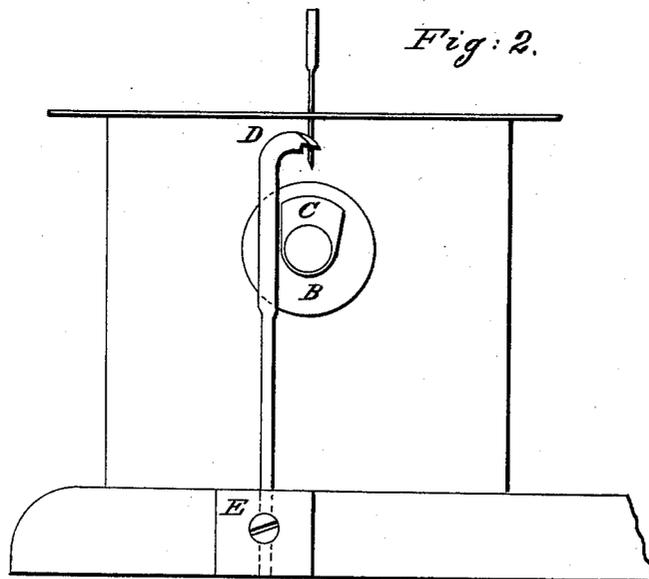
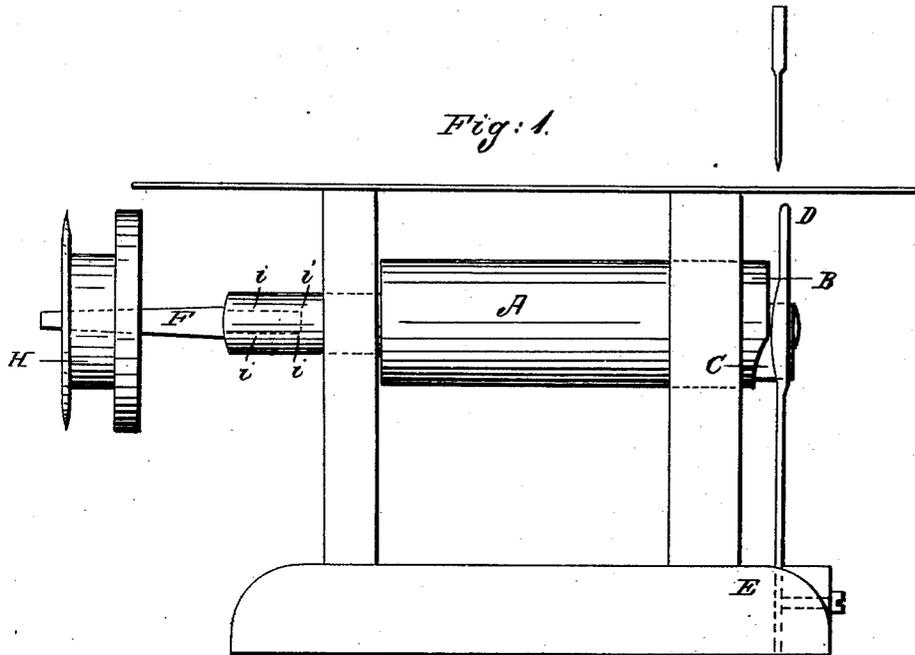


M. L. CLINTON.  
Sewing Machine.

No. 21,466.

Patented Sept. 7, 1858.



*Inventor:*  
*M. L. Clinton*

# UNITED STATES PATENT OFFICE.

MILES L. CLINTON, OF ITHACA, NEW YORK, ASSIGNOR TO H. F. HIBBARD,  
OF SAME PLACE.

## IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 21,466, dated September 7, 1858.

*To all whom it may concern:*

Be it known that I, MILES L. CLINTON, of Ithaca, county of Tompkins, and State of New York, have invented a new and useful Improvement in Sewing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The improvement consists in the peculiar method of operating the hook (or spring-hook) that holds the loop of thread in single-thread sewing-machines, and also the device for winding the thread onto the spool.

To enable others to make and use my improvement, I will give the following description of its construction and operation:

I make the entire machine, except the ends of the shaft and the position of spring-hook, in the usual manner of making single-thread sewing-machines.

I make the shaft, letter A, Figure 1, with a double cam on the end toward the needle. The inner cam, Fig. 1, letter B, is so constructed as, by the revolution of the shaft, to force the hook outward. The outer cam, letter C, is so made as, in the same revolution of the shaft, to press the hook backward. The hook in such case comes back to its place by its own spring as soon as the cams cease to operate.

The attached end of the spring-hook, letter D, Figs. 2 and 1, may be fastened to the bed-piece, as shown at letter E, Figs. 2 and 1, or to any other convenient part of the machine.

The machine being thus constructed, and operated in the usual manner, the needle is forced down through the cloth and passed

down outside of the hook between the thread and hook. The cam C now presses upon the spring-hook, forcing it out of the loop of thread and back from the needle. While still held back by cam C the cam B presses the hook outward outside of the needle, and now, the cam C ceasing to act, the hook springs forward outside of the needle into the loop of thread left by the rising needle. After the needle is raised out of the way of the hook the cam B ceases to operate and the hook springs back to its place, holding the loop of thread until the needle, again descending on the outside of the hook, takes the loop and holds it while the hook is moved by the cams and spring, as before.

I also make the opposite end of the shaft A, Fig. 1, of suitable size and shape, as shown at letter F, to hold spool H so that it (the spool) shall revolve with the shaft. By this device the spool can be wound with thread without the use of a separate winding apparatus or wheel, as has been heretofore used. This part that holds the spool may be made of a separate piece, as represented by dotted lines *i i i*, so as to be taken from shaft when not in use.

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

The cams B and C on shaft A, in combination with spring-hook D, constructed and operated substantially in the manner and for the purpose described.

MILES L. CLINTON.

In presence of—  
W. D. HUNT,  
S. W. SMITH.