No. 660,558. Patented Oct. 30, 1900.

D. A. CARPENTER.

BUTTON.

(Application filed May 11, 1900.)

(No Model.)

Fig. 1,

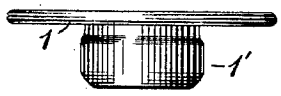


Fig. 2,

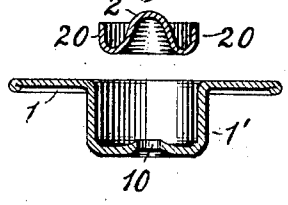


Fig. 3,

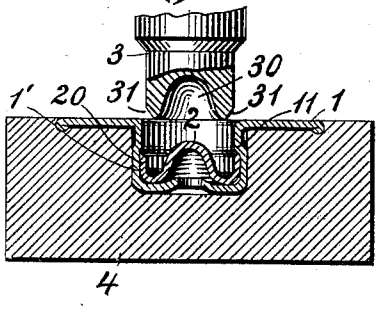


Fig. 4,

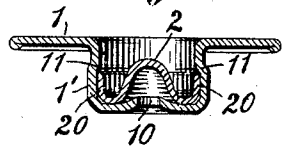
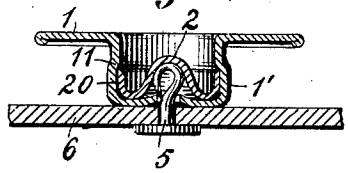


Fig. 5,



WITNESSES:

D. N. Naylor

Arthur F. Thompson.

INVENTOR

Daniel A. Carpenter.

UNITED STATES PATENT OFFICE.

DANIEL A. CARPENTER, OF NEW YORK, N. Y.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 660,558, dated October 30, 1900.

Application filed May 11, 1900. Serial No. 16,251. (No model.)

To all whom it may concern:

Be it known that I, DANIEL A. CARPENTER, a citizen of the United States, residing in the city of New York, in the county and State of New York, have invented a certain new and useful Improvement in Buttons, of which the following is a full, clear, and exact description, reference being made to the accompanying drawings, forming part of this specification.

This invention relates to improvements in the construction of tack-fastened buttons, which are commonly termed "two-piece" buttons; and the invention consists of a button composed of a shell and die united, the parts being formed and secured together as is hereinafter described and claimed.

On the accompanying sheet of drawings, Figure 1 is a side view of the button; Fig. 2, a section of the shell and die before they are united; Fig. 3, a section of the button and fragments of tools used in making it; Fig. 4, a section of the button alone, and Fig. 5 a section of the button secured to a piece of cloth.

Similar reference-numerals designate like parts in the different views.

The object of this invention is to produce a two-piece button so constructed as to render the die not liable ever to be separated from the shell, as well as to enable the button to be easily made.

The button-shell is formed from a round blank, the material being usually tin or brass, and consists of an annular section 1 and a hub 1′, having in its base a hole 10 of the proper size to fit the stem of the fastener. The die is likewise formed from a round blank, which is preferably steel. The central portion of the die is a dome 2, whose interior diameter at the base is greater than the diameter of the hole 10, and the outer portion 20 of the die is upturned around the dome 2, as appears by Fig. 2, and made to snugly fit in the hub 1′ of the button-shell. The die is so placed in the shell that the base of the die is in contact with the bottom of the hub, and the parts are united by means of a press and the tools or devices 3 and 4. (Represented in Fig. 3.) The tool 3, which fits snugly in the hub 1′ of the button-shell, is provided with a cavity 30, conforming to the dome 2 of the die, and with a beveled surface 31. The device or block 4 supports the parts of the button during the action upon them of the tool 3. This tool enters the hub 1′, the beveled surface 31 of the tool meeting the inner edge of the portion 20 of the die as the tool advances, and that portion of the die and the hub 1′ are spread together by the tool, which is forced between the portion 20 and the dome 2, the dome being received in the cavity 30 of the tool, and a shoulder 11, extending over the portion 20 of the die, is thus formed in the hub. The parts are then securely united, because the diameter of the die is greater than the interior diameter of the hub above the shoulder.

When the button is attached to a garment, the fastener 5 extends through the cloth 6 and the hole in the hub and is upset within the dome 2 of the die, as appears by Fig. 5.

Instead of the particular die shown obviously a die or clenching device differing therefrom somewhat in form within the portion 20 might be used.

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

1. A button composed of a shell and a die united, the shell comprising a hub 1′ containing a shoulder 11, and the die having the dome 2 and upturned portion 20 surrounding the dome, and the die being within the hub with its base next to the bottom of the hub, and with its upturned edge against the shoulder 11, substantially as described.

2. A button composed of a shell and a die or clenching device secured therein, the shell comprising a hub 1′ containing a shoulder 11, and the device in the shell having the upturned portion 20 surrounding its central portion, and confined in the hub by the shoulder 11 extending over it, substantially as described.

DANIEL A. CARPENTER.

In presence of—
WARREN S. STUTTS,
ARTHUR F. THOMPSON.