

July 9, 1929.

C. SAUER

1,719,904

BUTTON

Filed Jan. 21, 1929

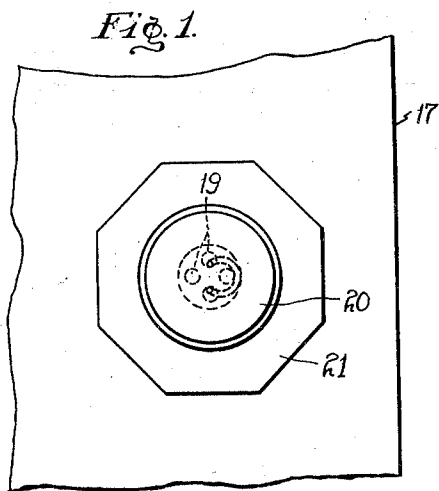


Fig. 2.

Fig. 3.

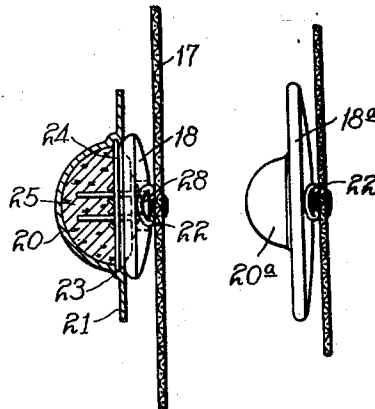


Fig. 7.

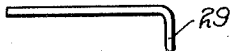


Fig. 4.

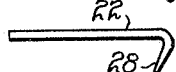


Fig. 5.

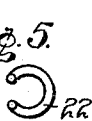
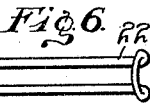


Fig. 8.

Fig. 9.

Fig. 10.

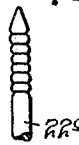


Fig. 11.

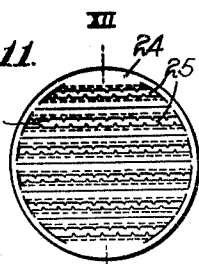


Fig. 12.

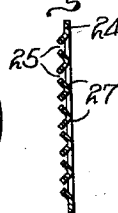


Fig. 13.

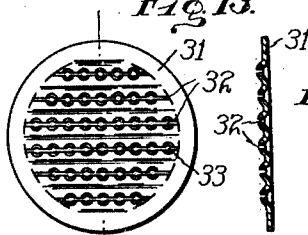


Fig. 14.



Fig. 15.

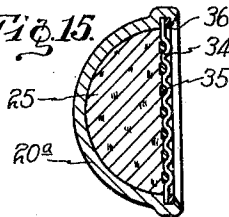
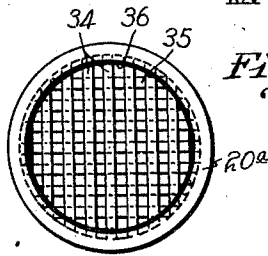


Fig. 16.



INVENTOR

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UNITED STATES PATENT OFFICE.

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BUTTON.

Application filed January 21, 1929. Serial No. 333,763.

My invention relates to buttons, and more particularly to decorative facings for buttons of various standard types, and to means for fastening such facings in place.

One object of my invention resides in the provision of means whereby facings can be readily applied to buttons which are in place, without removing said buttons, or destroying their connection to a garment.

Another object of my invention is to provide means for securely but detachably connecting facings to buttons.

Still another object of my invention is to provide fastening devices for buttons, button facings, etc., of generally improved and simplified form.

Some of the various means by which my invention may be practised are shown in the accompanying drawings, wherein Figure 1 is a face view showing my invention applied to a button; Fig. 2 is a vertical sectional view of the structure of Fig. 1; Fig. 3 is a view showing a modification of the facing of Figs. 1 and 2; Fig. 4 is an edge view of the facing clip or locking rod of Fig. 2; Fig. 5 is an end view thereof; Fig. 6 is a front view thereof; Fig. 7 shows a modification of the clip of Fig. 4; Figs. 8, 9 and 10 show various ways in which the penetrating end or the shank of the clip may be ribbed or roughened to prevent accidental withdrawal thereof; Fig. 11 shows a rear view of the locking disc of Fig. 2; Fig. 12 is a view taken on the line XII—XII of Fig. 11; Fig. 13 is a rear view showing a modification of the structure of Fig. 11; Fig. 14 is a view taken on the line XIV—XIV of Fig. 13; Fig. 15 is a sectional view of a modification of the fastening and clamping disc of Fig. 2; and Fig. 16 is a rear elevational view of the structure of Fig. 15.

