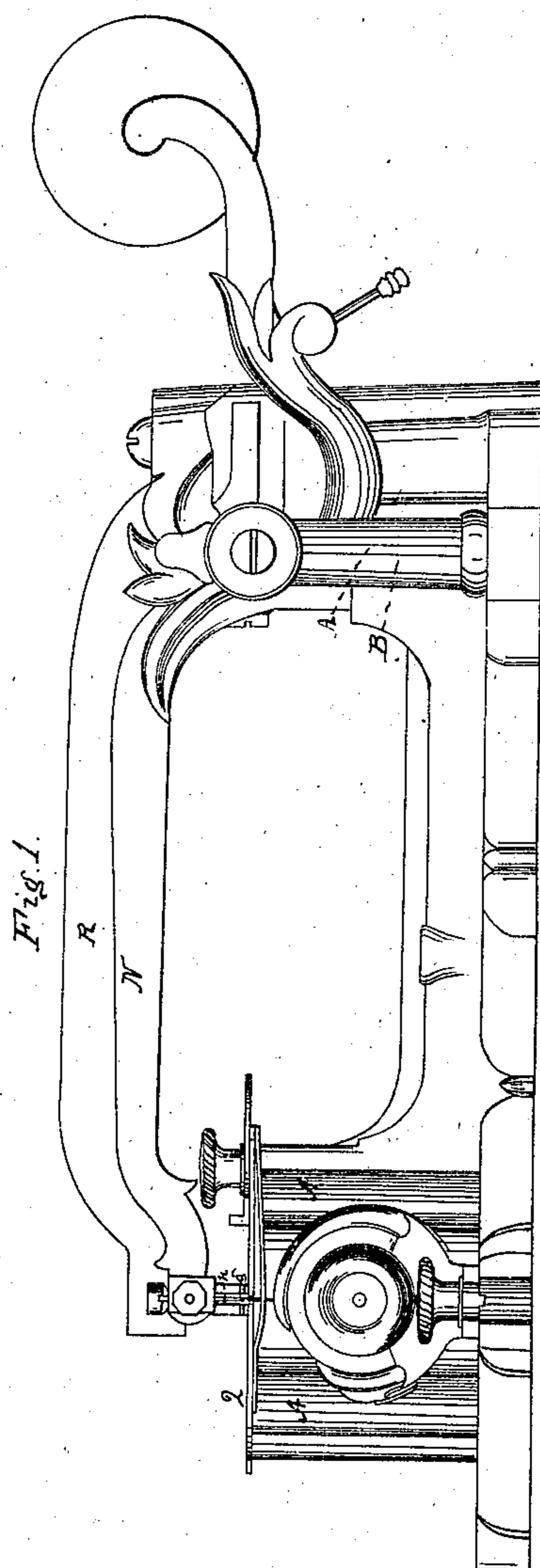
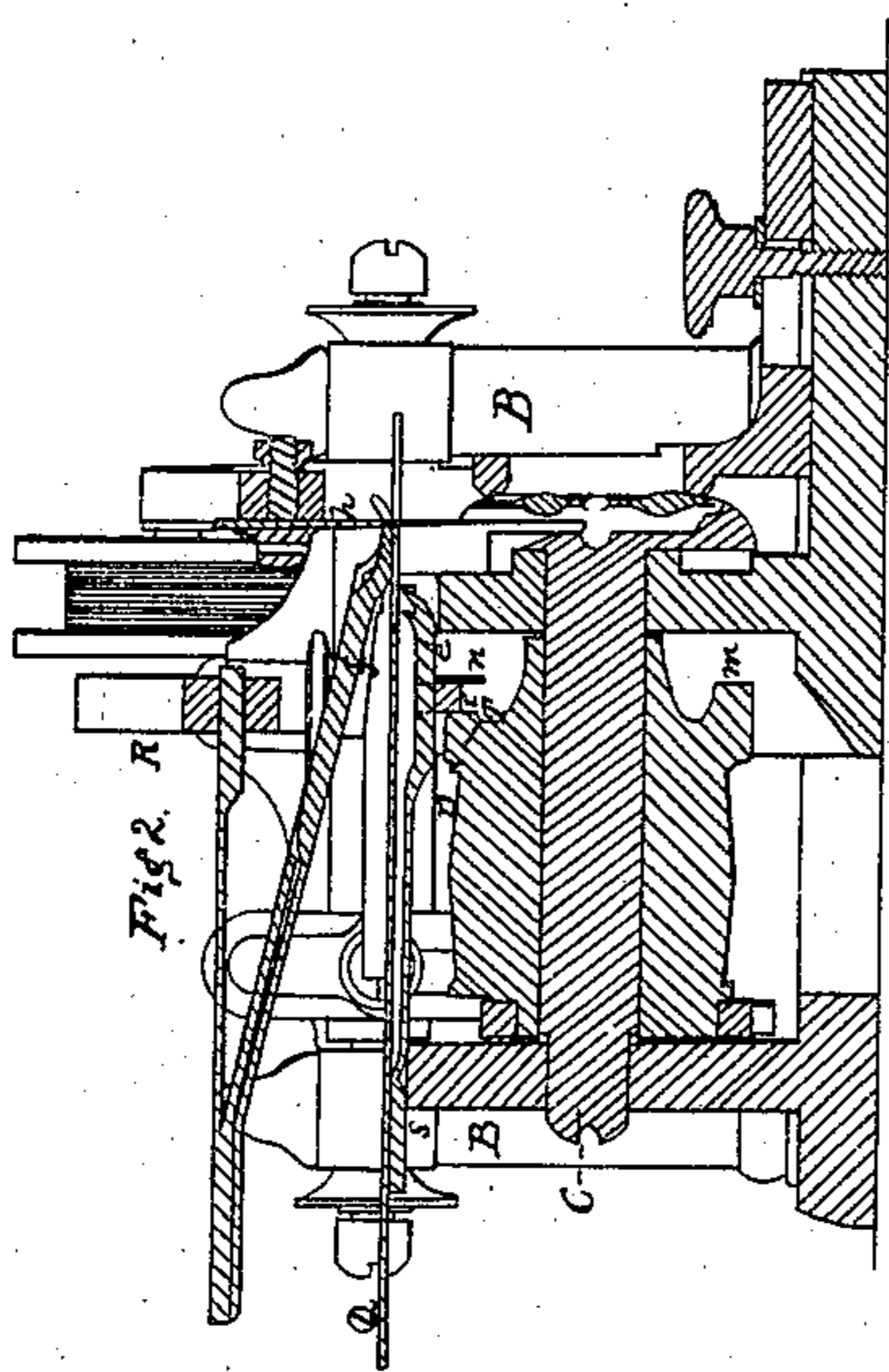


