(No Model.)

W. E. BENNETT.

METHOD OF SECURING BUTTONS TO MATERIALS.

No. 368,124. Patented Aug. 9, 1887.

Fig. 1.

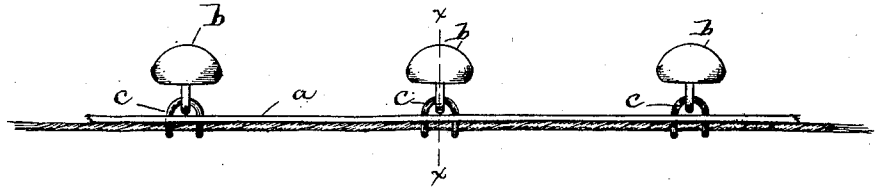


Fig. 2.

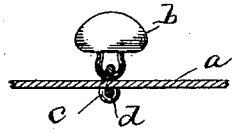


Fig. 3.

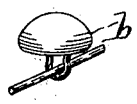


Fig. 4.

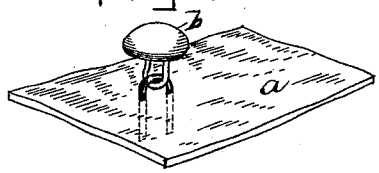
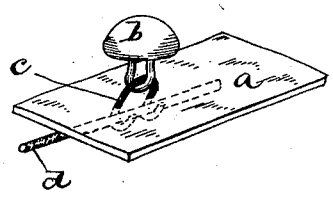


Fig. 5.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WALTER E. BENNETT, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO EDWARD P. MERWIN, OF SAME PLACE.

METHOD OF SECURING BUTTONS TO MATERIALS.

SPECIFICATION forming part of Letters Patent No. 368,124, dated August 9, 1887.

Application filed June 30, 1886. Serial No. 206,674. (No model.)

To all whom it may concern:

Be it known that I, WALTER E. BENNETT, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in the Method of Securing Buttons to Materials, of which the following is a specification.

This invention relates to the operation of attaching shoe-buttons to button-pieces of boots or shoes by metallic fastenings; and it consists in engaging the loop of a wire staple with the eye of a button, forcing the prongs of said staple through the piece of leather or other material to which the button is to be attached, and turning the ends of the staple-prongs around a cord or wire laid against the inner surface of said piece, as I will now proceed to describe.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents an edge view of a part of the button-piece of a boot or shoe, showing buttons attached in accordance with my method. Fig. 2 represents a section on line *x x*, Fig. 1. Figs. 3, 4, and 5 represent perspective views showing different stages of the operation of securing a button by my method.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents the portion of a boot or shoe upper to which the buttons *b* are applied.

c c c represent the metallic fastenings, which are staples engaged with the eyes of the buttons and having their prongs passed through the upper and bent over or clinched at the inner side of the upper around a cord, *d*, (or, as an equivalent thereof, a wire,) of such size that it is capable of being embraced by the bent-over or clinched ends or prongs of the fastenings. Said cord is placed on the inner side of the upper, and the prongs of the fastenings are bent around it, as best shown in Figs. 2 and 5, the bent prongs being preferably compressed so closely against the cord or wire that the latter cannot easily slip lengthwise through them.

The cord constitutes a stay, which prevents the staple from being pulled through the button-piece, and also prevents the button-piece from being stretched between the buttons. I prefer to use strong linen cord as the material of the stay, but may use any suitable fiber or metal.

I prefer to form the staple in the eye of the button by first inserting the end of a piece of wire of indefinite length in the eye of the button, then cutting a staple-blank from said wire, (said blank passing through the button-eye, as shown in Fig. 3.) I then bend said blank into staple form and force its prongs into the button-piece, and finally bend the points of the prongs around the cord *d*, as shown in Fig. 5.

If desired, the staple may be formed prior to its insertion in the button-eye. I prefer the mode first described, however, as it enables the button to be attached by a machine which successively feeds the wire into the eye of the button, cuts off a blank, (which is left in the eye of the button, as shown in Fig. 3,) bends the wire into staple form, forces the prongs through the piece *a*, and turns the points of the prongs over the cord, the last-named operation being effected by a suitably-formed die, against which the prongs are forced while they are being driven through the button-piece.

A machine organized to operate as above indicated forms the subject of a separate application for Letters Patent, filed by E. P. Merwin and myself, December 13, 1886, Serial No. 221,436.

The staples may be made either of round or flat wire.

I am aware that a button has been secured by a staple having rings or loops at the ends of its prongs, and a retaining-pin passed through said loops and corrugated to fit the same; but in this fastening the pin does not extend continuously from button to button and the ends of the wire staple are not tightly clinched about the pin to bind the latter and prevent it from slipping.

My improved method, involving the employment of a continuous cord or wire and the tight clinching or binding of the ends of the staple around the cord or wire, differs from any method of securing buttons of which I am aware.

I claim—

The improved method of attaching buttons,

the same consisting in inserting a wire blank in the eye of the button, bending said blank into staple form while in said eye, forcing the prongs of the staple through the button-piece, placing a continuous cord or wire against the inner surface of said piece, and tightly clinching or binding the points of the staple around the cord, so as to prevent the cord from slipping, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 19th day of June, 1886.

WALTER E. BENNETT.

Witnesses:
C. F. BROWN,
A. D. HARRISON.