T. D. EMERY.

Sewing-Machine Attachment.

No. 206,669. Patented Aug. 6, 1878.

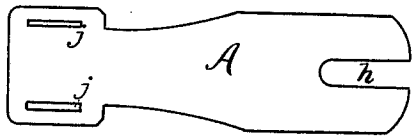


FIG. 1.

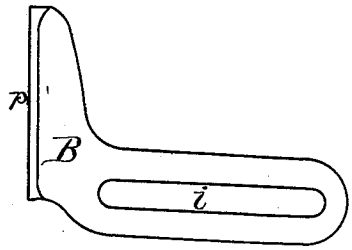


FIG 2

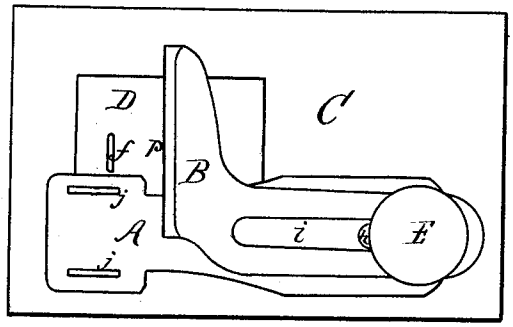


FIG 3

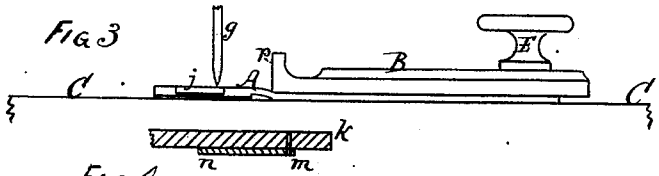
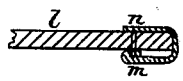


FIG. 4.



WITNESSES.
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UNITED STATES PATENT OFFICE.

THOMAS D. EMERY, OF HARRISON, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM S. NASH, OF WINDHAM, MAINE.

IMPROVEMENT IN SEWING-MACHINE ATTACHMENTS.

Specification forming part of Letters Patent No. **206,669**, dated August 6, 1878; application filed February 20, 1878.

To all whom it may concern:

Be it known that I, THOMAS D. EMERY, of Harrison, in the county of Cumberland and State of Maine, have invented a new and useful Sewing-Machine Attachment, which invention is fully set forth in the following specification, reference being had to the accompanying drawing.

My invention relates to devices for use upon a sewing-machine in the application of binding to the edges of garments; and it consists in the combination of an adjustable gage, against which the edge of the garment rests and is guided, to secure a parallelism between such edge and the line of stitching, with a binding-guide which directs the strip of binding to receive such line of stitching at a proper and uniform distance from or coincident with one of its edges, as well as at an unvarying distance from the edge of the garment, according to the adjustment of the edge-gage, said gage and guide being respectively constructed and made capable of adjustment relatively to each other and the throat-plate of a sewing-machine, substantially as hereinafter described.

In the accompanying drawing, Figure 1 is a detached plan of the guide and gage. Fig. 2 is a plan of a portion of a sewing-machine bed, including the throat-plate, and showing said guide and gage in working position thereon. Fig. 3 is a side elevation of the same. Fig. 4 is a cross-section of a portion of the edge, showing the manner of stitching and turning the binding.

A is the binding-guide; B, the edge-gage of common form; C, the bed of the machine; D, the throat-plate, and E the thumb-screw for securing the guide and gage to the bed. *f* is the passage in the throat-plate through which the vertically-reciprocating needle indicated at *g*, Fig. 3, vibrates.

The materials are caused to progress under and past the needle, during the process of stitching, by a feed-bar acting from above or below, in any of the well-known methods employed in sewing-machines. The guide and gage have slots *h* and *i*, through which the thumb-screw passes to secure them to the bed and to adjust them relatively to the path of the needle. Guide A is formed of light sheet metal and with two slots, *j j*, corresponding in length to the width of binding used. The part containing said slots is slightly curved upward to admit of a free passage of the binding through the slots. That part of the garment to which the binding is applied rests upon the guide above the binding, with its edge against the side *p* of gage B.

Guide A being properly adjusted upon the machine-bed to direct the edge of the binding under the needle, the gage B is then adjusted upon the guide with its work side *p* parallel to the direction thus given to the binding, and at such a distance from the nearest edge of the binding that the edge of the garment, when resting against the gage, shall properly overlay the strip of binding, so that when such single line of stitching shall be completed the binding may be folded to the requisite extent over the edge of the garment to be "felled" on the opposite side, in the usual manner.

The sections shown in Fig. 4 indicate the manner of applying the binding. Section *k* shows the binding as laid under the edge by the guide and stitched through its edge *m*, while its edge *n* is left free. Section *l* shows the manner of turning the binding over the edge, which is done by hand after it has left the machine in the condition shown at *k*, and its edge *n* is then felled upon the side to which it is turned, as before stated.

When bindings are thus seamed without the aid of such guides considerable skill is required on the part of the operator in directing the work so that the line of stitching shall be both parallel to or coincident with the edge of the binding and at an unvarying distance from the edge of the garment, and the common failure on the part of the operators to accomplish both of these requisites is the cause of much delay, extra expense, and annoyance, from the consequent necessity of paring or trimming the edges of the garment with shears to conform to the variable stitching and enable the binding to be uniformly folded over them, and resulting in a large proportion of comparatively imperfect work.

By the use of the simple and inexpensive invention herein described the above-named

difficulties are wholly avoided, the care and labor of the operator are lightened, and the quality of the work is greatly improved.

It is obvious that the relative positions of the guide and gage may be reversed, if need be, to better adapt them to any particular machine upon which they are to be used, and guide A may be made with an adjustable binding passage or passages to adapt it to varying widths of binding; but, for various reasons, the simple form shown is deemed preferable, as its cost is comparatively trifling, and a guide for each different width, it is believed, will be more convenient for practical use.

What I claim as my invention is—

The binding-guide A, having slot *h*, in combination with gage B, provided with slot *i*, the two being capable of adjustment relatively to each other and the throat-plate of a sewing-machine, substantially as described, for the purpose set forth.

THOMAS D. EMERY.

Witnesses:

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