(No Model.)

H. VOLLMER.

BUTTON.

No. 384,007. Patented June 5, 1888.

Fig. 1.

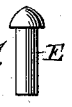


Fig. 2.

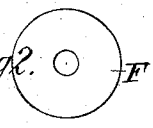


Fig. 3.

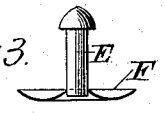


Fig. 4.

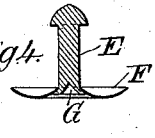


Fig. 5.

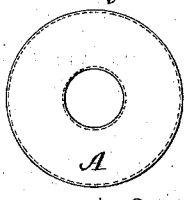


Fig. 6.

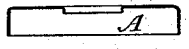


Fig. 7.

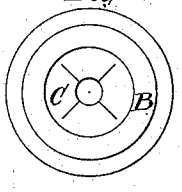


Fig. 8.

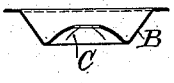


Fig. 9.

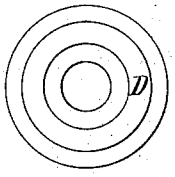


Fig. 10.

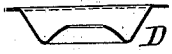


Fig. 11.

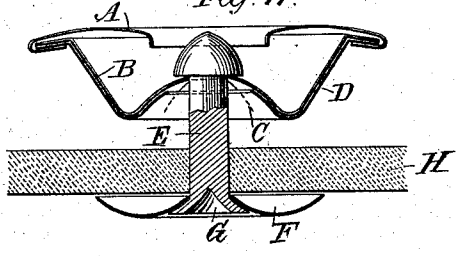


Fig. 12.

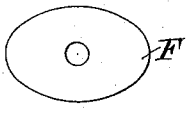


Fig. 14.

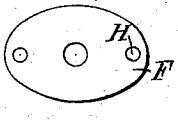


Fig. 13.

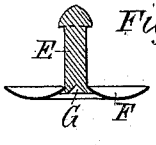
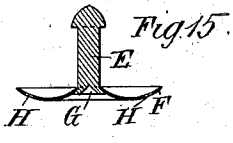


Fig. 15.



Witnesses
Frank G. Mattingly.
Louis P. Lincoln.

Inventor.
Henry Vollmer.
By his Attorneys.
Wheatley & Wright.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY VOLLMER, OF MANCHESTER, COUNTY OF LANCASTER, ENGLAND.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 384,007, dated June 5, 1888.

Application filed March 10, 1888. Serial No. 266,820. (No model.) Patented in Austria-Hungary October 15, 1887.

To all whom it may concern:

Be it known that I, HENRY VOLLMER, a citizen of Great Britain, residing at Manchester, in the county of Lancaster and Kingdom of Great Britain, have invented certain new and useful Improvements in Buttons, (for which I have obtained a patent in Austria-Hungary, dated October 15, 1887;) 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 or figures of reference marked thereon, which form a part of this specification.

This invention relates to that class of buttons which may be secured to garments without sewing, and has for its object to increase their strength and to reduce their liability to become accidentally detached from the garment.

These improvements consist in an improved construction and arrangement of the parts constituting the button-head and an improved method of manufacture and construction of the stud by means of which it is secured to the garment.

The drawings appended hereto illustrate in what manner this invention may be carried into practical effect.

Figure 1 is the stem; Fig. 2, the disk. Figs. 3 and 4 show the stem and disk united. Figs. 5 and 6 show the cover-plate; Figs. 7, 8, 9, and 10, the plates composing the back of the button-head; Fig. 11, the button and stud in section attached to the garment. Figs. 12 and 14 show elliptical disks, and Figs. 13 and 15 are sections of these disks with their stems.

In each of the figures the parts or details are shown, for the sake of clearness, on an enlarged scale, and similar parts in each of the figures are indicated by similar letters. The button and stud are shown in section as attached to the garment in Fig. 11. The stud alone is shown in Figs. 3 and 4 and the button-head in Fig. 11.

The stud consists of a stem, E, Fig. 1, upon one end of which a head is formed. To the other end the disk F, Fig. 2, is secured in the following manner: The end of the stem is passed for a very short distance through the hole in the disk F, as in Fig. 3, and is then expanded by a conical punch, as shown at G, Fig. 4. The disk is thereby firmly secured upon the stem. The cover-plate of the button-head is shown at Figs. 5 and 6. It may be plain or decorated, at the will of the manufacturer, and may or may not have a hole in its center. If the hole is used, its diameter should be slightly greater than the diameter of the stud-head. The back of the button-head consists of two peculiarly-shaped plates, Figs. 7, 8, 9, and 10. Both plates are flanged, dished, and recessed, and both have a hole in their center; but the hole in the outer plate, D, is slightly larger than the head of the stud, while the hole in the inner plate, B, is slightly larger than the stem of the stud and smaller than the head. The recessed portion of the inner plate is radially slit, as shown at Fig. 7. There may be four or more of these slits, a larger number, as six, being used for small buttons. The plates B D are dropped within the recess of the cover-plate A, so that the slit plate B is inside. The flange of A is then turned over the flanges of B and D, producing the button-head, as represented in section in Fig. 11.

In each of the figures where the parts are represented, A is the cover-plate, which may be flat, dome-shaped, or have any other desired plain or ornamental configuration. B is the inner back-plate; C, the slits therein. D is the outer back-plate. E is the stem of the stud. F is the stud plate or disk. G is the enlargement of the end of the stud-stem, and H is a portion of the garment with the button attached thereto.

The stud and button-head are sent out separately by the manufacturer. In using them the stud is first passed through a hole pierced in the garment, and the button-head is then pressed over the head of the stud, as in Fig. 11.

The buttons constructed as hereinbefore described may be employed as double or reversible buttons by modifying the construction of the stud in such a manner that the disk of the stud shall form or be part of a button-head. Thus an ornamental cover-plate may be attached to the disk, or the disk may be ornamental or shaped to form a button-head itself. The reversible or double button will then consist of a button-head attached to the stud, as in Fig. 4, where F, or an equivalent part or

parts, would be the fixed button-head, and the loose button-head may thereafter be attached, as already described, and as indicated in Fig. 11.

It is sometimes found desirable to attach trimmings, linings, cords, chains, and the like articles to the stud of the button, and when this is required I make the flange or disk of the stud elliptical in plan, as shown in Figs. 14 and 15, and form therein two or more holes or perforations, H.

An elliptical flange or disk for the stud may also be used when the button is desired to be near the edge of a garment or where greater security is required.

I claim—

1. The improved button hereinbefore shown and described, consisting of the cover-plate A, having a central aperture, in combination with the flanged, dished, recessed, and radially-slit inner plate, B, having a central hole, the outer plate, D, flanged, dished, and recessed, and having a central hole, the stud E, having a head larger than the hole in plate B, but smaller than the hole in plate D, and the disk F, surrounding the end of the stud, which is expanded against the outer side of the disk, substantially as shown and described.

2. In a stud for securing button-heads to garments, an elliptical disk or flange, F, having two small holes or perforations therein, substantially as and for the purpose set forth, and as illustrated by the drawings.

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

HENRY VOLLMER.

Witnesses:

WM. E. HEYS,

GEO. HEYS.