Dec. 15, 1925. 1,565,664

C. MAYER

FASTENING DEVICE

Filed July 16, 1923

Fig. 1.

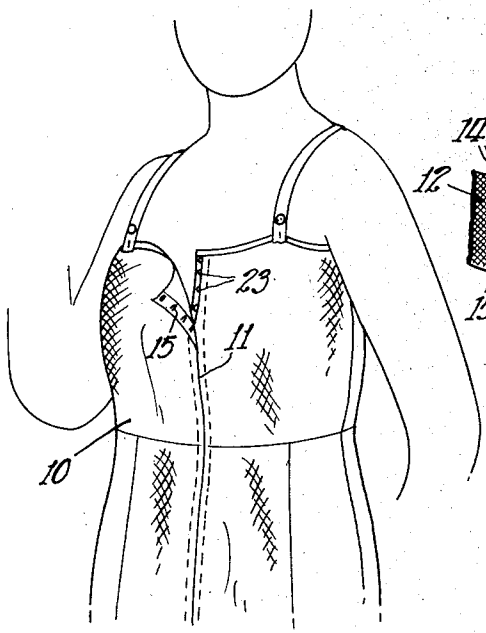


Fig. 2.

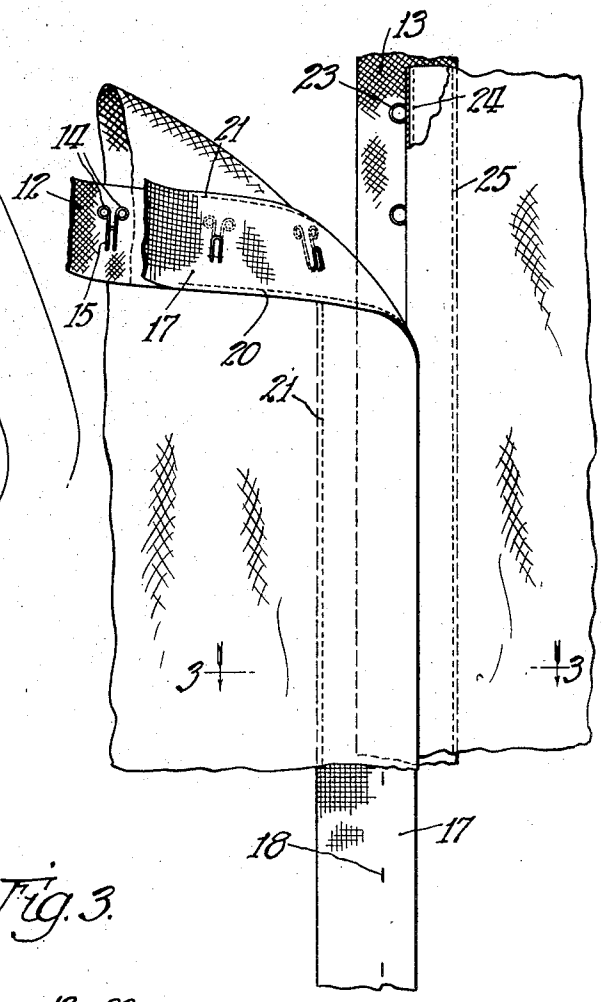


Fig. 3.

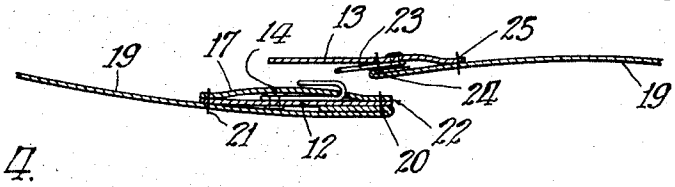
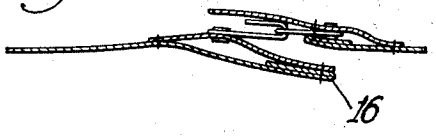


Fig. 4.



Inventor.
Clarence Mayer.
Emery, Booth, Janney & Varney
Attys.

Patented Dec. 15, 1925. 1,565,664

UNITED STATES PATENT OFFICE.

CLARENCE MAYER, OF CHICAGO, ILLINOIS, ASSIGNOR TO NATURE'S RIVAL CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

FASTENING DEVICE.

Application filed July 16, 1923. Serial No. 651,745.

To all whom it may concern:

Be it known that I, CLARENCE MAYER, a citizen of the United States, and a resident of the city of Chicago, county of Cook, State of Illinois, have invented an Improvement in Fastening Devices, of which the following is a specification.

This invention relates to improvements in devices for fastening garments or the like.

Among other objects the invention is intended to provide fastening devices which may be economically made and applied to garments or the like, and which will improve the neatness of appearance of the garment, particularly in the region of the fastening devices.

The nature of the invention may be readily understood by reference to one illustrative embodiment of the invention, shown in the accompanying drawing.

In said drawing:

Fig. 1 is a view of one form of garment to which the inventive fastening devices may be applied,

Fig. 2 is an enlarged view of a portion of a garment or the like showing the fastening devices,

Fig. 3 is a section along the line 3—3 of Fig. 2,

Fig. 4 is a diagrammatic view illustrating by contrasting example one of the functions of the improved fastening devices.

