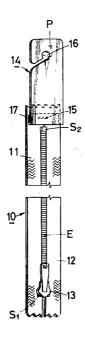
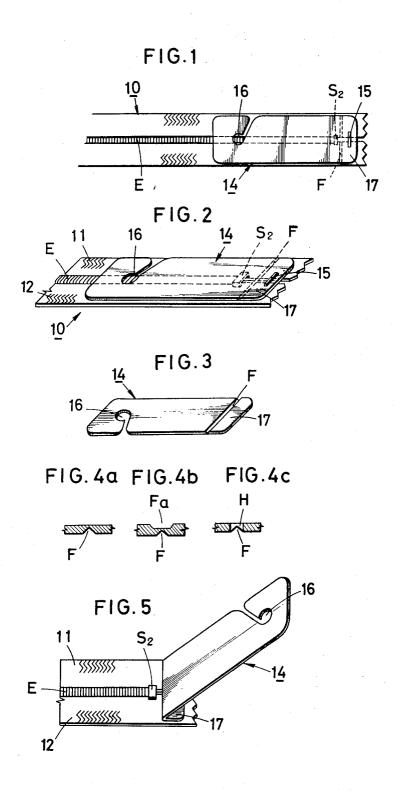
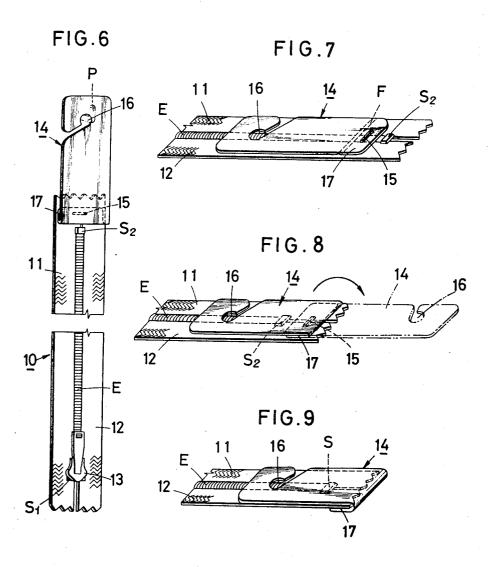
[45] Jan. 30, 1973

[54]	SLIDE FASTENER ATTACHED WITH A TUG	[56] References Cited  UNITED STATES PATENTS
[75] [73]	Inventor: Hiroyuki Ebata, Uozu, Japan  Assignee: Yoshida Kogyo Kabushiki Kaisha, Tokyo, Japan  Filed: Feb. 14, 1972	3.184.057 5/1965 Kidd206/78 R
[21]	Appl. No.: 226,061	Primary Examiner—Bernard A. Gelak Attorney—Bucknam & Archer
[30]	Foreign Application Priority Data  Feb. 15, 1971 Japan46/7832	[57] ABSTRACT  A slide fastener device is disclosed which is provided with a label or tag for indicating information relative to the fastener product. The tag is provided with a
[52] [51] [58]	U.S. Cl	transversely extending fold for folding the tag therealong outwardly or inwardly of the fastener and with an aperture for hanging the fastener vertically on
		5 Claims, 11 Drawing Figures



SHEET 1 OF 2





## SLIDE FASTENER ATTACHED WITH A TUG

This invention relates to a slide fastener and has particular reference to such a slide fastener which is provided with a label, tag or the like.

Slide fasteners have been proposed which are attached with a label or tag indicating thereon the types, sizes, prices, instructions and so on to facilitate the identification of different product fasteners. Known slide fasteners of this description have the disadvantage that the identification tag projects lengthwise beyond the end of the fastener at which it is attached, with the result that it becomes necessary to employ packaging bags or boxes of extra length for these slide fasteners.

Furthermore, the packaging operation would be more tedious and time-consuming because the workers must place fastener products with tags and those without tags selectively in containers of different sizes.

Whereas, it is the primary object of this invention to provide a slide fastener with a label or tag which will eliminate the above-noted disadvantage of the prior-art fasteners. More specifically, the object of the present invention is directed to the provision of means permitting a slide fastener with a tag to be of equal length to a slide fastener without a tag, so that the packaging 25 operation is simplified.

