(No Model.)

W. E. BENNETT.

PRESSER FOOT FOR BUTTON SEWING MACHINES.

No. 384,231. Patented June 12, 1888.

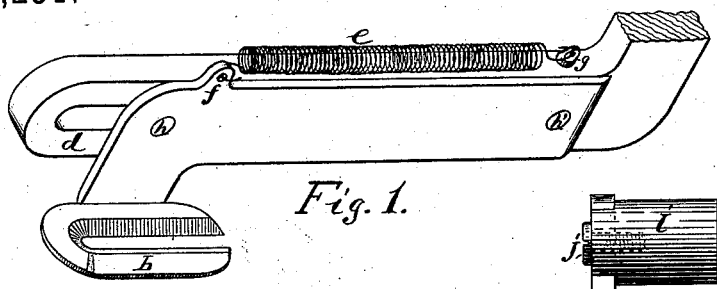

Fig. 1.

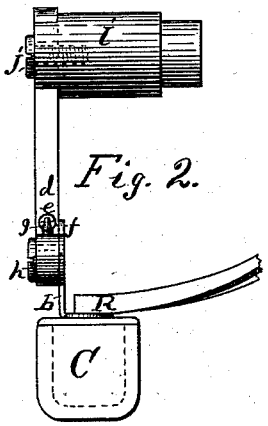

Fig. 2.

Fig. 3.

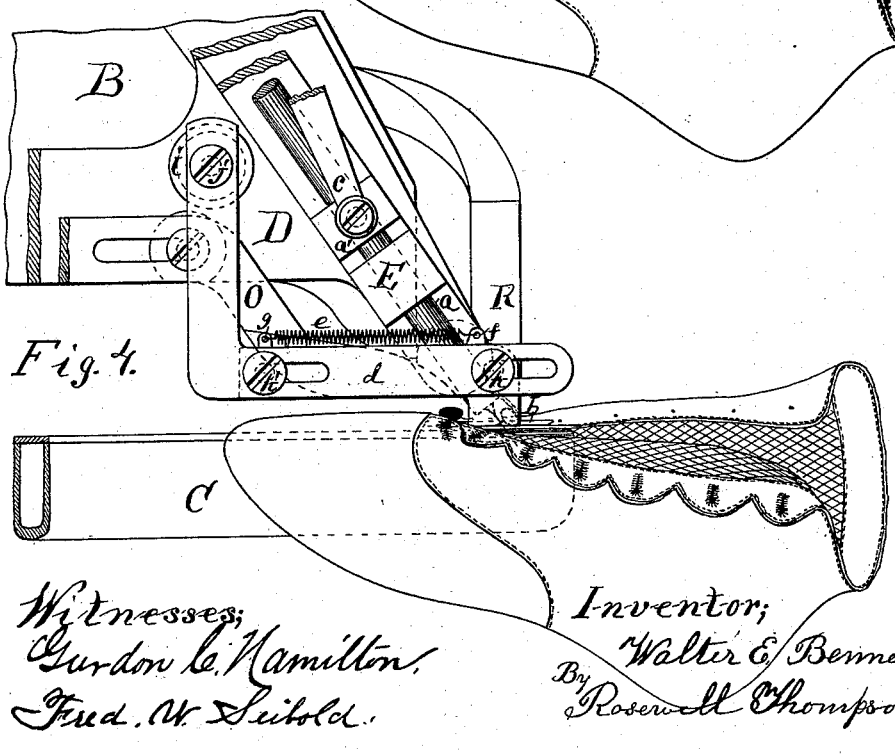

Fig. 4.

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UNITED STATES PATENT OFFICE.

WALTER E. BENNETT, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE MORLEY BUTTON SEWING MACHINE COMPANY, OF SAME PLACE.

PRESSER-FOOT FOR BUTTON-SEWING MACHINES.

SPECIFICATION forming part of Letters Patent No. 384,231, dated June 12, 1888.

Application filed July 18, 1887. Serial No. 244,618. (No model.)

To all whom it may concern:

Be it known that I, WALTER E. BENNETT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Presser-Foot for Button-Sewing Machines; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being made to the accompanying drawings, forming a part of this specification.

