

(No Model.)

H. HITCHCOCK.
SEWING MACHINE GAGE.

No. 332,526.

Patented Dec. 15, 1885.

Fig. 1

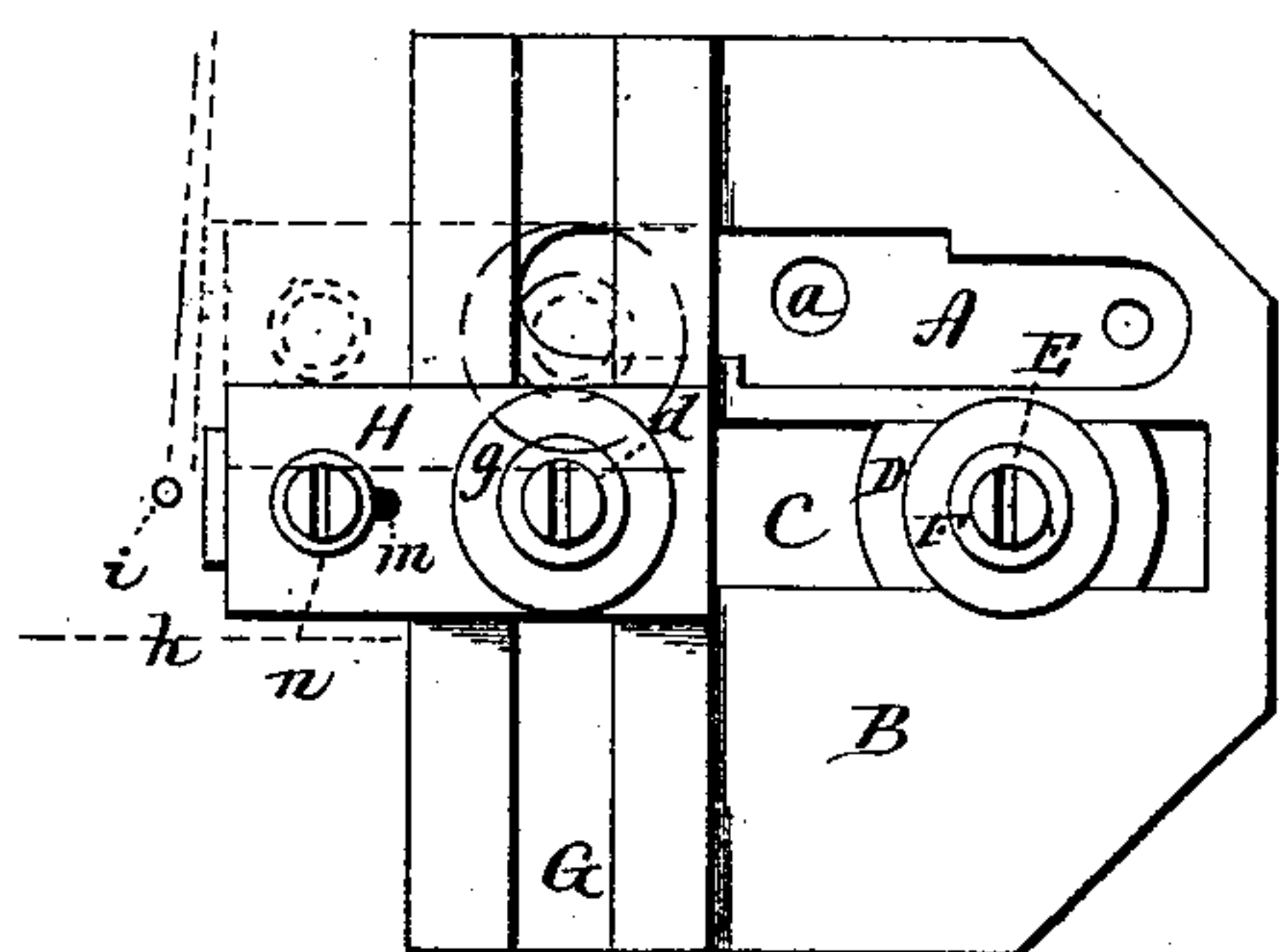


Fig. 3

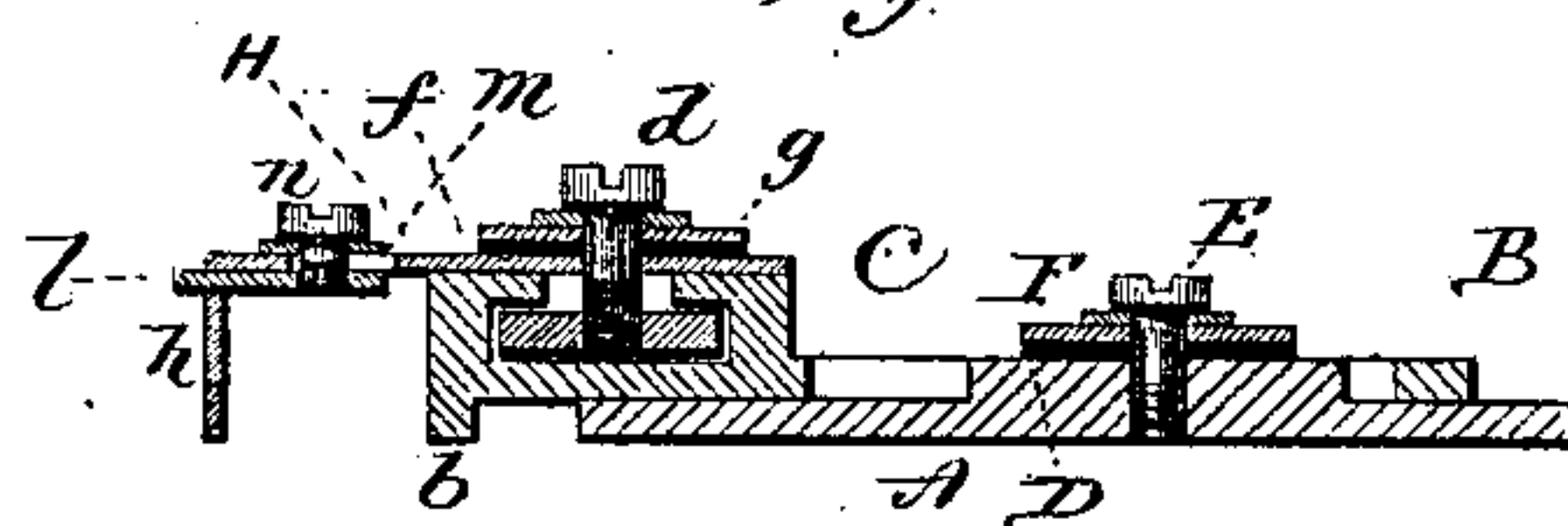


