

S. WILDER.

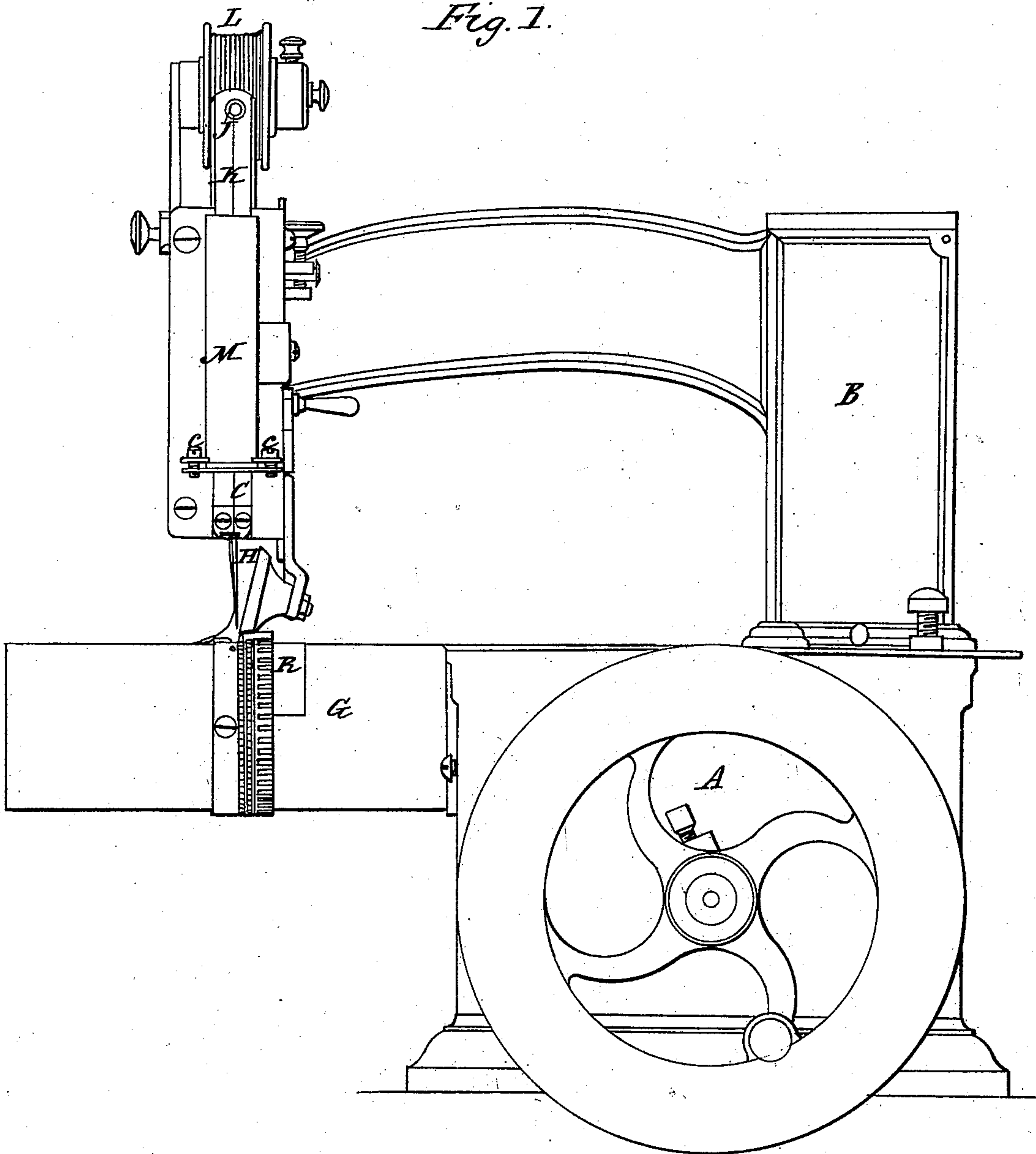
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Waxing Thread on Sewing Machines.

No. 12,336.

Patented Jan'y 30, 1855.

