(No Model.)

J. HOLMES.

SEPARABLE BUTTON.

No. 527,555. Patented Oct. 16, 1894.

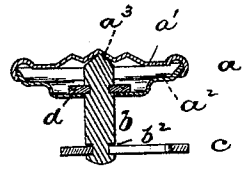

Fig. 3.

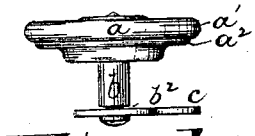

Fig. 1.

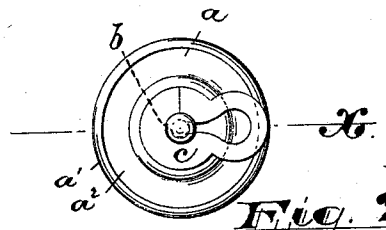

Fig. 2.

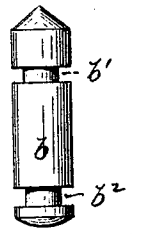

Fig. 4.

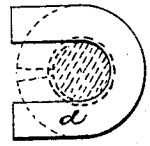

Fig. 5.

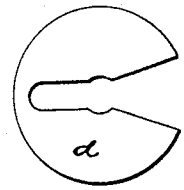

Fig. 6.

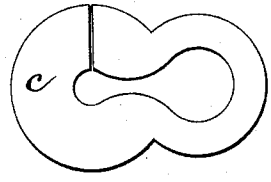

Fig. 7.

Witnesses

Oscar A. Michel.
Jas. S. Baldwin

Inventor:

John Holmes,

By Drake & Co. Atty's.

UNITED STATES PATENT OFFICE.

JOHN HOLMES, OF NEWARK, NEW JERSEY.

SEPARABLE BUTTON.

SPECIFICATION forming part of Letters Patent No. 527,555, dated October 16, 1894.

Application filed February 16, 1893. Serial No. 462,624. (No model.)

To all whom it may concern:

Be it known that I, JOHN HOLMES, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Buttons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked th e on, which form a part of this specification.

This invention relates to that class of buttons, known as bachelors' buttons, having, at one end of its shank, a permanent head and, at the other, a removable fastener.

It also relates to that class of buttons in which the outer head comprises two plates joined at the peripheries, the rear plate being made more concavo-convex, as shown in Figure 3, of the drawings hereinafter referred to, than the front plate, so as to give greater body to the button, and render the same more strong to resist the forces brought to bear thereon.

The objects of the invention are to reduce the cost of construction and to secure a stronger, less expensive and more sightly article and to secure other advantages and results some of which will be hereinafter more fully referred to.

The invention consists in the improved button and in the combinations and arrangements of parts, all substantially as will be hereinafter set forth and finally embodied in the clauses of the claim.

Referring to the accompanying drawings in which like letters indicate corresponding parts in each of the figures, Figs. 1 and 2 are respectively a side elevation and bottom plan of the button complete and Fig. 3 is a central longitudinal section of the same with the detachable fastener removed from the shank thereof. Fig. 4 is a detail section of the shank stud. Figs. 5 and 6 are detail plans of certain blanks which when bent around the shank serve to hold the same within the head of the button, and Fig. 7 is a plan of a fastener adapted to hold the button upon the garment.

In said drawings, *a* indicates the head of the button, *b* the shank thereof, and *c*, the removable fastener adapted to be held in a peripheral groove at the end of the shank so as to fasten and hold the button to the garment in any manner common to the class known as bachelors' buttons, to which the invention particularly relates.

The head of the button, *a*, consisting of the outer plate, a', and inner plate or collet, a^2, is preferably formed up from sheet metal in any manner usual in the art. Said plates are of different degrees of concavo-convexity, or are so formed that they engage at their edges and at their central parts form, therebetween, a chamber, in which the shank-fastening means are arranged. The two plates formed as above, when joined, give body to the head of the button and add strength thereto so that the button is not easily bent even though made of thin sheet metal. The means for fastening the head to the shank, also, are concealed by the front plate. Said front and rear, or inner and outer plates are held together, preferably, by turning the peripheral edge of the outer plate over that of the inner plate in the manner indicated in the sectional figure.

The present invention relates more particularly to the manner of fastening the shank to the head.

The shank consists of a short section of wire which extends through the perforated inner plate and extends into engagement with the inner side of the front or outer plate, a', which latter is pressed up at the center so as to form a recess or socket, a^3, to receive the end of the said wire section or stud. Said section or stud may be pointed to enter the recess and be centered therein and adjacent to the back or inner plate the same is notched or peripherally grooved, as at b', to receive a collar, *d*, which projects laterally from the said stud and serves as a shoulder or bearing for the back plate, the latter engaging said bearing and holding the stud against withdrawal.

Heretofore, buttons have been provided with collars, in similar positions therein, consisting of perforated plates having a funnel shape, at first, and with grooved shank. The shank having been inserted in the perforation, so that the inner edge coincided with the

groove, pressure was applied and the plate flattened, by which operation the perforation was contracted and the plate thus held to the shank. In this construction the amount of contraction was in all cases limited and varied in accordance with the variations in the quality of the metal, and thus, the fastening was not certain and strong to withstand the great strain frequently brought thereon when in service.

The method of forming the collar of my invention and the means employed avoid uncertainty, and always produce a construction having adequate strength.

The collar herein is shown to be formed of a short section of flat wire bent first into the form of a U, as indicated in Fig. 5, and then placed in the groove or annular notch and again bent so that the ends meet or approximate one another, the flat wire thus entering deeply into the grooves and having a rigid and strong connection with the shank. The plates, before referred to, being struck from sheet metal, required a large amount of wastage of the sheet and to secure any material contraction of the central perforation were necessarily of considerable diameter and this tended to create considerable waste. By the use of flat wire, all such waste is avoided and the buttons are not only of better quality but are also of reduced cost because of my improved construction.

At the outer end of the stud, where it is exposed to form the shank and pass through the material of the garment prior to receiving the fastener, the same is notched or grooved as at b^2 to receive the removable fastener, *c*, in the ordinary manner.

The construction of the collar may be modified without departing from the invention, and in Fig. 6 I have shown such a modification.

Having thus described the invention, what I claim as new is—

The improved bachelor's button herein described, in which is combined with the inner and outer plates of the head, which are centrally separate to form a chamber and are peripherally joined, a shank or stud extending through the inner plate into engagement with the front plate and having, at a point between said plates, just within the inner plate, a peripheral groove, a bent flat wire, adapted to be first bent into a U-shape, fitted into the peripheral groove, the ends of which are turned toward one another so as to meet or approximate one another, and thus forming a rigid collar inseparable from said stud, the outer edge of which forms a shoulder which engages the inner side of said inner plate, and a separable fastener, *c*, all said parts being arranged, combined and adapted to operate, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 4th day of February, 1893.

JOHN HOLMES.

Witnesses:
CHARLES H. PELL,
OSCAR A. MICHEL.