Jan. 1, 1935. J. W. STEELE 1,986,649

BAND AND FASTENING MEANS THEREFOR

Filed April 22, 1933

Fig. 1.

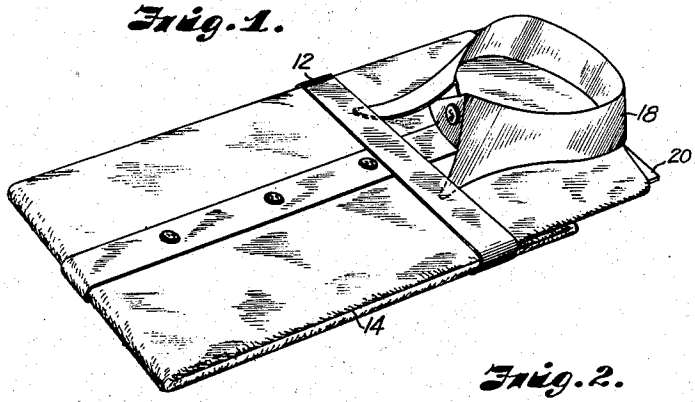


Fig. 4.

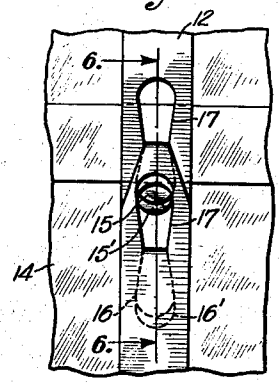


Fig. 2.

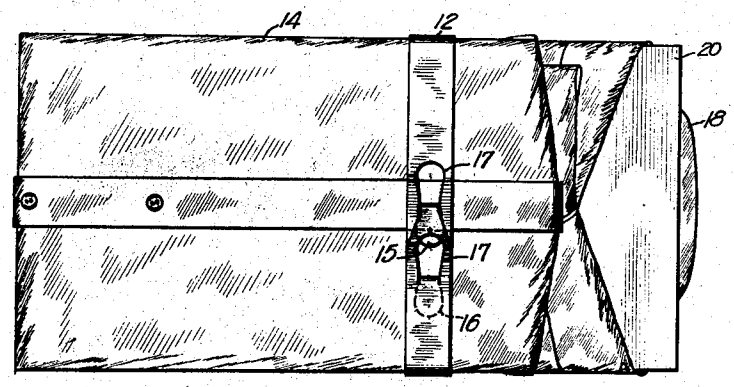


Fig. 3.

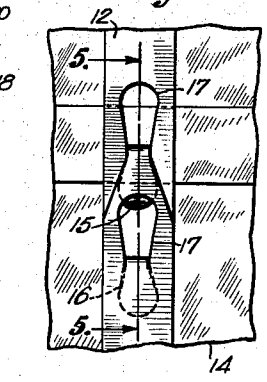
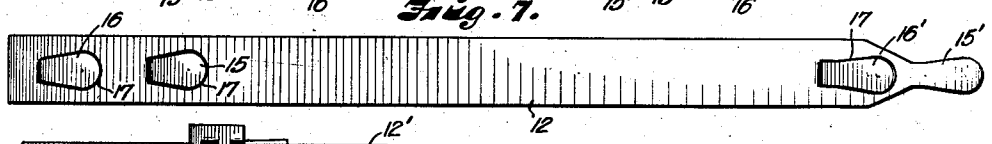


Fig. 6.

Fig. 5.

Fig. 7.



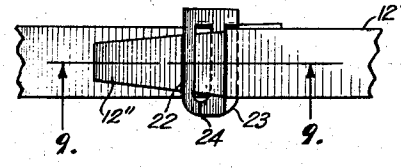


Fig. 8.

Fig. 7a.

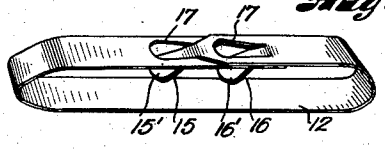


Fig. 10.

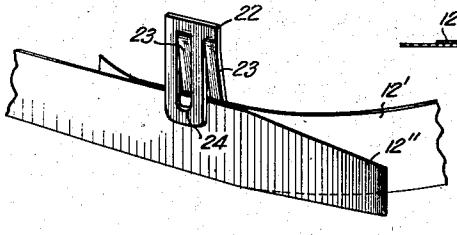
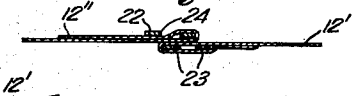


Fig. 9.



