

(No Model.)

E. B. ALLEN.

CARPET BINDING APPARATUS FOR SEWING MACHINES.

No. 600,503.

Patented Mar. 15, 1898.

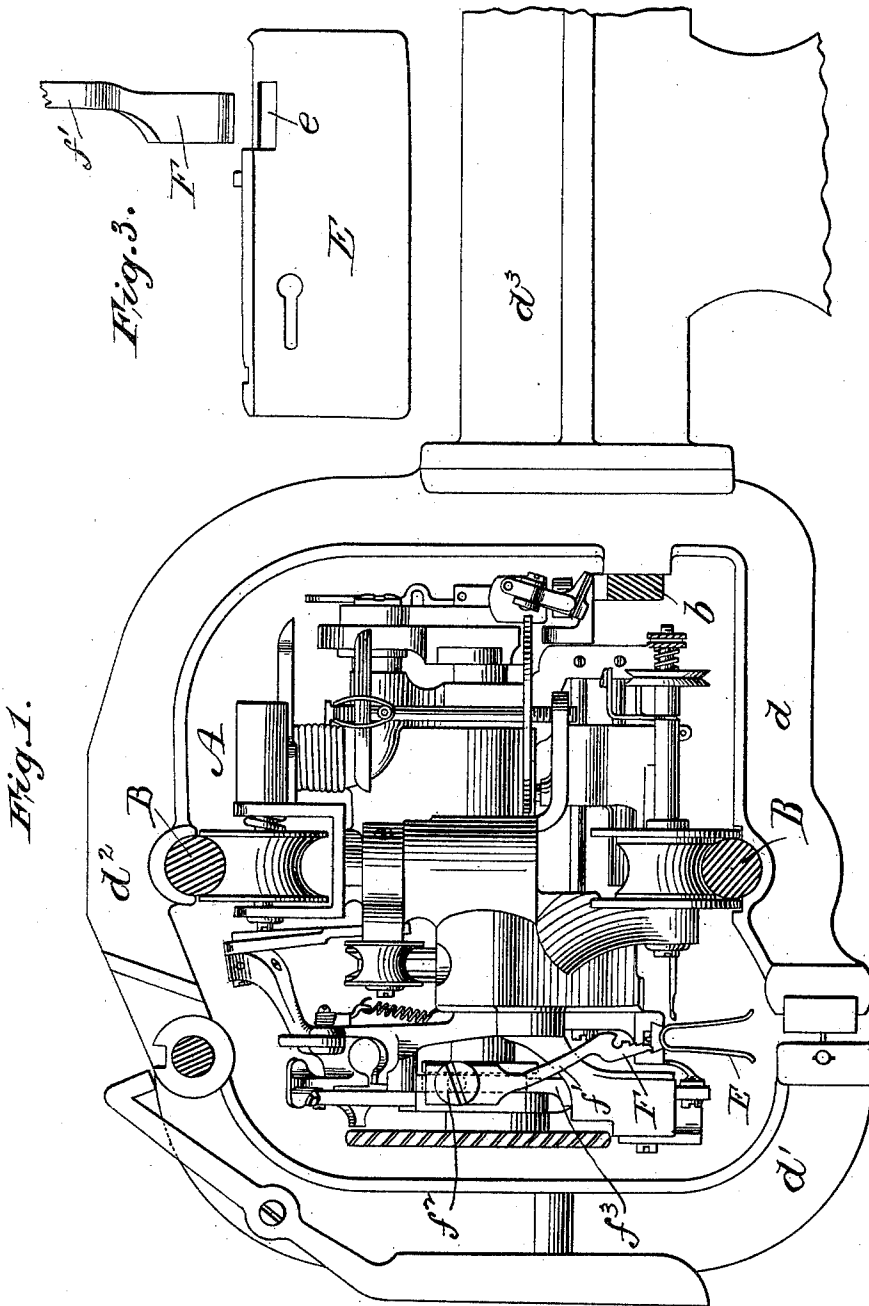


Fig. 1.

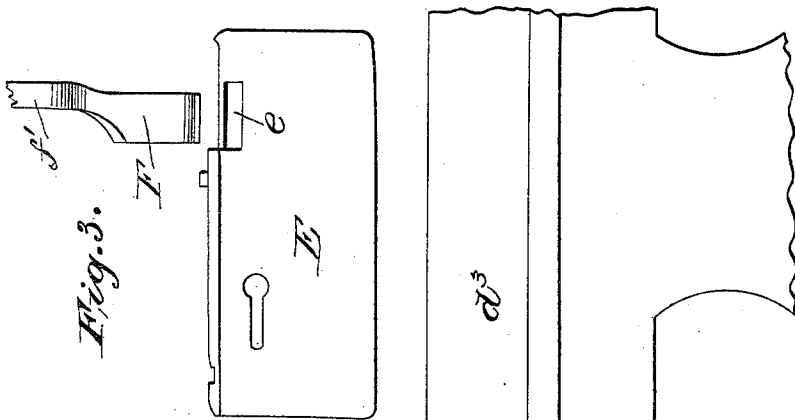
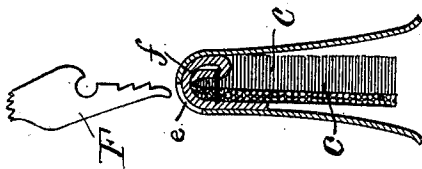


Fig. 3.

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Fig. 2.



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UNITED STATES PATENT OFFICE.

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CARPET-BINDING APPARATUS FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 600,503, dated March 15, 1898.

