

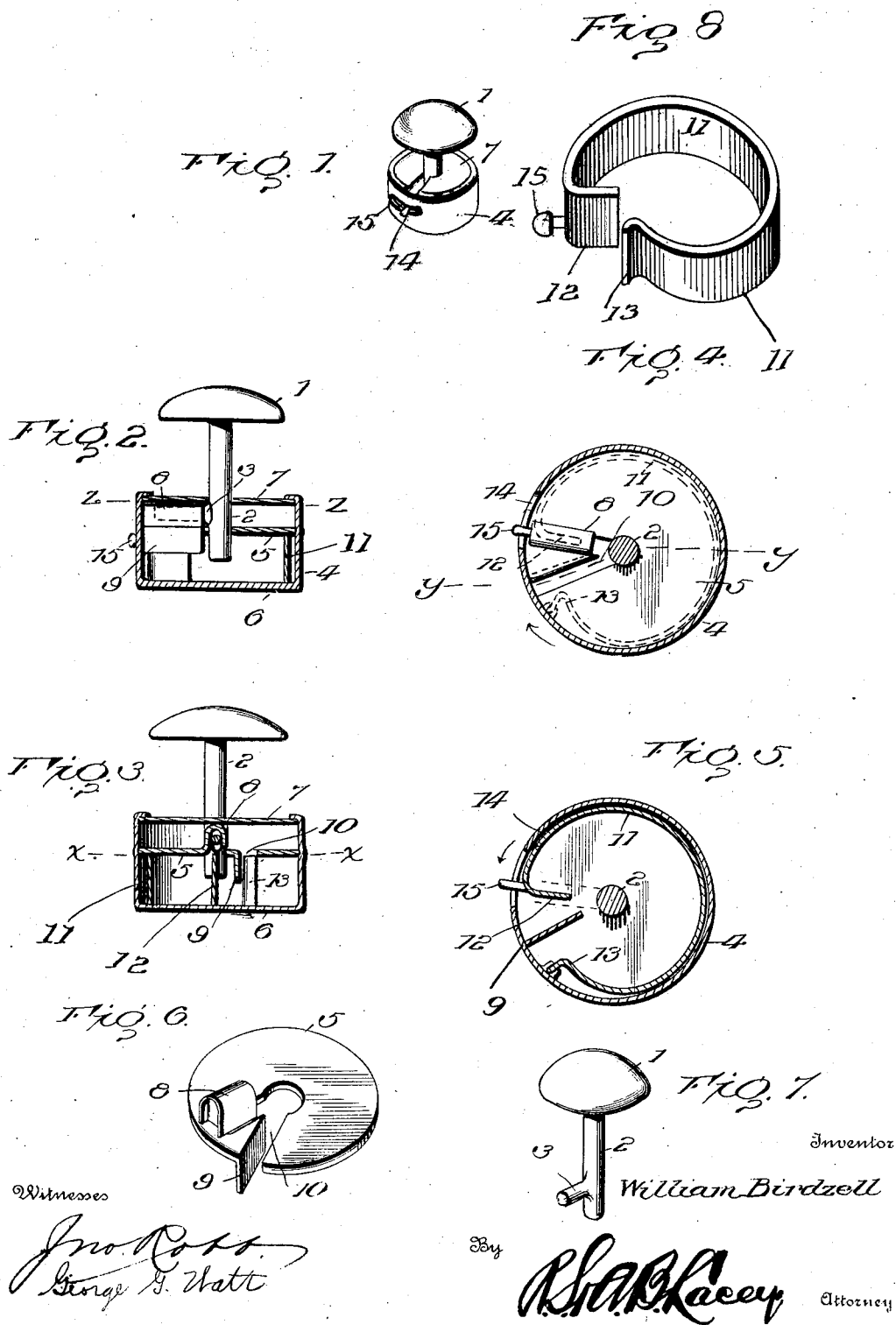
No. 738,977.

PATENTED SEPT. 15, 1903.

W. BIRDZELL.
COLLAR BUTTON.

APPLICATION FILED MAY 1, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

WILLIAM BIRDZELL, OF CHARLESTON, ILLINOIS.

COLLAR-BUTTON.

SPECIFICATION forming part of Letters Patent No. 738,977, dated September 15, 1903.

Application filed May 1, 1903. Serial No. 155,164. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BIRDZELL, a citizen of the United States, residing at Charleston, in the county of Coles and State of Illinois, have invented certain new and useful Improvements in Collar-Buttons, of which the following is a specification.

This invention provides new and useful improvements in buttons for collars, cuffs, and analogous adaptations.

