

No. 671,959.

Patented Apr. 16, 1901.

E. J. HAVERLY.
SEPARABLE BUTTON.

Application filed June 9, 1900.

(No Model.)

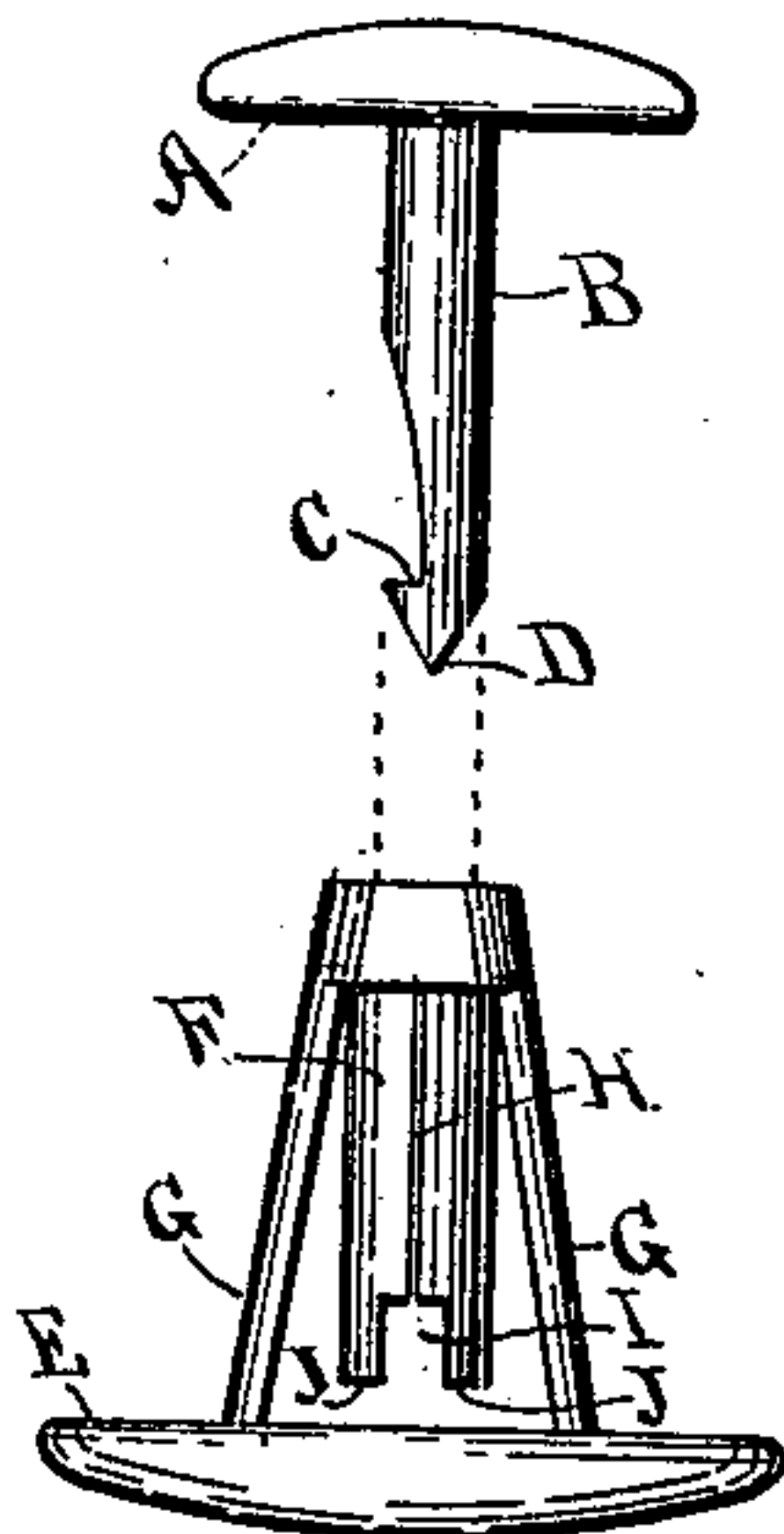


Fig. 1.

