No. 648,867. Patented May 1, 1900.

N. B. HALE.

STUD OR BUTTON.

(Application filed Nov. 7, 1898.)

(No Model.)

Fig. 1.

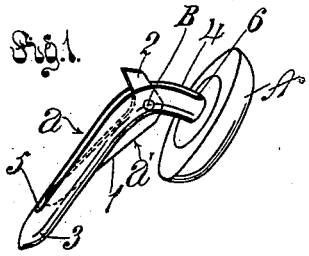


Fig. 2.

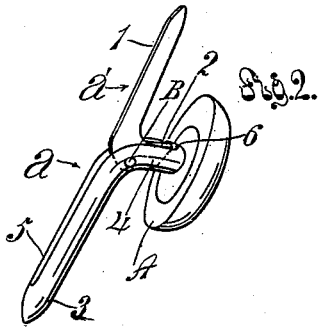


Fig. 3.

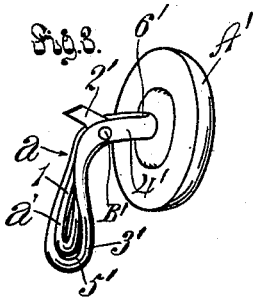


Fig. 4.

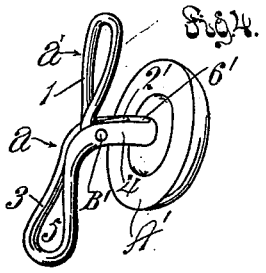
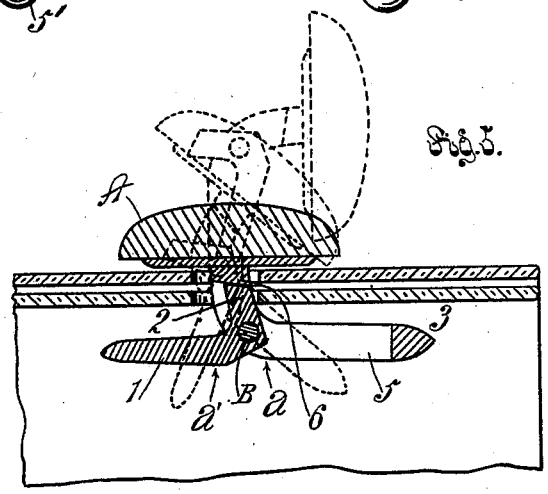


Fig. 5.



Witnesses
Geo. Kingman.
E. G. Paterman.

Inventor
Napoleon Bonaparte Hale
by Townsend Bros
his attys.

UNITED STATES PATENT OFFICE.

NAPOLEON B. HALE, OF SAN BERNARDINO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO HOWARD F. WALLACE, OF LOS ANGELES, CALIFORNIA.

STUD OR BUTTON.

SPECIFICATION forming part of Letters Patent No. 648,867, dated May 1, 1900.

Application filed November 7, 1898. Serial No. 695,792. (No model.)

To all whom it may concern:

Be it known that I, NAPOLEON BONAPARTE HALE, residing at San Bernardino, in the county of San Bernardino and State of California, have invented a new and useful Improvement in Studs or Buttons for Shirts, Cuffs, and other Wearing-Apparel, of which the following is a specification.

An object of this invention is to provide a very simple and superior fastening for the stud or button.

My invention relates to a fastening for a stud or button which is fastened by the act of inserting the shank of the stud into the garment to which it is to be affixed. It is possible to fasten the button in the garment at places where there are no button or stud holes. To fit the button or stud for this purpose, the free end of the shank is sharpened to pierce the material into which the shank is to be inserted.

A further object of my invention is to provide a button or stud which can be readily inserted and fastened with the use of but one hand.

The accompanying drawings illustrate my invention.

Figure 1 is a perspective view of my newly-invented shirt button or stud in position ready for insertion into the garment. Fig. 2 is a perspective view of the button or stud in its fastened position. Fig. 3 is a perspective view of a form of a modification of my invention adapted for use with the large button-holes now in use with cuffs and collars. The parts of the shank are shown adjusted for insertion. Fig. 4 is a perspective view of the form shown in Fig. 3 with the shank in its fastening position. Fig. 5 is a vertical mid-section showing the button in position for fastening a cuff. Dotted lines indicate different positions of the parts during the act of inserting the shank.