A. B. Wilson.
Sewing Machine.

N^o 12116

Patented Dec. 19, 1854.



UNITED STATES PATENT OFFICE.

ALLEN B. WILSON, OF WATERTOWN, CONNECTICUT, ASSIGNOR TO
W. P. N. FITZGERALD.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 12,116, dated December 19, 1854.

To all whom it may concern:

Be it known that I, ALLEN B. WILSON, of Watertown, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of the machine; and Fig. 2 is a transverse vertical section of the same, taken through the parts which form the stitches, and represents the peculiar arrangement for feeding the cloth along, in which said improvements consist.

To enable those skilled in the art to make and use my invention, I will describe its construction and operation.

The working parts of the machine are all attached to or carried by a suitable frame-work, A A B B, which is secured firmly to a table or bench. The mandrel C, resembling in a certain degree the mandrel of a lathe, is fitted in suitable bearings in the frame-work A A B B, and is suitably turned or provided with a pulley, D, to receive the rotary motion, through a driving-band, from a driving-wheel moved by a treadle under the table, or by any suitable means.

The operative parts of this machine and its construction are substantially the same as those described in Letters Patent of the United States, bearing date the 15th day of June, A. D. 1852, granted to Nathaniel Wheeler, A. B. Wilson, Alanson Warren, and S. P. Woodruff, of Watertown aforesaid.

The material to be sewed is laid upon a plate, Q, which is secured to the standards A A, and forms a small table. It is held down by a small pressing-spring, which is attached to the end of an arm, R, which is secured to the back of the frame-work, and extends over the top of the machine. In the front end of the pressing-spring *f* there is a slot, *g*, cut to allow the needle to pass through. An opening corresponding to the slot *g* is cut through the plate Q for the same purpose.

The arrangement for feeding the cloth along is shown in Fig. 2, and consists of a feed-bar, S. It is a straight flat bar with a slot extend-

ing nearly its whole length and with a projection, *i*, downward. Under the slot is secured a spring-bar, *k*, which is furnished with pointed teeth or notches at the end. The bar S slides in suitable bearings in the frame B B, immediately below the plate Q. The teeth or notches of the spring-bar *k* are immediately under a small opening in plate Q, but do not arise through this opening until pressure is applied to the spring-bar *k* by the revolution of the cam T upon the mandrel, which cam is nearly cylindrical and concentric to the mandrel; but at one point in its periphery there is a prominence. This prominence extends also to the front. By the revolution of the mandrel the prominence of the cam is made to act on the under side of the spring-bar *k* and force up its teeth or notches in contact with the cloth at the same time that its front part acts on the projection *i* and moves the feed-bar longitudinally forward toward the plane of the needle's motion, carrying the cloth with it. The movement of the feed-bar while its points or notches are above the surface of the plate Q and in contact with the cloth causes the cloth to move forward the proper distance for a stitch at each ascent of the needle, the bar being returned by the pressure of the spring *n*, attached to the frame-work, against the projection *i* after the prominence *m* on the cam has passed, the notches or teeth being freed from the cloth as soon as the prominence of the cam is clear of the spring-bar, by the force of the spring portion of said bar.

What I claim as my invention, and desire to have secured to me by Letters Patent, is—

The device above described in a sewing-machine for feeding the cloth along, consisting of a bar furnished with points or notches, having a vertical or up-and-down motion for fastening the cloth upon and releasing it from said bar by striking it against a plate or spring, and a lateral motion or motion forward and back for feeding the cloth along after each stitch, substantially as above set forth.

ALLEN B. WILSON.

Witnesses:

HENRY BRONSON,
FREDK. HURD,