

June 16, 1925.

1,541,936

I. C. FIFE

FASTENER

Filed Jan. 18, 1924

Fig. 1.

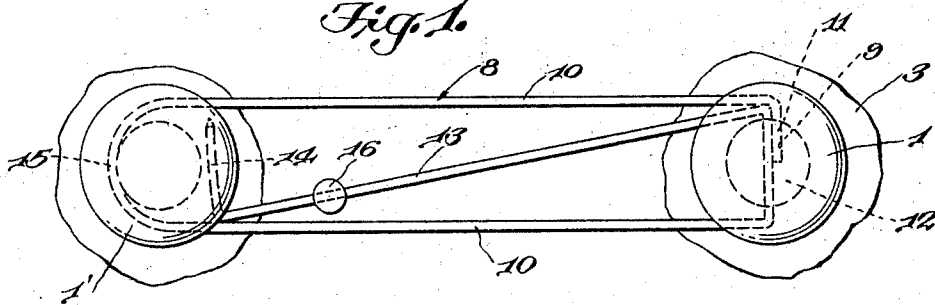


Fig. 2.

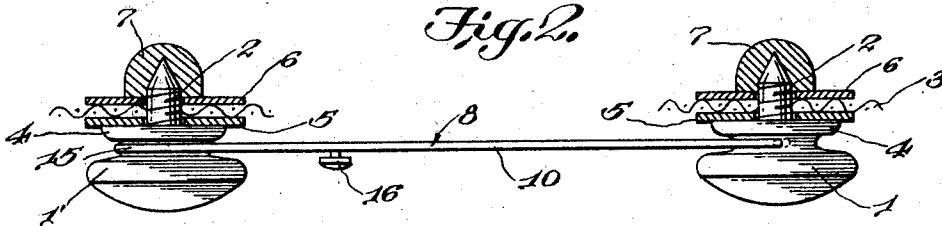


Fig. 3.

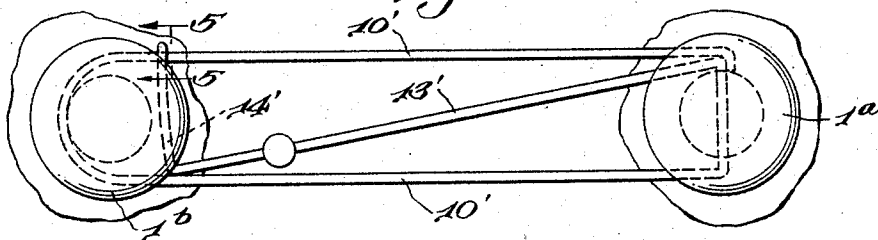


Fig. 4.

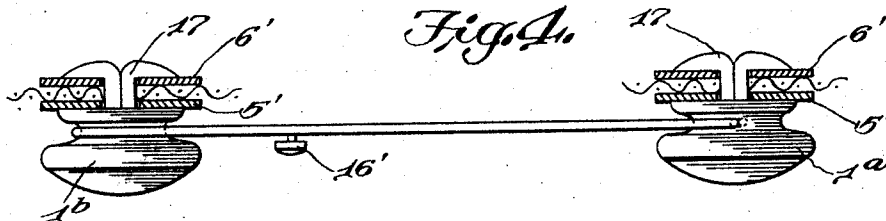
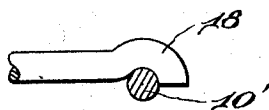


Fig. 5.

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UNITED STATES PATENT OFFICE.

IKLEY C. FIFE, OF CHICAGO, ILLINOIS.

FASTENER.

Application filed January 18, 1924. Serial No. 687,111.

To all whom it may concern:

Be it known that I, IKLEY C. FIFE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Fasteners, of which the following is a specification.

This invention relates to new and useful improvements in garment fasteners and more particularly to the type known as separable garment fasteners. The main object of the present invention is the provision of a garment fastener of this type which may be quickly and readily applied to the fabric of a garment or removed therefrom.

Another object of the present invention is the provision of a garment fastener of the separable type wherein the male portion of the fastener may be quickly and readily engaged with the female portion and the two portions securely retained in cooperative engagement until manually released.

Another object of the invention is the provision of a garment fastener wherein the fastenings of both the male and female portions are similar in construction and wherein the male and female fastening portions are disposed in spaced relation, together with means whereby the said fastening portions will be retained in this relation when in cooperative engagement.

A further object of the invention is the provision of a garment fastener of the detachable type which will eliminate the necessity of sewing buttons on the garment or making the usual button holes thus reducing the cost of manufacture of garments at the present time.

With the above and other objects in view the invention consists in the novel features in construction, the combination and arrangement of parts hereinafter more fully set forth, pointed out in the claims and shown in the accompanying drawings in which:—

Fig. 1 is a plan view illustrating a fastener constructed in accordance with my invention.

Fig. 2 is a longitudinal sectional view, parts of the fastener being shown in elevation.

Fig. 3 is a plan view of a slightly modified form of the invention.

Fig. 4 is a detail longitudinal section of the modified form, parts of the same being illustrated in elevation.

Fig. 5 is a detail section taken on the line 5—5 of Fig. 3.

