(No Model.)

E. D. GAINES.

EYELETING MACHINE.

No. 453,182. Patented June 2, 1891.

Fig 1

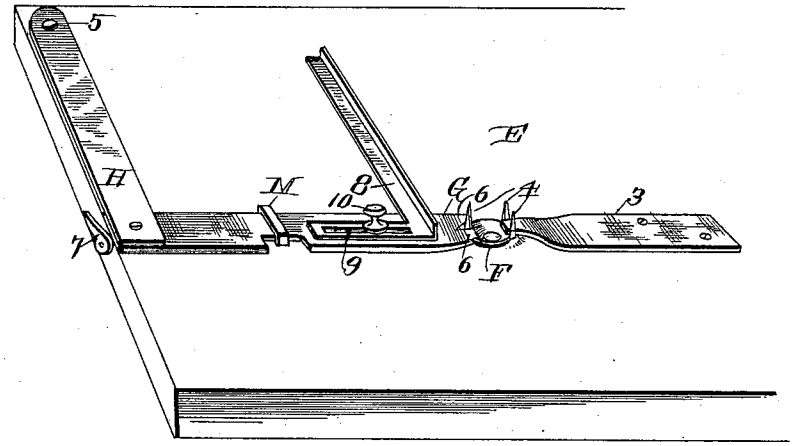
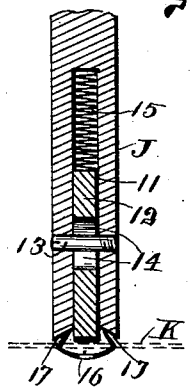


Fig 2



Witnesses
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UNITED STATES PATENT OFFICE.

ERASMUS DARWIN GAINES, OF STERLING, ILLINOIS.

EYELETING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 453,182, dated June 2, 1891.

Application filed June 18, 1890. Serial No. 355,850. (No model.)

To all whom it may concern:

Be it known that I, ERASMUS DARWIN GAINES, a citizen of the United States, residing at Sterling, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Carpet-Eyeleting Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to mechanism for furnishing carpets with eyelets at suitable intervals to adapt said carpet for being removably attached to the floor.

The object of my invention is to suitably seat at proper intervals in the floor of a room and near the margin thereof a series of round-headed studs or tacks and to furnish the carpet on either one or both sides thereof at the same intervals with an eyelet adapted to readily engage and disengage the floor-studs. In order to preserve the corresponding intervals between the studs and the carpet-eyelets, and to properly seat said eyelets and studs, I employ certain mechanism hereinafter described.

Figure 1 represents the mechanism employed for placing the eyelets at corresponding intervals in the carpet, and Fig. 2 exhibits the tool for clinching the eyelet in the carpet when properly placed.

Referring to Fig. 1, E is a suitably-sized board, having a metallic clip 3 rigidly seated transversely thereon, with its inner end free and raised sufficiently from said board to rest upon the eyelet F between two of the clinches 4 thereon, said eyelet being placed in a suitable socket in said board with its clinches upward.

G is an eyelet-holding clip seated transversely of the board E in line with the prolongation of the clip 3, with the interval between said clips sufficient to admit of the placing of the eyelet F. The clip G is seated in suitable ways M on the board E and adapted to reciprocate thereon in the following manner: The outer end of the clip G is pivotally attached to the adjacent end of the arm H, pivoted at 5 near its other end to the board E longitudinally of the latter. In seating the eyelet the clip G is withdrawn sufficiently for the insertion of said eyelet, and when the latter is in place the clip G is moved inwardly, being provided at its inner end with bifurcations 6, which pass, respectively, on either side of the remaining clinch 4 of the eyelet F. A lock-lever 7 is pivotally seated on the edge of the board E directly behind junction of the clip G and arm H in such position that when said lever is brought in a horizontal position the arm H and clip G can pass outwardly over such lever to admit the eyelet F, and when the clip G and arm H are pushed inward to engage said eyelet the longer end of said lever 7 is thrown downwardly and its shorter end is thrown upward behind the arm H, and thereby holds the clip G in engagement with said eyelet.

A gage 8 is adjustably seated on the upper surface of the clip G by means of a longitudinal slot 9 in the horizontal portion of said gage, in which a set-screw 10 is vertically seated, suitably engaging at its lower end the clip G. The purpose of the gage 8 is to furnish a stop at its inner face in the edge of the carpet, and thereby seat the eyelets F a uniform distance from the margin of said carpet, corresponding to the interval between the studs B aforesaid and the wall of the room.

When the eyelet is in the position shown in Fig. 1, the carpet K is placed over said eyelet with its margin against the gage 8 and slightly forced down upon the clinches 4. Then the tool shown in Fig. 2 is utilized to clinch said eyelet upon the carpet. This tool consists of a solid pin J, having a cylindrical opening 11 centrally formed in its lower portion. A short pin 12, is loosely seated longitudinally in the opening 11 by means of a transverse pin 13, which passes through the walls of said opening and a longitudinal slot 14, formed transversely through the pin 12. Between the inner end of the pin 12 and the inner end of the opening 11 is placed a coiled spring 15, which normally forces the pin 12 below the lower extremity of the pin J. The lower end of the pin H has a concave face 17; and when said pin is placed over the eyelet F and forced down upon the clinches 4 by

blows on its upper end the effect is to force the carpet solidly down upon the main body of said eyelet and the clinches 4 inwardly over said carpet, the short pin 12 meanwhile pressing the carpet downward between the clinches 4 in said eyelet, the spring 15 permitting the pin 12 to recede sufficiently to allow the pin J to be forced downward far enough to effectually clinch the eyelet F, the margins of the concavity 17 forcing the carpet outside of said clinches. The central opening 16 in the eyelet F is of such size as to readily pass over the head of the floor-stud B, when the tautness of the carpet prevents the disengagement of the eyelet. After the floor-studs are seated, as aforesaid, and the carpet furnished with the eyelets F the carpet is placed in position by simply forcing the eyelets successively over their corresponding studs B, and the carpet can be readily removed by slightly crowding it toward the wall and then lifting the eyelet from the stud B.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The combination, with a support, of two clips secured thereto, one of which is movable toward and from the other one, said clips being adapted to hold an eyelet between their adjacent ends and the support, and suitable driving mechanism, substantially as described.

2. The combination, with a board, of two clips secured thereto with their adjacent ends raised from the board and one of the clips movable toward and from the other one and having its end adjacent to the stationary clip bifurcated, whereby an eyelet may be secured between the ends of the clips and the board, and suitable driving mechanism, substantially as described.

3. The combination of the board E, clip 3, and clip G, secured thereto, arm H, lock 7, pivotally secured to the edge of the board and adapted to engage with the arm, and suitable driving mechanism, substantially as described.

4. The combination of the board E, clip 3, and clip G, secured thereto, oscillating arm H, lock-lever 7, pivotally seated on the edge of the board and adapted to engage with the arm H, and adjustable gage 8, and suitable driving mechanism, substantially as shown, and for the purpose described.

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

ERASMUS DARWIN GAINES.

Witnesses:

JOHN G. MANAHAN,

ADDA E. WARD.