

No. 640,651.

Patented Jan. 2, 1900.

S. A. GRANT.
COLLAR BUTTON.

(Application filed Mar. 10, 1899.)

(No Model.)

Fig. 1.

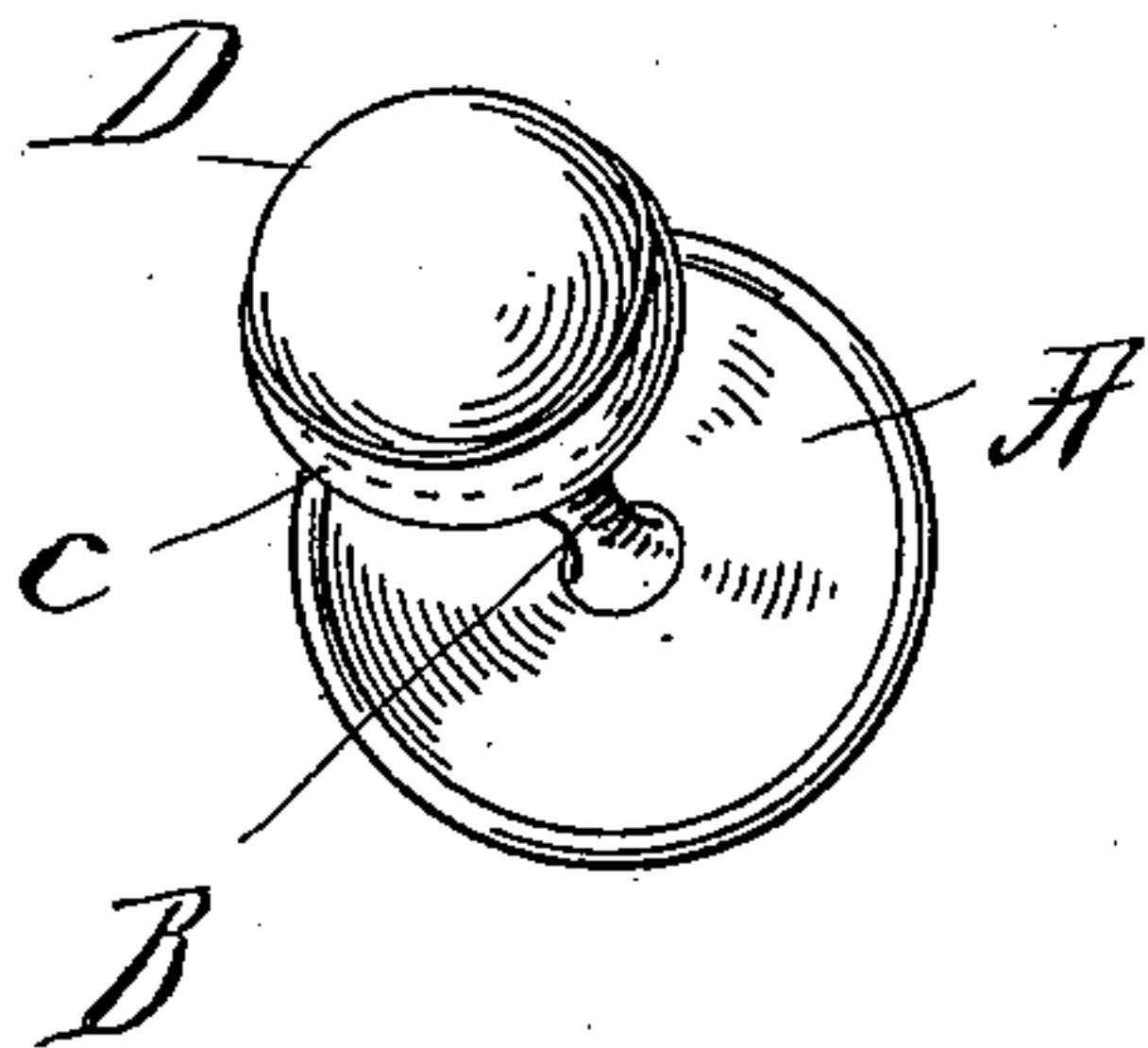


Fig. 2.

