April 27, 1965 L. M. ANDERSSON 3,180,543

METHOD IN THE MANUFACTURE OF SHIRTS, PAJAMAS AND THE LIKE OF BINDING THEM FOR PACKING

Filed Dec. 26, 1962

Fig.1

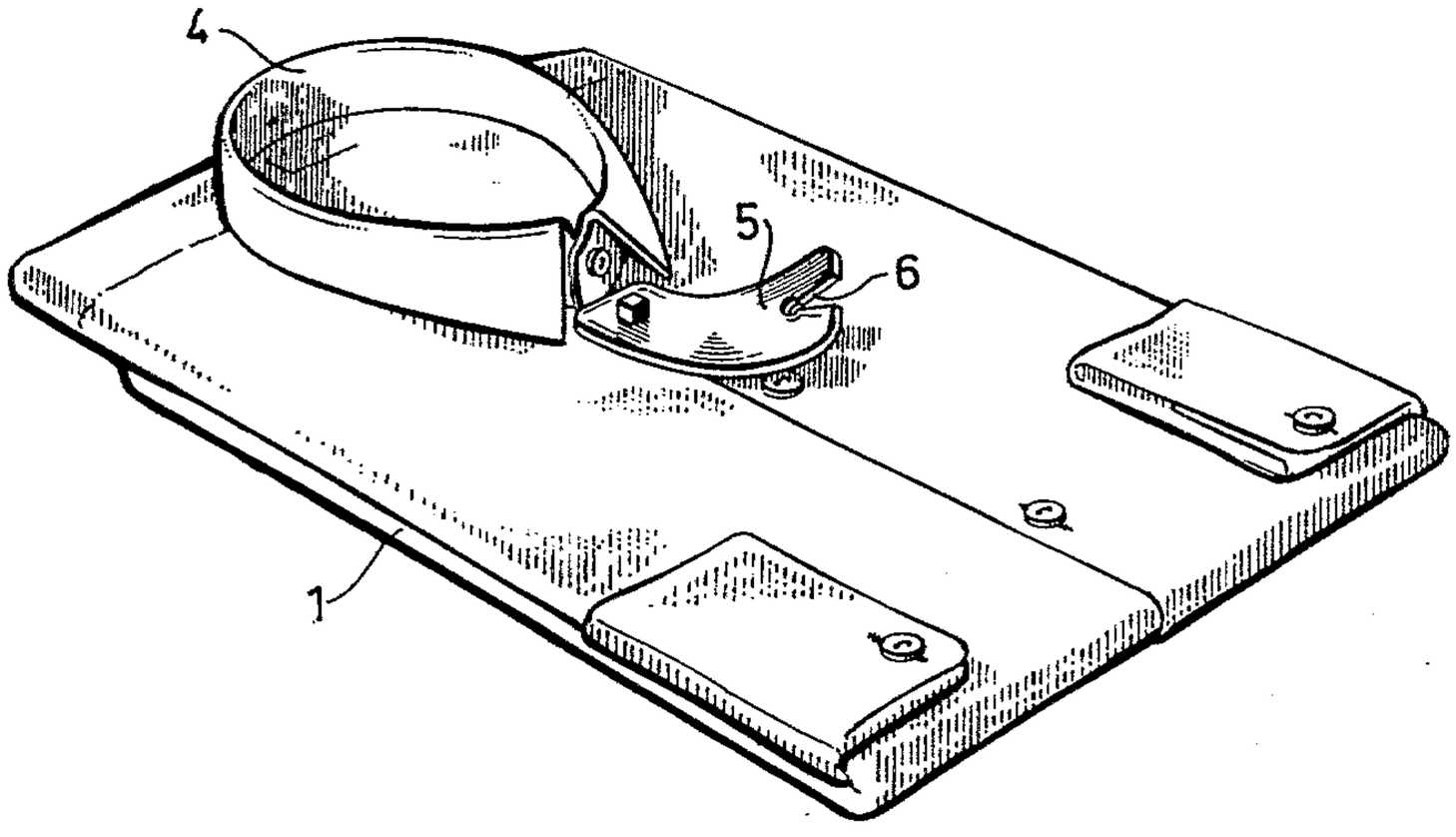


Fig.2

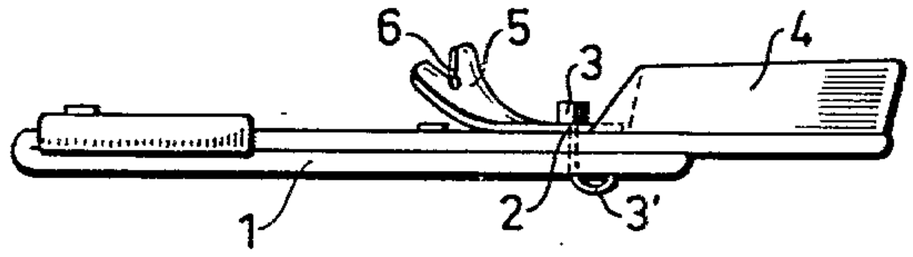


Fig.3

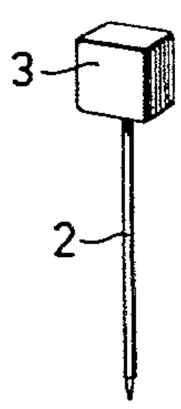


Fig.4

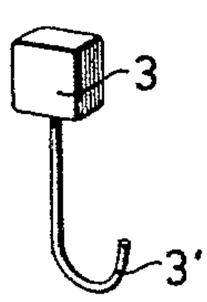
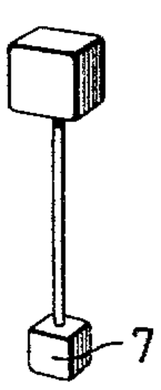


Fig.5



United States Patent Office

3,180,543

Patented Apr. 27, 1965

3,180,543

METHOD IN THE MANUFACTURE OF SHIRTS, PAJAMAS AND THE LIKE OF BINDING THEM FOR PACKING

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Filed Dec. 26, 1962, Ser. No. 247,105
Claims priority, application Sweden, Jan. 29, 1962, 959/62
2 Claims. (Cl. 223—71)

In packing shirts, pajamas and similar garment following up the manufacture thereof it is a conventional procedure to bind them in a suitably folded condition in which the lateral parts of the garment are turned inwards and its lower part together with the inwardly turned lateral parts is turned upwards behind the upper part of the garment, a cardboard sheet or other stiffening member being usually inserted in the garment. Binding is usually performed by means of pins which are applied at a great number of places. The pins applied result in a plurality of inconveniences. If the garments are stored in damp air the pins which usually consist of steel are likely to cause spots of rust and thereby to damage the farbic and also to scratch the fabric upon careless handling. Further, unpacking of the garment prior to the use thereof is an annoying procedure which often irritates the user. In order to eliminate this inconvenience, it has been proposed to draw a thread to and fro through the parts of the garment laid one upon another and to tie up the ends of the threads such as to form a loop. Then a stronger thread has been drawn through the loop for pulling it in two when the fastening had to be released for using the garment. Even this arrangement has proved in practice to result in inconveniences in the form of damages to the fabric. In addition, manual work is required for tying up the threads in connection with the binding operation.

The object of this invention is to avoid the above inconveniences. In its broadest aspect the invention is characterized by forcing a pointed pin having a head through the upper part of the garment and through the inwardly turned lateral parts and the upwardly turned lower part at a place where all of said parts are lying one upon another, and then locking the pin detachably on the opposite side so as to keep the garment in folded condition by means of said pin. The pin may be locked by bending, during or after the piercing, the pointed end thereof being made from a bendable material so that the fastening can be released merely by withdrawing the pin while the bent pointed end thereof is straightened. Consequently, it is very simple to assemble and disassemble the various parts of the garment, and disassembling can be performed by a single movement of the hand. Contrary to expectation it has proved that the straight pin can be forced through the garment and that the pin having a bent pointed end can be withdrawn from the garment while the pointed end is straightened without damaging the garment in any way whatever or leaving marks from the pin, provided that the pin is narrow and pointed and suitably deformable so as readily to be straightened. Advantageously, the pin is forced through at a place where some part of the inserted cardboard sheet, frame or the like usually supplied during the packing operation is situated, since withdrawal of the pin is facilitated thereby. The pin may be locked in its position for binding the garment by bending the pointed end such as to be directed inwards toward the garment, whereby to prevent the point of the pin from getting caught in adjacent articles.

