Nov. 24, 1925. 1,563,270

I. C. FIFE

FASTENER

Filed Jan. 18, 1924.

Fig. 1.

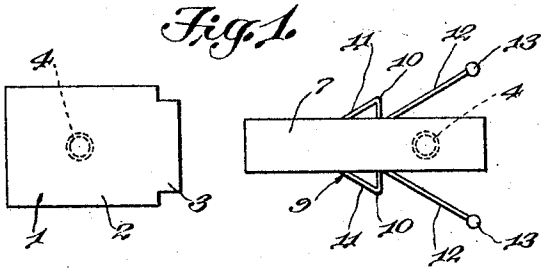


Fig. 2.

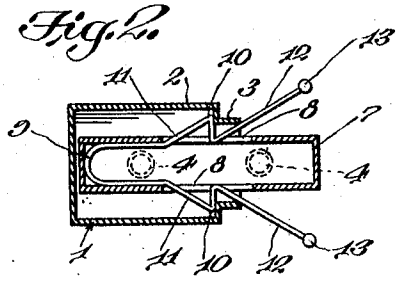


Fig. 3.

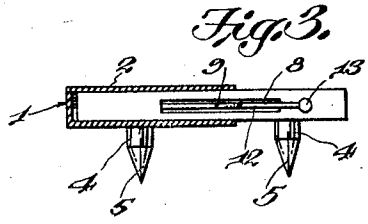


Fig. 4.

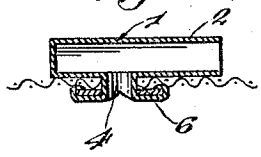


Fig. 5.

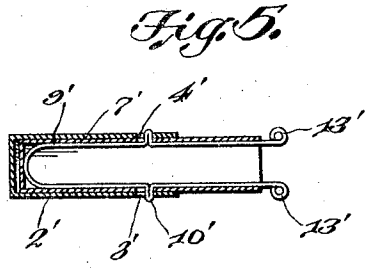
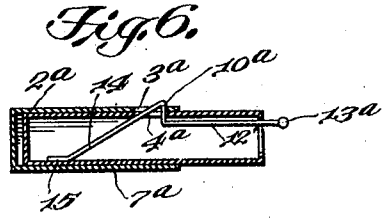


Fig. 6.



I. C. Fife INVENTOR

BY Victor J. Evans

ATTORNEY

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UNITED STATES PATENT OFFICE.

IKLEY C. FIFE, OF CHICAGO, ILLINOIS.

FASTENER.

Application filed January 18, 1924. Serial No. 687,113.

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 fasteners of the separable type. The main object of the present invention is the provision of a garment fastener of this type wherein the separable parts of the fastener may be quickly and readily engaged with each other and securely retained in an engaged position until manually released.

Another object of the invention is the provision of a garment fastener of the separable type wherein similar means is used for securing both the female and male portions of the fastener to the fabric of the garment and wherein the male and female portions of the fastener are so arranged with respect to the portions of the garment to be secured that they may be quickly and readily engaged with each other.

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 claim and shown in the accompanying drawings in which:—

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

Fig. 2 is a horizontal sectional view.

Fig. 3 is a longitudinal sectional view, parts of the same being shown in elevation.

Fig. 4 is a detail longitudinal section illustrating the manner of attaching the members to the fabric of the garment.

Fig. 5 is a longitudinal section illustrating a slightly modified form of the invention.

Fig. 6 is a similar view illustrating another form of the invention.

In carrying out my invention I provide a female fastening member 1 which comprises a casing 2 having a restricted mouth portion 3 at one end thereof and formed integral with one side of the casing 2 is a tapered penetrating shank 4, the pointed end of which is split as shown at 5 whereby the side portions of the same may be bent outwardly away from each other with the points engaging or embracing the perimeter of a washer 6 which is mounted upon the shank portion 4 and fitted against the fabric of the garment as shown in Fig. 4, the fabric being positioned between the casing 2 and the washer 6, this will securely retain the casing 2 in position with respect to the fabric of the garment.

The male portion of the fastener comprises an elongated casing 7 having formed upon one side thereof a shank 4 which is of the same construction as the shank 4 applied to the casing 2 and is fitted to the garment in the same manner. The casing 7 is provided upon opposite sides thereof with the longitudinal slots 8 and positioned within the casing is the intermediate portion of the retainer 9, the arms of which are bent to form shoulders 10 which project out through the slots 8 in the casing 7 beyond the outer faces of the casing, said shoulders having inclined portions 11 terminating into the intermediate loop of the member 9 so that when the casing 7 is inserted through the mouth portion 3 of the female member these inclined portions will engage with the side edges of the mouth and force the shoulders 10 into the casing 7 permitting the same to pass the end wall of the casing 2 upon which the mouth is formed, and through the resiliency of the retaining member the shoulders 10 will be moved outwardly into engagement with the inner face of the end wall of the casing to retain the casing 7 against movement with respect to the casing 2.

