2 Sheets—Sheet 1.

J. M. SMITH.

Sewing Machine.

No. 27,079.

Patented Feb. 7, 1860.

Fig. 1

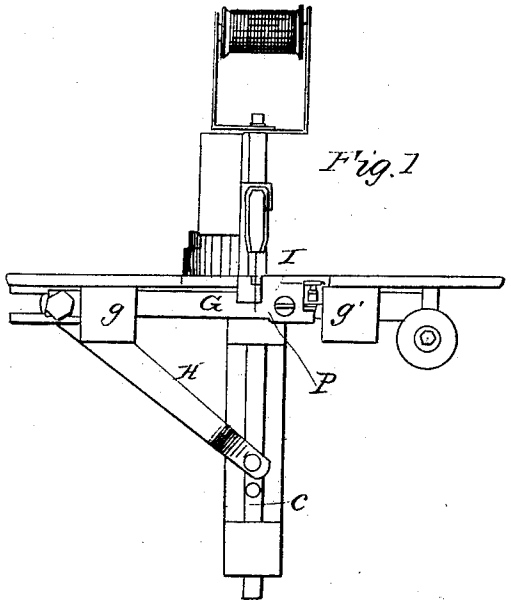


Fig. 2

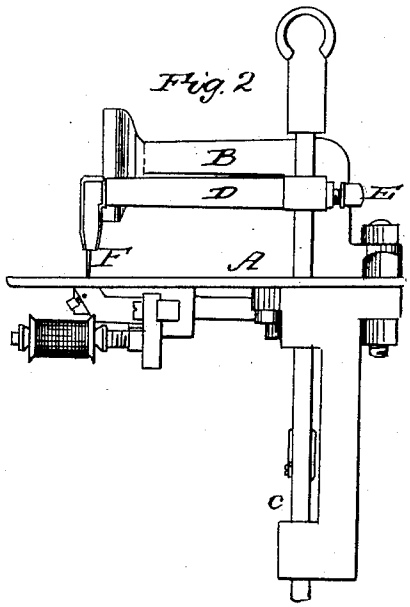


Fig. 3

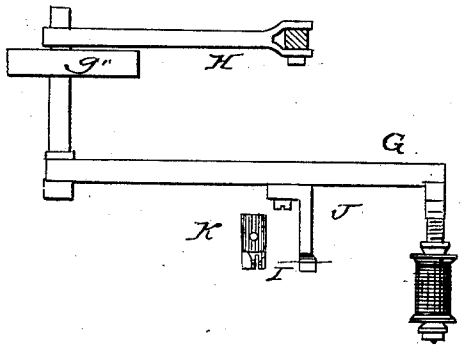
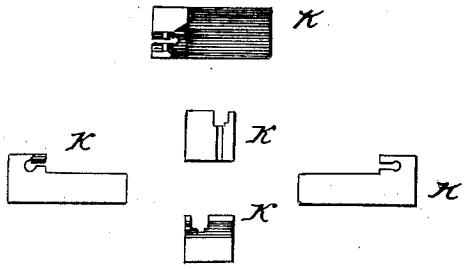


Fig. 4



Witnesses

Sidney Low

Francis S. Low

Inventor

Josiah M. Smith

2 Sheets—Sheet 2.

J. M. SMITH.

Sewing Machine.

No. 27,079.

Patented Feb. 7, 1860.

