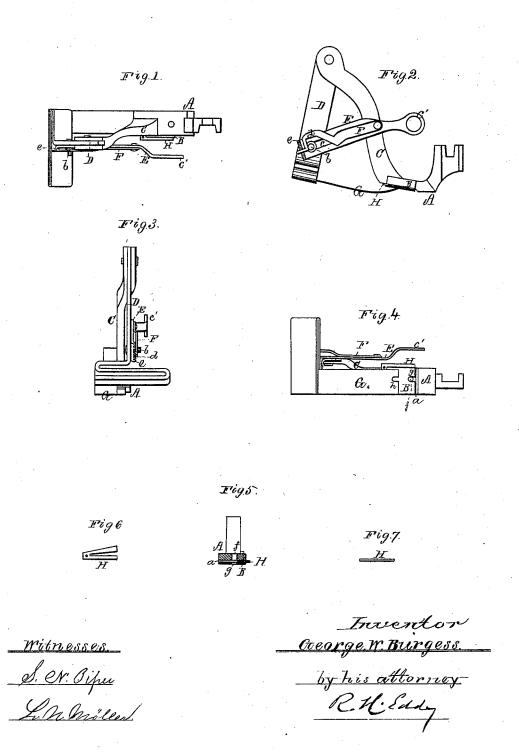
G. W. BURGESS. Rufflers for Sewing-Machines.

No. 200,431.

Patented Feb. 19, 1878.



UNITED STATES PATENT OFFICE.

GEORGE W. BURGESS, OF SKOWHEGAN, MAINE.

IMPROVEMENT IN RUFFLERS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 200,431, dated February 19, 1878; application filed July 17, 1877.

To all whom it may concern:

Be it known that I, George W. Burgess, of Skowhegan, of the county of Somerset and State of Maine, have invented a new and useful Improvement in Rufflers for Sewing-Machines; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which-

Figure 1 is a top view, Fig. 2 a front elevation, Fig. 3 an end elevation, Fig. 4 an underside view, and Fig. 5 a transverse section, of a ruffler of my improved kind. Fig. 6 is a top view, and Fig. 7 an edge view, of the gage, to be hereinafter described.

The said improved ruffler is intended to be applied to the presser-foot bar of a sewingmachine, a presser-foot, in my construction of ruffler, constituting part thereof.

In the drawings, A denotes the said foot, which, recessed in its bottom, has extending from and underneath it, in manner as shown, a plate, B, between which and the lower part of the foot is a narrow space, a, which I term a "third place" for the cloth.

From the said foot a bent arm, C, projects,

in manner as shown, and has hinged to it at its upper end a pendulous bar, D, bent in manner as shown in Fig. 3. From the vertical part of the said bar D a stud, b, extends into a slot, c, made in a bar, E, provided at its inner end with an eye or hole, c', to receive the screw of the needle-bar of a sewing-machine; in order to pivot the said arm to such needle-bar.

To the bar E is jointed a latch, F, having a trapezoidal recess, d, in it, as shown, and being properly shaped to catch into a small toothed rack, e, projecting from the bar E at

its outer end.

By moving the notched bar F more or less upward on the bar E the extent of movement of the stud in the slot may varied, in order to vary the movement of the bar D, from whose lower part a ruffling-spring, G, extends to and underneath the presser-foot.

The passage for the needle is shown at f. The plate B is notched, as seen at g, the ruffling-spring being similarly notched, as represented at h.

The amount the ruffler shall gather at any time during each advance of it is determined by the latch F.

By means of my improved ruffler the work while being sewed may be gathered and faced.

The furcated gage shown at H in Figs. 1, 2, 4, 6, and 7, and placed on the plate B, in manner as shown, is to gage the cloth, so that the stitching shall come near the edge thereof.

When it is not desirable for the stitches to

so appear this gage is not to be used.

In the above-described ruffler I have what I term a "third place"—that is, the narrow space a—for the cloth, whereby one can gather a piece of cloth between two other pieces; or one can gather, sew, and face cloth at one and the same time.

With the said ruffler one can readily see the

work as it progresses.

In using the ruffler, the piece to be gathered or ruffled goes into the lower opening of the pendulous bar, and thence between the plate B and the ruffling-spring. The upper piece of cloth, folded at its edge, extends a short distance over the piece to be ruffled and into the space a. The lower or facing piece of cloth goes underneath the ruffler, all of which will be readily understood by persons skilled in the use of sewing-machines and rufflers there-

1. The combination of the presser-foot A, the arm C extended therefrom, the bent pendulous and studded bar D, the spring G, and the slotted bar E, provided with the toothed $\operatorname{rack}\,e\,$ and the recessed latch F, all arranged

and applied substantially as set forth.2. The presser-foot A and the plate or projection B, arranged therewith so as to form between them the third place or passage a for the cloth, as set forth, in combination with the arm C, pendulous bar D, spring G, and the slotted bar E, provided with the toothed rack e and the recessed latch F, all being substantially as specified.

3. The combination of the furcated gage H, as described, for use with the ruffler, provided with the recess a, arranged with the presser-

foot A, as set forth.

GEORGE W. BURGESS.

Witnesses:

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T. H. DINSMORE.