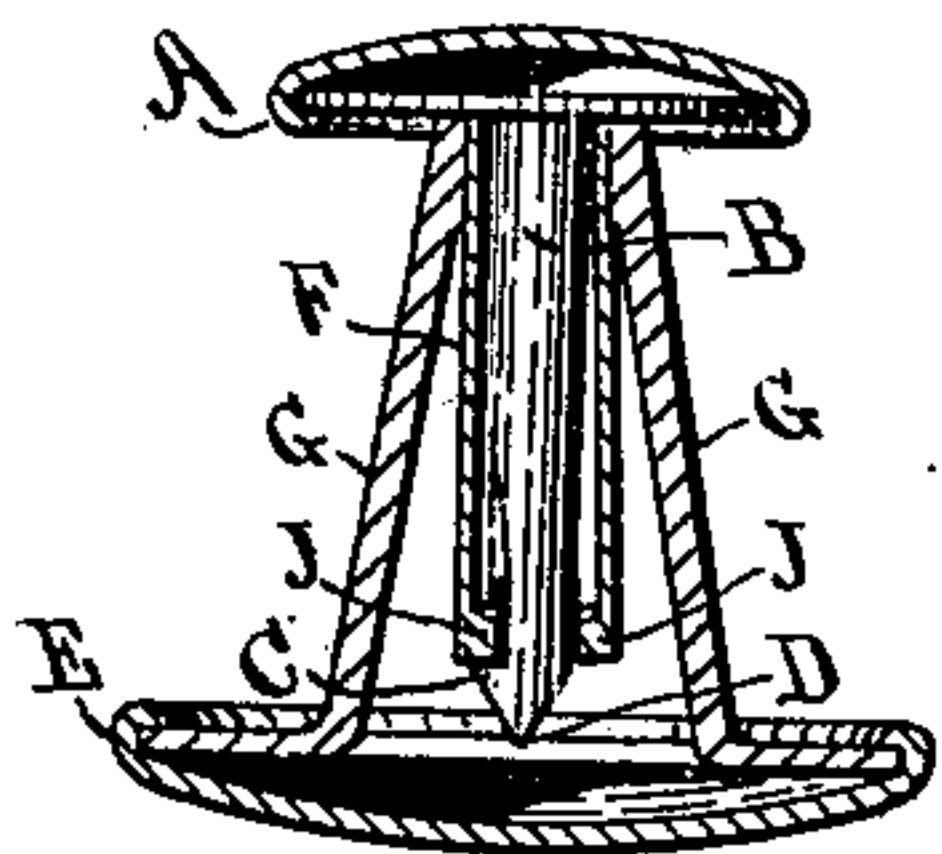


Fig. 3.

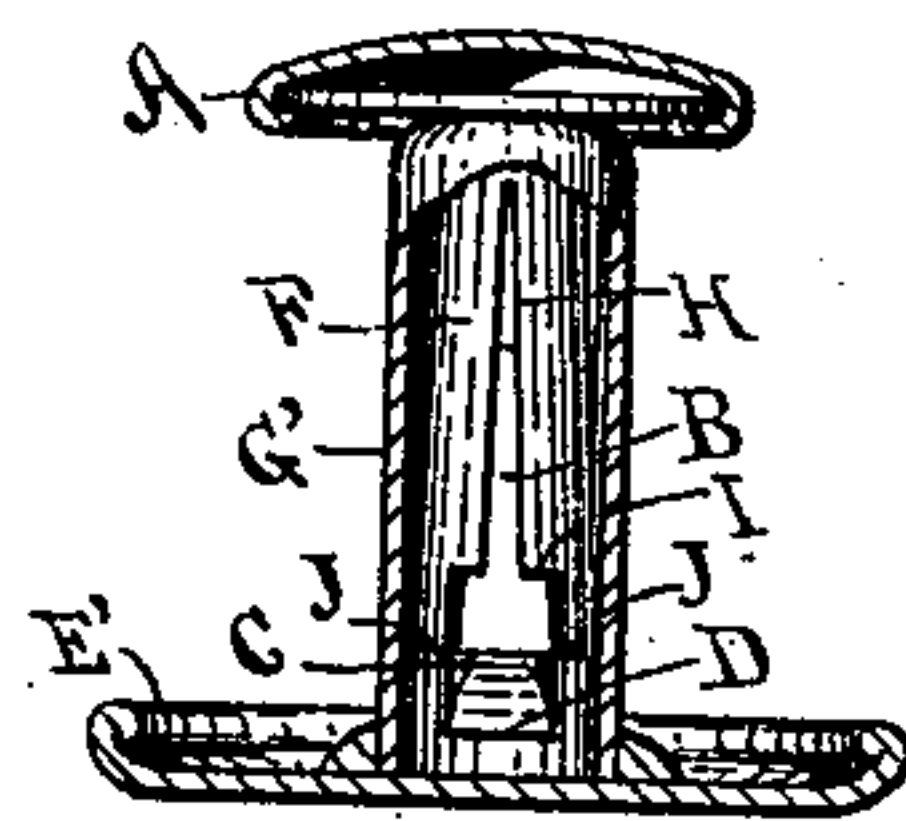


Fig. 4.

