

(No Model.)

C. E. PERRY.
SEPARABLE BUTTON.

No. 434,802.

Patented Aug. 19, 1890.

Fig. 1.

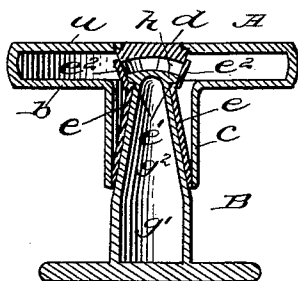


Fig. 2.

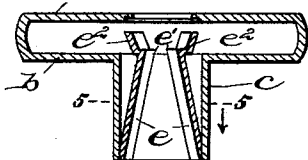


Fig. 4.



Fig. 5.



Fig. 3.

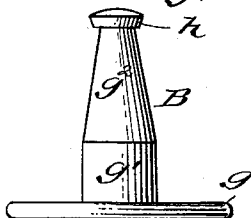
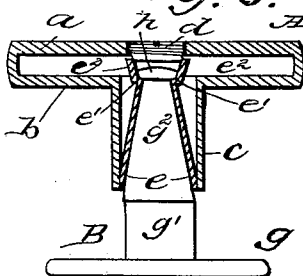


Fig. 6.



WITNESSES:

W. R. Hare,
C. Sedgwick

INVENTOR:

C. E. Perry
BY
Munn & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES ELWIN PERRY, OF FORSYTH, MONTANA.

SEPARABLE BUTTON.

SPECIFICATION forming part of Letters Patent No. 434,802, dated August 19, 1890.

Application filed February 12, 1890. Serial No. 340,177. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ELWIN PERRY, of Forsyth, in the county of Custer and State of Montana, have invented a new and useful Improvement in Separable Buttons, of which the following is a full, clear, and exact description.

My invention relates to separable buttons, the objects being to provide a button of the character named, which will be of simple construction, capable of rapid production from sheet or cast metal, and which may be readily attached to clothing without sewing or injury thereto.

With these ends in view the invention consists in certain features of construction and combinations of parts, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a central vertical section of the button in elementary form. Fig. 2 is a central vertical section of the head portion of the button removed from the shank. Fig. 3 is an elevation of the button-shank. Fig. 4 is a detail view of the wedging-disk which fits a central aperture in the face-plate of the button-head. Fig. 5 is a sectional plan view of the sleeve portion of the button-head and locking-springs therein, taken on the horizontal line 5 5 in Fig. 2; and Fig. 6 is a central vertical section of the button complete in its preferred form.

The head-piece A of the button is hollow, and, as shown, consists of an integral face-plate *a* and collet *b*, from which latter a concentric sleeve *c*, of proper length, projects. These parts may, for convenience in manufacture, be made separately by stamping from sheet metal and securing them together afterward, or the entire head-piece may be cast or otherwise formed from appropriate material in one operation. There is a central round aperture made in the face-plate *a* of the head-piece A for the reception of a coniform wedging-disk *d*, which may be shaped, as shown in Figs. 1 and 4, to permit it to be secured to a comparatively thin face-plate by riveting it thereto; or this circular wedge may have a screw-thread cut on its upper end portion to engage a thread

formed in the central aperture of the face-plate, as shown in Fig. 6, a transverse groove in the top of the screw end affording means to adjust the wedging-disk in the orifice, as will be further explained.

Within the sleeve portion *c* of the head-piece of the button the locking-springs *e* are located, which project upwardly and incline inwardly or toward each other, their lower ends being oppositely secured to the free edge of the sleeve *c*. The locking-springs *e* are made of elastic metal and are bent to curve them, producing longitudinal channels on their adjacent faces of equal depth, as shown in Fig. 5. The upper end portions of the springs *e* have similar offsets formed on them, as at *e'*, which provides a locking-shoulder on each in the same plane horizontally considered, and at *e''* the material in each spring is bent upwardly, so as to incline away from the body or toward the peripheral edge of the button-head, these flaring rings being curved to make them conform to the peripheral face of the coniform wedging-disk *d*.

The shank or male portion B of the button is shown detached in Fig. 3, and consists of a short cylinder *g'*, projecting from a circular base-flange *g*, which is concentric therewith, the cylindrical portion of the button-shank having a tapering extension *g''*, which is provided with a radial enlargement or head *h*, the periphery of which is tapered to make it conform to the curvature and inclination of the wings *e''* of the locking-springs *e* when the parts are assembled to produce a complete button.

These buttons are designed to be applied to any garment whereon buttons of this character may be used to advantage, different sizes being furnished to suit the articles of men's attire they are to be secured upon, and any degree of ornamentation desired may be given the face-plate. If an elastic thin metal is used for the face-plate *a*, the wedging-disk shown in Figs. 1 and 4 is the best adapted to co-operate therewith.

When the button is to be applied to a garment, a pointed conical piercing-stylet is used to produce a perforation in the fabric at the correct point, into which the shank of the button is introduced, the material being uninjured, as it is not cut. The shank B having been

inserted through the cloth so that its end will project from the face side of the same where the button-head is to appear, said head A is pressed upon the shank until the parts interlock, as shown in Figs. 1 and 6, which will
5 affix the button to the garment. Should it be desired to remove the button, if the face-plate *a* has been made elastic it may be pressed inwardly at its center sufficiently to release
10 the interlocking engagement of the shank B with the springs *e*; or if made as shown in Fig. 6 a screw-driver or a knife-blade may be utilized to revolve the threaded wedging-disk and by its inward projection release the shank B.
15 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with a button-shank composed of a base-flange at one end, a cylindrical
20 body projected centrally therefrom, which

body tapers toward its free end and terminates in a coniform radially-enlarged head, of a button-head having a thin centrally-perforated face-plate and a collet held parallel thereto, with a space between, by a peripheral
25 rim, a wedging-disk secured in the central perforation of the button-head face-plate, and concentric locking-springs that are located within the sleeve and have their lower ends secured to the free lower edge of the sleeve,
30 their upper ends being provided with locking-shoulders which engage the coniform head on the shank-body, and integral wings on the upper ends of the locking-springs, which may be spread when the wedging-disk is depressed,
35 substantially as set forth.

CHARLES ELWIN PERRY.

Witnesses:

JOHN M. HOLT,
HENRY TUSLER.