The invention will now be described in detail with reference to the appended drawings in which:

FIG. 1 is a plan view of a slide fastener embodying the invention;

FIG. 2 is a perspective view of a part of FIG. 1;

FIG. 3 is a perspective view of a tag according to the invention:

FIGS. 4a, and 4b and 4c, inclusive, are cross-sectional views on enlarged scale of different forms of a 35 fold provided in the tag according to the invention;

FIG. 5 is a perspective view showing the tag of FIG. 3 as folded half-way;

FIG. 6 is a perspective view of the fastener of FIG. 1 with its tag completely folded in position for mounting the fastener on a suitable hanger;

FIG. 7 is a perspective view showing a modification of the invention;

FIG. 8 is a perspective view showing another modification; and

FIG. 9 is a perspective view showing a further modification.

In accordance with the invention, there is provided a slide fastener comprising: in combination with opposed 50 stringer tapes carrying rows of interlocking fastener elements, a slider movable along said rows of elements, and end stops; means for hanging the fastener vertically on a support, said means comprising a tag foldably attached to one end of said fastener and provided at one 55 end portion with a transverse groove defining a line of fold along which said tag is folded on itself outwardly and lengthwise of said fastener and at the other end portion with an aperture for hanging the fastener.

Referring now to the drawings, and to FIG. 1 in particular, there is shown a slide fastener generally designated by reference numeral 10 which comprises opposed stringer tapes 11, 12 each carrying along one longitudinal edge thereof a row of interlocking elements E, a slider 13 movable along the rows of interlocking elements E for closing and opening the slide fastener, and end stops  $S_1$ ,  $S_2$ .

Designated generally at 14 is a tag which has a width substantially equal to or slightly smaller than the width of the fastener and which has one end secured as by a rivet or pin 15 to the slide fastener close at one terminal end thereof. The tag 14 is provided at the free end with an opening or hook eye 16 for hanging the slide fastener vertically on a suitable support pin P (FIG. 6) for purposes of display.

Adjacent the other end or attachment zone 17 of the tag 14 is provided a transverse recess or groove forming a line of fold F along which the tag 14 is allowed to be folded on itself outwardly and lengthwise of the fastener according to one embodiment of the invention. Preferred forms of the fold F are shown in FIGS. 4a, 4b and 4c. The fold of FIG. 4a is in the form of a V-shape groove. The fold of FIG. 4b is defined by the combination of a wide bottom recess Fa with an underlying V-shape recess F. The last example shown in FIG. 4c is characterized by the provision of a punch-out hole H with opposed marginal edges formed into a V-shape recess.

In the embodiment shown in FIGS. 1, 2, 5 and 6, the tag 14 is attached to the fastener 10 with its fold F lying outside of the bottom end stop  $S_2$  so that this end stop is exposed to view when the tag 14 is folded along the line of fold F into a hung position as shown in FIGS. 5 and 6 in which position the tag 14 projects beyond the region of the fastener.

In a transitional disposition of the slide fastener 10 such as when it is packed or while in transit, the tag 14 may be unfolded flat on the plane of the fastener so that the tag 14 does not protrude lengthwise of the fastener.

FIG. 7 illustrates the embodiment in which the fold F is positioned inside of the end stop  $S_2$  and above the rows of elements E.

In the embodiment shown in FIG. 8 the tug 14 is attached in its folded disposition so that contrary to the embodiment of FIG. 1 (FIGS. 2, 5 and 6), the tug 14 assumes an operative or hung position when it is unfolded as indicated by chain-dotted line.

FIG. 9 illustrates a further embodiment of the invention in which the tug 14 is folded about one terminal end of the fastener 10 and secured thereto with the attachment zone 17 underlying the reverse side of the fastener 10.

cation.

In accordance with the invention, there is provided a slide fastener comprising: in combination with opposed 50 fastener product, the principles of the invention may be stringer tapes carrying rows of interlocking fastener equally applied to a continuous chain of fasteners.

What is claimed is:

1. A slide fastener comprising: in combination with opposed stringer tapes carrying rows of interlocking fastener elements, a slider movable along said rows of elements, and end stops; means for hanging the fastener vertically on a support, said means comprising a tag foldably attached to one end of said fastener and provided at one end portion with a transverse groove defining a line of fold along which said tag is folded on itself outwardly and lengthwise of said fastener and at the other end portion with an aperture for hanging the fastener.

2. A slide fastener as claimed in claim 1 wherein said line of fold is positioned outside of one of said end stops so that said one end stop is exposed to view when said tag is folded.

3. A slide fastener as claimed in claim 1 wherein said line of fold is positioned inside of one of said end stops.

- 4. A slide fastener as claimed in claim 1 wherein said tag is attached in folded position so that the fastener is hung when said tag is unfolded.

  5. A slide fastener as claimed in claim 1 wherein said
- tag is folded about one terminal end of the fastener.