*Fig. 1.*



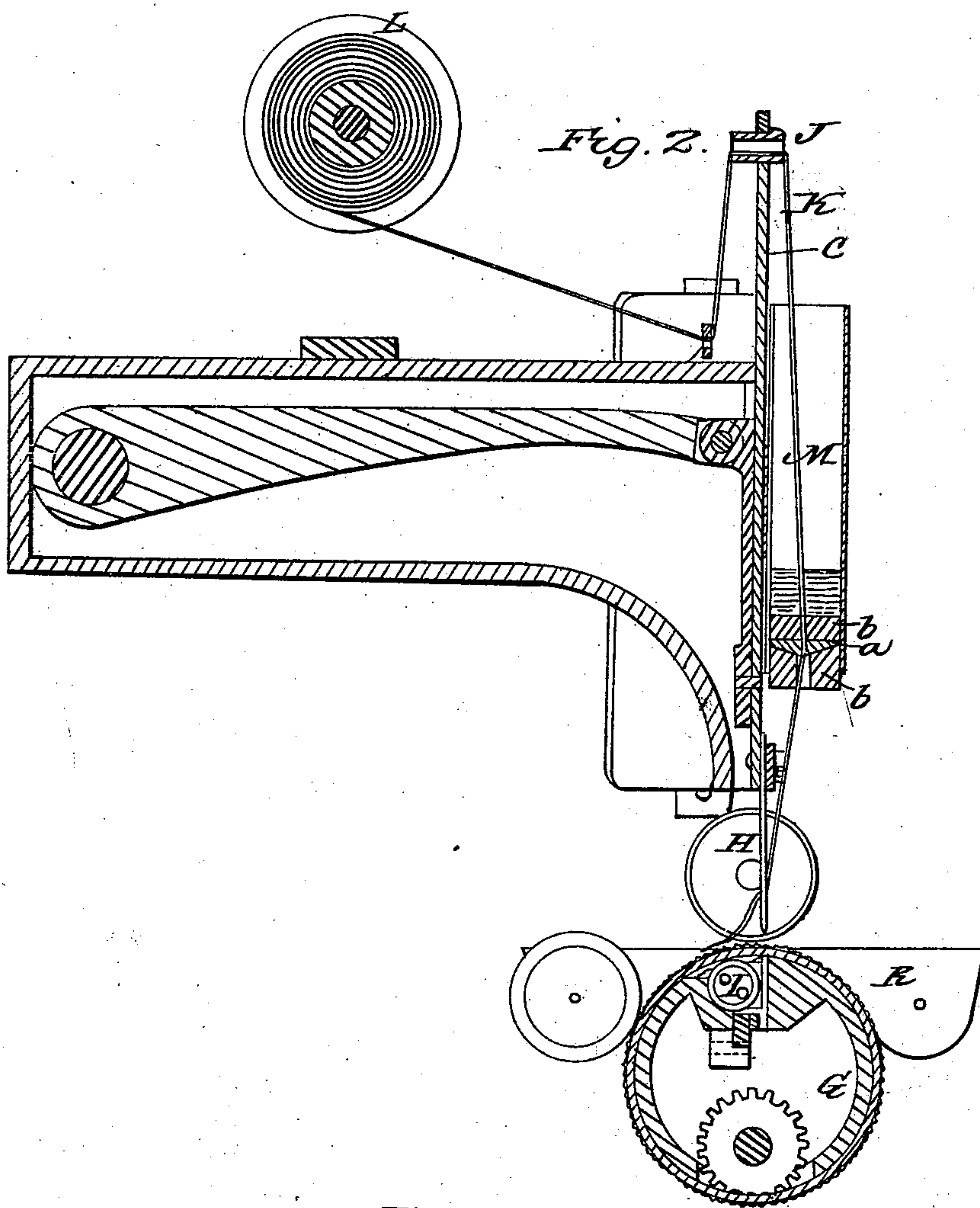
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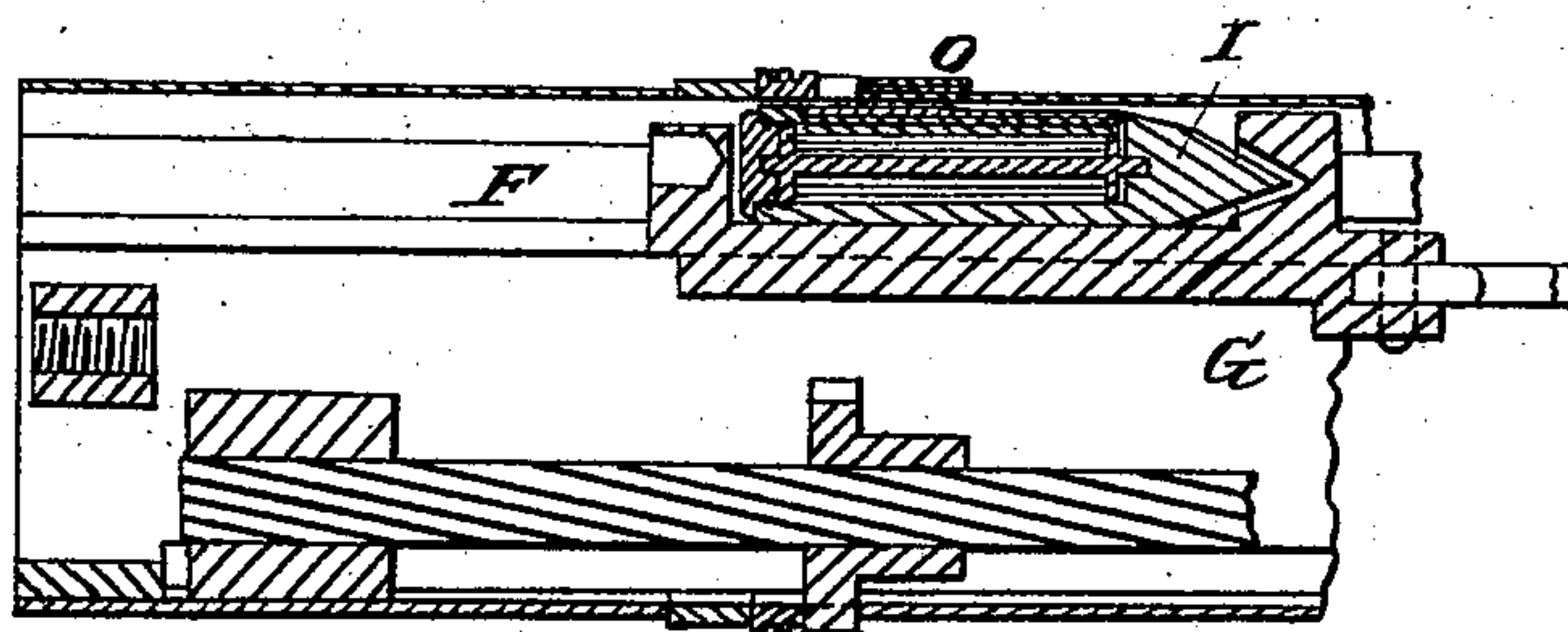
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*Fig. 3.*





