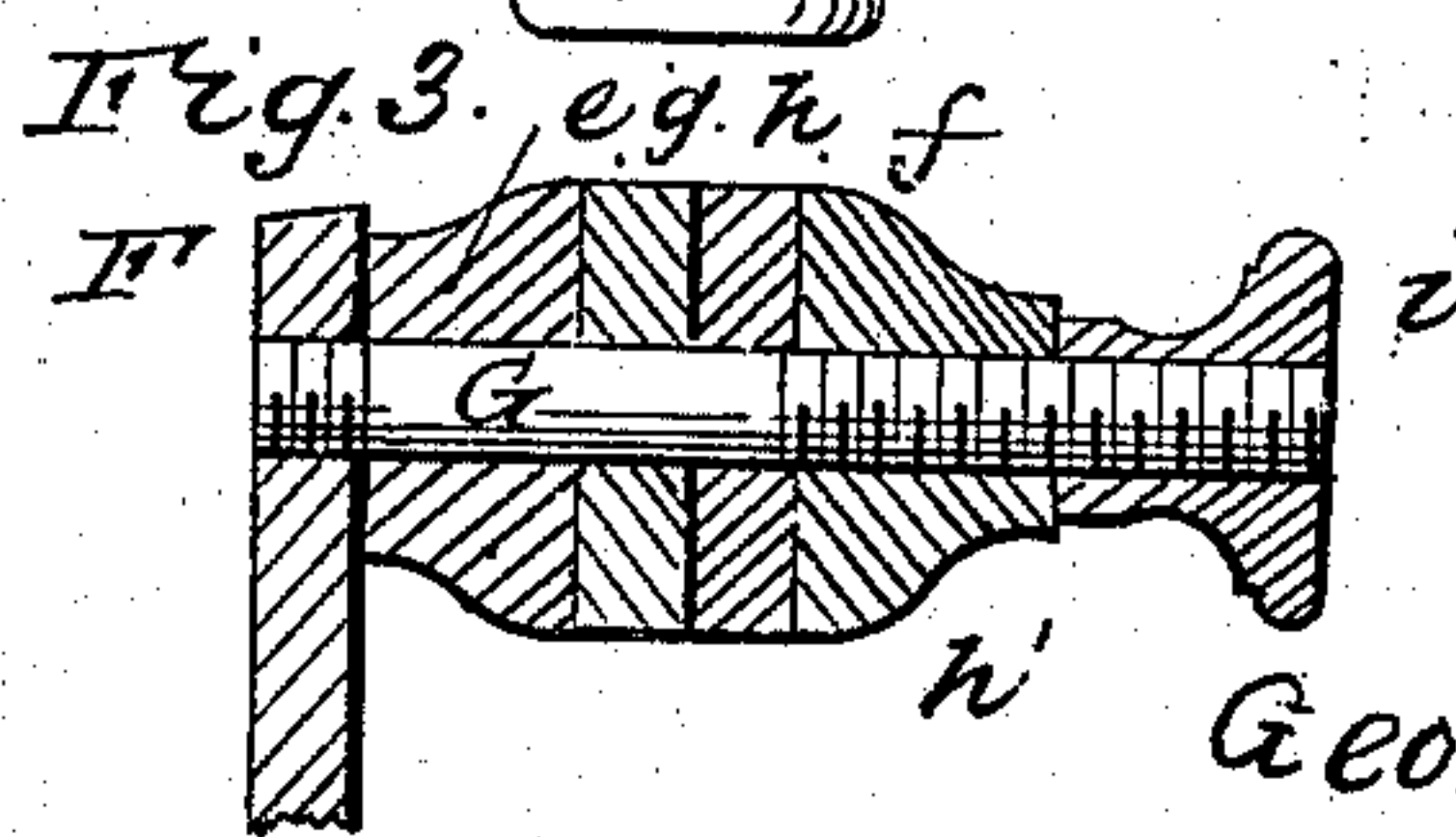
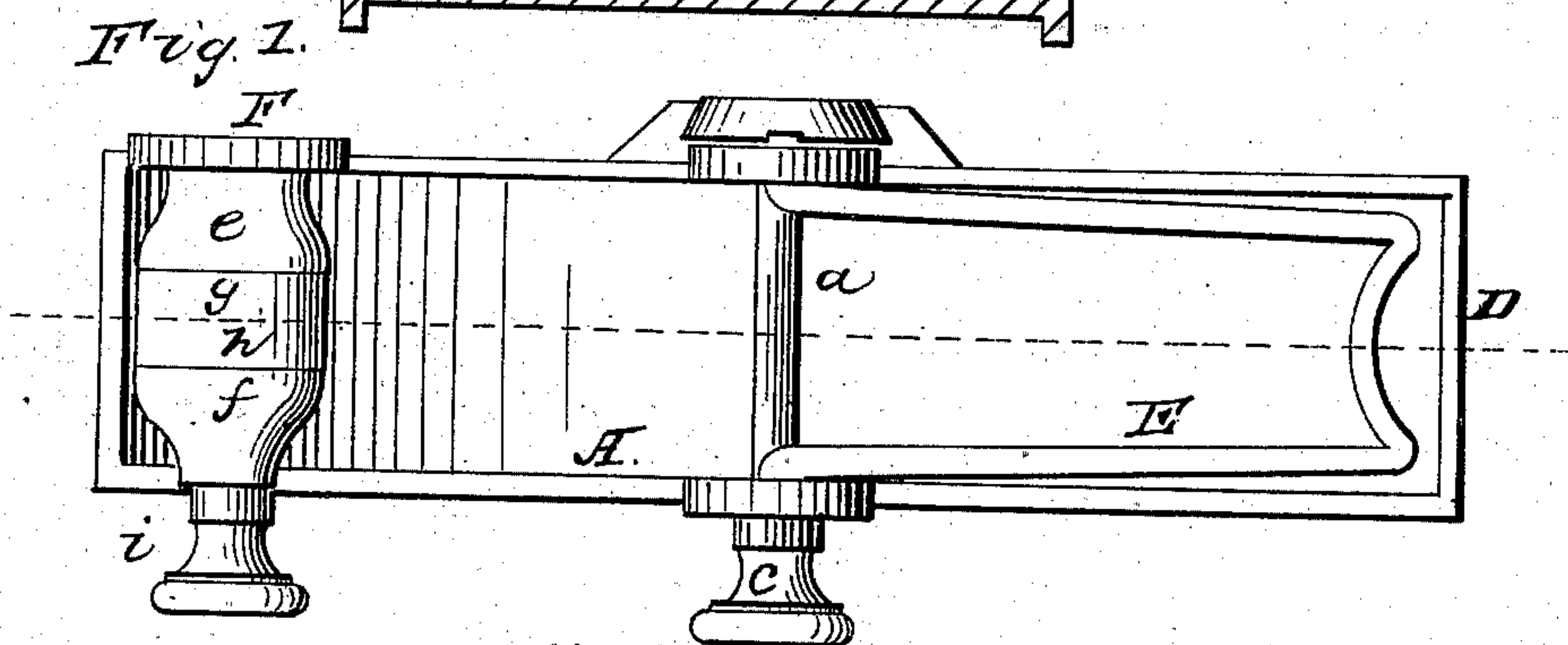
