

Feb. 9, 1971

C. D. ROSSER

3,561,073

IRON-IN-ZIPPER

Filed Sept. 3, 1968

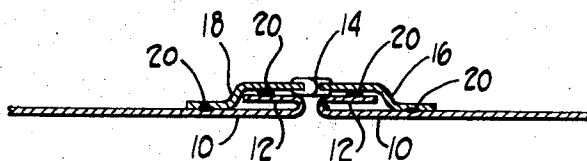


Fig. 1

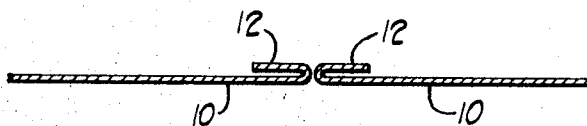


Fig. 2



Fig. 3



Fig. 4

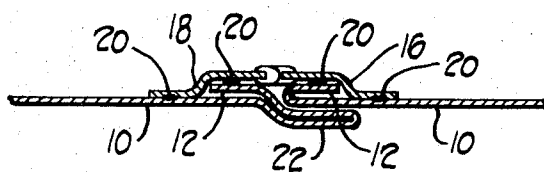


Fig. 5

INVENTOR.
CORINNE D. ROSSER

BY

A. Whitaker

ATTORNEY.

1

3,561,073

IRON-IN-ZIPPER

Corinne D. Rosser, 388 Fairwood Circle,
Berea, Ohio 44017

Filed Sept. 3, 1968, Ser. No. 757,527

Int. Cl. A44b 19/32, 19/34

U.S. Cl. 24—205.1

3 Claims

ABSTRACT OF THE DISCLOSURE

A slide fastener is secured to the folded over edges of a garment opening by two rows of thermoplastic adhesive on each fastener tape. The adhesive is between each tape and the respective fold and also between each tape and the garment edge adjacent the edge.

This invention relates to a method of affixing slide fasteners to a garment opening, and more particularly the invention relates to a structural combination wherein the slide fastener and other elements of the garment, as well as fabric sheets, are integrally joined by a thermal setting adhesive.

One of the most difficult sewing operations for the home dress maker is the correct application of a slide fastener to the garment being sewn. Pattern manufacturers and slide fastener manufacturers suggest methods which require a variety of operations to obtain the application of a slide fastener to the material. In each instance, basting is required. Further the slide fastener must be opened and closed, and sewing first one side and then the other with a "zipper foot" on the machine is also required. After the sewing is completed, the basting is removed which requires additional time and effort. The completion of the above steps in a uniform and neat manner requires considerable skill and in many instances the home dress maker is dissatisfied with the quality of the results generally obtainable. Further it is difficult to do all of the sewing operations on the inside of the garment in such a manner that the stitching will not show on the finished side of the garment.

It is an object of this invention to provide a novel method for the application of the slide fastener to the garment with ease and dispatch and without the use of sewing operations.

It is a further object of this invention to provide a closure combination for a garment or other construction utilizing a slide fastener wherein, the slide fastener is affixed to the marginal edges of an opening by a thermal setting adhesive.

Another object of this invention is to provide a method for applying a slide fastener to the marginal edges of an opening in a fabric panel wherein the fastener tape is joined to the fabric by placing a thermal plastic adhesive or resin there between and applying a hot iron to soften the adhesive which upon cooling provides a permanent bond between the slide fastener tape and the fabric panel.

Other objects and advantages more or less ancillary to the foregoing and the manner in which all the various objects are realized, will appear in the following description, which considered in connection with the accompanying drawings, set forth the preferred embodiments of the invention.

In the drawings:

FIG. 1 shows a cross-sectional view of the preferred embodiment of my invention wherein, the panel opening is closed with the edges in side by side relationship;

FIG. 2 shows the panel with the rebent edges prepared for the application of the slide fastener;

2

FIG. 3 shows the super imposed panels with the basting spaced from the edges;

FIG. 4 shows the basted opening of FIG. 3 prepared for the application of the slide fastener as shown in FIG. 1; and

FIG. 5 shows the cross-sectional view of slide fastener applied to a placket type opening.

Referring to the drawings and particularly to FIG. 1, a section 10 of a garment is shown therein as seen in a sectional view of the completed closure. In FIG. 2, section 10 of the garment or panel having an opening therein to be closed is shown with the marginal edge 12 rebent and having a width of approximately one-fourth inch. The edge 12 is preferably pressed to form a smooth and uniform margin for the opening.

A slide fastener 14 having tapes 16 and 18 affixed thereto, is positioned over the opening line with the front of the fastener towards the edges 12. A strip 20 of thermoplastic material having adhesive characteristics is positioned along the length of the slide fasteners tapes 16 and 18. One strip 20 is positioned to contact the section 10 and the other strip 20 of the thermo-plastic adhesive is positioned to contact the edge 12. It is contemplated that the strips 20 of thermoplastic material would be applied to the tapes 16 and 18 at the time of the manufacture of the slide fastener.