Referring to Figs. 1 and 2, a portion of a garment is represented by the numeral 17, a button 18 of any usual type is secured to the garment by sewing in the usual manner, such button being of the type wherein the holes extend completely through the button, as indicated at 19.

The primary purpose of the invention is to provide smooth or decorative facings to the button 18, for the purpose of concealing the thread and the holes which are ordinarily exposed to view. The facing is represented by the numeral 20 and is shown as having a flange 21 that is of polygonal form. The facing 20 is fastened to the button 18 by means

of a clip 22 that is of the form shown in Figs. 4, 5 and 6. The clip 22 is bent at its mid portion and may be of spring-like wire, so that the leg portions or shank portions thereof can be spread apart or brought closer together to permit them to pass through two holes 19 of the button.

The facing 20 is provided with an annular groove as indicated at 23, for the reception of the edge of a locking disc 24 which may be of sheet metal and of the form shown in Fig. 11. Cork 25 or similar material may be placed within the facing 20. The disc 24 is provided with a number of slits 25, the edges which define the slits being bent inwardly and roughened or toothed as indicated at 26.

It will be seen that by placing the facing 20 against the button 18 and tilting the button slightly to one side, the clip 22 may be inserted through the holes of the button and will be guided by the rounded surfaces 27 into the slits in the disc 24. The teeth 26 will prevent the facing sliding on the surface of the button 18, and the cork or other filler 25 will also assist in preventing displacement of the facing 20 relative to the button in directions parallel to the plane of the button.

Displacement of the facing diametrically or outwardly from the button will be prevented both by reason of the yieldable gripping force of the cork upon the clip, and also by biting engagement of the ribs formed by slitting the disc 24. If desired, the holding effect can be made more positive by employing a clip such as 22^a (Fig. 8) with spurs struck up from the surface thereof, or by a clip such as 22^b (Fig. 9) wherein annular ribs having flattened shoulders are provided, or as shown by 22^c (Fig. 10) wherein annular curved ribs are formed on the shank of the clip. The last-mentioned form will permit of more ready removal of the cap, thus facilitating the change from one style of facing to another.

There is co-operative relation between the spurs or studs on the shank of the clip as shown in Figs. 8 to 10, and the bend connecting the legs of the clip (Fig. 6) in that if when certain spurs engage the locking disc 21, the bend of the clip does not abut snugly against the disc, the loop or bend of the clip will yield or give under pressure to permit the shanks of the clip to be forced further into the button and allow other spurs further down the shank to engage the locking disc,

thus holding the parts very rigidly assembled.

In Fig. 3, the fastening 20^a is shown of much smaller diameter than the button 18^a, being employed primarily to conceal the thread and the holes whereby the button is secured to the cloth.

The mid portion of the bend of the clip 22 is flattened slightly as indicated at 28, so that it will not present so great an obstruction to the button hole (not shown) of the garment. Again, the clip instead of having its inner portion bent outwardly as shown in Figs. 2, 4 and 5, may have such portion lying at right angles to the shank of the clip as indicated at 29 in Fig. 7. Furthermore, the clip need have only one shank portion instead of the double shank of Fig. 6.

In Figs. 13 and 14 I show a locking disc 31 which may be of sheet metal or other suitable material and which is corrugated, the bottoms of the corrugations at the inner side of the disc being slit as shown at 32 and having holes 33 drilled therethrough. The corrugations serve to guide the points of the clip to the slits through which they may be pressed and to the holes 33 which are close enough so that the shank portions of the clip will enter them. In this arrangement as in the case of the disc 25, the edges of the strips formed by slitting the locking disc will exert a gripping action upon the shank portions of the clip even though such shank portions be smooth as in Fig. 4.

In Figs. 15 and 16, I show an arrangement wherein the locking is effected by means of a series of vertically-extending wires 34 and horizontally-extending wires 35 which are arranged in mesh-like form, the wires 34 being spaced slightly apart to permit entry of the clip shanks. The wires function as a locking disc and are held in assembled relation with respect to one another and with respect to the facing 20^a, by means of a clamping ring 36 which is held in place by bending back the inner edge of the facing 20^a, or the wires may be welded to the ring 36.