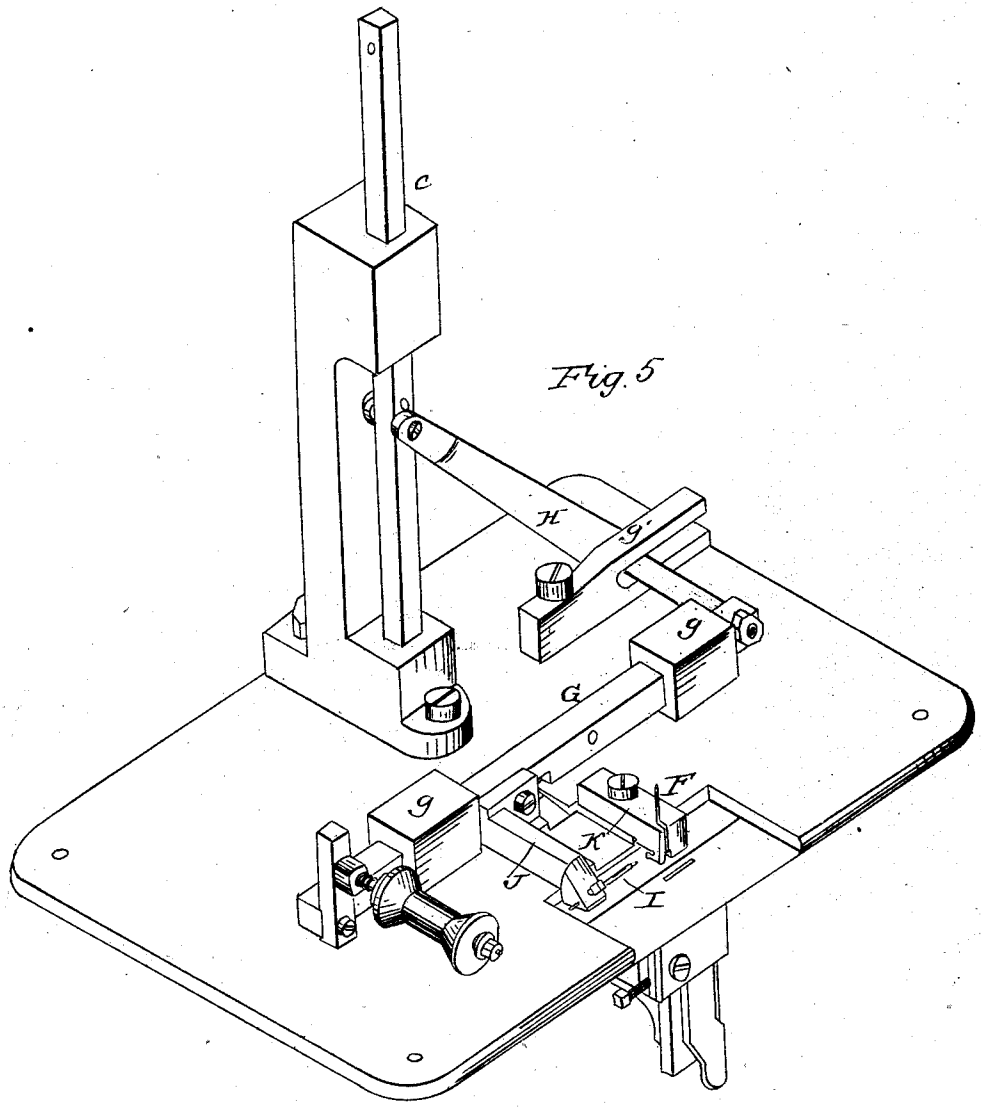


Fig. 5

UNITED STATES PATENT OFFICE.

JOSIAH M. SMITH, OF SOMERS, NEW YORK.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **27,079**, dated February 7, 1860.

To all whom it may concern:

Be it known that I, JOSIAH M. SMITH, of Somers, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is an end and Fig. 2 a side elevation of the machine; Fig. 3, a plan view of the operating parts located beneath the bed of the machine, and Fig. 4 views of the looping-plate detached. Fig. 5 is a perspective view of the under side of the machine.

My invention consists of an arrangement of means to operate the two needle bars or stocks.

A is the bed of the machine.

B is the arm, to the front end of which is attached the feed arrangement.

C is a sliding bar, which is moved vertically either by being connected directly to the ordinary treadle or attached by a connecting-rod to a crank on the end of a counter-shaft driven by pulleys and belting in the usual manner, and by which the first or sewing needle bar is directly operated.

D is the sewing-needle bar, secured to the bar C by the set-screw E, which allows it to be varied in its height above the bed A to suit the varying thickness of the cloth to be sewed in the machine, in order that the tension of the first or sewing thread may be preserved uniform.

F is the first or sewing needle, secured in the outer end of the bar D in the usual manner.

G is the second or looping needle-bar, which moves in the guides *g g' g''* and receives its horizontal movement by being attached to the bar C by the connecting-rod H, the downward movement of the latter bar causing the former to advance, and its upward movement causing it to recede.

I is the second or looping needle, secured in the usual manner to the arm J on the bar G, by which the looping-thread is carried through the loop of the sewing-thread to lock or fasten the stitch.

K is the looping-plate, secured to the under side of the bed A in such position that its vertical slot shall be in the line of the travel of the first needle and its horizontal slot in the line of the thread of the second one, its object being to hold the loop of the sewing-thread in position by the vertical slot for the passage through the loop of the second needle and thread, and the loop of the second thread by the horizontal slot for the passage through its loop of the first needle and thread, the sides of the slots being of such distance apart as will allow the thread to move readily between them, and yet prevent the loops becoming twisted, so that the needles could not properly pass through them.

Any of the feeding arrangements now in use may be attached to and operated by the machine for the purpose of feeding the cloth to be sewed.

The stitch made by the machine is that known as the "double-tambour" or "double-lock" stitch, each thread passing through the loop of and locking and locked by the other one, the second needle receding as the first one descends and passes through the loop formed by the second thread, and advancing as the first ascends to pass through the loop formed by the first thread, the times of the movemens of the two needles in relation to each other being regulated by adjusting the connecting-rod H on its bar C.

I do not claim the double-tambour stitch made in my machine, nor making that stitch by operating two needles in different directions; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The arrangement of the bars C and G and the connecting-rod H, as shown, for the purpose of operating at their proper times the two needles, as described.

JOSIAH M. SMITH.

Witnesses:

SIDNEY LOW,

FRANCIS S. LOW.