# UNITED STATES PATENT OFFICE.

SALEM WILDER, OF LYNN, MASSACHUSETTS.

## IMPROVEMENT IN WAXING THREAD ON SEWING-MACHINES.

Specification forming part of Letters Patent No. **12,336**, dated January 30, 1855.

*To all whom it may concern:*

Be it known that I, SALEM WILDER, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Waxing Thread on Sewing-Machines; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, letters, figures, and references thereof.

Of the said drawings, Figure 1 denotes a front elevation of a needle-and-shuttle sewing-machine constructed with or having my improvement. Fig. 2 is a vertical section taken through the needle-carrier and transversely to the shuttle-race. Fig. 3 is a section of the shuttle-race, shuttle, and mechanism applied thereto for waxing the thread of the shuttle, the said section being made vertically and longitudinally through the shuttle-race.

In the said drawings, A represents the main part or stand of the sewing-machine, the same being provided with an arm, B, extending upward therefrom and made to carry a needle-carrier, C, and to operate the mechanism thereof. This needle-carrier works or slides vertically directly over the shuttle-race F, which is formed within a projection, G, from the main frame.

Attached to the lower end of the needle-carrier is the needle H, and in the shuttle-race the shuttle I is placed and made to operate in the usual manner in which it is worked in the sewing-machines manufactured under the patent to Elias Howe, Jr. The upper part of the needle-carrier is provided, as is customary, with a thread-eye, J, through which the thread K from the bobbin L is carried to the needle. Between the said eye and the needle I arrange a wax holder or reservoir, M, which may be fastened to the arm of the machine. This wax-holder is formed with an india-rubber or elastic bottom, *a*, which is inclosed within a press or so arranged between plates *b b* as to be capable of being compressed by means of screws *c c* or other equivalents. The thread is carried through this elastic bottom or a hole formed therein. The object of the compressing mechanism of the bottom is to compress it firmly upon the thread, so as

not only to prevent the liquid wax from escaping out of the thread-hole of the bottom, but of removing from the thread any surplus of the wax beyond what it may be necessary for the thread to have for the operation of sewing with it. This wax-holder is intended to hold liquid wax or any fluid composition or material with which it may be desirable to saturate the thread, such thread being carried from the eye of the thread-carrier into and through such wax-holder and the liquid therein.

I am aware that a contrivance for applying oil to the thread has been arranged in rear of the eye of the thread-carrier or between the same and the bottom of the thread. In this case, as the thread is oiled before it reaches the eye of the thread-carrier, the said eye is liable to become more or less covered or filled with oil from the thread, the consequence of which is that the thread often becomes cemented or adheres to the eye of the thread-carrier, whereby it is liable to be broken when the machine is put in operation. Besides this, the oil from the thread is liable to run down upon the thread-carrier and needle or get upon the cloth or article to be sewed in quantities that may be very injurious thereto.

By my arrangement of the wax-holder between the eye of the thread-carrier and the needle the above-mentioned difficulties cannot occur; and, besides this, advantages result from it which will be obvious to persons skilled in the use of sewing-machines. When the wax-holder is fastened to the arm that supports the thread-carrier, and so that that part of the thread extending from the eye of the carrier to the needle shall pass through the wax-holder, the vertical movements of the carrier will move the thread up and down through the wax in the holder and aid greatly in the saturation of the thread.

Having thus described my invention, what I claim is—

1. The improvement of so applying the wax-holder to the frame or arm of the machine, and between the needle and the eye of the needle-carrier, that the vertical movements of the carrier shall cause the thread to be moved or drawn up and down through the wax-

holder and its elastic bottom, whereby the saturating of the thread becomes improved, as specified.

2. The combination of an elastic bottom or partition and its compressor with the wax-holder, the same being to regulate the application of the wax to the thread and to prevent its escape from the wax-holder, essentially as described.

In testimony whereof I have hereunto set my signature this 19th day of August, A. D. 1854.

SALEM WILDER.

Witnesses:

R. H. EDDY,  
F. P. HALE, Jr.