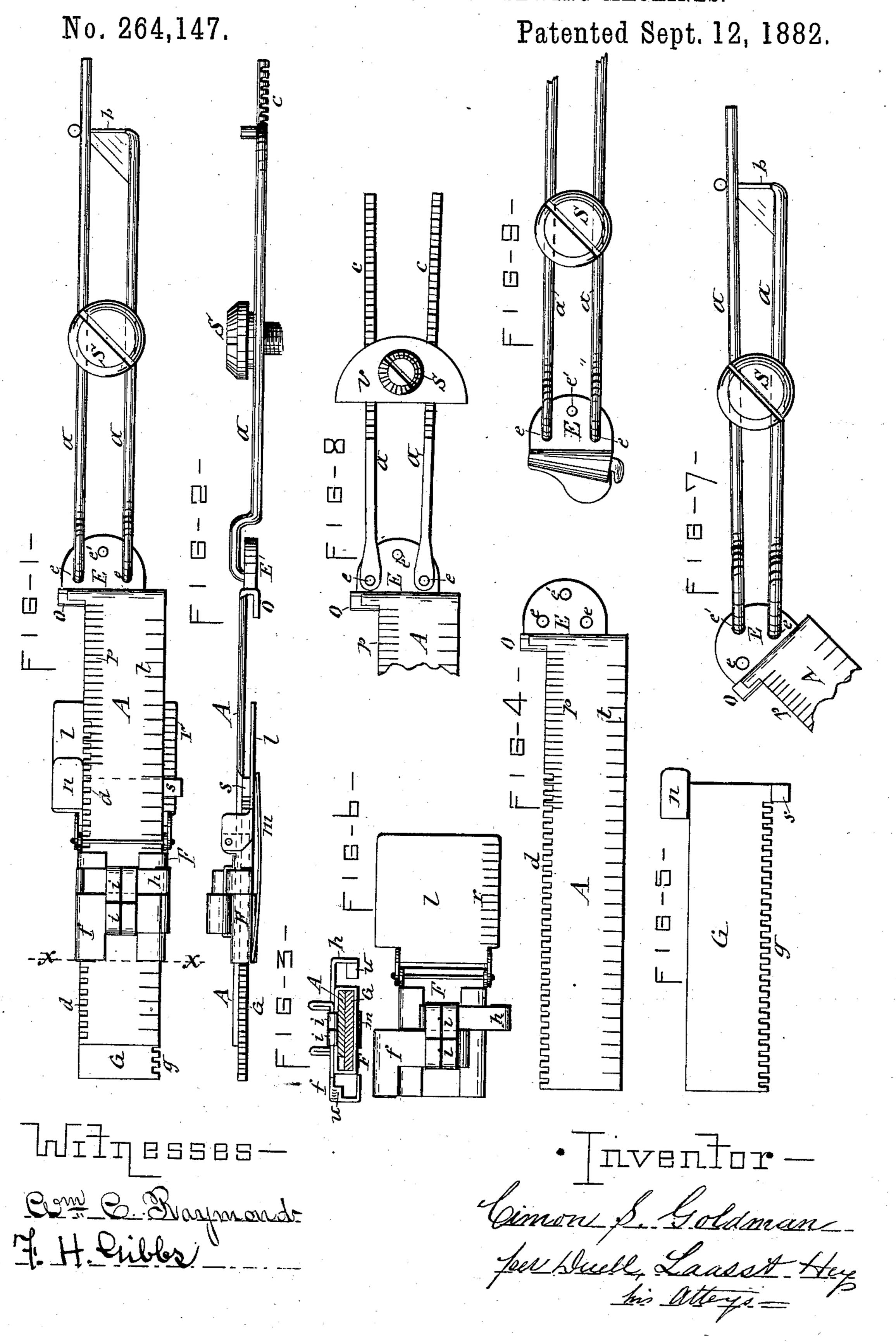
C. S. GOLDMAN.

PLAITING ATTACHMENT FOR SEWING MACHINES.



United States Patent Office.

