

G. SCHIER.
SHIRT AND COLLAR BUTTON.
APPLICATION FILED DEC. 17, 1903.

Fig. 1.

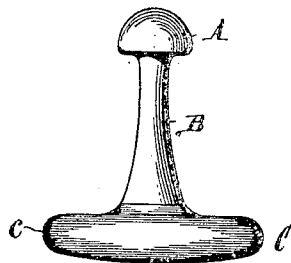


Fig. 2.

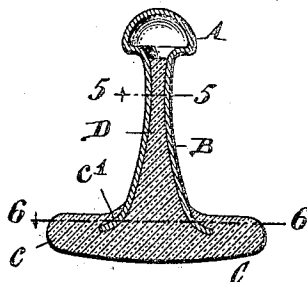


Fig. 3.

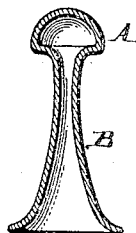


Fig. 4.

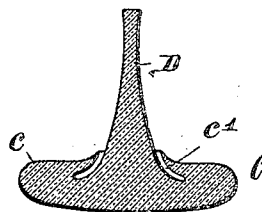


Fig. 5.

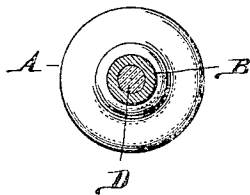
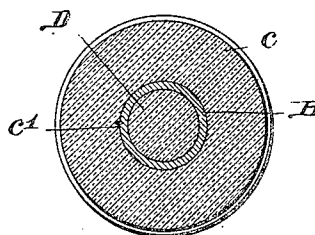


Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE SCHIER, OF BUFFALO, NEW YORK.

SHIRT AND COLLAR BUTTON.

No. 808,312.

Specification of Letters Patent.

Patented Dec. 26, 1905.

Application filed December 17, 1903. Serial No. 185,505.

To all whom it may concern:

Be it known that I, GEORGE SCHIER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Shirt and Collar Buttons, of which the following is a specification.

This invention relates to improvements in shirt and collar buttons; and it has for its object to provide a button with a flexible base which can be readily secured to the rigid upper portion of the button and when secured will be held thereon under all conditions of usage, said base being provided to overcome the annoyance of having a hard or rigid base pressing and rubbing against the back of the wearer's neck, thus avoiding chafing and the consequent irritation which a rigid base will invariably produce, and when the base is made of an inferior metal and it is affected by the perspiration of the body it may produce blood-poisoning. Furthermore, the said flexible base also avoids the swelling produced by the continual pressure of the rigid base against the neck, irrespective of what material the base may be made of, and particularly when used on an ill-fitting shirt or when the wearer is in a stooping position.

To overcome the above-mentioned objections, my invention consists, in detail form, in providing a button with a suitable head and a hollow shank and attaching thereto a flexible base having an undercut recess with a central core or stud extending therefrom and entering said hollow shank.

In the drawings, Figure 1 is a side elevation of a shirt or collar button embodying my invention. Fig. 2 is a central section thereof. Fig. 3 is a central section of the rigid upper portion of the button. Fig. 4 is a central section of the flexible base. Fig. 5 is an enlarged cross-section taken on line 5 5, Fig. 2. Fig. 6 is a cross-section taken on line 6 6, Fig. 2.

Referring to the drawings in detail, corresponding letters of reference refer to corresponding parts in the several figures.

The letter A designates the head of the button, and B the shank, which is preferably hollow and slightly flared from an intermediate point upward toward the head A. From the said intermediate point the shank is preferably flared toward its base, and at its lower end it is provided with a more pronounced flare approaching almost a right-angular curve. This exact outline need not necessa-

rily be followed; but I find in practice that such a construction is very desirable.

C designates the flexible base, which is constructed of soft rubber or any other suitable pliable or flexible material, and it comprises in its preferred form a circular base portion *c*, having an annular undercut recess *c'*, and a core or stud D, which is normally slightly larger than the opening in the shank into which it is forced. Said core or stud strengthens the shank and prevents its buckling or becoming indented, and when said core is compressed and forced into said hollow shank it presses securely against the metal of the shank and holds the base firmly to the upper portion of the button. The flaring lower end of the shank is held in the undercut recess *c'*, and thus aids in holding the two parts of the button together.

It is to be noted that the upper end of the core or stud D is flared to correspond to the shape of the upper end of the shank, thus tending to prevent withdrawal thereof from the shank except by the exercise of considerable force. It will be noticed that this lower end of the shank is not slit or otherwise formed so as to permit it to be spread subsequent to its insertion into the base. On the contrary, the contour of the shank remains the same at all times, and its surfaces are unbroken by slits, grooves, or other like formations.

If desired, the core or stud D may be held in the shank of the button by cementation; but this I have found unnecessary for general purposes.

The button may of course be altered in form and construction, and the invention may be embodied in a lever-button or in any button where its purpose may be of use.

It will be noted that the flared portion of the lower end of the shank B is embedded in the material of the flexible base C, the said flared end of the shank fitting snugly in the annular undercut recess *c'*. That portion of the base C which overhangs the undercut recess *c'* surrounds the flared end of the shank B and incloses the same in such manner that if the said overhanging portion is engaged in an effort to separate the shank longitudinally from the base the said overhanging portion will be pressed tightly against the flared portion of the base, and the connection between the base and shank will be thus made firm and the separation of the parts while under strain rendered impossible. Thus when the

button is introduced through a buttonhole and that portion of the garment surrounding the button is drawn tightly against the overhanging portion of the base any reasonable amount of strain will not effect a removal of the shank from the base.

By referring to the drawings it will be noted that a raised portion is provided upon the center of one face of the base, and it is in this raised portion that the annular groove is formed. A groove of considerable depth is thus produced without proportionately increasing the entire thickness of the base. It will of course be understood that it is advantageous to have the groove as deep as possible, as the height of the outer overhanging wall thereof is proportionately enlarged. The larger the surface of the wall bearing upon the shank the more firmly will the said shank be retained in place. It will also be noticed that it is not absolutely necessary to cement the stem to the shank or to notch the shank or provide any other securing means. The two parts will be firmly held together by the expansion pressure of the stem and by the contraction pressure of the walls of the groove. By this arrangement of the parts,

although the base and stem are securely fastened together to resist ordinary strains, they can be quickly separated by forcing back the overhanging retaining-wall of the groove to release the flared end of the shank. Said shank can then be withdrawn from the stem without injury to either of the parts.

Having thus described my invention, what I claim is—

A button comprising a head, a hollow shank connected therewith, said shank being formed with a flared end opposite said head, a flexible stem extending into said hollow shank, and a flexible base connected with said stem and formed with an annular undercut recess into which the flared end of said shank extends, the said flared end being thus embedded in the flexible base and being surrounded and inclosed by that portion of the base overhanging the undercut recess.

In testimony whereof I have signed my name in the presence of two subscribing witnesses.

GEORGE SCHIER.

Witnesses:

CHAS. F. BURKHART,
EMIL NEUHART.