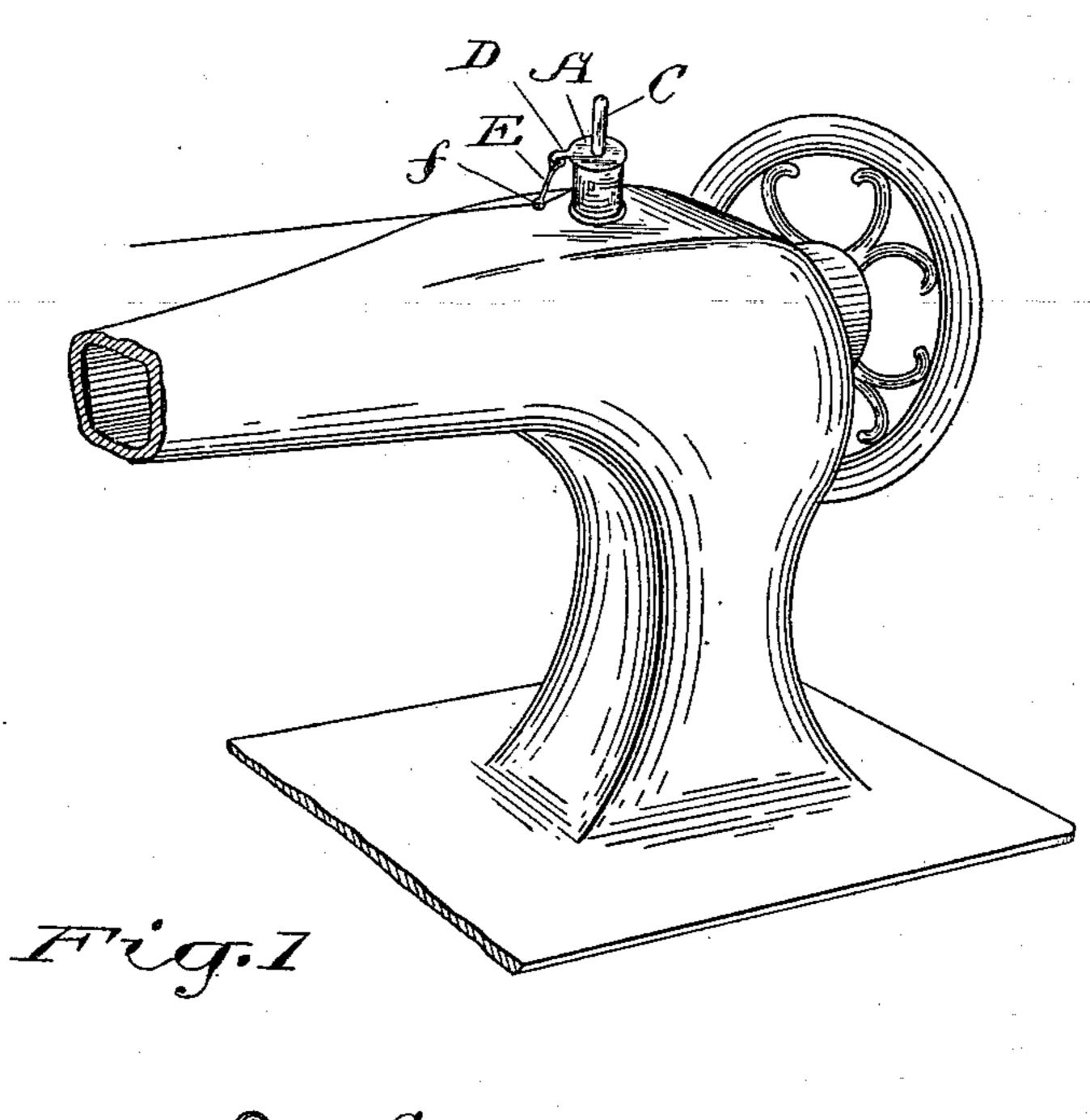
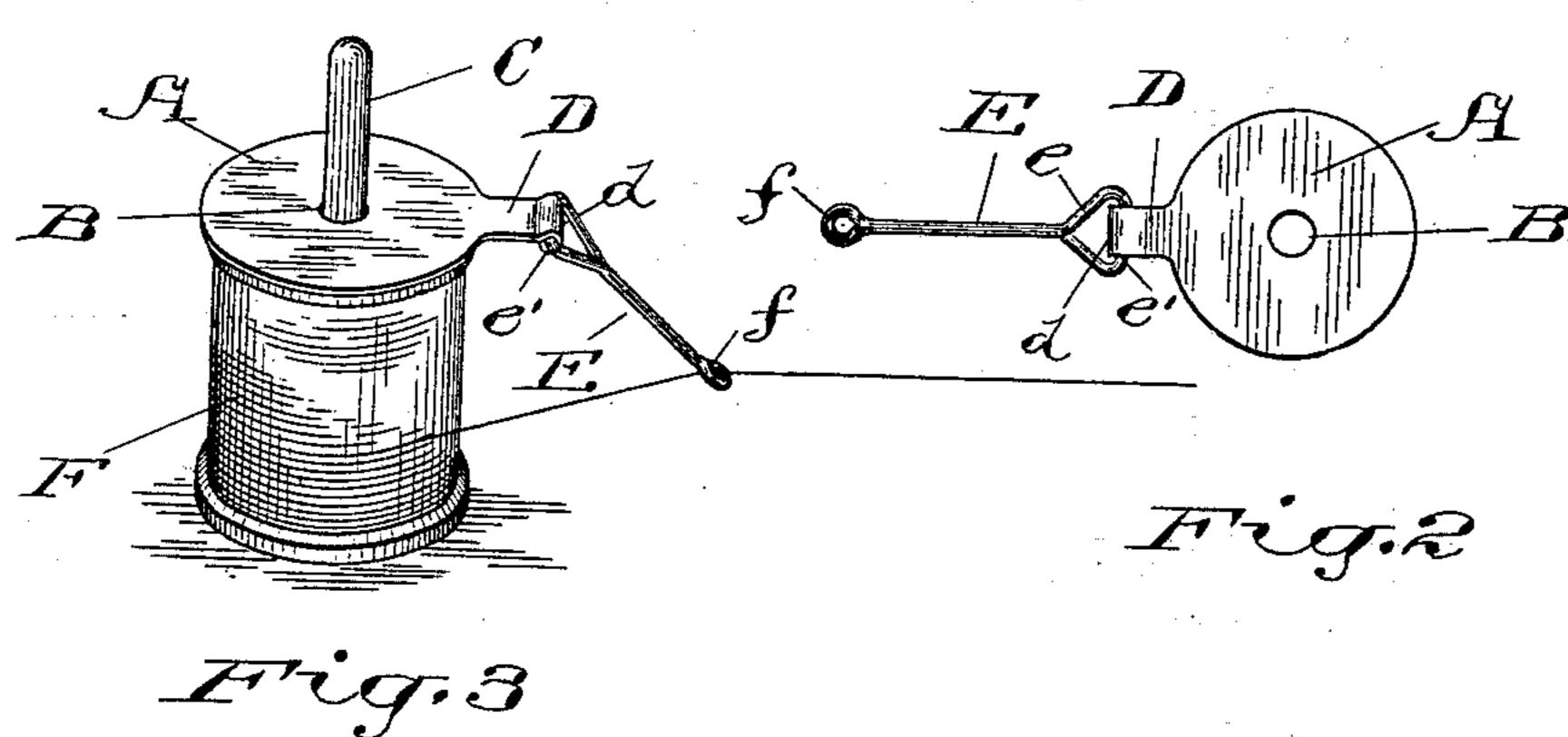
## A. NOLAN.