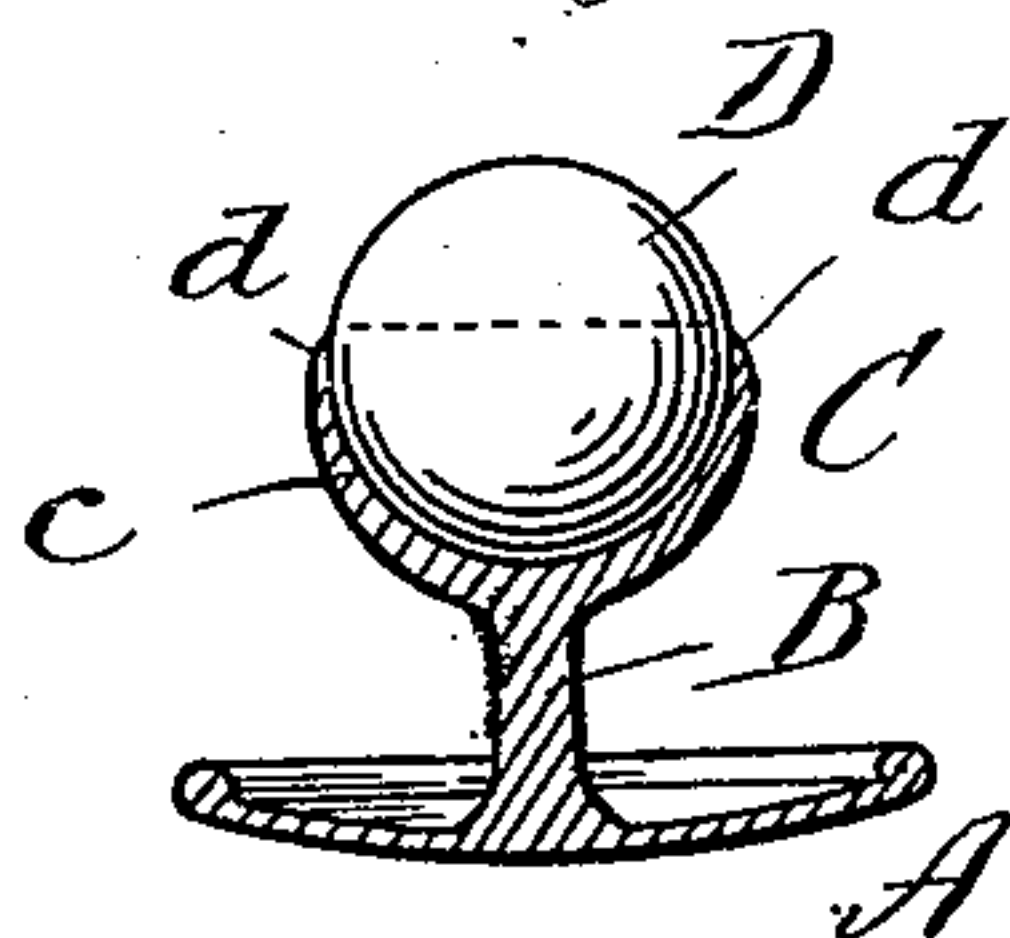


Fig. 3.

