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METHOD OF ATTACHING SHANK EYED BUTTONS.
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METHOD OF ATTACHING SHANK-EYED BUTTONS.

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To all whom it may concern:

Be it known that I, WILLARD A. SMITH, a citizen of the United States, residing at Melrose, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Methods of Attaching Shank-Eyed Buttons; 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.

This invention relates to a method of attaching shank-eyed buttons to fabrics by interlocking primary and secondary loops.

The primary object of the invention is to provide a novel and improved method of attaching a series of shank-eyed buttons by primary loops passed through the fabric and button eyes, and secondary loops passed through the fabric outside the eyes and over the heads of the buttons. It has been customary heretofore in attaching shank-eyed buttons by this form of interlocking primary and secondary loops to pass the loops through holes which are in a line with each other along the series of buttons so that the shanks of the attached buttons are substantially at right angles to the edge of the fabric and extend lengthwise of the buttonholes which are engaged with the buttons. The buttonholes therefore engage the edges of the button shanks, localizing the wear on the buttonholes, while any strain on the buttons puts a transverse pull on the thread by which they are attached. In accordance with the present invention the primary and secondary loops are passed through holes spaced apart transversely of the series of buttons so that the shanks of the buttons are substantially parallel to the edge of the fabric, and crosswise of the buttonholes which are engaged therewith. This tends to distribute the wear and strain on the ends of the buttonholes, while any strain on a button will put a lengthwise instead of a transverse pull on the attaching thread.

The above method of attaching the buttons is also well adapted for practising a further feature of the invention, which consists in passing button attaching loops through superimposed buttonholes in attaching the shank-eyed buttons, thus eliminating the subsequent operation of engaging the buttonholes with the buttons in manufacturing shoes, or other articles requiring such engagement in the finished product.

The invention will be readily understood from an inspection of the accompanying drawings and the following detailed description of the method of attaching buttons to shoe uppers illustrated therein.

In the drawings Figure 1 is a perspective view showing the top of a shoe upper to which buttons are attached by the present invention; Figs. 2, 3 and 4 are diagrammatic views showing the steps of the method; and Fig. 5 is a view showing the under face of the fabric to which the buttons have been attached.

In attaching buttons to shoe uppers by the methods comprising the present invention, the edge 2 of the upper in which the buttonholes 4 are formed, is first brought into proper position over the edge 6 along which the buttons are to be attached. A primary loop 8 of the attaching thread is then passed through the fabric 6, through a buttonhole 4, and through the eye of a button. A secondary loop 10 of the attaching thread is then passed through the fabric 6 at a point spaced from the primary hole toward the edge of the fabric, and in a line extending lengthwise of the buttonhole. This loop is passed through the buttonhole and through the primary loop, and then passed over the head of the button. The loops are taken up and drawn taut to tighten the knot thus formed and draw the shank of the button down close to the fabric. A secondary primary loop of the attaching thread is then passed through the fabric 6 at a point spaced from the first primary hole along the edge of the fabric that the loop will be passed through the succeeding buttonhole 4 substantially in line with the first primary loop hole. This loop is also passed through the eye of a button, and a secondary loop is passed through the fabric at a point spaced from the primary loop hole toward the edge of the fabric, through the primary loop outside the button eye, and is then passed over the head of the button, the loops being taken up and tightened as before. The succeeding buttons are similarly attached. Since the holes through which the primary and secondary loops pass
are in a line substantially at right angles to the edge of the fabric and extending lengthwise of the buttonhole, the loops will hold the shank of the attached button parallel to the edge of the fabric and crosswise of the buttonhole, with the resulting advantages outlined above.

Having explained the nature and object of the invention, and one manner in which it may be practised, what is claimed is:

1. The method of attaching a series of shank-eyed buttons to a fabric by primary loops passed through the eyes of the buttons, and secondary loops passed through the primary loops outside the eyes and over the heads of the buttons, which consists in passing the primary and secondary loops through the fabric at points which are spaced apart transversely of the series of buttons, the series of primary loop holes being in line with each other, and the series of secondary loop holes being in line with each other along the series.

2. The method of attaching a series of shank-eyed buttons to a fabric by primary and secondary loops one of which passes through and the other of which passes outside of the button eye, which consists in passing the primary and secondary loops through the fabric at points which are spaced apart transversely of the series of buttons, the series of primary loop holes being in line with each other, and the series of secondary loop holes being in line with each other along the series.

3. The method of attaching shank-eyed buttons to a fabric, which consists in superimposing thereon a buttonholed fabric, passing a primary loop of thread through the under fabric, a buttonhole, and a button eye, passing a secondary loop through the fabric and buttonhole at a point spaced from the primary loop lengthwise of the buttonhole, passing the secondary loop over the head of the button and taking up the loops to tighten the knot.

4. The method of attaching shank-eyed buttons to a fabric by primary and secondary loops one of which passes through and the other of which passes outside of the button eye, which consists in superimposing on the fabric a buttonholed fabric, passing the button attaching loops through the under fabric and through a buttonhole at points spaced apart lengthwise of the buttonhole, passing one of the loops over the button head, and taking up the loops to tighten the knot.

WILLARD A. SMITH.

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