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PLAITING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 264,147, dated September 12, 1882. Application filed July 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, CIMON S. GOLDMAN, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and 5 useful Improvements in Plaiting Attachments for Sewing-Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention consists, first, in improved devices designed to better secure a hemmer or tucker in its requisite operative position on a sewing-machine, and adapted for any location of the clamping screw with which sewing-ma-15 chines are usually provided for attaching hemmers and tuckers thereto; and, secondly, in a novel construction and combination of the constituent parts of the tucker, whereby the same is rendered more convenient and efficient in 20 its operation than others heretofore in use, all as hereinafter more fully explained, and specifically set forth in the claims.

Referring to the annexed drawings, Figure 1 is a plan view of my invention in its opera-25 tive position. Fig. 2 is an edge view of the same. Fig. 3 is a transverse section on line X X. Figs. 4 and 5 are detached plan views, respectively, of the main plate and the gageplate. Fig. 6 is a plan view of the clasp by 30 which the aforesaid plates are secured to each other adjustably in their relative positions. Fig. 7 illustrates the adaptability of my invention for the various locations of the thumbscrew or clamp-screw by which it is to be at-35 tached to the machine. Fig. 8 illustrates modifications of the means for attaching the tucker or hemmer to the sewing-machine; and Fig. 9 is a plan view of my improved attach. ing devices applied to a hemmer.

Similar letters of reference indicate corresponding parts.

A represents the main plate, provided on one end with the rigid transverse hook o for the reception of the edge of the tuck to be stitched, 45 as hereinafter more particularly set forth. Said plate has on its upper surface two graduated scales, p and t, one of which is on the rear edge and arranged from the hook o toward the opposite end of the plate, and preferably di-50 vided into spaces of one-sixteenth of an inch each. The other scale is at the front edge of the plate and divided into spaces of one-eighth inch each, the numbering of the latter scale l

beginning with number 1, directly opposite number 3 of the rear scale. The plate A is also 55 provided on one edge with a series of notches or ratchet-teeth, d, and the gage-plate G, which is situated underneath the main plate, is provided on the opposite edge with similar notches, g. The gage-plate G is movably connected to 60 the main plate A by means of a clasp, F, which encompasses the two plates, and is provided on its top with two ways, ii, preferably formed of lugs punched out of the edges of the clasp and bent over the top of the same. In the 65 said ways slide two plates, f and h, which overlap respectively opposite edges of the main plate and gage-plate, and are provided with a tongue, u, as best seen in Fig. 3 of the drawings, by which tongue they engage the notches 70

d and g of the plates A and G.

On the end of the clasp F, facing the hook o of the main plate A, is hinged a lip, l, which is somewhat wider than the main plate, so as to project at opposite edges thereof. The lip 75 l is pressed against the under side of the gageplate by a spring, m, secured to the under side of the clasp F and bearing with its free end on the bottom of the lip. The end of the gageplate G which lies between the main plate A 85 and $\lim l$ is provided with lateral extensions, one of which projects at the rear edge of the main plate, and has a forwardly-extended lip, n, which, in conjunction with the lower lip, l, forms the hook or groove for the reception of the 85 edge of either the hem of the garment or the tuck already formed. The other lateral extension of the gage-plate projects at the front edge of the main plate and forms a gage or indicating arm, s, its forward edge being even 90 with the end of the gage-plate and lying across a graduated scale, r, on the edge of the lip l, said scale being divided into one-sixteenthinch spaces, for the purpose hereinafter explained.

The main plate A is provided at the end adjacent to the hook o with the extension E, which has three means, e e e', for detachably connecting thereto two bars, a a. Said means may consist either of holes for receiving the hooked roo end of the bars, as shown in Figs. 1 and 2 of the drawings, or of studs or hooks for engaging an eye on the end of said bars, as represented in Fig. 8. The arrangement of the three attaching devices e e e' allows the bars to be 105 extended from the main plate, either in line

therewith, as shown in Figs. 1 and 8 of the 1 thicknesses of seams to pass underneath the drawings, or at an angle therefrom, as shown in Fig. 7, thus accommodating the device to the location of the clamp-screw S, with which 5 nearly every machine is provided. One of the bars a has a laterally-extended shoulder or ledge, b, and the other bar a lies across said shoulder, and is provided with a series of notches or a ratchet, c, adapted to engage with to the same. The clamp-screw S then being introduced between the two bars a a, and pressing one upon the other, firmly secures the same in the desired position. An equivalent arrangement is illustrated in Fig. 8 of the draw-15 ings, in which both bars are provided with a ratchet-face, and a washer, v, is placed astride the same, and has a downward flange engaging the ratchets of the bars, and the clamping-screw S passes through the said washer. 20 and firmly secures the same interlocked with the bars a a.