Application filed April 13, 1897. Serial No. 631,990. (No model.)

To all whom it may concern:

Be it known that I, EDWARD B. ALLEN, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Carpet-Binding Apparatus, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain improvements to be used in connection with the carpet holding and sewing apparatus fully shown and described in my United States Patents Nos. 524,994, 524,996, 524,997, and 548,736, the object of the present invention being to provide means whereby when a binding has been sewed to the pile face of the raw edge of a carpet, as described in my application, Serial No. 631,989, of even date herewith, the said binding when folded over the seam first formed and over its own edge and the edge of the carpet may be stretched or drawn taut over the carpet edge and the carpet and binding be properly held while the traveling sewing-machine advances and sews down the last or folded-over edge of the binding-strip to the back of the carpet. To this end I have provided, in connection with a carpet holding or supporting apparatus and a sewing-machine, a stretching device for drawing the folded binding taut over the raw carpet edge being bound, this stretching device consisting, preferably, of a wedge-shaped finger reciprocating in a plane transverse to the plane of movement of the traveling machine (or of the movement of the work, if the latter be the moving part) and having a roughened or serrated working face which, acting against the free edge of the binding-strip, continually draws the same tight over the carpet edge to be bound. This reciprocating stretcher in this binding operation takes the place of the reciprocating piler of my Patent No. 524,994 referred to.

In the accompanying drawings, Figure 1 is a front end view of the traveling sewing-machine with my invention applied thereto, the machine-guideway and carpet-support being also partly shown. Fig. 2 illustrates the binding operation, and Fig. 3 is a detail side

view of the binding-guide and the reciprocating stretcher.

The traveling sewing-machine A is or may be essentially the same in construction and operation as the machines shown and described in my patents hereinbefore referred to and is adapted to run on guide rails or tracks B and to be moved along by feeding devices which engage a stationary rack-bar *b*, as fully set forth in my Patent No. 524,996. The carpet section or strip *c* to be bound is preferably supported edgewise vertically by suitable holding and clamping devices operating in connection with fixed supports, as *d*, as fully described in my Patent No. 524,997, and one of which holding and clamping devices, *d'*, with its impaling-pin, is herein shown pivoted at its upper end to the fixed arm *d*², attached to a support or standard *d*³.

E is a depending saddle-guide which rides over the upper edge of the carpet, which is supported edgewise vertically, and over which upper edge the binding tape or strip *f* (one edge of which has been previously attached to the pile face of the carpet) is folded.

F is the wedge-shaped reciprocating stretcher, the working face of which is roughened or serrated with the teeth facing downward, so as to engage the binding-strip in the downstrokes of the stretcher, but sliding freely upward over said binding-strip on the return strokes. The shank *f*¹ of the said stretcher is attached, as by a set-screw *f*², to the reciprocating loop-spreader bar *f*³, to which, in my Patent No. 524,994, the piler is shown as being attached, thus taking the place of the said piler. The saddle-guide E is provided with an opening *e*, through which the stretcher can work to engage the folded-over binding-strip and stretch the same transversely in front of the needle.

In the operation of the machine herein shown in sewing down the last edge of a binding-strip one edge of which has already been attached by a line of stitches to the pile face of the carpet the stitches of the last seam will pass through the carpet and binding in the same plane as the stitches of the first seam, or substantially so; but as the stitches of the first seam will be covered by the folded-

over binding and as the last seam will be made with its enchain side at the back of the carpet the binding-attaching stitches, when the thread or threads thereof correspond in color to the carpet and binding, will be hardly visible on the face of the carpet, being nearly hid by the pile thereof, and as the folded binding will be drawn tight over the edge of the carpet by the stretching device a neat and durable finish will be given to the carpet edges thus bound.

Although I prefer in the use of the binding device hereinbefore described to employ a carpet holding and sewing apparatus which sustains the carpet being bound edgewise vertically and which employs a traveling sewing-machine, I do not wish to be understood as limiting my invention to these features, as the carpet to be bound might be supported horizontally or the sewing-machine might be stationary and the carpet fed through the same by any well-known form of feeding apparatus. Neither do I wish to be understood as limiting my invention to the particular form of binding-stretching device herein shown, as I consider that any device which will stretch the folded-over binding laterally or transversely to the seam would be an equivalent for the reciprocating stretcher herein shown and described.

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

1. The combination with a carpet-holding apparatus, of a track or guideway, a traveling sewing-machine running on said track or guideway, an inverted or saddle guide for the edge of the carpet and its attached binding,

and which guide is carried by said traveling machine, and a stretching device, also carried by said traveling machine and comprising means to act on the binding to draw the same tight in a plane transverse to the line of the seam, and by which a folded-over binding, one edge of which has been previously attached to a carpet near the edge thereof, may be drawn taut over the said edge of the carpet when the other edge or part of said binding is to be sewed down to the carpet.

2. The combination with a carpet-holding apparatus, of a track or guideway, a traveling sewing-machine fitted to run on said track or guideway, a guide for the edge of the carpet and its attached binding, a binding-stretching device having a serrated or roughened face, and means for reciprocating the said stretching device in a plane transverse to the seam formed by said traveling sewing-machine.

3. The combination with a carpet-holding apparatus, a traveling sewing-machine and a track or guideway for said machine, of a depending saddle carpet-guide carried by said machine, and provided at its top with an opening, and a reciprocating binding-stretcher working through said opening and serving to draw taut a folded-over binding one edge of which has already been attached to the edge of the carpet.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD B. ALLEN.

Witnesses:

HENRY CALVER,
JOSEPH F. JAQUITH.