity of closely spaced points, with the points at one surface alternating with those at the other surface, said strand extending parallel to and adjacent one edge of the tape, a bead affixed to the tape between said strand and said edge and metallic fastening elements secured to said bead and each contacting with said strand on at least one of said surfaces.

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