The ends of the member 9 extend outwardly at an acute angle from the inner ends of the shoulders 10 to form the handle portions 12 which are provided with finger pieces 13 at their outer ends adapted to be readily grasped by the fingers of the oper-

ator and through pressure exerted toward the casing 7 the shoulders 10 may be readily engaged with the end of the casing 2 so as to withdraw the casing 7 through the mouth portion 3.

From this it will be apparent that the two casing members 2 and 7 may be quickly and readily engaged with each other through the resiliency of the arms which carry the shoulders 10 or may be readily detached by pressing inwardly upon the finger pieces 13.

In Fig. 5 I have illustrated a slightly modified form of the invention wherein one end of the casing 2′ is open and the side walls of the casing is provided with opposed openings 3′ and the casing 7′ is provided with similar openings 4′. The casing 7′ in this form of the invention carries the U shaped member 9′, the intermediate portion of which is arranged within the casing while the ends of the same project beyond the open end of the casing and are looped to form the finger pieces 13′. The arms of the U shaped member 9′ are provided intermediate their ends with the outwardly projecting loops 10′ which normally project through the openings 4′ in the casing 7′, and when the casing 7′ is inserted in the casing 2′ the finger pieces 13′ are moved toward each other to permit the loops 10′ to move into the casing 2′ until the openings 3′ and 4′ are disposed in alignment at which time the resiliency of the U shaped member 9′ will project the loops 10′ through the aligned openings and retain the said casings against movement. It will be apparent from the above that when it is desired to detach or remove the casing 7′ from the casing 2′ the finger pieces 13′ are moved toward each other to disengage the loops 10′ from the adjacent openings 3′ and 4′ permitting a longitudinal movement of the casing 7′ with respect to the casing 2′ so as to disengage the two members.

In Fig. 6 I have illustrated still another form of the invention wherein the casings 2^a and 7^a are provided in their side walls with suitable openings 3^a and 4^a respectively, and arranged within the casing 7^a is a spring member 14 one end of which is attached to one side of the casing 7^a as shown a 15 while the spring member is disposed at an acute angle transversely of the casing 7^a and then bent at right angles to form a shoulder 10^a which is normally projected through the opening 4^a in the casing 7^a and extending outwardly through the open end of the casing 7^a from the inner end of the shoulder 10^a is the handle portion 12′ provided with a finger portion 13^a at its outer end whereby pressure may be exerted upon the finger piece 13^a for moving the shoulder 10^a laterally to disengage the same from the openings 3^a and 4^a when the two casing members are fitted together.

Attention is directed to the fact, however, that by having the inclined portion 15 the casing 7^a may be readily inserted within the casing 2^a so that when the inclined portion engages the end of the casing 2^a the shoulder 10^a will be forced inwardly into the casing 7^a permitting the same to pass into the casing 2^a until the openings 3^a and 4^a are positioned in alignment at which time the resiliency of the spring member will force the shoulder 10^a outwardly through the openings and engage the same with the wall of the openings for preventing movement of the casings with respect to each other.

From the foregoing description taken in connection with the accompanying drawings it will be apparent that I have provided a comparatively simple and durable garment fastener of the separable type wherein the male and female portions may be readily engaged or disengaged at the will of the operator.

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 manufacture of the same without departing from the spirit of the invention or the scope of the appended claim.

Having thus described my invention what I claim is:—

A fastener of the class described including an outer casing open at one end, a restricted mouth portion surrounding the open end, a second casing adapted to be inserted through said mouth portion and having longitudinally opposed slots in the side walls thereof, a spring member having its intermediate portion formed U-shaped with its arms inclined laterally in opposite directions and inwardly projecting portions at the outer ends of the inclined portions forming oppositely disposed shoulders movable through the slots in the second casing, the ends of said spring member forming handles projecting in divergent relation from the inner ends of the shoulder portions whereby the inclined portions will engage the edges of the restricted mouth when inserting the second casing into the first casing to engage the shoulders with the inner edge of the restricted portion, said handles being compressed toward each other for releasing the shoulders.

In testimony whereof I affix my signature.

IKLEY C. FIFE.