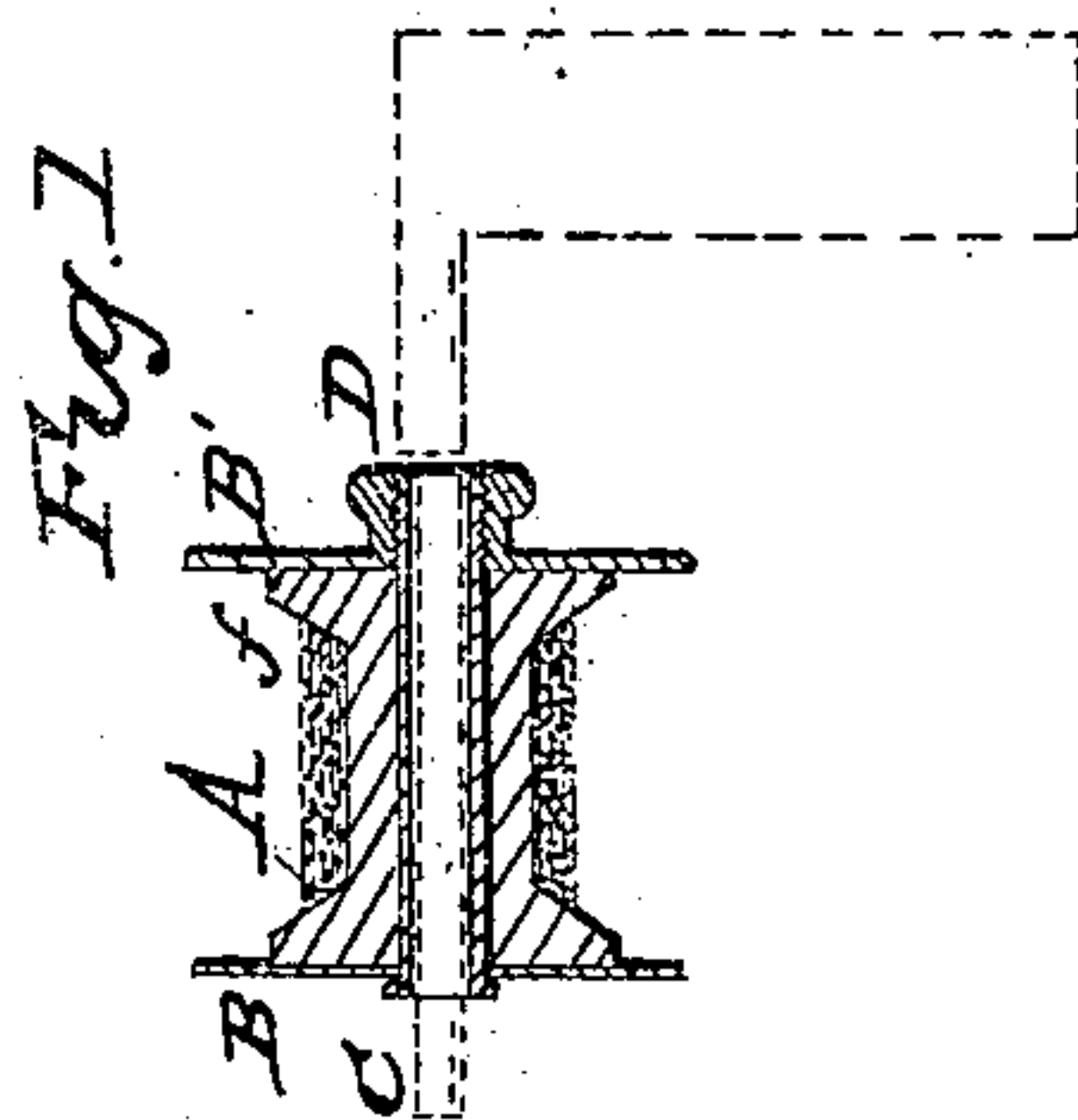
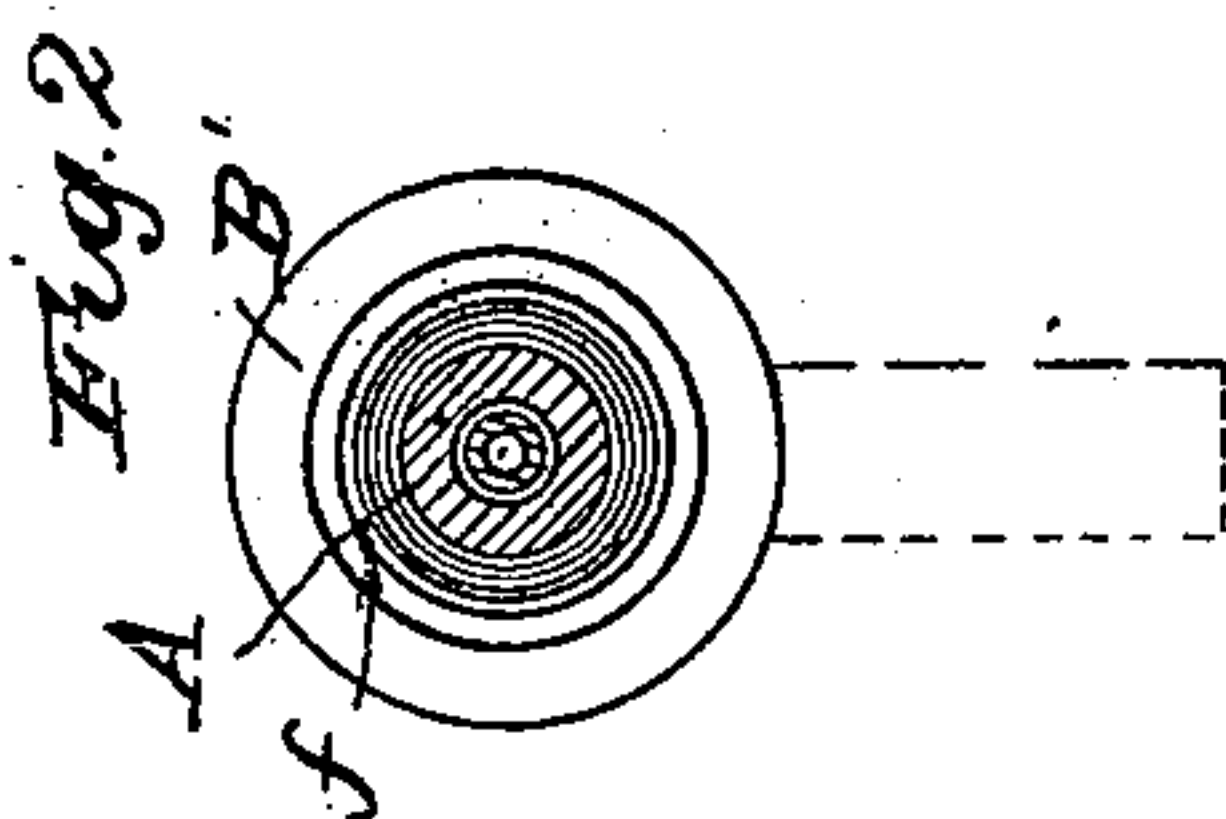