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UNITED STATES PATENT OFFICE

1,986,649

BAND AND FASTENING MEANS THEREFOR

James Warren Steele, Kansas City, Mo.

Application April 22, 1933, Serial No. 667,345

4 Claims. (Cl. 24—17)

The present invention relates to bands and fastening means therefor, and has particular reference to the bands used for holding laundered shirts in their folded condition after completion of the finishing and folding operations.

Accordingly it is the principal object of the invention to provide an inexpensive and yet efficient band securing means which requires no positive fastening means such as pins, staples, etc., but which utilizes a frictional holding action for retaining the ends of the band together and thereby holding the band in place upon the shirt. It is also sought to devise a simple band and fastening means construction wherein the fastening means is embodied as a part of the band itself, by stamping it out to form the required frictional holding means.

With the foregoing general objects in view, the invention will now be described in detail by reference to the accompanying drawing illustrating what I have found to be satisfactory methods of embodying the same in suitable practical form, after which those features and combinations deemed to be novel will be particularly set forth and claimed.

In the drawing—

Figure 1 is a perspective view of the front of a finished shirt provided with a band and fastening means therefor;

Figure 2 is a plan view on a larger scale showing the rear of the shirt and the fastened ends of the band;

Figure 3 is a fragmentary view on a still larger scale showing the fastened ends of the band;

Figure 4 is a similar view showing the position of the fastening elements for effecting a slight take-up adjustment in the belt;

Figures 5 and 6 are detail sectional views representing sections taken on the lines 5—5 and 6—6, of Figures 3 and 4 respectively;

Figure 7 is a plan view of the band illustrated in Figures 1 to 6;

Figure 7*a* is a perspective view of the band in the process of connecting and fastening the ends thereof;

Figure 8 is a plan view of the ends of a band utilizing a separate fastening device operating on the frictional holding principle;

Figure 9 is a detail section, representing a section taken on the line 9—9 in Figure 8; and

Figure 10 is a perspective view of the parts shown in Figure 8, illustrating the method of applying the fastening device.

Referring now to the drawing in detail, and more particularly to Figures 1 to 7*a*, the improved band device is illustrated as comprising a band 12 made from a strip of suitable flexible material, such as paper, of sufficient length to embrace a finished and folded shirt 14, with the ends of the band in overlapping relation, as shown in Figures 1 and 2. The end portions of the band are suitably punched to form the cooperative frictional attaching elements, one of said end portions being thus provided with a pair of spaced tongues 15, 16, struck from openings 17 and which are left attached to the band along straight transverse lines, said tongues being of somewhat spatulate shape, narrowing toward their attached ends.

The other end portion, which is designed to be placed in overlapping relation to the first end portion, is also formed with a pair of tongues, a terminal tongue 15′ and a tongue 16′ struck out from an opening 17, and spaced apart substantially the same distance as the tongues 15 and 16, so as to match with and overlie the latter in the overlapping and fastening operation. The tongues 15′ and 16′ are also of spatulate form but their narrower attached ends are a trifle longer for the purpose of a slight adjustment in the fastening operation as hereinafter explained.

In applying the band to a shirt 14, the operator wraps it about the folded shirt, preferably in the manner illustrated in Figures 1 and 2, or in retaining engagement with the points of the collar 18, thereafter bringing the ends of the band in overlapping relation at the rear of the shirt, and so that the outer tongues 15′ and 16′ are in substantial register with the inner tongues 15 and 16. The operator then simultaneously presses the two pairs of tongues inward so as to bend them back together, hinge-fashion, against the under face of the band, that is between the band and the shirt. Thus the folded position of the tongues, in engagement with each other, and so held by being confined between the band and the shirt, serves to hold the ends of the band in securely fastened relation, and by a frictional action, without the need of any pins, staples or other positive fastening devices. The provision of the double pair of tongues as shown renders the fastening more secure, without making it appreciably more complicated for the operator, who can manipulate the two pairs of tongues with the same facility as a single pair, and this also serves to aline the band ends in a proper manner.

Moreover the provision of the double tongue arrangement divides the tearing pull or strain upon the two attaching points represented by the straight sides of the openings 17, and it will also

be noted that, these being the narrowest sides of said openings, the bands are weakened as little as possible at these attaching points. Another advantage of this feature as regards the form of the tongues and their openings is that after the bending of the tongues is once started in the fastening operation, the spatulate form of the tongues, combined with the similar outline of the openings, promotes the certainty of the operation, by virtue of the converging character of the sides of said openings, and likewise tends to prevent any casual detachment of the tongues from the openings which would obviously require the larger portions of the tongues to be pulled through the narrower ends of the openings.

