(Model.)

H. FREEDMAN.

TUCKING GUIDE FOR SEWING MACHINES.

No. 414,149. Patented Oct. 29, 1889.

Fig. 1.

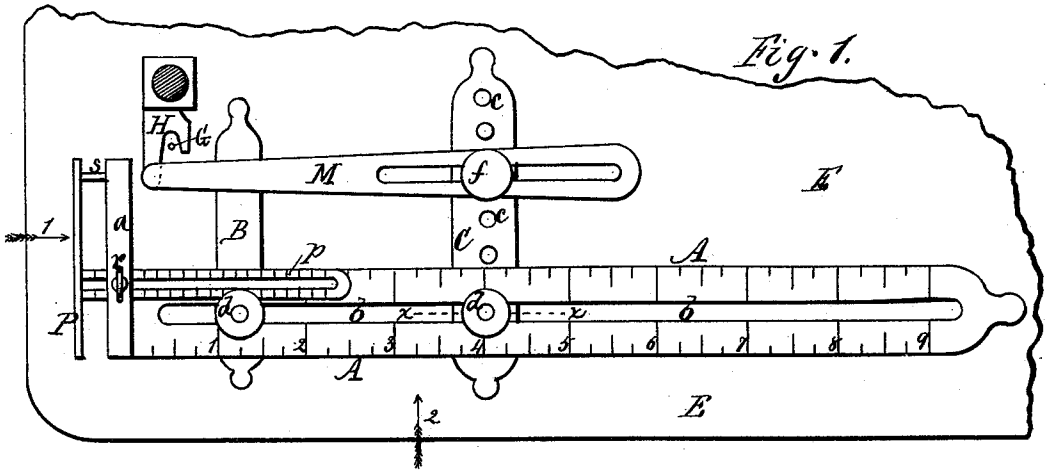


Fig. 2.

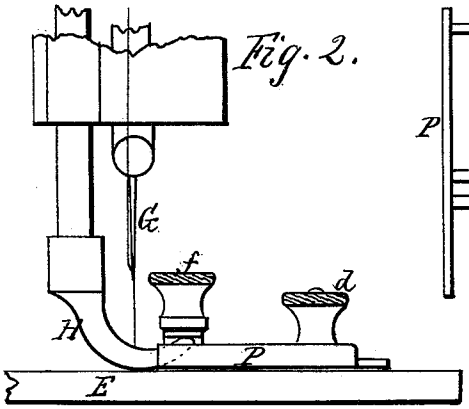


Fig. 4.

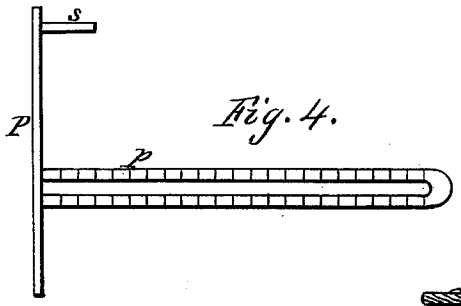


Fig. 5.

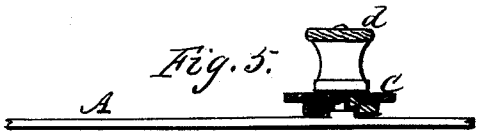


Fig. 8.

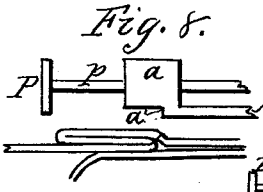


Fig. 3.

Fig. 6.

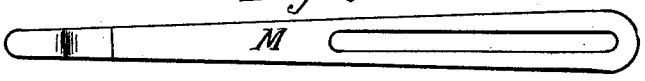
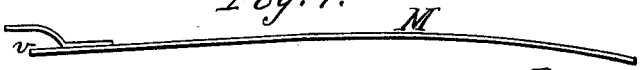


Fig. 7.



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Inventor.
Hayman Freedman,
by R. F. Osgood, Atty.

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

HAYMAN FREEDMAN, OF ROCHESTER, NEW YORK, ASSIGNOR OF ONE-HALF TO NATHAN STEIN, OF SAME PLACE.

TUCKING-GUIDE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 414,149, dated October 29, 1889.

Application filed February 10, 1887. Serial No. 227,203. (Model.)

To all whom it may concern:

Be it known that I, HAYMAN FREEDMAN, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Plaiting Attachments for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this application.

This invention relates to an attachment for plaiting thick and heavy goods—for example, woolen cloths made up into children's garments, ladies' cloakings, &c.—and is of especial value in clothing-manufactories. It has been found that ordinary plaiters—such as accompany sewing-machines and are used for plaiting light goods—will not answer this purpose; hence it is the practice in clothing-manufactories to do the work by hand, first marking the plaits with a measure, then folding and basting the plaits, and finally stitching the same, each operation being complete in itself. It is the object of my invention to obviate these difficulties by producing a device by which the work can be done in a more expeditious, effective, and accurate manner; and my invention consists of a device constructed, arranged, and operating as follows.