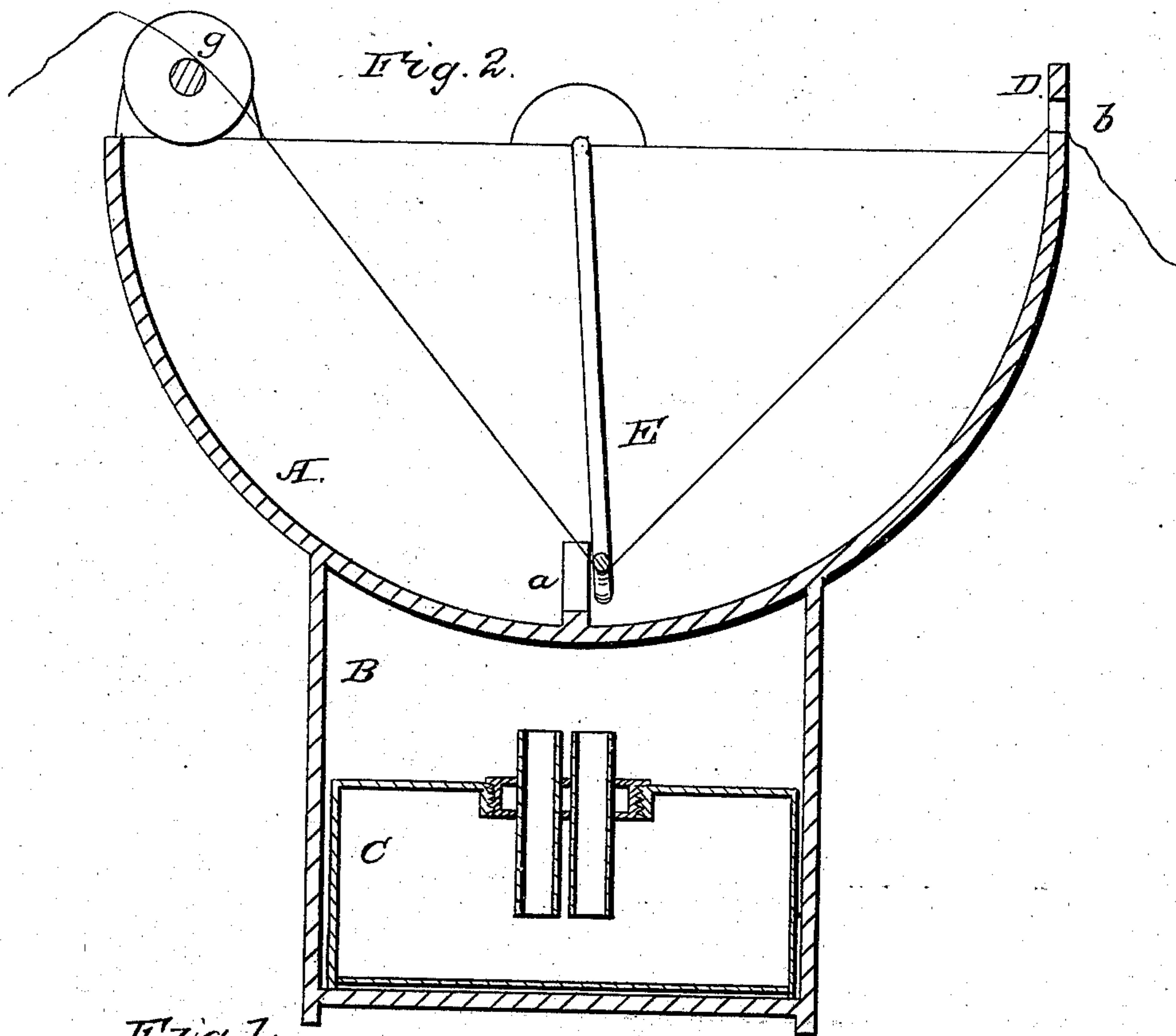


