

No. 665,985.

Patented Jan. 15, 1901.

F. E. WHITE & H. D. & C. A. BURNHAM.

COLLAR BUTTON.

(Application filed Feb. 17, 1900.)

(No Model.)

Fig. 1.

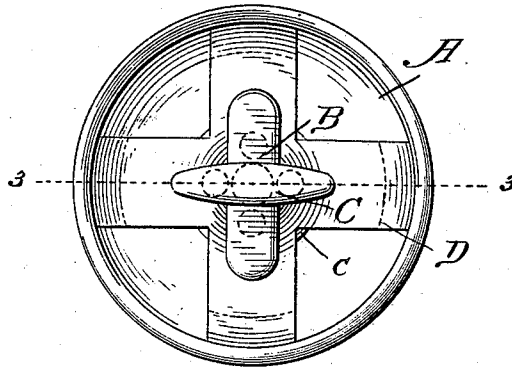


Fig. 3.

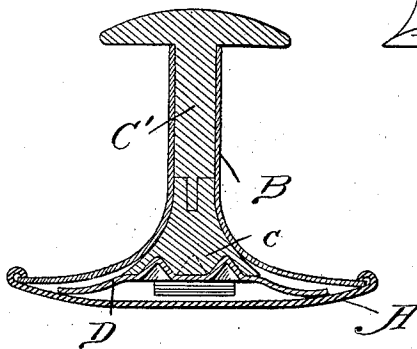


Fig. 4.

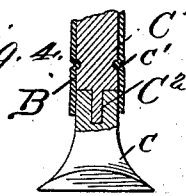


Fig. 5.

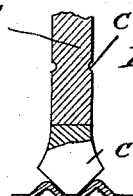
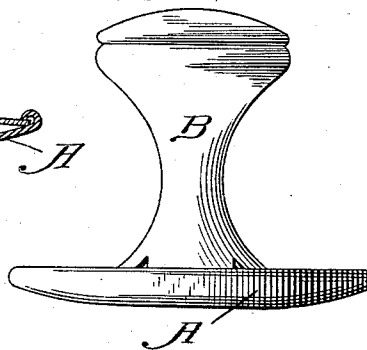


Fig. 2.



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UNITED STATES PATENT OFFICE.

FRED E. WHITE AND HERBERT D. BURNHAM, OF GARDNER, AND CLARENCE A. BURNHAM, OF WINCHENDON, MASSACHUSETTS.

COLLAR-BUTTON.

SPECIFICATION forming part of Letters Patent No. 665,985, dated January 15, 1901.

Application filed February 17, 1900. Serial No. 5,635. (No model.)

To all whom it may concern:

Be it known that we, FRED E. WHITE and HERBERT D. BURNHAM, of Gardner, and CLARENCE A. BURNHAM, of Winchendon, Massachusetts, citizens of the United States, have invented certain new and useful Improvements in Collar-Buttons, of which the following is a specification.

Our invention relates to improvements in collar-buttons; and the object of the invention is to provide an extremely simple article of few parts, reducing the liability of the article to get out of order, one in which a very short shank may be used without interfering with the ease with which it may be inserted in the buttonhole, and, finally, one which will not accidentally become unbuttoned or detached.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the button. Fig. 2 is a side view showing the locking-shoe turned in position for the shank to be inserted in the buttonhole; and Fig. 3 is a section on line 3 3 of Fig. 1, Figs. 1 and 3 showing the shoe in locking position. Figs. 4 and 5 are detail views.

In the drawings, A indicates the base of the button, of any desired shape, as circular, oval, or the like, and in the present instance is shown as made of sheet metal, having its edge rolled or flanged over to engage the shank. The button-shank B is made reduced and circular in cross-section near its center and of greater diameter above and below. The portion of the button-shank which is adjacent to the shoe is of elongated cross-section and preferably flares outwardly to a sufficient extent to conform in shape to the shoe, which is a long narrow piece of any suitable material. When the shank and base are both made of sheet metal, the shank projects under and is firmly clamped by the turned-over edges of the base. The shank is provided with a cylindrical bore. The portion of the shank approaching the base flares, but maintains its circular form. The shoe carries a shoe-shank C' of circular cross-section, which is rotatably mounted in the button-shank and is retained therein by having an enlarged portion c corresponding to the

adjoining portion of the button-shank. It will thus be seen that when the shoe is turned into the position shown in Fig. 2 the shoe and shank may be readily forced through the buttonhole, and after it is in place the turning of the shoe into the position shown in Figs. 1 and 3 effectually locks it against withdrawal, as the shank by reason of its elongated portion will be held with said elongated portion lengthwise of the buttonhole and will consequently hold the shoe crosswise of said hole.

In order to prevent the shoe from accidentally turning, we prefer to provide a spring-plate D in the space between the base and shank; this spring-plate having projections preferably formed by striking up the metal of the plate to engage corresponding notches in the end of the shoe-shank, as clearly shown in full lines in Fig. 3 and in dotted lines in Fig. 1.

It will be noticed that by flaring the end of the shoe-shank a much broader bearing-surface is provided for the spring-plate, thus insuring the better operation of the parts.

On account of the shoe C at one end and the end c at the other being larger than the intermediate portion of the shank it is necessary to make one portion thereof detachable to permit insertion. This may be done in a number of ways, though we have shown and described but one in the present application. This form is illustrated in Figs. 4 and 5, in which it will be observed that the parts C' and c are provided with a tongue-and-groove connection C². In using this form of connection in order to securely hold the shank C' in place and prevent its separation from the lower portion c we may form an annular groove or channel c', into which the metal of the button-shank B is struck, which thus, while permitting ready rotation of the shoe, will prevent its withdrawal.

While we have described the larger part A as the "base" and the small part C as the "shoe," it will be understood that these terms are used for convenience of description only and do not in any way limit the invention—as, for instance, if the invention were embodied in a cuff-button the part A would properly be called the "head" and the part

C the "shoe," while if the invention were embodied in a collar or like button the part A would, as above, be called the "base" and the part C the "head" or "shoe."

5 Having thus described our invention, what we claim is—

- 10 1. A button comprising a base, a shank having a flaring tapered portion adjacent to the base and an elongated portion at the opposite end, an elongated shoe having a shank provided with a flaring tapered portion forming a broad inclined bearing-surface, and a spring engaging said enlarged surface, substantially as described.
- 15 2. A button comprising a base having a circular flanged edge, a shank having a circular flared portion engaging said flanged edge, a shoe having a shank journaled axially in said button-shank and having a flaring end portion
- 20 corresponding to said flared shank and a

spring coacting with said shoe-shank and tending to force the same outwardly into said button-shank, substantially as described.

3. A button comprising a head, a shank having a flaring portion adjacent to the head 25 and an elongated portion at the opposite end, a shoe having a shank with a correspondingly-flared portion, a detachable connection between said parts, an annular groove in the outer part, the material of the button-shank 30 being constricted into said groove, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

FRED E. WHITE.

HERBERT D. BURNHAM.

CLARENCE A. BURNHAM.

Witnesses:

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FRED J. DUNN.