In carrying out my invention I provide knob portions 1 and 1', the knob portion 1 supporting the female portion of the fastener, while the knob 1' constitutes the male portion of the fastener. Both of the knob portions 1 and 1' are provided with threaded studs 2 adapted to be inserted through the fabric 3 of the garment and positioned between the flange 4 of the knobs and the fabric 3 is a washer 5 which is mounted upon the stud 2 to retain said washer against transverse movement, and in order to provide for suitable clamping means, a second washer 6 is mounted upon the stud 2 upon the opposite side of the fabric 3 and in opposed relation with the washer 5, and in order to retain the washers 5 and 6 in clamping engagement with the fabric 3 a nut 7 is threaded upon the end of the stud 2 for forcing the washer 6 into clamping engagement with the fabric 3 so as to securely clamp the same between the two washers 5 and 6.

Secured to the knob 1 is a female portion 8 of the fastener which comprises in its construction a single piece of material one end of which is disposed at right angles to the body portion of the material and inserted into the transverse opening 9 formed in the shank portion of the knob 1. The material is then bent upon itself to form the two spaced arms 10 which are disposed in parallel relation as shown in Fig. 1 and the end of the material opposite the end which is inserted in the opening 9 is disposed at right angles to one of the arms 10 and extended through the opening 9 in parallel relation with the end portion 11 of the material. After being passed through the opening 9 forming the transverse portion 12 the material is then arranged at an incline and extended longitudinally of the arms 10 to form the resilient retaining arm 13, the outer end of which is bent at right angles to form the stop finger 14. It will be noted that by extending the end of the material from the knob 1 upon an incline with respect to the side arms 10 it will provide for a certain amount of resiliency in the member 13 to normally retain the inner end of this member in engagement with one of the side arms 10 as shown in Fig. 1 thus positioning the stop finger 14 in alignment with the shank of the knob 1' after the loop 15 has been en-

gaged with the shank portion of the knob 1' to prevent accidental removal of this loop from its engagement with the shank of the knob 1'.

5 In engaging the knob 1' with the female portion of the fastener the edge of the knob 1' is inserted between the retaining arm 13 and one of the side arms 10, forcing the arm 13 laterally from its normal position
10 so as to permit the head of the knob 1' to be inserted through or to be passed beyond the arms 10 and then by moving the knob laterally or along the length of the arms 10 the shank portion of the knob 1' will readily
15 pass behind the stop finger 14 after which the resiliency of the retaining arm 13 will tend to return this arm to its normal retaining position as shown in Fig. 1 positioning the stop finger 14 directly in alignment
20 with the shank of the knob 1' so as to prevent the accidental removal of this knob from engagement with the female portion of the fastener. In order to facilitate the operation of the arm 13 for detaching the
25 knob 1' from the female portion of the fastener a finger piece 16 is attached to the arm 13 at a point adjacent its inner end which may be readily grasped by the fingers for manually moving the stop 14 out of alignment
30 with the end portion 11 to permit the knob being removed with its engagement of the female portion of the fastener.

In the modified form of the invention illustrated in Figs. 3 to 5 the construction of
35 the fastener is similar to the form set forth above with the exception of the securing means for fastening the knobs to the fabric of the garment. In this form of the invention the knobs 1^a and 1^b are provided with
40 yieldable tongues 17 normally forming a pointed projection which can be readily passed through the openings in the washers 5' and 6' and through the fabric of the garment between these washers and the ends of
45 the tongues turned over onto the washer 6' as shown in Fig. 4 for securely clamping the washers 5' and 6' in engagement with the fabric of the garment.

In this form of the invention the stop finger 14' is provided with an offset loop 18 which is adapted to engage with one of the side arms 10' as clearly illustrated in Fig. 5
50 for retaining the arm 13' in its locked position so as to prevent accidental displacement of the knob 1^b with respect to the female portion of the fastener. In this form of the invention the looped portion 18 may be quickly and readily disengaged from the arm 10' with which the same is engaged by
55 grasping the finger piece 16' and imparting a slight lateral movement to the arm 13' so that the arm 13' may be moved to permit disengagement of the knob 1^b from the female portion of the fastener.

From the foregoing description taken in
65 connection with the accompanying drawings it will be apparent that I have provided a simple and efficient garment fastener wherein the fastening members which secure the same and female portion of the
70 fastener to the fabric of the garment are similar in construction which will reduce the manufacturing cost of the device so that the same may be placed upon the market at a comparatively low cost. I also wish to
75 direct attention to the fact that only a very slight change is necessary in the fastening members in order to attach the female portion of the fastener to one of the members which secures the entire fastener to the fabric of the garment.

While I have shown and described the preferred form of my invention I wish it to be understood that various changes and alterations may be carried out during the
85 manufacture of the same without departing from the spirit of the invention or the scope of the appended claims.

Having thus described my invention what I claim is:—

1. A fastener of the class described including knob members detachably connected to the body of a garment at pre-determined points, a loop member having one end connected with one of said knobs and its other
90 end detachably engaged with the other knob, a yieldable arm carried by said loop and normally disposed at an oblique angle between the sides of the loop whereby the same may be moved laterally to permit
100 insertion of the second loop within the loop, and a stop finger carried by said arm and adapted to be positioned in front of the second knob to retain said knobs in spaced relation with respect to each other.

2. A fastener of the class described including headed button members provided with reduced shank portions, means for detachably connecting said buttons to the fabric of a garment in pre-determined spaced
110 relation with respect to each other, a loop member having one of its ends connected with the shank portion of one of said buttons and its other end detachably engaged with the other button, a yieldable arm carried by said loop and normally disposed at an angle between the sides of the loop and adapted to be moved laterally with respect to the side portions of the loop to permit the
120 second button to be engaged with the loop, and a stop finger carried by said arm and normally positioned adjacent the second button to prevent disengagement of the loop and to retain said buttons in spaced relation.

In testimony whereof I affix my signature.

IKLEY C. FIFE.