G. F. KENDALL.

Thread Waxer for Sewing Machines.

No. 67,881.

Patented Aug. 20, 1867.



Witnesses

*S. A. Piper.
Lauritz Moller*

*Inventor
George F. Kendall.
by his attorney
R. H. Early*

United States Patent Office.

GEORGE F. KENDALL, OF FITCHBURG, MASSACHUSETTS, ASSIGNOR TO
E. M. DICKINSON AND COMPANY, OF THE SAME PLACE.

Letters Patent No. 67,881, dated August 20, 1867.

IMPROVEMENT IN THREAD-WAXER FOR SEWING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, GEORGE F. KENDALL, of Fitchburg, in the county of Worcester, and State of Massachusetts, have invented a new and useful Machine or Apparatus for Waxing Thread; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, and

Figure 2 a longitudinal section of it.

Figure 3 is a section taken through its expressing collars, and their shaft and screw.

In such drawings, A denotes a semicircular trough, having a shoulder, *a*, formed within it, and at the lowest part of it, such shoulder serving as a stop for the depresser E. It also has a lamp-holder, B, projecting from it, and suitably formed for supporting a lamp, C, underneath it, for the purpose of heating it and wax when therein. At one end, the trough has a projection, D, through which is a hole, *b*. A depresser, E, formed of wire, bent in the form as represented in fig. 1, and provided with a knob, *c*, turns in bearings at the centres of the sides of the box. Such depresser may be turned from a vertical or nearly vertical position within the trough and against the shoulder *a*, up into an inclined position out of the trough. At or near the opposite end of the trough is another projection, F, from which there projects horizontally over the trough and across it, a shaft or screw-pin, G, provided with a shoulder, *e*. On the said pin, and between the said shoulder and a collar, *f*, placed on the pin, are two disks, *g h*, of vulcanized India rubber, which are concentric with the pin or shaft, and are arranged side by side. The pin has a male screw, *h'*, cut on it to receive a nut, *i*, which is screwed on it and against the collar, such being to force the two elastic disks together.

The thread, on running through the apparatus for the purpose of being waxed, is first led through the hole *b*, thence underneath and against the depresser, and thence over and upon the pin or shaft G, and between the two elastic disks or expressers *g h*.

I am aware of the thread-waxing apparatus described in Isaac Banister's patent, No. 41,050. I am also aware of the thread-waxing apparatus described and represented in the patent of Thomas J. Halligan, No. 54,145; therefore I do not claim such. My apparatus resembles them in most particulars, except in the expressing part thereof, which, instead of being a flexible tube, as it is in the apparatus of Banister, or a lever and a jaw as it is in that of Halligan, consists of two elastic disks, each being so applied on its shaft or pin as to be capable of being turned around thereon as occasion may require, in order to prevent it from being worn in a groove or grooves by the thread. With my improvement, fresh bearing-surfaces of the expressers can be brought into action from time to time on the thread, by simply revolving the expressers a little, and thus the expressers will last a very long time, and perform their functions to much better advantage than those of the other parties above named. Furthermore, the shoulder *a*, when used in the trough, and to support the depresser, not only arrests the depresser in its proper position, but serves to prevent it from being bent or moved out of place by the thread while running against it.

I therefore claim as my improvement in a thread-waxing machine, the arrangement and combination of the rotary elastic disks *g h* with the shouldered shaft or pin, the collar, the nut, and the screw of the pin, the whole being applied to or arranged with the trough and the depresser as set forth.

I also claim the construction of the trough with the shoulder *a* at its bottom, and with the rotary depresser applied to the trough, so as to operate with such shoulder as set forth.

GEORGE F. KENDALL.

Witnesses:

C. H. B. SNOW,
T. K. WARE.