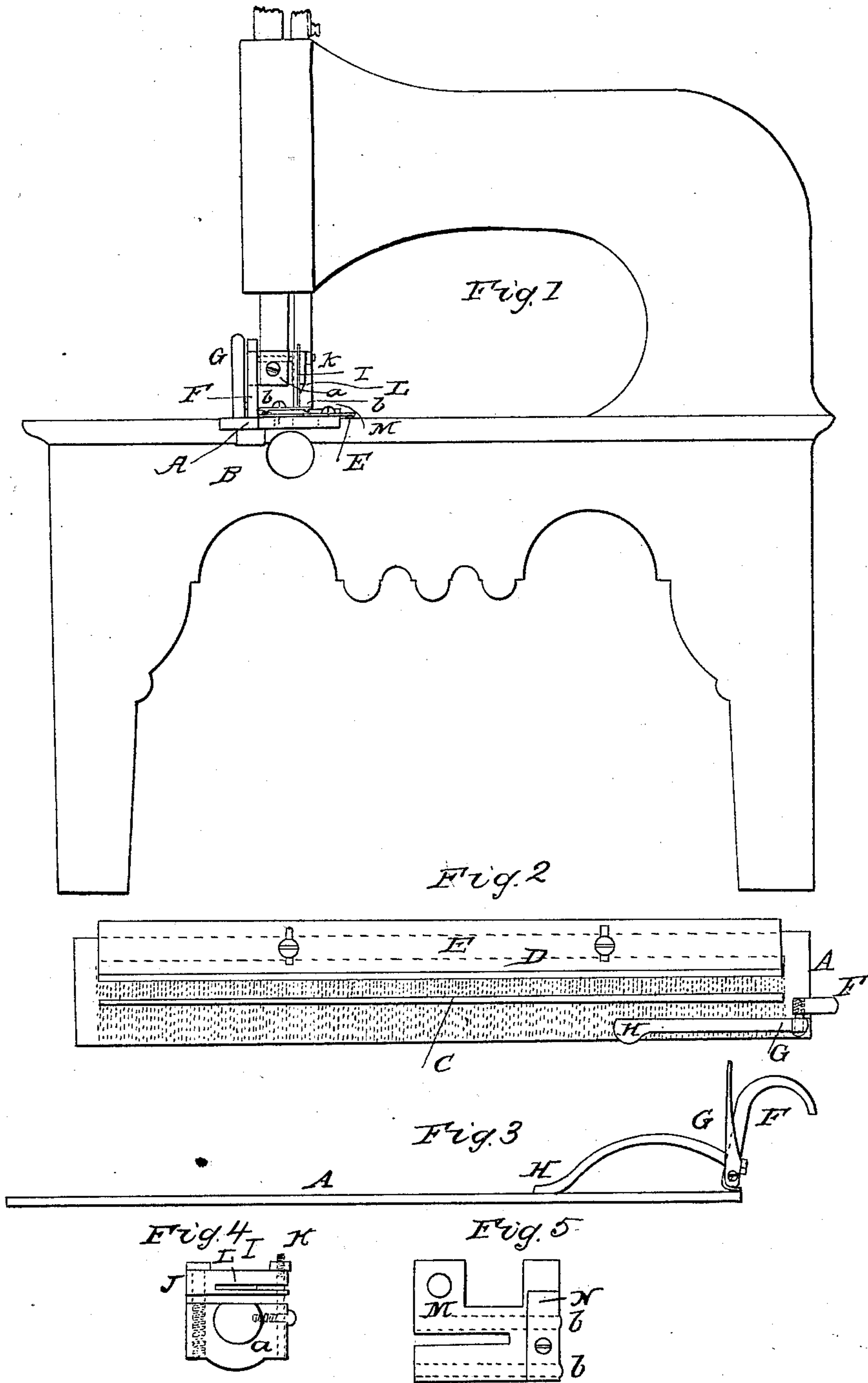


J. W. MARSH.
Sewing Machine.

No. 18,511.

Patented Oct. 27, 1857.



UNITED STATES PATENT OFFICE.

JOHN W. MARSH, OF OXFORD, MASSACHUSETTS.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 18,511, dated October 27, 1857.

To all whom it may concern:

Be it known that I, JOHN W. MARSH, of Oxford, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Sewing-Machines, to enable them to trim welt-seams at the same time that they are sewed, or to sew-lap seams or others with double rows of stitches, with facility; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, due reference being had to the accompanying drawings by the letters marked thereon, in which drawings—

Figure 1 shows a side view of a machine with my improvements; and Figs. 2, 3, 4, and 5 show parts of the same, hereinafter to be described.

To construct my improvements, make a slide, A, and fit it to slide in a groove in the frame B, the slide having a rack on its under side to fit the gear, if the machine has a gear-feed motion, (the racks not being necessary if what is known as the "awl-feed" or "needle-feed" is used,) and having a slot, C, as shown in Fig. 2, for the needle to pass through, and near that another, D, through which the knife passes to cut when used. A guard, E, is fitted to the slide by screws through slats, to allow its being set such distance from the needle as it is wanted to sew from the edge of the work, and a stem, F, is put into the slide to draw it back to begin anew. By the side of this is placed a spring-lever, G, which holds a pad, H, on its arm pressed on to the work or slide. To the needle or awl holder is attached the head (shown in Fig. 4) *a*, being fast to the holder, and I is a knife-carrier, the screw J making it adjustable either toward or from the needle or awl, and K, with its nut, secures the knife L, and serves as a guide to I by passing through *a*. The knife L may be of the form shown in Fig. 3 when it is desired to have it cut when going down, the slope of the knife being reversed to cut when rising, as in awl or needle feeding machines.

Fig. 5 shows a view of the foot-piece M, with its sliding needle N and spaces necessary for the needle and knife to work through, and has on its under side two grooves to allow the stitches of the first row to pass on either side of the needle without being flattened when sewing the second, the slide having two points, *b b*, to guide the work by to make the seams parallel.

The other parts of the machine may be of

most any of the various forms in common use on boot or shoe work, and on that account a more particular description is not deemed necessary.

The operation is for sewing and trimming a welt-seam: The slide A is drawn back and the work placed thereon. The guard E being set, if used, the end of the work being held under the foot-piece M and the other under the pad H, the knife L being set the distance from the needle that it is wanted to trim the work, it works with the needle or awl, cutting or trimming the work as fast as the slide is fed along. To sew a lap-seam, the knife is removed, and the first or lower piece laid on the slide with its edge against the guard E, which forms a guide for it, and the other piece is laid over both the guard and the first, and one or both are held by the pad H and foot-piece M, as before. In this kind of a seam the guard E is of great utility, as without it it is almost impossible for the workman to keep the under piece in place to make true work. In sewing a second row of stitches the slide N is set to show by one of its points *b* the proper distance, and the first seam is guided to it by the workman.

The slide A and its guard E are more particularly adapted to straight work, but can be used with curved by the workman guiding the work, while the knife trims equally well on curved or straight work, and the adjustable guides *b b* on the foot-piece M are particularly useful in curved work.

I do not claim the use of a slide for a feed-motion irrespective of its form and accompaniments; but

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

1. The combination of the slide A, provided with the slots C D, guard E, and pad H, with the foot-piece M, with its guide N and slots, arranged and operating substantially as described.

2. The combination of the slide A and foot-piece M with the knife, and needle-holder, as constructed and arranged, for securing and trimming the work while being sewed in its passage through the machine.

In witness whereof I hereunto set my hand in the presence of two witnesses.

JOHN W. MARSH.

Witnesses:

GEORGE C. WEBBER,
J. HENRY HILL.