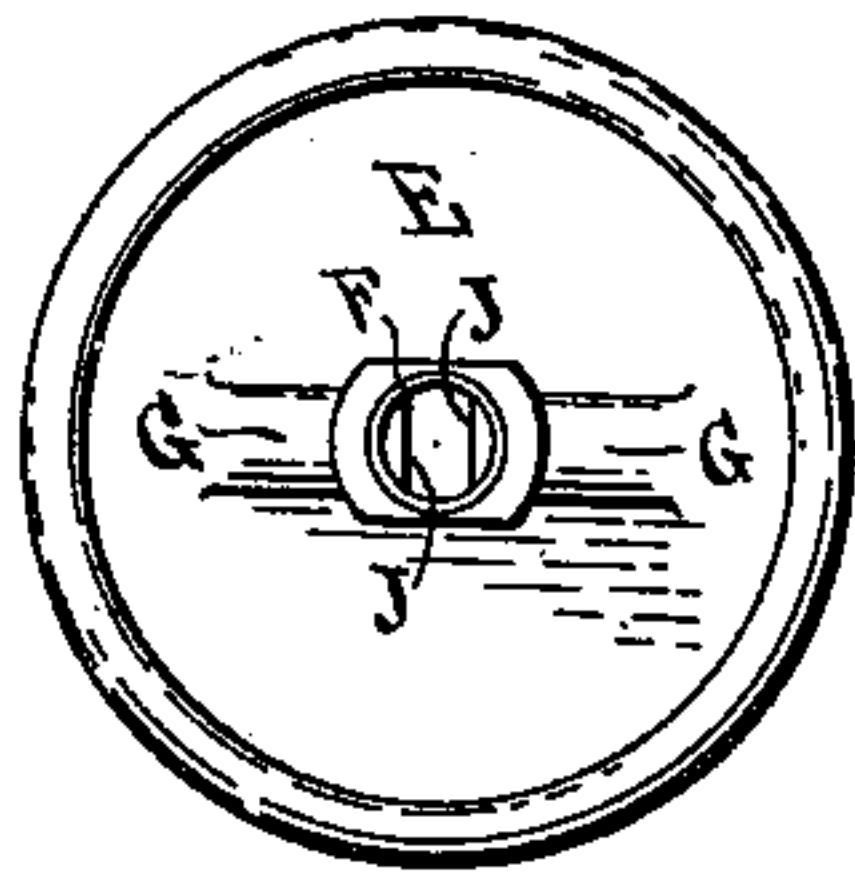


Fig. 2.

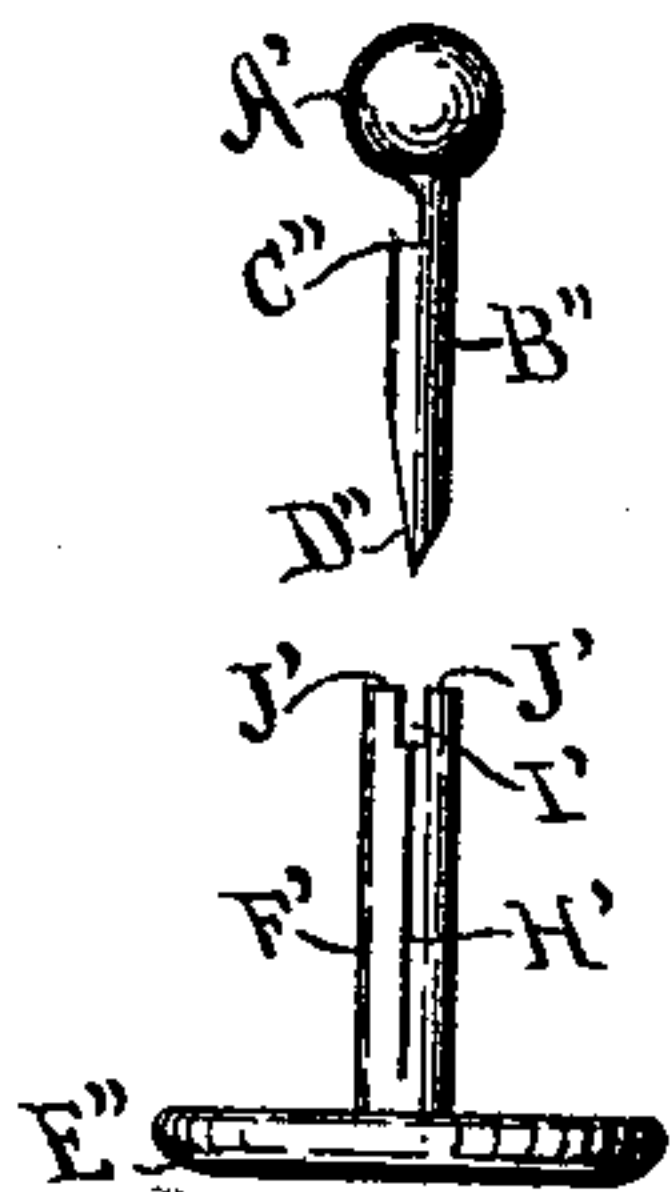


Fig. 6.