Since a certain standard size of shirt board 20 is used in the shirt folding operation, a standard length of band 12 is possible, as well as pattern for the punching of the tongues and openings with relation to the ends of the bands. However, since variation in the sizes of the shirts as well as in the weight of the fabrics of which they are made will produce some variation in the girth of the folded shirt, this is compensated for in the present improvements, as already indicated, by punching the tongues and openings so as to practically register for accommodating a shirt of average girth, as illustrated in Figures 3 and 5, but making the narrower attached ends of the tongues 15′ and 16′ sufficiently long to provide for a slight taking up or letting out of the band when applied to a shirt requiring such an adjustment, as illustrated in Figures 4 and 6.

A modified form of construction for effecting the frictional holding or fastening function in accordance with the principle of the present invention is illustrated in Figures 8 to 10. In this instance, instead of punching the band to provide the openings and tongues, I use a plain band 12′ with one of its ends 12″ slightly tapered, and provide a separate element for retaining the ends of the band in frictional holding engagement. This comprises a clip device 22 which may be stamped from any suitable material, such as cardboard, to form a pair of spaced tongues or fingers 23, one of which is struck out from an opening 24 providing an eye through which the tapered end 12″ of the band may be threaded. In the use of this device, after the ends of the band 12′ are brought into overlapping relation as illustrated in Figure 10, the device is forked over said ends with the fingers 23 between the band and shirt. Then the band ends are bent in opposite directions, one of them around the finger 23 which is struck from the opening 24 and thus being retained in bent relation by its position between the band and shirt, and the other band end 12″ being bent around that part of the device which forms the frame of the opening 24 and thereafter threaded through said opening as illustrated in Figures 8 and 9. It is thus apparent that this provides a fastening means of a frictional holding character similar to that attained by the use of the construction illustrated in Figures 1 to 7.

From the foregoing it will be seen that an efficient and yet comparatively simple and inexpensive construction is provided for carrying out the desired objects of the invention. All need of pins or like fastening means, or stapling devices, is eliminated, as well as the labor involved in their use, and at the same time the improved construction provides a sufficiently secure fastening action for all practical purposes for which it is designed. The use of pins or similar fastening means has for a considerable time been recognized, by laundry people, manufacturers, merchants and others having anything to do with the fastening of shirts or other articles in the finishing and folding of the same, as having many disadvantages both as regards their own operations and also in the annoyance of their patrons in having to fuss with such types of fastenings, so many of which are encountered not only in the folds of the shirt for holding them in place but also in the band around the shirt. It is therefore to be noted that the present improvements are particularly useful in the direction of overcoming these disadvantages, and further that by wrapping the band around the shirt high enough to engage the collar points it is possible to dispense with so many other fastening pins (as are commonly used) for holding the folds of the shirt in place.

While I have herein illustrated and described what I now consider the preferred methods of practicing the invention, I desire to be understood as reserving the right to make such changes and modifications as may fairly fall within the spirit and scope of the appended claims.

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

1. A band and fastening means therefor comprising, a flexible band having end portions overlapping and provided with anchoring means for slidingly adjustable frictional engagement with bent portions of said end portions and having at least one of said bent portions in frictional binding engagement with the object to which the band is applied.

2. A band and fastening means therefor comprising, a flexible band having overlapping end portions each provided with a tongue-shaped opening and a correspondingly shaped tongue therein, said openings registering with the overlapping of the end portions and said tongues being bendable together out of said openings into engagement with the inner face of the band, and the shanks or attached ends of said tongues being elongated sufficiently to permit relative adjustment of the ends of the band prior to bending of the tongues.

3. A band and fastening means therefor comprising, a flexible band having overlapping end portions, one of said end portions having a pair of spaced openings of tongue-shaped outline and correspondingly shaped tongues therein, the other end portion being provided with a pair of tongues spaced for registering with said openings and projectible therethrough for bending in unison with said first tongues into position for frictional retaining engagement between the band and the object to which it is applied, and the shanks or attached ends of said tongues being elongated sufficiently to permit relative adjustment of the ends of the band prior to bending of the tongues.

4. A band and fastening construction, comprising a flexible band having overlapping end portions, and a detachable resilient clip device providing anchoring elements around which the ends of the band are bent in opposite directions and also formed with a retaining opening for one of said end portions.

JAMES WARREN STEELE.