Fig. 2

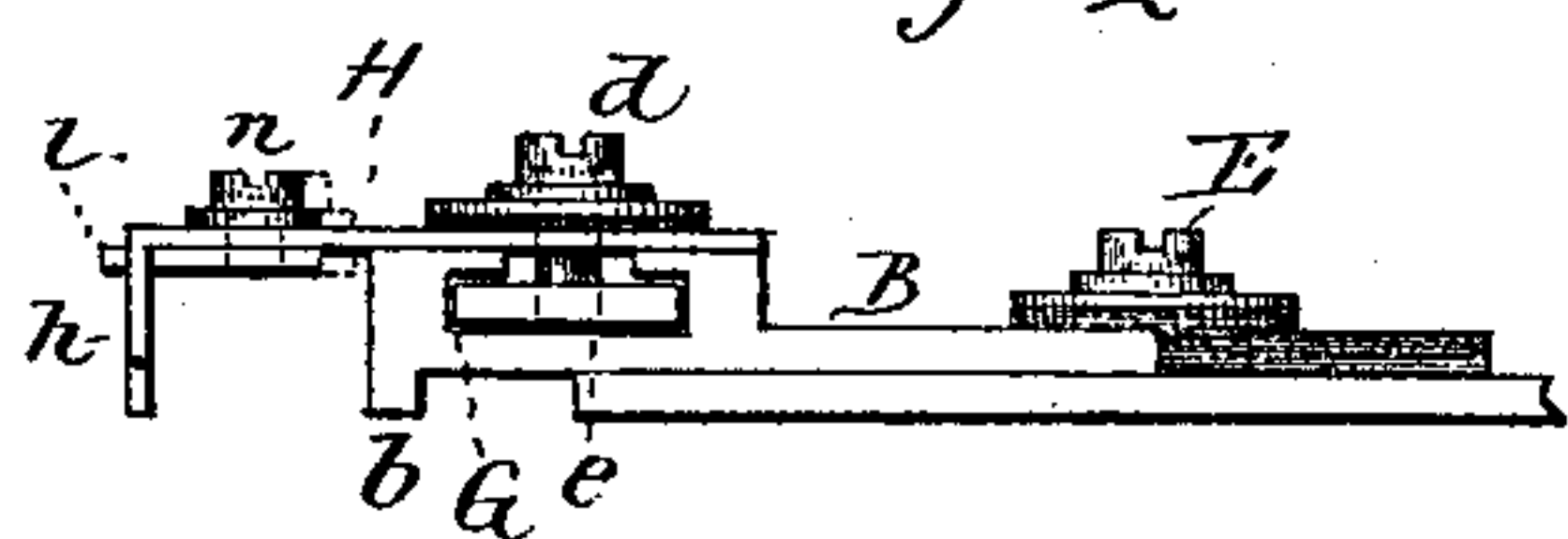
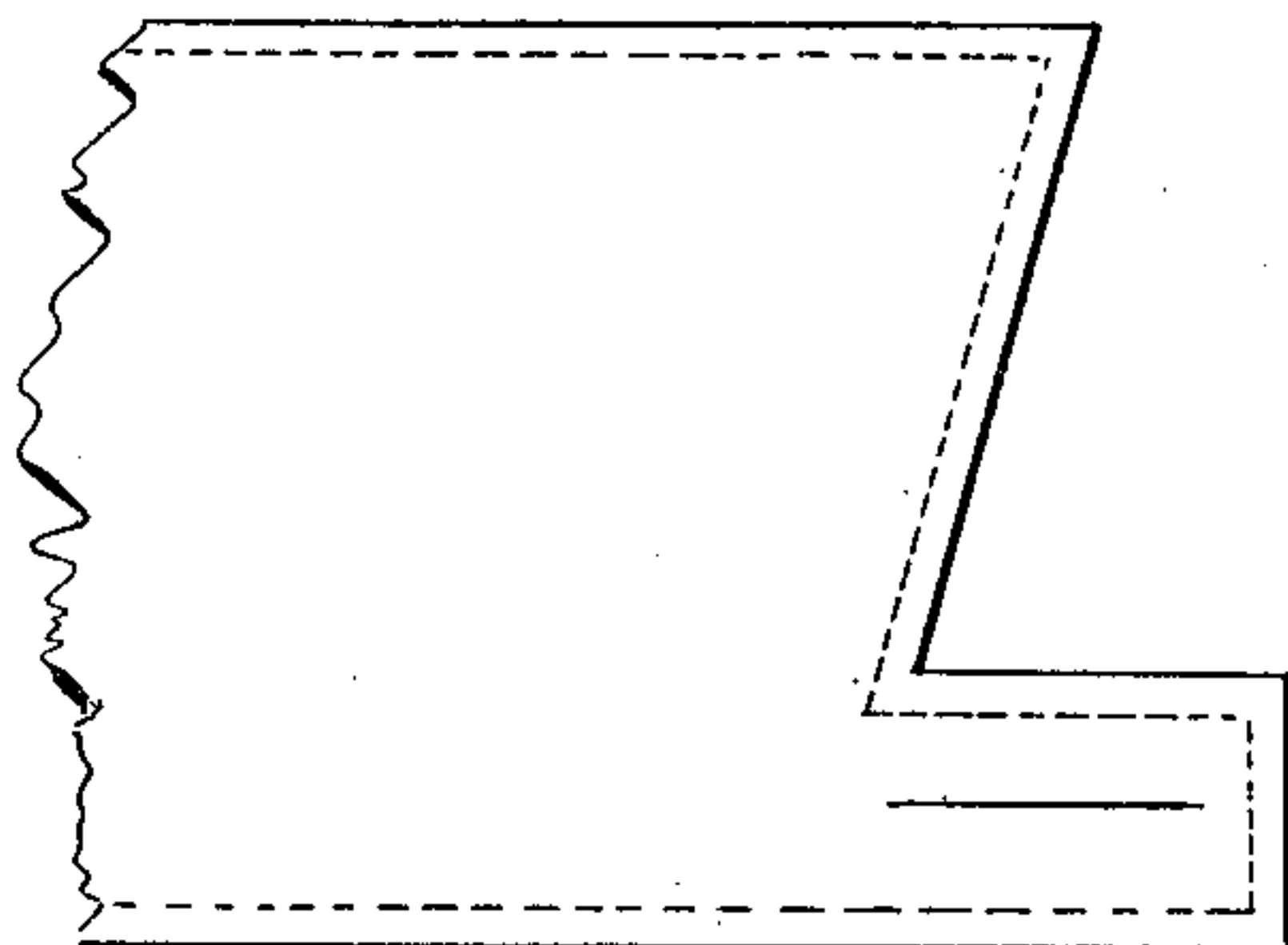


