(No Model.)

E. B. ALLEN. CARPET BINDING APPARATUS FOR SEWING MACHINES. No. 600,502. Patented Mar. 15, 1898. Ø, õ, Ē E 6 0 1.29.5  $\mathbb{O}$ FI 1  $\mathcal{S}$ Fig.L Á  $\mathcal{X}^{z}$ ••• 27

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Inventor. By E. B. Allen Itury Caluer,

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## UNITED STATES PATENT OFFICE.

EDWARD B. ALLEN, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO THE SINGER MANUFACTURING COMPANY, OF NEW JERSEY.

## CARPET-BINDING APPARATUS FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 600, 502, dated March 15, 1898.

Application filed April 13, 1897. Serial No. 631,989. (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 use-5 ful 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 improve-10 ments to be used in connection with the carpetholding and sewing apparatus fully shown and described in my United States Patents Nos. 524,994, 524,996, 524,997, and 548,736,
- 15 the object of the present invention being to provide means whereby a binding may be applied to the raw edge of a carpet, and more particularly to a device whereby one edge of a binding-tape may be sewed flat to the pile
- 20 face of the carpet edge preparatory to being folded over the said edge and over the seam first formed, so as to be finally sewed down taut over the carpet edge by the apparatus fully shown and described by my application,
- 25 Serial No. 631,990, of even date herewith. To this end I have provided, in connection with an apparatus by which a carpet is supported edgewise vertically and with a traveling sewing-machine, a depending combined carpet
- 30 and binding guide, preferably of such construction that the edge of a flatwise - held binding-tape will be caused to register with the edge of the carpet to be bound, so that a seam may be formed through both the carpet
- 35 and binding, near to and parallel with their edges, to attach one edge of the binding to the carpet, the binding to be subsequently folded over the seam thus formed and the carpet edge, and then finally sewed down by
- 40 another seam, as heretofore stated. In connection with the depending carpet and binding guide of whatever form used a tape support or reel carried by the traveling sewingmachine and so supported thereon as to be in
- 45 advance of the guide will preferably be employed.

In the accompanying drawings, Figure 1 is a front end view of the traveling sewing-machine with a carpet and binding guide ap-50 plied thereto, the machine-guideway and caris a detail side view to show the relative positions of the guide and tape-reel. Fig. 3 is a detail side view of the carpet and binding guide which causes the binding-tape to regis- 55 ter with the edge of the carpet, and Fig. 4 is a detail end view of the same. Figs. 5 and 6 are detail side and cross-sectional views, respectively, of a depending guide adapted to present the binding and carpet to the needle 60 with the binding folded over the carpet edge.

The traveling sewing-machine A is or may be essentially the same in construction and operation as the machine shown and described in my patents hereinbefore referred to and is 6; 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 to be bound is supported edge- 70 wise vertically and preferably by the 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 im- 75 paling-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 the depending carpet and binding guide removably attached to the traveling machine 80 A and having a carpet-passage *e* and a separate binding-strip passage e', the upper edges of both of which are at the same level or in the same horizontal plane, so as to cause the upper edges of the carpet and binding to be 85 brought into register with each other. The carpet-passage is open at its bottom for an obvious reason, while the bottom of the binding-strip passage is closed, the vertical extent of the latter passage being equal to the width go of the binding which is to be used.

To adapt the binder for use in connection with bindings of varying widths without requiring entire interchangeable binders of different sizes to be used, a portion of the binder 95 comprising the division wall or plate  $e^2$  and the lower part  $e^3$  of the outer wall or plate of the binder is formed separate from the upper part  $e^4$  of said outer wall or plate and is removably attached thereto in any suitable or 100 convenient manner, as by screws  $e^5$ . By propet-support being also partly shown. Fig. 2 | viding interchangeable parts  $e^2 e^3$  of different

sizes or widths the binding-passage e' may be varied in extent to accommodate bindings of different widths, as will be understood.

To facilitate the entrance of the binding 5 into the binding-passage by the attendant at the commencement of the work, a slot  $e^6$  is preferably formed in the outer wall of the said binding-passage and through which slot a pointed instrument may be introduced to 10 move the binding along in said passage.

F denotes a binding-carrying reel or support which is sustained by an arm or bracket f, attached to any suitable part of the frame A' of the traveling sewing-machine and ex-

- 15 tending out in front of said machine, so as to carry the binding in advance of the binding and carpet guide. The binding-tape on the reel is pressed down slightly to hold it smooth by a metal plate f', and to hold the binding 20 under proper tension as it unwinds the said plate, which turns with the reel or coil of binding, is pressed against by a friction-spring
- $f^2$ , having a rectangular or other suitable opening to engage a corresponding or rectangular 25 portion of the fixed pin  $f^3$ , around which the binding reel or coil turns.
  - For use in applying a folded binding to a carpet edge, so that both edges of the bind-
- ing may be sewed to the carpet at one opera-30 tion, the depending guide E', having the carpet-passage  $e^7$  and the separate inclosed binding-passage  $e^8$ , may be employed. With the use of this form of guide, however, the binding cannot be so tightly and neatly applied
- 35 to the carpet edge as when the binding is first applied flatwise to the pile face of the carpet by means of my guide E, hereinbefore described, and then afterward folded over the carpet edge and drawn taut over the same in 40 being finally sewed down by the apparatus

shown and described in my concurrent application hereinbefore referred to.

Having thus described my invention, I claim and desire to secure by Letters Patent 45

1. The guide E having the carpet-passage e open at its bottom and the binding-passage e' closed at its bottom, the connected parts  $e^2$ ,  $e^3$  of the said guide, forming the closed bottom of said passage, being detachably se- 50 cured to the part  $e^4$  thereof, to permit of the use of similar interchangeable parts of different sizes.

2. The combination with appliances for supporting a carpet edgewise vertically, a travel- 55 ing sewing-machine, and a track or guideway on which said machine may move, of a depending carpet and binding guide carried by said machine and having separated carpet and binding passages, and a binding-support 60 also carried by said machine.

3. The combination with appliances for supporting a carpet edgewise vertically, a traveling sewing-machine, and a track or guideway on which said machine may move, of a de- 65 pending carpet and binding guide carried by said machine and having separated carpet and binding passages, the tops of both of said passages being at the same level or in the same horizontal plane to bring the upper 70 edges of the carpet and binding into register with each other, and a binding-support also carried by said machine.

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

EDWARD B. ALLEN.

Witnesses: HENRY CALVER, JOSEPH F. JAQUITH.