For the purpose of illustration I have shown in the drawings one form of garment 10 on which the inventive fastening devices may be employed. Such a garment may have one or more seams 11 at the front, sides or back which are fastened together by suitable fastening devices when the garment is worn. One typical form of fastening means consists of a series of hooks and eyes suitably spaced along the free edges of the portions of the garment to be fastened together. Such hooks and eyes may be conveniently applied in the form of hook-and-eye tapes 12 and 13 respectively to which the hooks and eyes respectively are suitably secured at proper intervals, and which tapes are sewed along the desired edges of the garment. In such typical tapes, the hooks, for example, may be secured by rivets, or the like, 14, at points remote from the bend or end 15 of the hook.

These and other fastening devices especially when under tension cause the free or outer margin of the garment to wrinkle and frequently expose the fasteners, and otherwise impair the neatness and appearance of the garment. For example, the typical hook tends to cause the distortion illustrated diagrammatically in Fig. 4. Because of the tendency of the fabric of the garment to stretch under tension, and also because of the slight twisting moment exerted on the fabric by the hook under tension (see Fig. 4), the free edge 16 of the garment wrinkles and is flexed outwardly, frequently exposing the fasteners and otherwise impairing the flatness of the seam and the neat appearance of the garment. Obviously, the same sort of distortion may take place with other types of fastening devices.

To obviate this and other defects, I have employed to cooperate with the hook-tape 12, a second strip of material, in this instance a tape 17 which overlies the hooks and cooperates to preserve the flatness of the seam and the garment when the hooks are placed under tension. This result is secured, in this instance, by providing a series of openings or slots 18 in the tape 17 registering with the ends 15 of the hooks and through which the terminal portions or bills of the respective hooks are passed. Thus the tape serves also substantially to conceal the hooks and improve the appearance of the garment. The tape 17 is secured in any suitable way to the tape 12 or the garment 19. In this instance, both tapes 12 and 17 are secured together and to the garment, simultaneously, by a longitudinal line of stitching 20 located preferably beyond the ends 15 of the hooks. Also, preferably, another line of stitching 21 is employed along the opposite edges of the tapes, securing them to the garment. Considerable economy may be effected by arranging the tapes to be secured to the garment along one edge simultaneously by the line of stitching 21 and by securing the tape 17 (and if desired the tape 12) simultaneously with the stitching 20 which forms the finishing seam along the edge of the fabric of the garment. These lines of stitching 20 and 21 are sufficiently remote from the hooks so that the latter do not interrupt or interfere with the stitching operation.

Any suitable method for forming the

slots 18 in the strip 17 and applying the latter over the hooks may be employed. Preferably, these slots are narrow cuts of a length only sufficient to permit the tape to be passed over the hooks. The improved hook-tape 12 with its cooperating tape 17 may be supplied in assembled condition (that is with the openings in the tape 17 passed over the respective hooks) as an article of manufacture, by the manufacturer who applies the hooks to the tape.

The overlying tape 17 engages the hooks at the bends 15, and, by reason of its attachment (for example, by the stitching 20) to the garment 19 near the ends 15 of the hooks, the tape tends to hold the garment in contact with the hooks, even though stretched by the hook tension, and to prevent the displacement illustrated diagrammatically in Fig. 4. Any tendency for the free edge 22 of the garment to draw away from the normal plane of the garment is resisted by the tape 17.

Any suitable form of eye may be employed in connection with the improved hook tape. I have illustrated a conventional form of eye 23 secured at suitable intervals along the tape 13 by means of which the former is secured to the garment 19 by suitably located stitching 24 and 25. Obviously any other form of eye or its equivalent may be employed.

For effecting similar advantages in connection with other types of fastening means, the manner of application of the overlying strip may be changed to suit the particular type of fastening means employed. When the fastening means are secured to the garment at points remote from their connection with the cooperating fastening means, such an overlying strip may be advantageously employed to hold the garment in contact with the fastening devices close to their points of connection with the cooperating fastening devices. By arranging the overlying strips so that portions thereof fall beyond the ends of the fastening devices, the ease with which such strip may be secured to the garment is considerably increased.

Obviously the invention is not limited to any particular construction and the details of the illustrative devices may be variously modified. Furthermore, it is not indispensable that all the features of the invention be used conjointly, since they may be used to advantage in various combinations and sub-combinations.

Having described one embodiment of my invention, I claim:

As an article of manufacture hook tape comprising a strip of tape having hooks riveted thereto in spaced relation with the entirety of the hooks lying between the edges, and a superposed strips of tape completely overlying the shanks and the rivets of said hooks on said first named strip and having openings intermediate its edges, the return-bend portions of the bills of the hooks projecting through said openings, both of said strips constructed and arranged to be sewed to a garment by parallel rows of stitching along the opposite edges on opposite sides of the row of hooks with the fabric concealing the rear ends of the rivets; said strip of tape, overlying the hook strip, presenting portions cooperating with the shanks of the hooks between the return bends and the rivets.

In testimony whereof, I have signed my name to this specification.

CLARENCE MAYER.