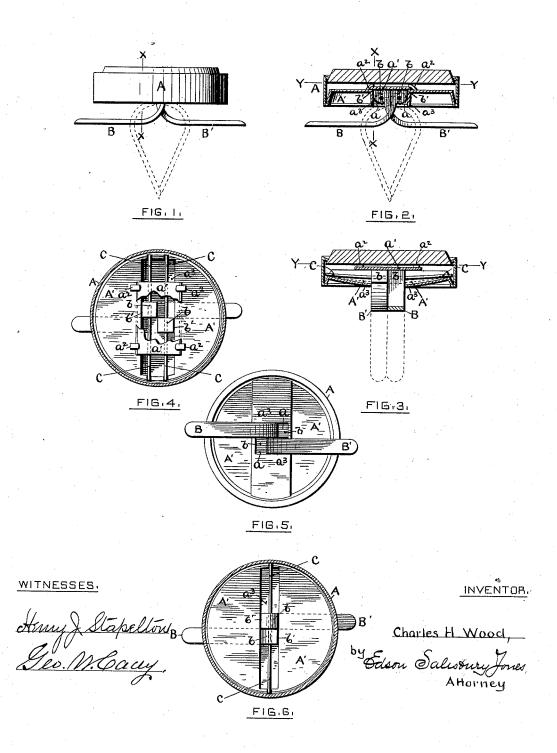
## C. H. WOOD.

BUTTON OR STUD.

No. 344,609.

Patented June 29, 1886.



## UNITED STATES PATENT OFFICE.

CHARLES H. WOOD, OF WRENTHAM, ASSIGNOR TO THERON I. SMITH, OF NORTH ATTLEBOROUGH, MASSACHUSETTS, AND CHARLES G. BLOOMER, OF CRANSTON, RHODE ISLAND.

## BUTTON OR STUD.

SPECIFICATION forming part of Letters Patent No. 344,609, dated June 29, 1886.

Application filed June 22, 1885. Serial No. 169,378. (No model.)

To all whom it may concern:

Be it known that I, Charles H. Wood, of Wrentham, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Buttons and Studs; and I do hereby declare the following specification, taken in connection with the accompanying drawings, forming a part of the same, to be a description thereof.

This invention relates to that variety of buttons or studs having a shoe composed of two bent arms, which are pivoted or hinged to swing or turn into positions to allow the button or stud to be applied and removed, and to 15 hold the same in place, and having a spring or springs to hold the arms in proper posi-

The invention consists in hinging or mounting the shoe-arms upon and by means of a 20 pivot pin or pins having a spring function, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a side view of a sleeve-button embodying the invention, with the shoe-arms 25 shown in full lines in position to hold the button in place and in dotted lines in position for the button to be applied or removed. Fig. 2 shows a transverse section of the button. Fig. 3 represents a transverse section of the 30 button on line x x of Figs. 1 and 2. Fig. 4 shows a horizontal section on line y y of Figs. 2 and 3. Fig. 5 represents a rear view of the button. Fig. 6 shows a horizontal section of a button with both arms mounted on the same 35 spring pivot-pin.

A is the button-head, which may be of any preferred form or style. BB' are the bent arms composing the shoe. These arms pass through slots a a, Fig. 5, in the back-plate A', 40 and are hinged and connected to the head by pivot pins or wires C, composed of "pianowire" or other material having a spring function. The outer ends of the pins C rest upon the back plate, as shown in Figs. 3 and 4, and 45 the pins pass through the inner ends, b b, of the arms, as shown in Figs. 2, 3, and 4. The inner ends of the arms are held by the spring pivot-pins against a plate, a', secured to the

back plate in any preferred manner, as by lugs  $a^2$ , projecting from the back plate and 50 bent down upon the plate a', as shown in Figs. 2, 3, and 4, and said ends of the arms are furnished with salient or angular portions b', as is common to lock or hold the arms in proper positions. The central portion  $a^3$  of 55 the back plate is depressed, as shown in Figs. 2 and 3, so as to allow room for the spring pivot-pins C to bend, as shown by dotted lines in Fig. 3, when the arms are swung. The plate a', however, may be integral with the 6a back plate, and the depressed portion a<sup>3</sup> thereof be a separate piece, secured to the back plate by solder, or in any preferred manner, as will be readily understood, so as to cover the spring pivot-pins C from view.

In place of employing two pivot-pins C, one for each arm, said arms may both be mounted on one and the same pin C, as shown in Fig. 6.

By employing a pivot pin or pins, C, having a spring function, the necessity of using 70 a spring in addition to the pivot pin or pins is avoided.

I am aware that buttons or studs have heretofore been constructed with a shoe composed of bent arms hinged to turn, and provided 75 with salient or angular portions which are engaged by a spring or springs to lock or hold the arms in position, and I do not claim such constructions.

What I claim, and desire to secure by Let- 80 ters Patent, is-

1. A button or stud having its shoe composed of two bent arms adapted to swing laterally upon the spring pivot pin or pins C, all arranged substantially as set forth.

2. The combination, with the head A, having a slotted back plate, of the arms BB', passing through the back plate, and having salient or angular portions b', and the spring pivot pin or pins C, passing through the arms and 90 hinging them to the head, substantially as set forth.

CHARLES H. WOOD.

Witnesses:

EDSON SALISBURY JONES, HENRY J. STAPELTON.