(No Model.)

E. B. ALLEN.

GUIDE FOR CARPET SEWING MACHINES.

No. 524,995. Patented Aug. 28, 1894.

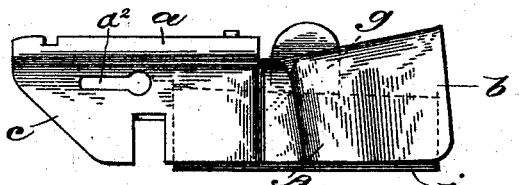

Fig. 1.

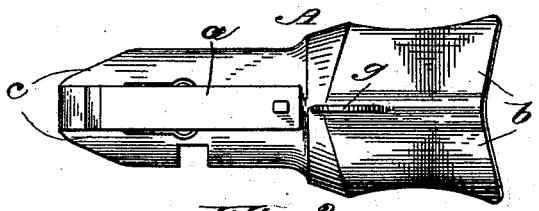

Fig. 2.

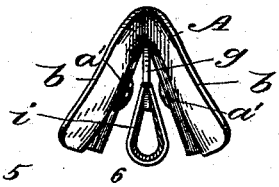

Fig. 3.

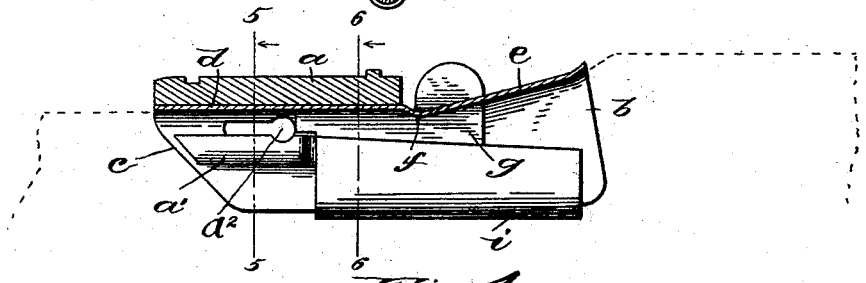

Fig. 4.

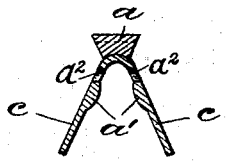

Fig. 5

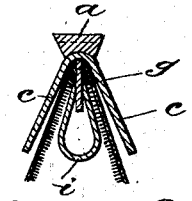

Fig. 6.

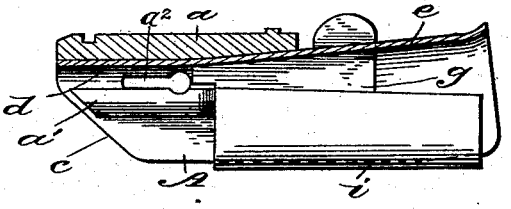

Fig. 7.

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UNITED STATES PATENT OFFICE.

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

GUIDE FOR CARPET-SEWING MACHINES.

SPECIFICATION forming part of Letters Patent No. 524,995, dated August 28, 1894.

Application filed November 14, 1893. Serial No. 490,874. (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 Guides for Carpet-Sewing Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to guides for that class of carpet sewing machines more especially adapted to unite the edges of carpets which are suspended vertically and to travel with relation to the stationarily held carpets; my improved guide being more particularly intended for use with a machine traveling on a track or guideway parallel with which the carpets are suspended vertically.

My improved guide is made in the form of a saddle or inverted trough having depending outwardly flaring sides or flanges which converge toward the rear or needle end of the guide, near which end they are slotted for the passage of the needle and the threads which form the double loop stitch seam, the trough-shaped or saddle guide having, centrally placed between its depending sides, a dividing plate or divider, to hold the pile fabrics separated from each other, while below and sustained by said divider is preferably provided a separator which holds the suspended fabrics a little distance apart below the divider so as to have a tendency to curve the fabrics to bring their edges together in such a position as will assist in turning in the pile and partially abut the edges. For securing the best results the forward end of the divider is rearward of the forward end of the saddle-shaped guide and the rearward end of said divider is just in front of the needle slots in the side flanges of the guide, while the rear end of the separator is some little distance in front of the needle slots, and the forward end of said separator is preferably in front of the forward end of the divider. Also a part or all of the guiding surface at the apex of the saddle guide is preferably inclined downward rearwardly so that as the guide travels forward over the carpet edges (which are held a little higher than the guiding surfaces at the apex of the saddle guide) said edges will be depressed to force in the pile; and owing to the fact that the rear end of the separator is some little distance in front of the needle the positions of the fabrics held apart by the said separator will be permitted to come together just before being reached by the needle; while the pile, pressed inward by contact with the divider, will be retained in its inwardly forced position until the edges have been joined by the stitch-forming mechanism of the traveling machine.

