May 14, 1940. S. M. WARD 2,200,812

DETACHABLE RETAINING MEANS

Filed May 26, 1939

Fig. 1.

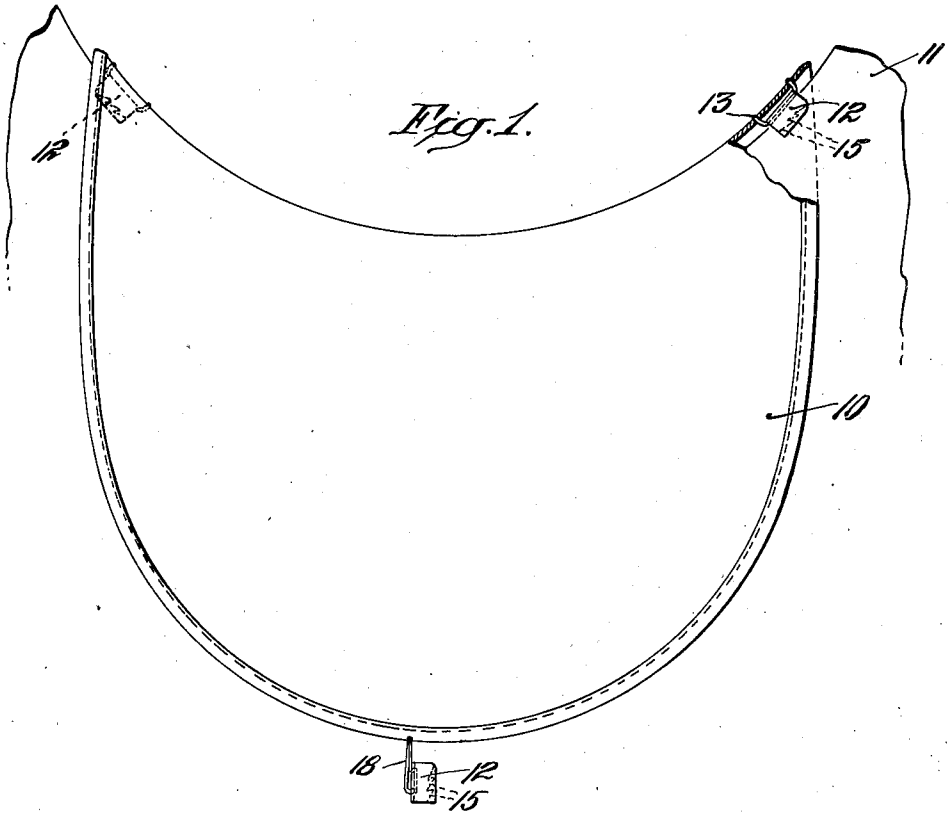


Fig. 2.

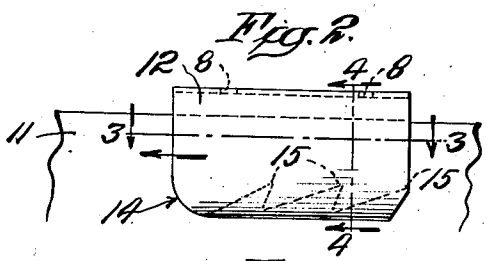


Fig. 5.

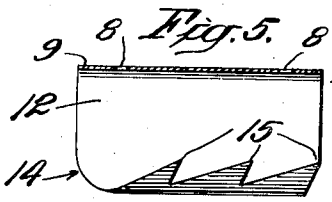


Fig. 3.

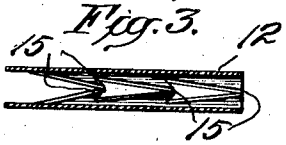


Fig. 4

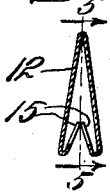


Fig. 6.

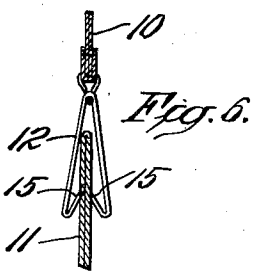
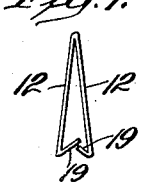


Fig. 7.



INVENTOR
SENA M. WARD
BY
ATTORNEY

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DETACHABLE RETAINING MEANS

Sena M. Ward, New York, N. Y.

Application May 26, 1939, Serial No. 275,849

5 Claims. (Cl. 24—151)

This invention relates to detachable retaining devices particularly adapted for securing of dress shields of the type employed in women's garments for protection in the region of the arm hole openings or arm scye portions of the garment. A particular object of the present improvements is to provide conveniently attachable and detachable retaining means adapted for varied uses and which in the specified use for the retaining of dress shields may be permanently attached to the shields and by its improved form permits of readily securing of the shield to the arm scye portion of the garment and allows the shield to be readily detached therefrom to facilitate laundering of the garment and replacement as desired.

To this end I have devised an improved form and construction of retaining means in the form of a clasp which may be economically made of sheet metal. These improved clasps are suitably secured to the dress shields and are so designed that they may be readily secured to the arm hole portions of the garment by a unidirectional sliding movement to clamp on the arm scye of the garment for securely retaining the shield in position. They further offer the advantage of permitting quick and convenient removal of the shields by a continued movement of the clasps in the same direction while firmly resisting reverse direction of movement thereby allowing of assembling of the clasps upon the shields so as to firmly resist the pulls or stresses tending to displace the shields from their proper position.