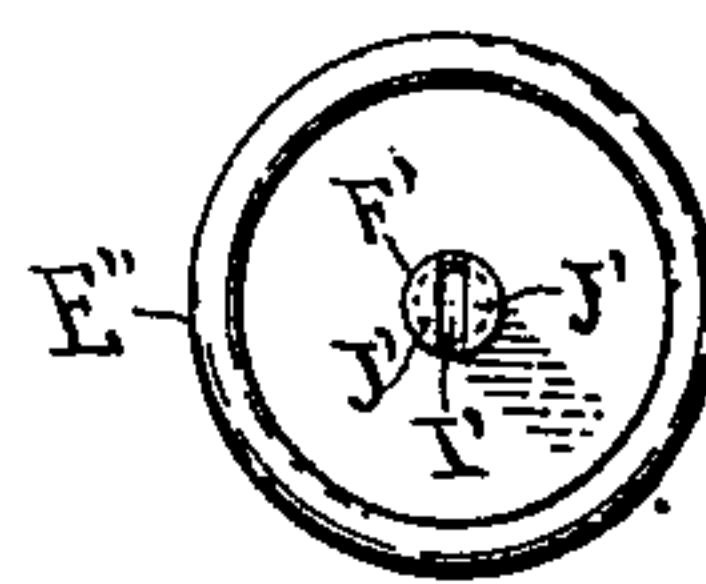


Fig. 7.

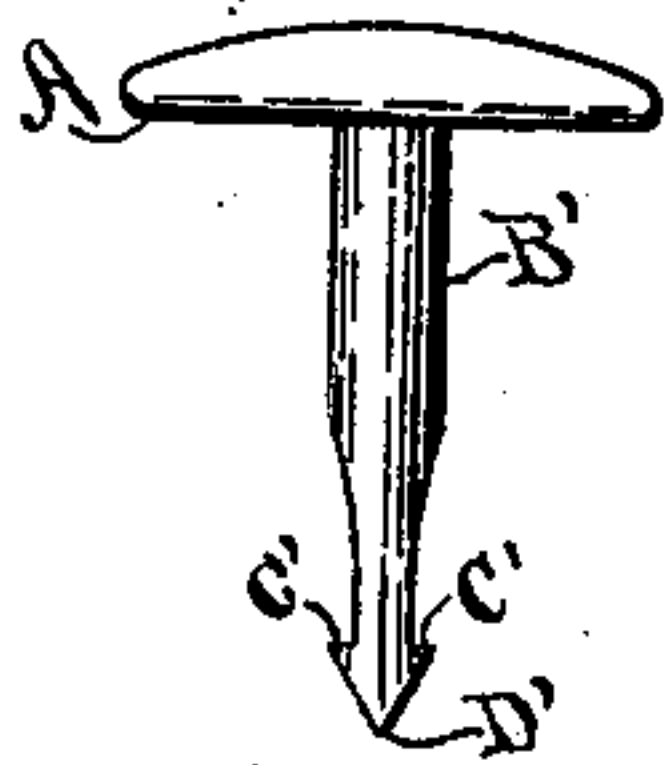


Fig. 5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ELMER J. HAVERLY, OF SAYRE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
TO JOHN B. HUTCHINS, OF SAME PLACE.

SEPARABLE BUTTON.

SPECIFICATION forming part of Letters Patent No. 671,959, dated April 16, 1901.

Application filed June 9, 1900. Serial No. 19,675. (No model.)

To all whom it may concern:

Be it known that I, ELMER J. HAVERLY, a citizen of the United States, residing at Sayre, in the county of Bradford and State of Pennsylvania, have invented a new and useful Improvement in Separable Buttons, of which the following is a specification.

This invention relates to improvements in collar-buttons, shirt-studs, or other forms of buttons which are made separable in order to permit of their being readily applied to or removed from articles of wearing-apparel; and the object of my improvement is to provide a separable button comprising two parts, which shall be simple in construction and effective in operation, which may be reduced in size to the smallest desirable compass, and yet be able to sustain a high degree of strain without giving way, and which will not be readily separable except at the pleasure of the user.