The button is of the composite type consisting of two elements, cap and base portions, which are of such a structure that they may be readily interlocked when put into use and removed by proper manipulation of parts, when desired, in an easy and expeditious manner.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the same for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the article, showing the preferred form of same when in use. Fig. 2 is a sectional view of the button, the parts being assembled on the line Y Y of Fig. 4. Fig. 3 is a second sectional view similar to that shown in Fig. 2. Fig. 4 is a horizontal sectional view on the line Z Z of Fig. 2. Fig. 5 is a horizontal sectional view on the line X X of Fig. 3. Fig. 6 is a detail perspective of the lock-plate. Fig. 7 is a detail perspective of the base of the button. Fig. 8 is a detail perspective view of the spring.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The base of the button, as shown in Fig. 7 of the drawings, consists of a plate 1, a stem 2, and a projection or extension 3, disposed upon the aforesaid stem 2. The cap consists of a body 4, preferably of approximately cylindrical form and having a lock-plate 5 disposed within the said body for coöperation with the stem of the base. The body 4 is closed at the outer end, as shown at 6, and a plate 7 is utilized

to close the open end of the cap. The lock-plate could serve in the capacity of the plate 7, however. In order to give the article a finished appearance, the plate 7 may be used, though it will be understood that I may use my discretion relative to this detail of structure, as governed by the manufacture of the device. The lock-plate is provided with a seat 8 and a stop 9, the seat 8 being formed by the provision of an arched portion and the stop 9 by bending a portion of the plate inward. The plate is provided with a slotted opening 10, which opening is disposed adjacent the stop 9 and is adapted to receive the stem 2 and projection 3 of the base of the button.

Between the lock-plate 5 and the outer end 6 of the cap member is interposed a circular spring element 11, provided with a spring extension 12, which extension coöperates with the projection 3 of the stem 2 of the base of the button in a manner which will be described more clearly hereinafter. The circular spring element 11 is provided at the end opposite that upon which the extension 12 is formed with a fold 13, which fold receives a portion of the stop 9 and serves after a manner to brace the said stop. The spring 12 is adapted to lie normally adjacent the side of the seat 8 opposite the stop 9, thus obstructing the movement of the projection 3, when the same is introduced within the body of the cap through the slotted opening 10. By reference to Fig. 3 of the drawings it will be noted that when the projection is disposed within the seat 8 the spring 12, which has been moved to permit introduction of the projection within the seat, assumes its normal position with the upper edge thereof in contact with the upper side of the projection, thus rigidly holding the projection within the seat, as clearly shown.

Describing more particularly the manner of use of the button when applied to a collar, the base is disposed with the stem 2 passing through the openings in the end portion of the said collar. The cap is then applied to the stem 2. Said stem and the projection 3 are passed into the body of the cap. The cap is then given a rotary movement in the direction of the arrow shown in Fig. 4, and the projection moves into contact with the spring

12, forcing same toward the stop 9. By a slight outward pull of the cap the projection 3 is introduced within the seat 8, and the spring 12 assumes its normal position upon the opposite side of the seat, thus locking the projection within the seat and preventing disengagement of the cap from the base. Because of the position of the stop 9 the cap can be rotated only in the direction indicated by the arrow. In order to disengage the parts, an opening 14 is disposed upon the periphery of the body 4 of the cap, and through this opening 14 projects a finger-piece 15, which finger-piece extends from the spring element 11, being preferably integral therewith. Pressure upon the finger-piece 15 in the direction of the stop 9 will cause movement of the spring 12 to the other side of the seat 8 adjacent the said stop and permit by a longitudinal movement of the cap toward the base of the button and a rotary movement thereafter of disengagement of the projection from within the seat 8. The rotary movement of the cap will be continued until the stop 9 comes into contact with the projection 3, which will indicate that the said projection is adjacent the slotted opening 10, and the operator may then readily remove the cap from the base by pulling same in an outward direction, which will cause passage of the projection through the said opening 10 upon the lock-plate 5.

The button may be made of metal and finished in any suitable manner.

The article is inexpensive as regards to the manufacture and affords a secure means for holding the parts of an article together, being especially advantageous when applied to wearing-apparel of the character of collars and cuffs.

Having thus described the invention, what is claimed as new is—

1. In a button, the combination with a base provided with a stem, a cap, a lock-plate provided with a seat, engaging means provided upon the stem of the base and adapted to be received within the seat of the lock-plate, and means for preventing displacement of the aforesaid engaging means from the seat.

2. In a button, the combination with a base provided with a stem, a projection disposed

upon the stem, a cap for reception of the stem, a lock-plate provided with a seat disposed thereon to receive therein the projection of the stem, and spring means for cooperation with the aforesaid projection to prevent displacement thereof from the seat.

3. In a button, the combination with a base provided with a stem, a projection disposed upon the stem, a cap, a lock-plate provided with a seat thereon to receive therein the projection of the stem aforesaid, stop means for limiting the movement of the projection within and without the seat, and spring means disposed adjacent the seat and adapted to cooperate therewith to hold the projection from displacement therefrom.

4. In a button, the combination with a base provided with a stem having a projection thereon, a cap having a lock-plate provided with an opening to receive the stem and projection of the base, stop means disposed upon the lock-plate limiting the movement of the aforesaid projection, a seat also disposed upon the lock-plate adapted to receive therein the projection, spring means cooperating with the seat to prevent displacement of the projection, and means for manipulating the said spring means to remove the cap from the base.

5. In a button, the combination with a base provided with a stem having a projection thereon, a cap, a lock-plate disposed upon the cap and provided with an opening to receive the stem and projection aforesaid, stop means disposed adjacent the opening of the lock-plate to limit the movement of the projection within the cap, a seat for reception of the projection carried by the lock-plate and a spring disposed between the body of the cap and the lock-plate and cooperating with the projection to hold same within the seat, and an extension projected from the said spring whereby same may be manipulated so as to permit displacement of the projection from the seat of the lock-plate and removal of the cap from the base.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM BIRDZELL. [L. S.]

Witnesses:

CHAS. D. MCCRORY,
FRED CHAMBERS.