When the tapes 16 and 18 are in over-lying relationship with the edge 12 and section 10 a hot iron is applied to the tapes and under the influence of the heat and pressure from the iron the strips 20 of the thermo-plastic adhesive soften and migrate into the tapes 16 and 18 as well as the sections 10 of the garment and the marginal edge 12. Upon removal of the iron the adhesive cools and provides a permanent bond between the materials of the garment and the tapes 16 and 18 affixed to the slide fastener 14.

In preparing the openings to be closed by the slide fastener of said opening the length should be the same as the length of the teeth portion of the slide fastener 14 with an additional one-half inch. The opening may be closed with machine basting on the seam line as shown in FIG. 3 with the seam allowance trimmed to leave no more than one-fourth inch after which the basted opening may be pressed open as shown in FIG. 4. The slide fastener teeth are placed face down and in line with the stitched part of the seam as shown in FIG. 1, with the thermoplastic adhesive 20 in place and the slide fastener in super imposed as shown in FIG. 1. The application of the hot iron to the tape on one side forms the attachment thereto, and then when the iron is touched to the other side the attachment is complete.

In FIG. 5, a placket closure is illustrated, and in this instance, only one side of the seam allowance is trimmed to one-fourth inch. The chain of the slide fastener 14 is then placed against the ironed fold of the material 10 and in contact with edge 12 and the iron is applied thereto to soften the thermo-plastic adhesive 20 and affix that portion of the slide fastener 16 permanently in place. The flap 22 of the seam fabric and main fabric 10 is then positioned over the slide fastener 14 and the opposed portion of the section 10. The tape 18 of the slide fastener is then brought into contact with rebent edge 12 and the section 10 with the thermo-plastic adhesive 20 there between. Application of the hot iron to the tape 18 results in the tape 18 being permanently affixed to the edge 12 and the section 10 with the flap 22 in its proper relationship to the placket closure.

The description herein is directed to garment closures but it is understood that the description and claims may apply equally to other uses and construction wherein slide fasteners are used to close or join two fabric panels for ready separation.

3

Having thus described this invention in such full, clear, and concise and exact terms as to enable any person skilled in the art to which it pertains to make and use same, and having set forth the best mode contemplated of carrying out this invention, I state that the subject which I regard as being my invention is particularly pointed out and distinctly claimed in what is claimed, it being understood that equivalents or modifications of, substitutes for, part of the above specially described embodiment of the invention may be made without departing from the scope of the invention as set forth in what is claimed.

What is claimed is:

1. The method of applying a slide fastener to a garment for closing an opening, said slide fastener having tapes which carry thermal plastic and thermal setting adhesive comprising the steps of placing the sides of an opening in the garment in juxtaposition, folding the sides of the opening to form a rebent portion forming a one-fourth inch wide marginal edge and pressing same, stitching the edges of the opening together, placing the slide fastener with the teeth face down and in line with the opening and covering said marginal edge, applying a hot iron to the slide fastener tape and applying pressure thereto, and holding the material of the garment and the slide fastener tape in position until the same has cooled.

2. The method of applying a slide fastener to a garment as defined in claim 1 wherein the fastener tape overlaps the marginal edge and is joined to the material beyond said marginal edge when the heat is applied thereto.

3. In a garment construction having a slide-fastener for closing an opening therein comprising a slide fastener

4

having a pair of tapes affixed thereto, edge sections of said garment having a main section and a rebent marginal edge overlapping said main section, each of said tapes overlapping said edge sections of said garment opening, a thermo plastic adhesive between the tape and the said rebent marginal edge thereby securing same together and between the tape and said main section thereby securing them together whereby said slide fastener is permanently affixed to said edge sections of the garment when heat and pressure are applied with an iron, said adhesive being the sole means of securing said tape to the edge sections.

References Cited

UNITED STATES PATENTS

1,860,433	5/1932	Rosenbaum	24—205.1
2,067,734	1/1937	Silberman	24—205.1
2,145,552	1/1939	Marinsky	24—205.1
2,632,220	3/1953	Robinsohn	24—205.1
2,768,922	10/1956	Klein	24—205.16
3,002,244	10/1961	McNamara	24—205.1
3,143,778	8/1964	Abraham	24—205.1

FOREIGN PATENTS

1,068,380	6/1954	France	24—205.1
714,536	12/1941	Great Britain	24—205.1

BERNARD A. GELAK, Primary Examiner

U.S. Cl. X.R.

24—205.16; 112—265; 156—66; 161—50; 2—265