H. E. BODWELL, Jr.

Device for Controlling the Spool Thread in Sewing Machines.

No. 51,544.

Patented Dec. 19, 1865.



Witnesses
J. M. Brown
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UNITED STATES PATENT OFFICE.

H. E. BODWELL, JR., OF MILLBURN, NEW JERSEY.

IMPROVEMENT IN DEVICES FOR CONTROLLING THE SPOOL-THREAD IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 51,544, dated December 19, 1865.

To all whom it may concern:

Be it known that I, H. E. BODWELL, Jr., of Millburn, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Thread-Controllers for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an axial section of an apparatus made according to my invention. Fig. 2 is a cross-section thereof.

Similar letters of reference indicate like parts.

The object of this invention is to prevent the thread of spools set on sewing-machines from springing over the ends of the spools and becoming entangled and soiled; and it consists in combining with the ordinary merchantable spool certain appliances whereby, when the thread is unwound, its coils will not be allowed to spring over the ends of the spool.

A designates a spool of thread applied to a sewing-machine by means of a spindle or arm. (Shown in red.) Its flanges *ff*, when the spool is full, are usually level or even with the periphery of the thread wound on it.

In the operation of sewing-machines it is found that the uppermost coil or coils are apt to spring outward, because of their own elasticity, and become loose on the spool, and to ride over one or the other of the flanges *f*, thereby leading to the disarrangement of the thread and causing an interruption of the sewing, especially if the thread becomes thereby entangled or jammed between the spool and any of the parts of the machine.

My object is to prevent such a disposition of the thread, and to prevent the coils from springing off from the spool during the operation of a sewing-machine. In order to accomplish my object I place supplementary flanges at the ends of the spools in the follow-

ing manner: C is a tube, whose left-hand end is formed with a shoulder, *c'*, so as to form a head, which serves to hold the circular plate or flange B up to the spool. This tube is passed through said plate, and next through the spool, and then through the circular plate B', which is then brought close up to the spool. A nut, D, is then screwed upon the right-hand end of the tube, and the plates are by this means firmly clamped against the ends of the spool. The tube is next placed loosely on a spindle or arm on a sewing-machine in the usual manner.

It will be observed that the flanges or plates, by reason that their diameter is greater than the diameter of the flanges *f* of the spool, will arrest the thread when its elasticity causes it to be uncoiled, and so will prevent the strands from riding over them onto the spindle. Some kinds of thread have a greater tendency to uncoil and to override the spool than others, owing to a peculiarity in the mode of finishing, or to undue hardness of spinning, or to other causes; but nearly all kinds have this tendency when the spool is revolved too freely, or has rotated more than is necessary for the amount of thread required by the seam.

I do not wish to be understood as claiming the application of disks to spools for preventing the thread from riding over the ends and entangling; nor do I claim the use of nuts for retaining such disks in place. I am not aware, however, that the common merchantable spool which is known and sold as an article independent of machines has been furnished with the specific appliances described in this specification.

I claim as new and desire to secure by Letters Patent—

The combination of the threaded sleeve C, having a shoulder, *c'*, nut D, and perforated plates B B', when constructed and employed as and for the purposes specified.

H. E. BODWELL, JR.

Witnesses:

J. E. MEEKER,
HORACE PARK.