The foregoing and other features and advantages of my present improvements will be more fully understood by reference to the accompanying drawing wherein like reference characters are applied to the corresponding parts in the several views.

In the drawing:

Fig. 1 is a view in side elevation of a dress shield employing therewith the retaining clasps of my invention and showing the manner of assembling the arm hold portion of a shirtwaist or garment.

Fig. 2 is a view in side elevation of the improved clasp with arrows showing the direction of movement for attaching and detaching thereof.

Fig. 3 is a horizontal cross section taken on line 3—3 of Fig. 2.

Fig. 4 is a vertical cross sectional view taken on line 4—4 of Fig. 2.

Fig. 5 is a central, vertical and longitudinal section taken on line 5—5 of Fig. 4.

Fig. 6 is an end elevation of the improved clasp showing same assembled with the material of the garment, the latter shown in section.

Fig. 7 is a view in end elevation, showing a modified arrangement of the retaining teeth of the clasp.

In the approved embodiment of the features of my invention, as shown in Figs. 1 to 6, at 10 there is shown the standard form of arcuately contoured dress shield of protective waterproof material composed of inner and outer folds or flaps connected by the usual arcuate scye portion and adapted for straddling the scye of the garment with the outer fold within the garment sleeve in the well known manner. In accordance with the present invention, there is secured to the scye portion of the shield and between the shield folds and preferably at the opposite ends of the shield, as shown in Fig. 1, retaining clasp members 12 adapted for securing engagement with the scye portion of the garment.

As best shown in Figs. 2 to 6, the clasp members are of an improved structure and design desirably made from sheet materials, preferably stainless steel, which may be stamped out and bent to form as shown having opposite, inclined side wall portions 12 joined by the upper fold over connecting portion 9 and having their longitudinal free edge portions as shown formed with a forward rounded edge 14 and with rearwardly inclined teeth 15 which are desirably turned inwardly and upwardly as best shown in Figs. 4, 5 and 6. The connecting portion 9 is desirably formed with apertures 8—8 to receive a securing thread for attaching to the shield altho, as shown in Fig. 1, the attaching of the clasp may in simpler manner be by an attaching thread 13 passed end to end through the clasp. As shown the teeth 15 are formed with their front faces having minor inclination and with the rear faces of major and undercutting inclination thereby to produce teeth having a definite rearward inclination which, assisted by the rounded forward edges 14, permbits the clasps readily receiving the material of the scye of the garment between the teeth by a forward movement of the clasp with relation to the garment material. It will correspondingly firmly resist any reverse movement as will readily be understood. In the assembly, as shown in Fig. 1, of the uppermost clasps upon the shield, the clasps at opposite ends of the shield have their teeth reversely inclined so as in each instance to resist

movement of the clasps toward the center of the sleeve opening. Also as shown, additional clasps may suitably be attached to the lower ends of the shield flaps for securing engagement with the material of the garment which desirably is effected with a loose thread connection 18.

The gauge of metal employed for the clips is determined to obtain an effective retaining grip upon the material of the garment and when it is desired to remove the clasps and shield for the purpose of laundering of the garment or replacement of the shields it is only necessary to further move them in the same general direction as when assembling to work the clasps forwardly and upwardly from their resilient securing engagement with the fabric. The upward inclination to the teeth as shown is desirable in obtaining a more effective securing grip upon the material and imparts an added resiliency to the gripping action.

In Fig. 7, there is shown a simple modification in the form of the clasp wherein the teeth are formed of differing size with the longer teeth of one side wall partially overlying the shorter teeth of the opposite side wall to obtain a more secure grip upon the material of the garment.

While I have shown and described desirable embodiments of the features of my invention, it will be understood that varied modifications may be made therein without departing from the scope of the invention as defined in the appended claims. Also, while the improved clasps are described as adapted for the retaining of dress shields, it will be understood that they may be used for other purposes as for instance the temporary securing of dress material during fittings.

I claim:

1. A retaining device of the character described consisting of a clasp composed of a body of resilient sheet material folded flatwise upon itself to provide opposed walls having their longitudinal free edge portions formed with inwardly and rearwardly inclined retaining teeth adapted to permit unidirectional attaching and detaching with a fabric.

2. A retaining means of the character described consisting of a body portion of resilient sheet material folded flatwise upon itself to provide opposed side walls having their free edges formed with rounded forward ends and with inwardly and rearwardly inclined retaining teeth adapted to permit unidirectional attaching and detaching movement relative to the material of a garment.

3. A retaining means of the character described consisting of a body portion of resilient sheet material folded flatwise upon itself to provide opposed, angularly disposed side walls having their longitudinal free edge portions formed with inwardly and upwardly inclined retaining teeth, said teeth being rearwardly inclined for unidirectional attaching and detaching movement.

4. A retaining device of the character described consisting of a clasp composed of a body portion of resilient sheet material folded upon itself to provide resilient opposed side walls having their longitudinal free edge portions formed with rounded forward ends and with inwardly and upwardly inclined teeth, said teeth having front faces of minor inclination and rearward faces of major and undercutting inclination for unidirectional attaching and detaching movement.

5. A retaining means of the character described consisting of a clasp composed of a body portion of resilient sheet material folded upon itself to provide opposed side walls having their longitudinal free edges formed with rounded forward ends and with inwardly and upwardly inclined teeth, the teeth of the opposed walls having differing length with the longer teeth partially overlying opposed shorter teeth.

SENA M. WARD.