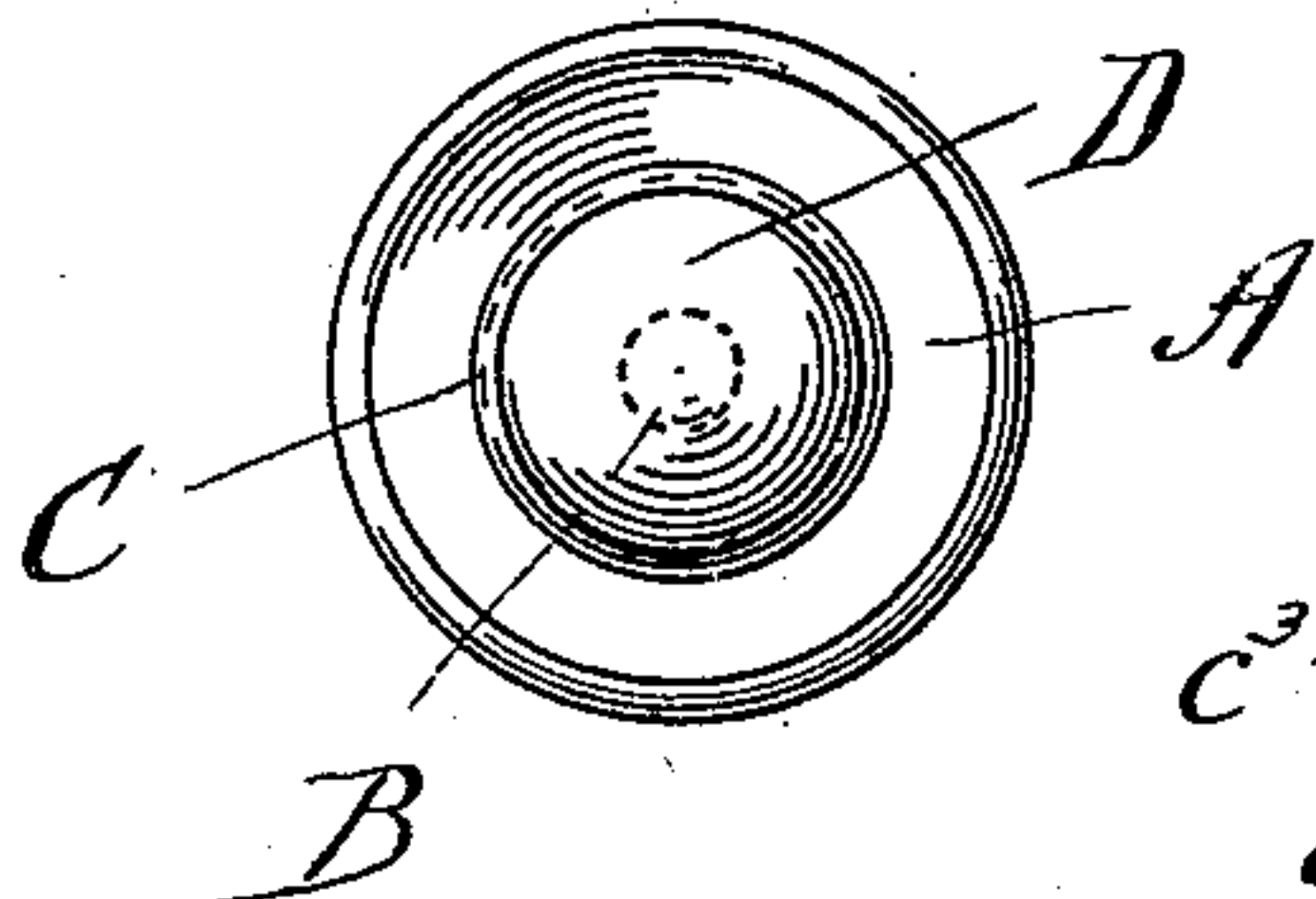


Fig. 5.