In the accompanying drawings Figure 1 is a side view of my improved guide, and Figs. 2 and 3 are top and front end views, respectively, of the same. Fig. 4 is a side view with one of the side flanges cut away to show the line of the guiding surface at the apex of the trough-like or saddle guide. Figs. 5 and 6 are sections on lines 5—5 and 6—6, respectively, of Fig. 1, the positions of the fabrics to be joined being denoted by dotted lines in Fig. 6, and Fig. 7 illustrates a slight modification.

A denotes the inverted trough-shaped or saddle guide consisting of depending outwardly flaring side flanges meeting on a curve at their upper edges, said flanges converging somewhat toward each other from their front ends *b* to their rear ends *c* and being provided with needle and thread slots or openings a^2. The guiding surface of the fabric edges is at the apex of the trough and this guiding surface is preferably made, as shown in Fig. 4, with a straight or horizontal portion *d* and a portion *e* which inclines downward rearwardly, while just at the rear end of the downwardly inclined part *e* of the guiding surface is formed a slight downward jog or projection *f*. It is not, however, essential that a part of the guiding surface at the apex of the trough-like or saddle guide should be horizontal, as such guiding surface, forward of the needle slots, might incline downward gently all the way from the front end of the guide, as shown in Fig. 7.

Centrally secured to the under side of the saddle guide is a depending dividing plate, or divider, *g*, the rear end of which terminates just in front of the needle and thread slots *h* formed in the side flanges of the guide, while below and supported by said divider is a separator *i* which is thicker than

said divider and which is preferably pear-shaped in cross-section, as shown by Figs. 3 and 6. The forward end of the divider *g* is some little distance rearward of the forward end of the saddle guide and also preferably rearward of the forward end of the separator *i*. The side flanges of the guide A are preferably provided internally with slight projections *a'* adjacent to the slots *h*, said projections assisting in bringing the fabric sections together at the sewing point.

To the saddle guide A is soldered or otherwise secured a block *a* by which said guide is to be removably attached to the traveling sewing machine, the positions of the vertically suspended fabrics over which the guide is to travel being denoted by dotted lines in Fig. 4. As the upper edges of the fabrics, or the edges to be joined, are held a little higher than the guide, the latter, in riding over said edges forces them downward; while the separator, holding them apart, serves to assist in curving the fabrics outward from each other, as shown in Fig. 6, thus turning in the pile and bringing the extreme edges of the carpet sections together partly abutted, the operation of turning in the pile being assisted by the projection *f* at the rear end of the inclined part *e* of the guiding surface of the guide.

It will be observed, from the location of the needle openings a^2 formed in the depending sides of the guide between the ends thereof, that said guide is adapted to hold and control the fabrics both in front and rearward of the needle.

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

1. A guide, for use with traveling sewing machines, made in the form of a saddle or inverted trough with depending, outwardly flaring sides converging toward each other rearwardly and having needle openings between their ends to adapt the said guide to control the fabrics both in front and rearward of the needle and said guide being provided with a central, depending, dividing plate or divider.

2. A guide, for use with traveling carpet sewing machines, made in the form of a saddle or inverted trough with depending, outwardly flaring sides, provided with needle openings to adapt the said guide to control the fabrics both in front and rearward of the needle and said guide having a depending, central divider, and a separator which is of greater thickness than said divider and which is arranged below the latter.

3. A guide, for use with traveling carpet sewing machines, made in the form of a saddle or inverted trough with depending flaring sides slotted to form needle openings and provided with a central divider and with a separator below said divider and of greater thickness than the latter, the forward end of said separator being extended beyond or forward of said divider.

4. A guide, for use with traveling carpet sewing machines, made in the form of a saddle or inverted trough with depending flaring sides slotted to form needle openings and provided with a central divider and with a separator below said divider and of greater thickness than the latter, the forward end of said separator being extended beyond or forward of said divider and the rear end of said separator being some little distance in front of said needle slots.

5. A guide, for use with traveling carpet sewing machines, made in the form of a saddle or inverted trough with depending, outwardly flaring and rearwardly converging sides which are provided between their ends with needle openings, said guide being thus adapted to control the fabrics both in front and rearward of the needle, and having, beneath its apex, a guiding surface which inclines downward rearwardly, said guide being provided with a depending, centrally placed, dividing plate or divider extending downward beneath the apex of said trough.

6. A guide, for use with traveling carpet sewing machines, made in the form of a saddle or inverted trough with depending, outwardly flaring sides which are provided, between their ends, with needle openings, said guide having beneath its apex a guiding surface the rear portion of which is horizontal and the forward part of which inclines downward rearwardly, and said guide being provided with a central, depending, dividing plate or divider.

7. A guide, for use with traveling carpet sewing machines, made in the form of a saddle or inverted trough with depending, outwardly flaring sides, and having beneath its apex a guiding surface the rear portion of which is horizontal and the forward part of which inclines downward rearwardly, with a downward jog or projection at the rear end of said inclined forward part, said guide being provided with a central depending dividing plate or divider.

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

EDWARD B. ALLEN.

Witnesses:
J. G. GREENE,
L. L. BURRITT.