

(Model.)

H. FISHER.

GAGE ATTACHMENT FOR SEWING MACHINES.

No. 258,736.

Patented May 30, 1882.

Fig. 1

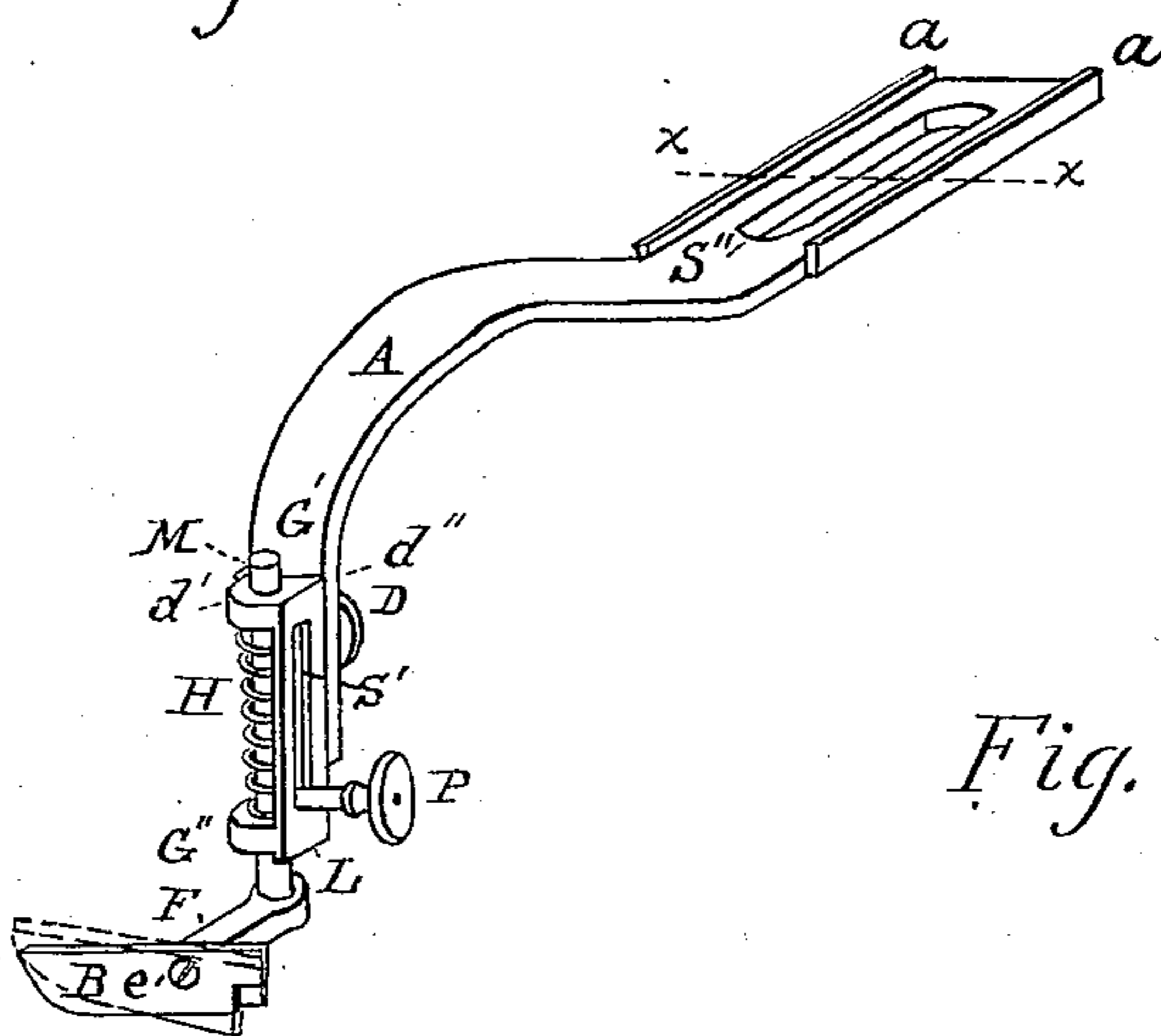


Fig. 2

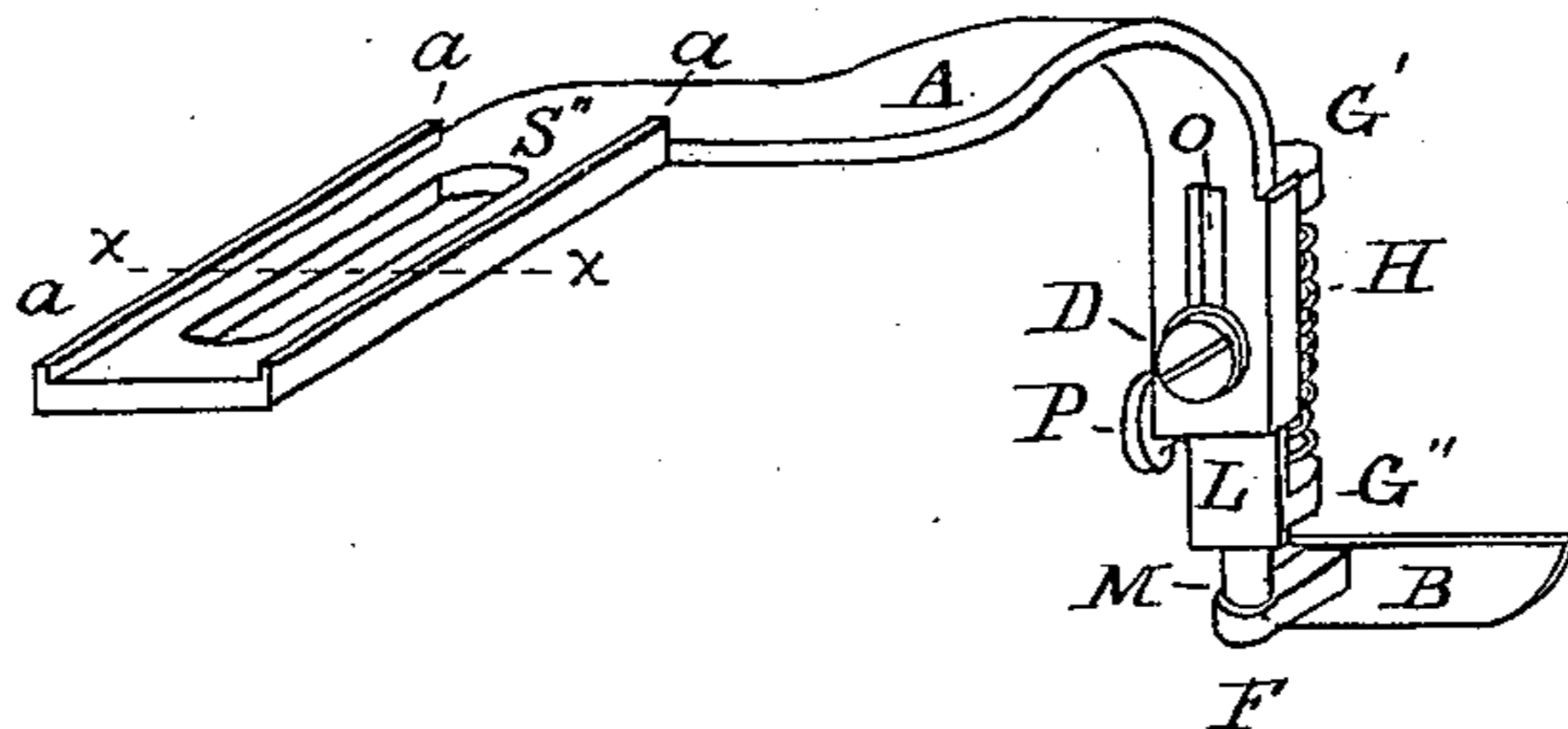
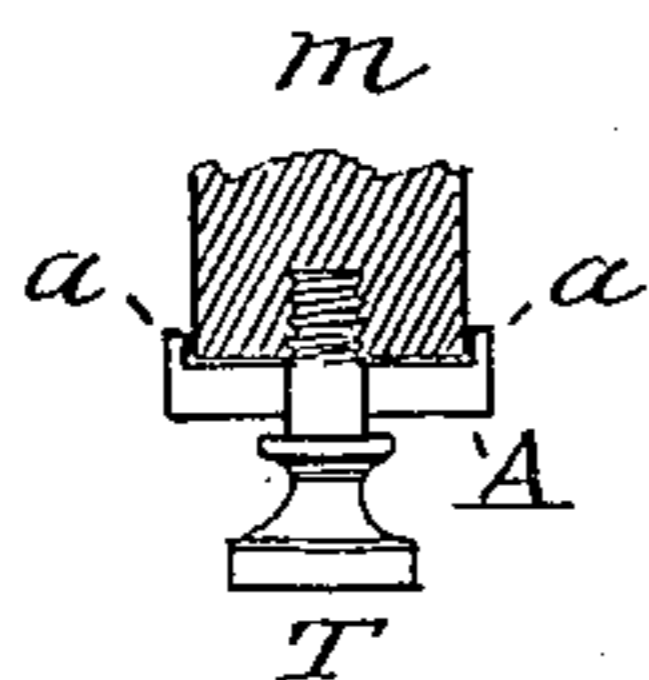


Fig 3



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UNITED STATES PATENT OFFICE.

HORACE FISHER, OF TROY, NEW YORK.

GAGE ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 258,736, dated May 30, 1882.