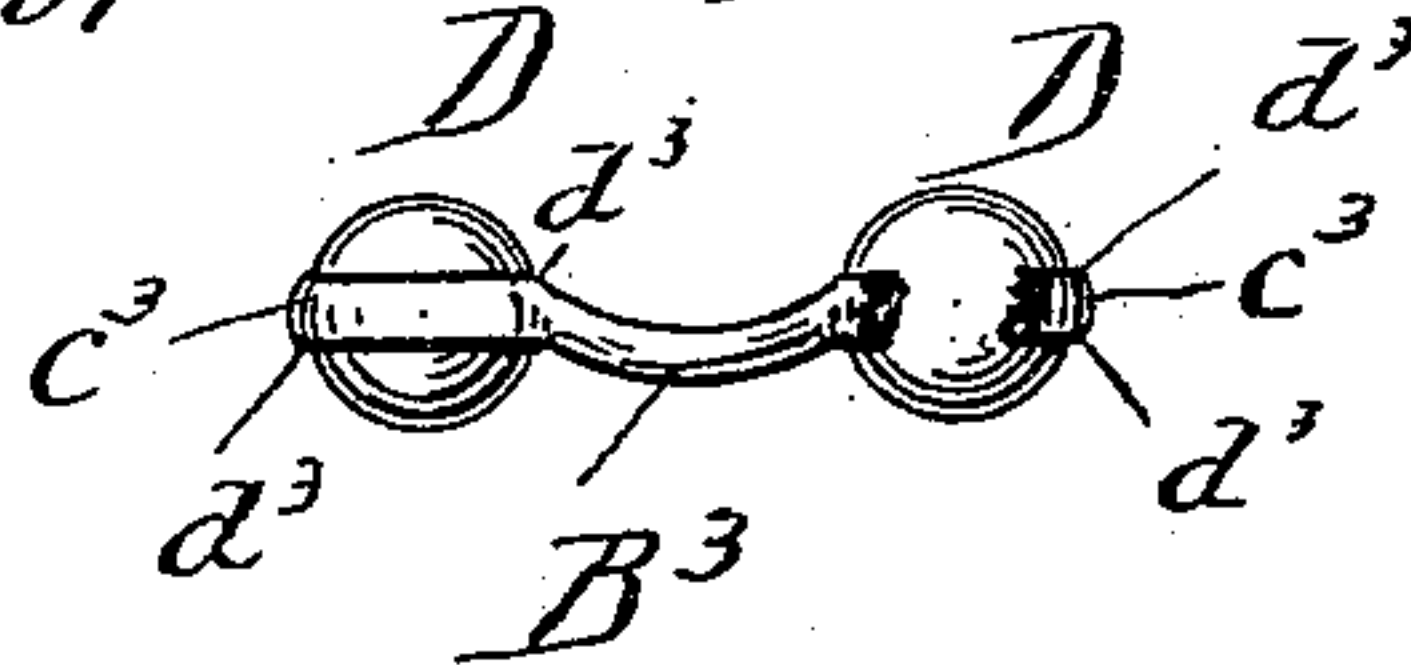
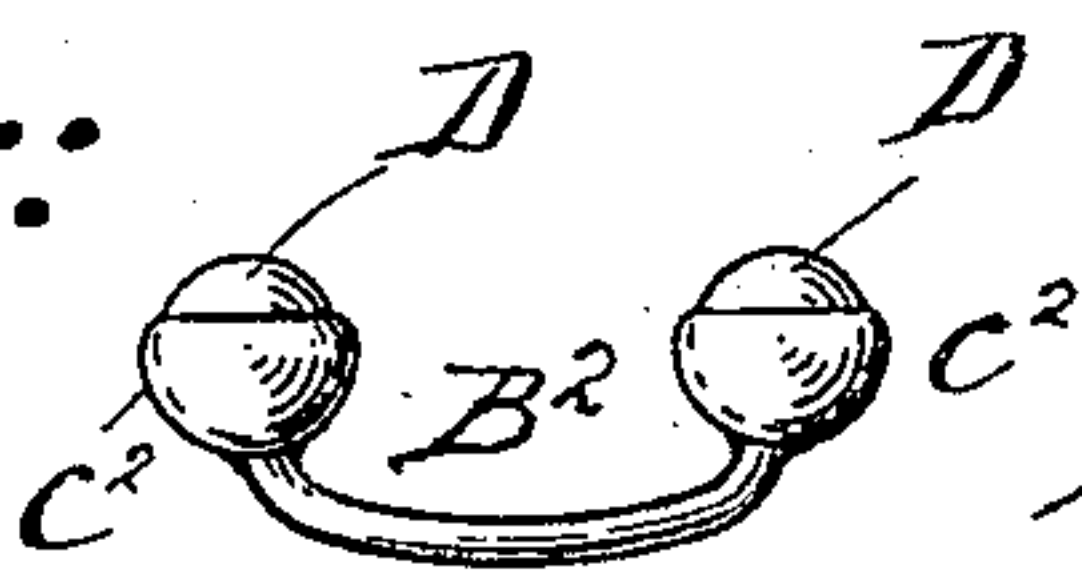


Fig. 4.