Fig. 4



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SEWING-MACHINE GAGE.

SPECIFICATION forming part of Letters Patent No. 332,526, dated December 15, 1885.

Application filed March 30, 1885. Serial No. 160,576. (No model.)

To all whom it may concern:

Be it known that I, HENRY HITCHCOCK, of New Haven, in the county of New Haven and State of Connecticut, have invented new Improvements in Sewing-Machine Gages; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a top or plan view of the guide; Fig. 2, a front edge view; Fig. 3, a transverse central section; Fig. 4, a portion of a collar to illustrate the use of the invention.

This invention relates to the construction of a gage to be applied to sewing-machines for running lines of stitches near the edge of articles as a finish for the edge, with special reference to the manufacture of collars and like articles where an internal angle occurs in the line of stitching, such as seen in Fig. 4. This angle occurs in a collar at the front end, and is formed by the end and the tab or extension for the button-hole. For straight stitching of this character a plain straight fixed guide is all that is required on the machine; but on the end as the work approaches the angle the guide stands in the way of the work—that is, the tab will strike the end of the guide, so that the guide must be removed before the line of stitching can extend down to the angle, turn the angle, and pass onto the tab, leaving that portion of the work to be done by the operator without the guide.

The difficulties attending the stitching of the internal angle on collars is the same on other articles where a like angle occurs.

The object of my invention is the construction of a guide which will act as a guide close down to the angle, and avoid the hand-guiding necessary in the common construction of guides; and my invention consists in the construction of the guide, as hereinafter described, and more particularly recited in the claims.

A represents the plate, which is adapted to be secured to the work-plate of the machine, say, by means of a screw through the hole *a*, which may enter the usual guide-screw hole. Upon this plate A a second plate, B, is arranged, its working edge having a downwardly-projecting flange, *b*, corresponding