In the drawings, Figure 1 is a plan view of the plaiting device attached to the bed-plate of a sewing-machine, showing also a cross-section of the needle-bar and presser-foot. Fig. 2 is a side elevation of Fig. 1, looking in the direction of arrow 1, Fig. 1. Fig. 3 is an edge elevation of Fig. 1, looking in the direction of arrow 2, Fig. 1, showing also a piece of cloth with a series of plaits formed thereon. Fig. 4 is a plan view of the guide-bar removed from place. Fig. 5 is a cross-section in line $x\,x$ of Fig. 1. Figs. 6 and 7 are a top view and edge view, respectively, of the pressing-spring. Fig. 8 is a detail view.

A indicates the body of the device, the same consisting of a metal strap or plate provided at its left-hand end with a cross-head a, having on the under side a small downwardly-projecting rib or shoulder a', that forms a guide, and also provided with a slot b for the attachment of the gage-bar and attaching-bar, hereinafter described. The upper face of the plate A is laid out with a scale of inches and subdivisions, as shown.

B is a gage-bar, and C an attaching-bar, both standing at right angles to the plate A and secured thereto on the under side by screws, on which are screw clamping-nuts $d\,d$. These bars are adjustable laterally on the plate A to any desired position by simply loosening the nuts and sliding them along.

The attaching-bar C is provided with a series of holes $c\,c$, through any of which passes a thumb-screw f to attach the bar fast to the bed-plate E of the sewing-machine, which bed-plate is always provided with a hole to receive the screw. The holes in the attaching-bar enable it to be fitted to the different holes of bed-plates, which are located in different positions, and also enables the cross-head a to be adjusted laterally to the proper position relatively to the needle G and presser-foot H.

The object in adjusting the gage-bar B laterally on plate A is to produce different widths of plaits, as will presently be described. The square edge of the gage-bar next to the needle serves as the shoulder or guide for the loose folded edge of the cloth to run against.

P is a guide-bar, consisting of a thin strip of metal standing on edge and parallel with the cross-head a, being usually made of the same length. It has a slotted arm p, which passes through a slot in the cross-head and rests over the top of plate A, as shown in Fig. 1, and it is held at any adjustment, out or in, by a clamping-screw r. The top of the guide-arm p is also marked with a scale, usually in one-eighth inches. The guide-bar P has a pin s, which rests in a hole in the cross-head a, the object of which is to keep the guide-bar parallel with the cross-head at all adjustments and keep it from turning or twisting.

The operation is as follows: A plait is first formed in the cloth and turned over to the left and the cloth is folded double, so that the loose folded edge rests in against the edge of the gage-bar B. In this condition the guide-bar P rests at the left outside of and against the turned-over edge of the plait already made, and the shoulder a' of the cross-head

a rests on the inside of said plait against the ridge formed by the stitching, the plait being thus embraced between the guide-bar and cross-head. In this condition the plait already formed will run along between the guide-bar and cross-head, being guided thereby, and as it moves along will form the guide to the loose folded edge of the cloth that runs against the gage-bar B. If the plait already formed is straight, the loose folded edge will also run straight, and the stitching which is being made by the needle half-way between the cross-head *a* and gage B will also be straight. In this manner one plait after another can be rapidly made of the same size perfectly uniform and regular, it only being necessary to shift from one plait to the succeeding one as the work goes along. Different widths of plaits can be made by adjusting the guide-bar P out or in and correspondingly adjusting the gage-bar B, the scales on the plate A and arm *p* allowing this to be done with great facility.

The great advantage in this invention is that the plait already made is the guide for making the next one.

M is a slotted spring attached to the bed-plate E by the clamping-screw *f*, its outer end resting on the toe of the presser-foot H and provided with a point *v*, that bears on the cloth to keep its folded edge in contact with the edge of the gage-bar B. It is raised at each rise of the presser-foot, which allows the goods to be fed along. This spring can be made of any desired length, according to the distance of the clamping-screw from the presser-foot.

w is a small block of metal forming a washer, which is placed between the plate A and attaching-bar C. When the needle-plate of the machine stands above the surface of the bed-plate E, it serves simply to raise the plate A on a level with the needle-plate.

Having described my invention, I do not claim, broadly, an adjustable guide for controlling the width of the tuck; but

What I claim as new, and desire to secure by Letters Patent, is—

1. In a tucker for sewing-machines, the combination of the bar A, slotted so as to be adjusted forward and back, the cross-head *a* on one end of the bar extending inward at right angles to a point nearly opposite to the needle and provided on its under side with a shoulder *a'*, that forms the guide on the inner side of the tuck, and the guide-bar P, consisting of a slotted shank *p*, passing through a slot of the cross-head *a*, and an outer cross-head of the same length and parallel to the cross-head *a*, forming the guide on the outer side of the tuck, as herein shown and described.

2. In a tucker for sewing-machines, the combination of the bar A, provided with the right-angled cross-head *a*, the guide-bar P, provided with a cross-head parallel to cross-head *a*, the bars B and C, attached to plate A and adjustable out and in, and the spring M, attached to bar C and resting on the toe of the cloth-presser, as shown and described, and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HAYMAN FREEDMAN.

Witnesses:
LUDWIG STEIN,
R. F. OSGOOD.