It is advantageous in a button-sewing machine to use a presser-foot which has a long bearing-surface on each side of that point on the upper where the needle punctures it, or, in other words, where the button is to be attached. In working on uppers, however, to which the vamps have already been attached this is not possible, because while sewing on the first button the vamp-seam would come under the presser-foot and prevent it from holding the goods firmly to the throat-plate. I have therefore devised a sliding presser-foot by the use of which I am able to get a short bearing-surface while sewing on the first button, and a long one for all the rest of the buttons to be sewed onto the upper. This presser-foot consists of a foot portion proper, which is slotted, the slot being open at the rear end. This foot portion is mounted on a shank, and this shank is secured to a bearing on the machine by a pin-and-slot connection, by means of which the foot is enabled to move with relation to the needle. When in its forward position, the rear portion only of the foot is operative. Consequently, if the foot is placed on the upper with its rear end touching the vamp seam and the upper and foot are slid forward, which movement is allowed by the pin-and-slot connection before referred to, the first button can be attached close to the said seam. After the attachment of this button, as the upper is fed to bring the proper part of the same for the attachment of the second button into position, the foot moves with it to its second position, in which position it has an extended bearing on the upper on both sides of the point of attachment of the second button. The foot remains in this second position while the remainder of the buttons are being sewed on. The open-ended slot referred to allows the upper to be fed without raising the foot, the buttons passing out of the open end of the slot.

In the accompanying drawings I have shown my improved sliding presser-foot as applied to a button-sewing machine for which Letters Patent were granted to Rosewell Thompson, November 30, 1886, No. 353,609.

Figure 1 is a perspective view of the presser-foot and bearing, showing top and right side of the same and general construction. Fig. 2 is a front end view of the same, but drawn on a smaller scale, together with the front end of the throat-plate and fabric-supporting arm of the machine. Fig. 3 is a left side view of the presser-foot as it appears when applied to the machine, together with a portion of the needle-bar, needle-bar bearing, support, and other devices, of which it has not been deemed necessary to show the operating mechanism. This view has also upon it a representation of a vamped upper-leather, showing the position of said presser-foot and manner of clamping the fabric while the first button near the seam is being sewed on. Fig. 4 is a view of the same devices, but with presser-foot and upper-leather in the positions they occupy while the second button is sewed on. Said presser-foot remains in this last position while sewing on the rest of the buttons to the fabric.

Similiar letters of reference indicate corresponding parts.

Of the devices belonging to my improvement, *b* is the sliding presser-foot. *d* is the bearing. *e* is a spiral spring, one end of which is hooked into an eye, *f*, on the top edge of the vertical portion of the presser-foot and the other end into the stud *g*, which is driven into the back top edge of the bearing. *h h'* are screw-studs fitted to slide freely in the openings in the bearing, but screwed firmly into the side of the vertical portion of the presser-foot. *i* is a stud, which is driven firmly into the side of the needle-bar-bearing support, the outer and free end being slotted to receive the upper end of the vertical portion of the bearing, the same being firmly secured in said slot by means of the screw *j*.

Of the button-sewing machine referred to, B is a portion of the arm of the same; C, a portion of the fabric-supporting horn, and D a portion of the needle-bar-bearing support.

E is a portion of the needle-bar bearing. *a* is the lower end of the needle-bar. *a'* is the needle-bar carrier, and *c* the lower end of connecting rod or pitman, which imparts motion to said carrier and needle-bar. O is a portion of the locking-loop spreader-bar, and R is the front end of the button-feeding trough.

I will now describe the practical operation of my improved presser-foot, with reference to the accompanying drawings.

The vertical portion of the presser-foot bearing being attached to the movable needle-bar-bearing support, the operator first raises the presser-foot from the throat-plate by means of a treadle under the machine, said presser-foot being at this time in its extreme back position. He then passes the quarter on which the buttons are to be sewed under the presser-foot, and then brings the vamping-seam against the back end of the same, and pulls said quarter and presser-foot toward the end of the button-trough, so that the first button may be placed near said seam while being sewed to the quarter and the presser-foot allowed to clamp only that portion of the fabric on which said button is to be sewed, in the manner shown in Fig. 3. The presser-foot clamps the fabric to the throat-plate while in this position during the entire operation of sewing on the first button; but when the presser-foot is released from pressure upon the fabric, after the completion of the stitch, said presser-foot moves in unison with the fabric during the operation of the feeding mechanism to place the second button in its proper position to be sewed to said fabric, after which the presser-foot remains in its extreme back position while sewing the second and succeeding buttons, as shown in Fig. 4. It thus acts as a permanent presser-foot during the sewing of all buttons except the first one near the vamping-seam, it being necessary to change its position only while sewing on the first button, for reasons above explained.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In combination with a button-sewing machine and the button-attaching devices thereof, a bearing having slots substantially parallel to the table of the machine, and a presser-foot secured to said bearing by means of pins which engage the slots, the presser-foot having a rearwardly-extending open-ended slot, all substantially as described, for the object set forth.

2. In combination with a button-sewing machine, the button-attaching devices thereof, and a presser-foot having a rearwardly-extending open-ended slot, and secured to a slotted bearing by means of pins which engage the said slots, and a spiral spring connecting said foot and bearing and operating substantially as shown and described, for the object set forth.

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