Instead of bending the pointed end of the pin for locking the pin in the binding position the pointed end of the pin may be straight and forced, after penetration through the garment, into a locking member on the rear side of the garment, said locking member being adapted frictionally to engage the pointed end to an extent such that the pin is retained in position, the frictional engagement being however such that the pin is easily withdrawable by hand.

In the accompanying drawing two embodiments of the invention are shown by way of example. FIG. 1 is a perspective view of a shirt bound in accordance with the invention and FIG. 2 is a longitudinal section of this shirt through the binding place. FIGS. 3 and 4 show the pin prior to and after the bending of the pointed end, whereas FIG. 5 illustrates an embodiment comprising a straight pin and a locking member.

In the condition illustrated in FIG. 1 where the lateral parts of the shirt are turned inward and the lower part 1 is turned upward behind the lateral parts, as shown in FIGS. 1 and 2, a pin 2 having a head 3 of plastic or similar material is passed through the shirt immediately below the collar 4 thereof whereupon the pointed end 3′ of the pin has been bent at the back of the shirt so as to bind the shirt. The pin extends through the breast portion, the lateral portions and the upwardly turned lower portion of the shirt. Preferably, the pin, before being forced through the shirt, can be passed through a strip 5 having end flaps 6 or the like. This strip may serve as an ornament, but may also be used to facilitate withdrawal of the pin. As shown in FIG. 2 the pin is bent such that the pointed end is directed inwards toward the fabric.

When the shirt has to be used it is merely necessary to draw the pin upwards, and the pointed end will be automatically straightened if the pin is sufficiently thin and made from a suitably deformable material, such as a stainless metal alloy. In order to prevent damage to the fabric during withdrawal of the pin and to facilitate straightening of the pointed end of the pin, it is suitable to pass the pin through the shirt at a place where some part of the insertion is present which usually consists of a sheet of cardboard and is usually inserted into the garment with the purpose of retaining the form of the garment during packing and obtaining a nice appearance.

Instead of bending the pin from the straight form shown in FIG. 3 to the form shown in FIG. 4 the point of the pin may be forced into a locking member 7 at the lower side of the garment, as illustrated in FIG. 5. The locking member is made from a material such as cork, wood, synthetic plastic or the like which causes sufficient friction and clamping action to retain the locking member on the pointed end of the pin as long as the garment is desired to be bound. Thereafter, when the pin is withdrawn with sufficient effort before the garment is used the pointed end will come loose from the locking member.

Application of the pin and eventual bending thereof may be carried out either by machine or manually by means of a suitable tool.

What is claimed is:

1. A method in the manufacture of shirts, pajamas and similar garments, which comprises the steps of folding lateral parts of the garment inwards into contact with a central part thereof, folding a lower part of the garment thus folded to lie behind the remainder of the folded garment, forcing a pointed pin having a head from one side of the folded garment through the upper part thereof and through the inwardly turned lateral parts and the lower part folded behind the central part of the folded garment at a place where all of said parts are lying in a superimposed position, and then locking the pin detachably on the opposite side of the folded

garment so as to keep the garment in the folded condition by means of said pin, by bending the pointed end of the pin as it is forced through the folded garment from one side thereof until its point is directed toward the opposite side of the folded garment.

2. An article of manufacture comprising a garment and single point fastening means keeping the garment in a folded state, said garment having lateral parts folded into contact with a central part and a lower part folded to lie behind said central part, the fastening means comprising one single pin piercing all of said parts at the central line of the folded garment where said parts are in superimposed position, said pin being provided with a head at one side of the garment and a point at the other side thereof, the end portion of the pin adjacent to said point being bent to give the pin a J-shaped configuration with the point directed toward and in contact with said other side of the folded garment.

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