> It is obvious that the described attaching devices are applicable to a hemmer, as shown in Fig. 9 of the drawings, as well as to a tucker,

25 as before described.

The operation of my invention is as follows: The tucker is secured in position by connecting the bars a a to the main plate A and clamping said bars by the set-screw S, which enters 30 a hole in the top of the sewing-machine table. The width of the tuck to be formed is regulated by placing in range with the needle the mark of the scale p corresponding to the width of the tuck desired. The first tuck is gaged 35 by placing the hem of the garment against the end of the gage-plate G and between the lips ln, then spreading the fabric under the main plate and into the hook o thereof. The fabric is thus passed under the needle. The fabric 40 being maintained smooth under the main plate causes the row of stitches to be parallel with the edge of the garment and with the tuck in the hook o. When this is completed the fabric is removed from under the tucker. Then the 45 gage-plate is set at a distance from the hook o corresponding to the distance required between the tucks, the scale t on the main plate, in conjunction with the indicator s on the gage-plate, serving to indicate the said distance. Before 50 clamping the two plates A and G the clasp F is moved backward or forward to bring the end of the lip l the same distance from the end of the gage-plate as the distance from the seam of the tuck to the edge of the tuck already 55 formed, as aforesaid, the indicators being therefore set on the scale r of the lip l to correspond to the number of the scale p which was in range with the needle during the formation of the tuck. The parts being then locked in 60 their desired position by the plates f and h, the tuck is introduced between the lips l and n, the fabric again spread under the main plate and tucked into the hook o, and then passed under the needle in the manner aforesaid, thus 65 forming tucks of uniform widths with the great-

est facility and accuracy. The peculiar ar-

rangement of the flexible lip l allows different |

tucker without interfering with the operation $\mathbf{of:the:device.}$

It will be observed that owing to the arrangement of the main plate A, with its fixed hook o and gage-plate G, and adjustable lip l, I am enabled to form tucks of any desired width and at almost any distance apart. 75

Having described my invention, what I claim 1S--

1. In a hemmer or tucker attachment for sewing-machines, the combination, with the main plate A of said attachment, of two bars 80 connected therewith and interlocking ratchets applied to the free end of said bars and clamped by the attaching screw, substantially as set forth and shown.

2. The combination, with the main plate A, 85 of the bars a a, connected therewith at different points, and provided at their free ends with adjustable interlocking devices, and adapted to receive between them the attaching screw, substantially as set forth.

3. The plate A, provided with the ratchet d, in combination with the clasp F and the locking plate f, connected to said clasp and adapted to engage the ratchet of the plate A, as shown and described.

4. The combination of the main plate A and gage-plate G, provided respectively with ratchets d and g, the clasp F, encompassing said plates, and the locking-plates f and h, connected to said clasp and adapted to engage 100. the respective ratchets, substantially as described and shown.

5. In combination with the plates A and G, provided respectively with ratchets d and g, the clasp F, provided with the ways i i, and 105 the locking-plates f and h, sliding in said ways and adapted to engage the respective ratchets, substantially in the manner specified and shown.

6. In combination with the plates A and G 110 and clasp \mathbf{F} , the lip l, hinged on the latter, substantially as shown and described.

7. In combination with the plates A and G and clasp F, the hinged lip l and spring m, substantially as shown and set forth.

8. In combination with the main plate A, the gage-plate G, provided with the upper lip, n, and the clasp F, provided with the lower lip, l, substantially as shown and described.

9. The combination, with the main plate A, 125 provided with the hook o and scale p, of the clasp \mathbf{F} , the lip l, connected with said clasp and provided with the scale r, and the gageplate G, provided with the indicator s, all as shown and described, for the purpose set forth. 125

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 7th day of July, 1882.

CIMON S. GOLDMAN. [L. s.]

Witnesses:

C. H. DUELL, WM. C. RAYMOND.