to the thickness of the plate A. In the plate B is a transverse slot, C, which sets over a corresponding rib, D, on the plate A, to serve as a guide for the movement of the plate B. The plate B is secured in its place by a screw, E, in the plate A, and brought to bear upon a collar, F, which collar extends over onto the surface of the plate at the edges of the slot C, and so that the plate B may be firmly held upon the plate A, as indicated in Fig. 3, but yet be adjusted thereon transversely—that is, from right to left or left to right, as the case may be—the flanged edge of the plate B being toward the needle and substantially parallel with the path of the feed. Longitudinally on the plate B, and near its working edge, is an inverted-T-shaped groove, G. Over this groove the guide H is placed, and through it a screw, *d*, is introduced into a nut, *e*, in the groove below, and so that the guide H may be clamped to the plate B. This should be done under a yielding pressure, and, as here represented, may be by the introduction of an elastic washer, *f*, beneath a hard washer, *g*, upon which the head of the screw *d* bears, as seen in Fig. 3, and so that the guide may be easily moved longitudinally in the groove, this groove, however, preventing its transverse movement. The outer end of the guide H is turned downward, as at *h*, into close proximity with the work-plate. This turned-down end *h* is the guiding-surface against which the work is to run in stitching, and it is in width only sufficient for a practical guide. The slot in the plate B permits its adjustment to the right and left, so as to bring the guide H nearer to or farther from the needle, as occasion requires, while the longitudinal groove G permits the movement of the guide H forward and back.

Thus constructed the device is applied to the work-plate of the machine, and the guide H adjusted the proper distance from the needle, according to the line of stitches to be run.

In Fig. 1, *i* represents the needle. The work will pass along beneath the needle and against the guide H, say, until the inner angle comes against the guide H. Now, were not the guide H movable in the longitudinal grooves G, the stitching could not be finished to the angle without the removal of the guide; but so soon as (say, in case of a collar) the tab reaches the

guide H, and would naturally stop, the operator, placing the finger upon the guide H, moves it as the work progresses until the extreme angle of the work is reached—say, as indicated in broken lines, Fig. 1. Thus the guide has been in position to govern the relation of the edge of the work to the needle to the extreme angle or turning-point. Then to turn the angle around onto the tab (in the case of a collar) the guide H is moved in the opposite direction until the work may be turned, so as to bring the guide against the tab; then the work will progress as before, the operator moving the guide until it is returned to its normal position, as seen in Fig. 1.

This illustration of the guide as applied to stitching the angle in the collar will be sufficient to enable those skilled in the art to stitch like internal angles in other work. In work where the line of stitching is at some distance from the edge—as in collars, cuffs, and like work—the extreme edge is liable to turn up against the guide and permit the work to approach the guide, so as to make the line of stitching irregular. To avoid this turning up and hold the work flat, I apply to the guide H a transverse slide, *l*, which is introduced through an opening in the downward projection *h*, and into it through a slot, *m*, in the guide a screw, *n*, is set, so as to hold it with sufficient friction that it may be moved out or in, and yet retain its place in either position.

In the drawings the guide is shown as thrown out to lie over the edge of the work and prevent its turning up, as before mentioned; but it may be drawn inward, as indicated in broken lines, Fig. 2, when not required for use.

While I prefer the plate A as a part of the attachment, it may be omitted, and the plate B applied directly to the work-plate.

The guide H may be entirely removed, and the plate B used as an ordinary guide for the sewing-machine.

I claim—

1. The herein-described gage for sewing-machines, consisting of the plate B, constructed with a transverse slot, C, through which it is adapted to be adjustably secured with relation to the needle of the machine, said plate also constructed with a T-shaped longitudinal groove, G, the guide H, arranged transversely over said groove, secured in said groove, and so as to be movable longitudinally on said plate B, under the advancing movement of the work, substantially as described.

2. The combination of the plate B, constructed with the transverse slot C, through which it is adapted to be adjustably secured with relation to the needle of the machine, said plate also constructed with a T-shaped longitudinal groove, G, the guide H, arranged transversely over said groove, made longitudinally adjustable therein, with the movable slide *l* in said guide H, the said slide adapted to be projected from said guide above the work, substantially as described.

3. The combination of the plate A, constructed for attachment to the work-plate, the plate B, constructed with the transverse slot C, and through which it is adjustably secured to said plate A, the said plate B also constructed with a T-shaped longitudinal groove, G, the guide H, arranged transversely over the groove G, and made movable longitudinally therein under the advancing movement of the work, substantially as described.

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Witnesses:

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