The rear or exposed surfaces of the wires are rounded so that the ends of the clips will readily pass between them and the inner sides of the wires 35 are flattened so that the corners of the flattened portion will tend to exert a gripping action upon the shank of the fastening to prevent withdrawal thereof. The wires 34 have bends formed therein at intervals to serve as seats for the wires 35.

In inserting a clip, the wires 34, and particularly the wires 35, will be spread slightly, the tendency being to force the wires 35 out of their seats in the bends referred to. Upon attempted withdrawal of the clip, the force thus exerted will tend to pull the wires 35 snugly to their seats in the bends and thereby cause them to exert a gripping action upon the shank of the clip.

In all of the forms of fastening above de-

scribed, the clips may be inserted through the button and through the locking disc at various angles, and this is an important feature of my invention because in many cases, the button of a garment cannot be turned at a sufficiently great angle relative to the plane of the garment to permit the insertion of the clip in a direction perpendicular to the plane of the button.

If desired, the device may be employed in connection with a button which has not been previously sewed to a garment by simply placing the button at the desired location on the garment and forcing the shanks of the clip through the cloth, through the holes in the button, through the locking disc, and into the cap. Various forms of the locking devices above referred to will have ample holding strength to securely maintain the button and the facing in position on the garment.

The invention could also be employed in the fastening of what I have termed the facing, directly to the garment, in that the button 18 could be dispensed with and the clip forced through the garment into the facing structure, the facing in that case functioning in itself as a button.

I claim as my invention:—

1. The combination with a button facing of a fastening clip adapted to engage a supporting member, and a locking disc secured to the facing and having elongated slots formed therein to permit passage of a portion of the clip and whose walls grip the same.

2. The combination with a button facing of a fastener therefor comprising a clip having a head portion adapted to lie against the rear side of a button, a shank portion extending through a hole in the button, and means carried by the facing for gripping the said shank portion.

3. The combination with a button facing of a fastener therefor comprising a clip having a head portion adapted to lie against the rear side of a button, a pair of shanks extending from said head portion and adapted to pass through holes in the button, and means carried by the facing for gripping said shank portions.

4. The combination with a facing, of means for fastening it to a button, comprising a clip having a head portion adapted to engage the rear side of a button and a shank portion adapted to extend through a hole in the button, a locking disc carried by the facing, and strip-like gripping members carried by said disc in position to engage the said shank.

5. The combination with a facing of means for fastening it to a button, comprising a clip having a head portion adapted to engage the rear side of a button and a shank portion adapted to extend through a hole in the button, a locking disc carried by the facing, strip-

like gripping members carried by said disc in position to engage the said shank, and means for preventing movement of the disc relative to the said shank in a direction longitudinal of said strips.

6. The combination with a facing, of means for fastening it to a button, comprising a clip having a head portion adapted to engage the rear side of a button and a shank portion adapted to extend through a hole in the button, a locking disc carried by the facing, a plurality of pairs of clip gripping members in said disc, and means for guiding the shank of the clip into operative relation with one of said pairs of gripping members.

7. A fastening device comprising a clip adapted to engage a supporting member, and a gripping device secured to a member and adapted to be connected to the said supporting member, and means on said gripping device for gripping the said clip at either of a plurality of points in the plane of said gripping device.

8. A fastening device comprising a clip adapted to engage a supporting member, and a clamping disc adapted to be secured to a member to be connected to the said supporting member, and clip gripping means on said disc extending to various points throughout the plane thereof.

9. The combination with a button facing and a supporting member therefor of a fastening device comprising a clip having a shank portion and a yieldable head portion, and a gripping member connected to the

facing and having gripping engagement with the said shank portion, the said head portion being adapted to abut against the rear surface of the said supporting member.

10. The combination with a button secured to a garment, of a facing disposed against the outer surface of said button, a headed clip extending from the inner surface of the button into the said facing, and means carried by the facing for gripping the shank of said clip.

11. The combination with a button secured to a garment, of a facing disposed against the outer surface of said button, a headed clip extending from the inner surface of the button into the said facing, and means carried by the facing for gripping the shank of said clip, the said clip having a yieldable head portion normally abutting against the rear side of the button.

12. The combination with a button facing of a fastener therefor comprising a clip having a head portion adapted to lie against the rear side of a button, a shank portion extending through a hole in the button, means carried by the facing for gripping the said shank portion, the said facing being recessed intermediate its front surface and the front side of the gripping members, and perforatable filling material confined within said space in position to be penetrated by the said shank.

In testimony whereof I, the said CONRAD SAUER, have hereunto set my hand.

CONRAD SAUER.