In the drawings the button is shown on an enlarged scale for clearness of illustration.

A indicates the body of the button, and *a* the main body of the shank. The shank *a* is bent and cleft.

a' is a bent shank-tongue. The tongue preferably tapers at the free end, so that the tongue can be so far chambered in the cleft as not to project from the end face of the shank, and the tongue is pivoted at such a point of its bend that when the end of the arm 1 of the tongue is inserted into the cleft a portion of the body of the tongue will project, as at *a'*, beyond the upper face of the shank into the open angle formed by the arm 3 and the stem 4 of the shank, and the other arm 2 of the tongue will project from the outer side of the bend of the shank, as clearly illustrated in Figs. 1 and 3. The arm 2 of the tongue is of such form that when the arm 1 is thrown upward into line with the arm 3 of the shank the arm 1 is chambered in the stem 4 of the shank, so that the arm 3 of the shank and the arm 1 of the tongue form a T-fastening to hold the shank from being withdrawn from the garment.

In practice to insert the shank the tongue is thrown into position with its arm 1 inserted in the cleft 5. The point of the shank is then inserted into the garment and pushed therethrough, thus bringing the material of the garment against the portion 1' of the arm of the tongue which projects into the open angle of the shank. The pressure of the material of the garment on the portion of arm 1 which is in the open angle or bend of the shank, as shown at *a'*, causes the arm 1 of the tongue to be pushed out of the shank until the material of the garment comes against the arm 2 of the tongue, and the pressure upon the arm 2 continues to force arm 1 of the tongue outward until it is practically in line with the arm 3 of the shank.

To withdraw the stud or button, the head or body thereof is pulled over toward the side toward which the shank is bent and is then drawn outward from the material in which the shank has been inserted, and the pressure of such material is thus brought against the arm 1 of the tongue, thus closing the tongue into the cleft and allowing the shank to be withdrawn. The button or stud is positively retained in place except when the stud is withdrawn in the manner just described.

It is to be understood that various forms and different variations of this device can be made without departing from my invention. The point of the arm 3 of the shank is shown rather blunt in the drawings, but may be made

sharper or blunter, as may be desired—that is to say, in the form shown in Figs. 1 and 2—the device is provided with a pointed arm 3, by which a hole may be made for the insertion of the button into material where there is no buttonhole, while the form shown in Figs. 3 and 4 is to be used where a buttonhole already exists. In this latter form the arm 3′ and the cleft 5′ of the shank are broadened at the end, and the arm 1′ of the tongue is likewise broadened, so as to give a broader engaging face to said arms.

B indicates the pivot.

The cleft stem 4 of the shank is arranged to form a stop 6 to hold the arm 2 of the tongue when the tongue is in its fastening position. The purpose of the cleft shank is to afford a bearing for both ends of the pivot B and to give greater strength of construction for the stud.

The arms of the tongue are shorter than the cleft in the body and arm of the shank and are arranged for alternately chambering their respective points in said cleft, so that when the parts are in the position shown in Figs. 1 and 3 the shank and tongue are readily inserted through the cloth or through the buttonhole, as the case may be, and when the shank is fully inserted the shank-arm of the tongue will be chambered in the stem or body of the shank, as indicated in Figs. 2 and 4.

In Figs. 3 and 4, A′ indicates the button; B′, the pivot; 2′, the short tongue; 4′, the stem of the shank; 6′, the stop in such stem. a^2 indicates the main body of the shank, and a^3 the bent shank-tongue.

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

A stud or button with bent cleft shank; a bent tongue in the cleft pivoted at its bend to the bend of the shank; the arms of said tongue being shorter than the corresponding parts of the cleft in the shank and arranged for the alternate chambering of the respective ends of the arms in said cleft.

N. B. HALE.

Witnesses:
JAMES R. TOWNSEND,
E. A. NISBET.