Application filed October 31, 1881. (Model.)

To all whom it may concern:

Be it known that I, HORACE FISHER, of the city of Troy, county of Rensselaer, and State of New York, have invented a new and useful
5 Improvement in Gage Attachments for Sewing-Machines, of which the following is a specification.

My invention relates to that class of devices which are attached to sewing-machines to guide
10 the fabric beneath the needle, so as to produce a line of stitching parallel to the edge of the fabric, or parallel to another seam along which the gage may guide the fabric, and the object of my improvement being to make the gage
15 automatically adjustable.

My invention consists in combining with a gage plate or blade a helical spring and mandrel, with the latter attached to the foot at right angles where the foot joins the blade,
20 and the mandrel constructed with a guideway formed in an offset from the gage-leg, and which guideway serves as a stop for the spring, the several parts being arranged to provide for the vertical adjustment of the gage-blade
25 automatically.

Another feature of my invention consists in combining with the foot and gage-blade a pivoted connection, on which the blade may rock longitudinally to adjust itself to the surface of
30 the fabric when the gage-blade is used to guide the fabric passed beneath its edge and along a seam or another row of stitching.

In the accompanying drawings, forming a part of this specification, there are three figures illustrating my invention, and in all of which the same designation of parts by letter-reference is used.

Figure 1 shows in perspective a front view of my improved gage. Fig. 2 illustrates in perspective a rear view of the gage. Fig. 3 shows
40 a vertical section taken on the lines *xx* of Figs. 1 and 2 and through the center of the projection on the under side of the sewing-machine arm, to which the gage attaches by means of
45 a set-screw.

The several parts of the device are designated by letter-reference as follows:

The letter A indicates the gage-frame, L its downwardly-projected leg, and F its foot.

50 S'' indicates a slot formed in the end of the

gage-frame, and *aa* guides formed on the frame at the sides of the slot S'' to receive the projection *m* upon the under side of the sewing-machine arm; and T designates a set-screw which, by means of its passage through the
55 slot S'', securely attaches the gage-frame to the sewing-machine projection *m*, the object of the guides *a a* being to keep the gage-frame at a proper angle and to prevent its turning on the set-screw when the machine is being
60 operated.

The letters G' and G'' indicate two projections formed on the side of the leg L, the projections being constructed with an opening for the sliding vertical passage of the mandrel M,
65 which is placed within the helical spring H, and the latter so placed with reference to the two projections G' and G'' to work between them.

At S' there is indicated a slot which is formed
70 in the leg L, and at P a finger-button attached to the end of a rod or pin, which passes through the mandrel M and between the coils of the helical spring at the bottom of the latter to guide the spring to the mandrel. The letter
75 B indicates the gage-blade, which, upon its side face, is pivoted to the horizontal foot F, as shown at *e*.

The letter O designates a slot formed in the side of the leg L, and D indicates a set-screw
80 by means of which the two parts *d'* and *d''*, which form the leg L, may be lengthened to increase and shortened to decrease the pressure of the blade upon the table or fabric as actuated by the spring H.
85

The operation of the parts thus constructed to form a gage for guiding fabric being sewed beneath the needle is as follows: The blade B being horizontally connected with the foot F and the latter with the mandrel M, the mandrel being pinned to the spring H, when the blade B is raised it is moved against the force of the spring by the action of the connected parts, and from the same force of the spring the blade is kept down upon the table or the
90 fabric placed beneath it, with the pressure of the spring made adjustable by means of the slot O and the set-screw D. The blade of the gage thus combined with the mandrel and spring has a prompt and efficient means pro-
100

vided for its vertical adjustment automatically when the fabric is being passed beneath it, and by means of the pivoted connection made between the blade and the foot the end of the
5 blade will rise to pass over cross-seams or uneven places in the material being sewed.

I am well aware that gages have been made in which the gage - frame itself acted as a spring; but these differed from mine in the fact
10 that I employ a rigid frame with the spring and blade acting independently of the frame.

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

15 1. In a gage attachment for sewing-machines, the combination of a horizontal blade, B, pivotally connected to a foot, F, a connecting-mandrel, M, and surrounding coil-spring H, substantially as described.

2. In a gage attachment for sewing-machines, 20 the combination of the horizontal blade B, pivotally attached to the foot F, the mandrel M, with coil-spring H, the leg L, with perforated projections G' G'', and the slot S', and pin and button P, substantially as shown and set forth. 25

3. In a sewing-machine gage attachment, the combination of the frame A, with slotted ends, the slotted member L, with perforated projections G' G'', mandrel M, surrounding coil-spring H, foot F, and pivoted gage-plate 30 B, substantially as and for the purpose set forth.

Signed at Troy, New York, this 19th day of October, 1881.

HORACE FISHER.

Witnesses:

GEO. S. DEXTER,

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