

(No Model.)

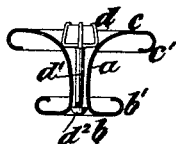
O. T. SMITH.

BUTTON.

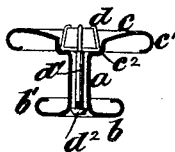
No. 345,814.

Patented July 20, 1886.

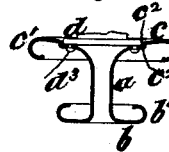
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*

*O. Sundgren*  
*Emil Hexter.*

*Inventor:*

*O. T. Smith*  
*by his Attys.*  
*Brown & Hall.*

# UNITED STATES PATENT OFFICE.

ORVILLE T. SMITH, OF BROOKLYN, NEW YORK.

## BUTTON.

SPECIFICATION forming part of Letters Patent No. 345,814, dated July 20, 1886.

Application filed December 21, 1885. Serial No. 186,336. (No model.)

*To all whom it may concern:*

Be it known that I, ORVILLE T. SMITH, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Buttons, of which the following is a specification.

An important object of my invention is to provide a very strong and light, and therefore inexpensive, button which is particularly adapted for the reception of the setting of a diamond or analogous ornament, and my invention may be embodied in sleeve-buttons, collar-buttons, studs, &c.

The invention consists in a button of novel construction, hereinafter described, and pointed out in the claims; and it also consists in the novel combination, with a button, of a diamond or other ornament and a setting therefor, as also hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figures 1, 2, and 3 represent several forms of buttons which embody my invention.

In all three figures similar letters of reference designate corresponding parts.

In Fig. 1 I have represented a button which comprises a tubular stem, *a*, a shoe, *b*, and a head, *c*, and which is or may be formed entirely from one piece of metal without seam or joint, and the shoe and head *b c* are formed by outwardly-turned flanges of unequal diameter at the opposite ends of the tubular stem *a*. The larger of these flanges, *c*, constitutes the head of the sleeve-button. The metal from which this button is formed is of substantially uniform thickness throughout. As here represented, the outer edges of the shoe and head *b c* are turned or rolled inward, and respectively upward and downward relatively to the stem, as shown at *b' c'*, so as to form a finished edge, and the button has a central opening, which extends through the stem and head and through the shoe. It will therefore be seen that but comparatively little metal will be required to make this button, and solid gold buttons embodying this invention may be sold at a reduced price. The head *c* is in the form of a curved or flaring flange, which forms a smooth continuation of the metal of the stem. The central opening through the stem and head is very advantageous, for the reason that

it forms a proper seat or recess in which may be placed a diamond or other ornament secured in the setting *d*, made separate from the button. As here represented, the setting or mounting has a central stem, *d'*, which projects through the central stem, *a*, of the button, and is secured to the button by a nut, *d''*, or by a screw-thread otherwise formed. This setting is therefore readily removable from the button, and different settings for different-sized diamonds or other ornaments may be readily secured in similar buttons by dealers having a stock of buttons on hand. Not only is this style of setting appropriate to the shape and form of the head *c* of the button, but the opening which is presented at the head forms a very secure and appropriate seat, by which the setting *d* is properly centered. The upwardly and outwardly flaring form of the head *c* from the stem *a* is advantageous for two reasons. The outer surface of the head forms a reflecting-surface, which is inclined in all directions inward toward the diamond at the center, and the rays of light striking this inclined surface are reflected inward toward the center or the focus of the diamond, thereby showing it off to great advantage. This form of the head also gives a greater projection in the direction of the axis of the button near the circumference than at the center, and consequently the diamond and its setting are largely shielded and protected against rubbing and knocks, and the simple inexpensive claw-setting *d* may be used without danger of the stone becoming loosened and lost.

The button shown in Fig. 2 is like that before described, except that in the head *c* there is a rabbet or depression, *c'*, which is concentric with the opening through the stem *a*, and the setting *d* for the diamond or other ornament is situated in the depression *c'*, thereby securing in this button, also, a projection of the portion of the head which is around the setting above or beyond the setting, so that the diamond and setting will be largely shielded and protected.

The button shown in Fig. 3 differs only from those shown in Figs. 1 and 2 in that it has formed in the head *c*, and concentric with the stem *a*, a rabbet or depression, *c'*, considerably

larger in diameter than that shown in Fig. 2. In this example of the invention the ornament may consist of a stone or of an embossed or otherwise ornamented plate of metal, *d*, which is seated within the rabbet or depression *c*,<sup>5</sup> and may be secured therein by means of prongs or spurs *d'*, which project from the head *e*, and are riveted on the under side thereof, or by any other suitable means.

I do not claim, broadly, herein a button having its stem and head formed of one piece of metal without seam or joint, the head having in its face a central seat or depression, and there provided with means for securing a diamond or other ornament, and having the metal around the seat or depression raised above the stem, so as to shield and protect a diamond or other ornament secured in the seat or depression, as such a button forms the subject of my pending application for Letters Patent No. 202,426, filed May 17, 1886. Neither do I claim, broadly, herein a button having its stem and head formed of one piece of metal without seam or joint, the head having a central seat or depression in its face, and being flared upward and outward from said seat or depression, so as to give it a projection above the same at the circumference, and provided at the seat or depression with a setting for a diamond or other ornament made separate from the button and secured in said seat or depression, as such a button is embraced in my aforesaid application. Neither do I claim herein a button having a tubular stem and head formed of one piece of metal without seam or joint, the head having a central seat or depression, and provided at said seat or depression with a setting for a diamond or other ornament, which has a stem or shank entering the tubular stem of the button, and is thereby secured in the button, as such a button is claimed in my aforesaid pending application.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A button consisting of a tubular stem provided at opposite ends with outwardly-turned flanges, one forming the head and the other the shoe of the button, and having an opening entirely through the button, the head

having at the center a seat or depression for a diamond or other ornament, and having a surrounding portion extending outward from the seat, and projecting above and beyond the seat, so as to shield and protect the diamond or other ornament, substantially as herein described.

2. A button consisting of a tubular stem provided at opposite ends with outwardly-turned flanges, one forming the head and the other the shoe of the button, and having an opening entirely through the button, the head having at the center a seat or depression for a diamond or other ornament, and being flared upward and outward from the seat or depression, so as to give it at the circumference a projection above and beyond the seat, substantially as herein described.

3. The improved button consisting of a tubular stem provided at opposite ends with outwardly-turned flanges, one forming the head and the other the shoe of the button, and having an opening entirely through the button, the head having a central seat or depression, and the surrounding portion extending outward from and above the seat or depression, and having a diamond or other ornament secured in the seat or depression, and shielded and protected by the surrounding portion of the head, substantially as herein described.

4. The improved button consisting of a tubular stem provided at opposite ends with outwardly-turned flanges, one forming the head and the other the shoe of the button, and having an opening entirely through the button, the head having a central seat or depression and a surrounding portion extending outward from and above the seat or depression, and also having a setting for a diamond or other ornament made separate from the button, and removably secured in the central seat or depression, whereby the ornament will be shielded and protected by the surrounding portion of the head, substantially as herein described.

ORVILLE T. SMITH.

Witnesses:

M. LINDEMAN,  
C. HALL.