Witnesses:
John Garfield,
M. A. Campbell



Inventor,

S. A. Grant,

by W. A. Bellamy,
Attorney.

UNITED STATES PATENT OFFICE.

SIDNEY A. GRANT, OF SPRINGFIELD, MASSACHUSETTS.

COLLAR-BUTTON.

SPECIFICATION forming part of Letters Patent No. 640,651, dated January 2, 1900.

Application filed March 10, 1899. Serial No. 708,514. (No model.)

To all whom it may concern:

Be it known that I, SIDNEY A. GRANT, a citizen of the United States of America, and a resident of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Collar-Buttons, of which the following is a full, clear, and exact description.

This invention relates to a new and useful article of manufacture—to wit, a collar-button of novel construction, whereby the head of the button may be more quickly and easily inserted through the buttonholes of the shirt and collar or other garment or article of wearing-apparel and whereby a button of attractive and improved appearance is had.

The improved collar-button is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the button. Fig. 2 is a central sectional view through the button. Fig. 3 is a plan view. Figs. 4 and 5 are side views of buttons of different forms embodying this invention, one of the bands d^3 of Fig. 5 being broken away.

In the drawings, Figs. 1 to 3, A represents the back of the button, B the shank or stem, and C the top or head. The back and shank are constructed integrally or in parts joined together in any suitable or well-known way; but the stem-like shank is formed in cup shape, as indicated at c , forming an encircling ball-bearing having a depth to receive slightly more than half of the bulk of the sphere D. The mouth or marginal portion of the encircling ball-bearing after the sphere has been placed therein is inwardly crimped, spun, or otherwise turned to contract the mouth of the ball-bearing, so that its diameter is less than the greatest diameter of the ball. The inwardly-turned edge portion of the ball-receiving bearing has its contour, as indicated at d , inclining toward the surface of the ball, approaching the same gradually and avoiding a sharp shoulder, so that when the head of the button is forced through the buttonhole, as may be done with greater facility because of the turning of the ball, which is freely rotatable, the surfaces which are slightly outlying beyond the ball, around the center thereof, are practically continuations. When the button is being passed through a buttonhole, the ball is turned at an angle, so that the side of the ball will be presented to the buttonhole, and in rolling through the buttonhole less friction is exerted upon the edges of the but-

tonhole, and hence less injury will be done to the material.

I may form the different parts of the button of different materials or metals, as occasion or preference demands.

In Figs. 4 and 5 I have shown the invention as comprised in bar link-buttons for cuffs, Fig. 4 showing double ball-bearings $c^2 c^2$, similar to the ones c in Fig. 2, united by the common base or bar B^2 and having in their top or head ends the spheres, retained as before described, and Fig. 5 shows the spheres retained by the encircling bands c^3 , carried at the opposite ends of the base or bar B^3 , it being understood that the spheres D D are retained against displacement by the marginal portions d^3 of the bands c^3 , inwardly forced, spun, or crimped. The bands d^3 , forming encircling ball-bearings, are made concave upon their inner sides, so as to correspond to the convexity of the sphere D, and the concavity is sufficient to catch the sphere upon each side of its center, and thus prevent its displacement. Between the bars or bases are short shanks to which the bands or ball-bearings are attached. The bars as shown in Figs. 4 and 5 act as bases in the same manner as the base A in Fig. 1.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A button, consisting of a base provided with a suitable shank, a sphere at the end of the shank, and a ball-bearing, encircling this sphere, which sphere projects a suitable distance beyond the outer edge of the ball-bearing so that when the sphere is presented to the buttonhole it rolls through the hole, substantially as shown.

2. A button consisting of a base, shanks at each end of the base, and encircling bands d^3 secured to the shanks, and which bands are made concave upon their inner sides so as to form encircling ball-bearings and thus catch over each side of the center of the spheres to prevent them from being displaced, while allowing the spheres to freely turn, substantially as shown and described.

Signed by me at Springfield, Massachusetts, this 2d day of March, 1899.

SIDNEY A. GRANT.

Witnesses:

WM. S. BELLOWS,
M. A. CAMPBELL.