I accomplish my object by means of the construction and arrangement of parts as illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the button, showing one part in position to be inserted in the other; Fig. 2, a plan view of the "back" portion of the button; Fig. 3, a sectional view showing the parts in interlocked position; Fig. 4, a modified button in which the interlocking parts are shown in position for separating; Fig. 5, a modified form of the "head" portion, and Figs. 6 and 7 a shirt-stud with my invention applied thereto.

Similar letters refer to like parts in the several views.

A represents the head of the button, from which projects a shank B, having a flat-faced notch on one side at C in proximity to the beveled end D.

E is the back portion, upon which is supported a tubular socket-piece F by means of the legs G G, the outer end of this socket-piece being secured in a collar attached to the outer extremities of said legs. The socket-piece F is provided with diametrically opposite longitudinal slits H, which extend from the notch I to near the outer extremity of the socket-piece. Inward projections J J, forming two straight parallel jaws, are located at

the inner extremity or free end of the socket-piece and spaced a suitable distance apart on opposite sides of the notched portion I. To form this socket-piece, a small round bar or piece of wire of brass or other metal has a hole drilled into it to the requisite depth. The tubular piece thus formed is then cut off a short distance beyond where the hole stops, after which the notch I and the slit H are cut. The outer end of this socket-piece is then secured in the support attached to the back piece E. In Figs. 1, 2, and 3 this support is shown as consisting of the two narrow legs G G, set at an inclination toward one another. In Fig. 4 I have shown the support as consisting of a tubular casing G', rising from the back E', this tubular support being of slightly larger internal diameter than the socket-piece F.

The operation of the device is as follows: The socket-piece F and supports G G having been passed through the buttonhole or buttonholes of the parts of the wearing-apparel to be fastened together, the shank B of the headpiece A is pushed into the socket-piece until the notched portion C has reached the jaws J J, the beveled point D spreading the parts of the socket-piece apart for this purpose. As soon as the notch C is brought opposite one of the jaws J the sides of the socket-piece will spring together, thereby firmly clamping the shank B within said socket. In order to remove the head of the button, it is given a quarter-turn in either direction, this quarter-turn causing the broad portion of the shank at the notch C to spread the jaws J J apart, as shown in Fig. 4, thereby permitting the withdrawal of the shank B. As the flat surface of the notch C engages a corresponding surface on one of the jaws J, it will be evident that considerable effort will be required to give this quarter-turn to the head A and that therefore said head will be firmly held in place, except when the necessary force to turn it is applied by the user, and by spacing the jaws J J apart on opposite sides of the notch I an extreme lateral motion in the split portion of the socket is avoided when inserting and withdrawing the shank. The notch I, however, may be dispensed with and

the jaws J J spaced apart merely the width of the slit H. Such will be the case especially with small sizes of buttons and studs.

5 Instead of forming the shank B with one notch, as shown in Figs. 1, 3, and 4, I may provide it with two diametrically opposite notches C' C', as shown in Fig. 5. In this case both jaws J J will be engaged by the shank B'; but I consider the one notch the
10 more desirable construction, since it may be made deeper and a larger surface of contact with a jaw J be assured thereby.

Other ways of attaching the socket-piece to the back of the button than the two shown
15 may be employed without departing from the spirit of my invention, and changes may be made in the form and proportions of the shank and socket-piece, as shown, for instance, in the shirt-stud illustrated in Figs. 6 and 7, in
20 which the tubular socket-piece F' is attached directly to the back E'' with the split end of the socket-piece projecting outward, J' J' indicating the position of the jaws and I' the notch between the jaws, which is here shown
25 reduced to near the width of the slit H'. In this modification the shank B'', attached to the

head A', differs from the shanks B and B' in that the notch C'' is located in proximity to the head instead of adjacent the pointed end D''. In this form of the button the jaws J' J' 30 grip the shank near the head, the remainder of the shank extending down into the socket-piece, thereby preventing lateral motion at the head and locking the parts firmly together.

Having thus described my improvements, 35 what I claim, and desire to secure by Letters Patent, is—

A separable button comprising two parts, the one having a shank with a wedge-shaped point and a flat-faced notch above the point, 40 and the other provided with a tubular socket to receive said shank, said socket being split longitudinally from its free end and having inward projections at said free end forming two straight parallel jaws across the end, as 45 and for the purpose set forth.

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

ELMER J. HAVERLY.

Witnesses:

JOHN R. MURRAY,
ARTHUR PETERS.