## ATTACHMENT FOR SEWING MACHINES.

(Application filed June 22, 1898.)

-(No Model.)





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## United States Patent Office.

ABINA NOLAN, OF TORONTO, CANADA.

## ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 624,238, dated May 2, 1899.

Application filed June 22, 1898. Serial No. 684,116. (No model.)

To all whom it may concerns

Beit known that I, Abina Nolan, a subject of the Queen of Great Britain, residing in the city of Toronto, in the county of York and Province of Ontario, Canada, have invented a certain new and useful Attachment for Sewing-Machines; and I hereby declare that the following is a full, clear, and exact description of the same.

Silk and other thread when used on a sewing-machine, owing to its nature and the manner in which it is spooled, is liable to become tangled and kinked as it is unwound by the action of the needle, thus causing the oper-15 ator a considerable annoyance and loss of time in addition to waste of material and the risk of spoiling the work. To overcome this difficulty is the object of the present invention, which consists of providing the spool-20 holder with a removable plate, preferably of metal and of a larger diameter than the spool, and which is arranged to sit on the top of the spool to prevent the thread being drawn from the top of the same as it is unwound, and to 25 provide the plate with a swinging arm normally hanging perpendicularly and arranged to be moved into a horizontal position in the same plane as the top of the plate by the unwinding action of the thread, which passes 30 through an eye fitted in the lower end of the arm.

Figure 1 is a perspective view of a sewing-machine frame, showing the spool-holder, spool, and attachment. Fig. 2 is an enlarged plan view of the attachment, showing the swinging arm extended horizontally. Fig. 3 is an enlarged perspective view of a section of the spool-holder, spool, and attachment, with the arm intermediate its perpendicular and horizontal positions.

Like letters of reference refer to like parts throughout the specification and drawings.

A represents a circular plate of slightly greater diameter than that of an ordinary spool used for holding sewing-silk. Formed centrally in the plate A is a circular bore B, of slightly greater diameter than the diameter of the ordinary spool-holder C in order that the attachment may move easily perpendicularly on the spool-holder and accommodate itself to the top of the spool, but not suffi-

ciently greater than the diameter of the spoolholder to allow of any lateral movement on the part of the plate. The plate A is provided with a radial lug D, the outer end of 55 which is bent to form a diminutive sleeve d.

E represents an arm having a loop e at one end. The loop e is substantially triangular-shaped, having one side e' at substantially-right angles to the length of the arm. The 60 opposite end of the arm is provided with an eye for comparatively large diameter, through which is adapted to pass the thread from the spool to the needle.

When the plate and the arm are assembled, 65 the side e' is contained within the sleeve d and serves as a pintle for the arm to swing upon.

The use of the invention is as follows: The spool F is placed upon the spool-holder C, 70 after which the circular plate is placed on top of it, with the spool-holder C passing through the bore B and the arm E hanging perpendicularly from the lug D, (on that side of the spool opposed to the needle,) the thread being 75 then fed from the spool through the eye f to the needle. The operation of the needle causes the thread to be unwound from the spool, and during the unwinding of the thread the arm follows the position of the coil—that 80 is, it swings from the bottom to the top of the spool and back again, and so on alternately until the use of the thread has been discontinued, when the attachment can be removed to allow of the spool being replaced 85 by a new one.

The attachment can as well be placed below the spool as above it, the arm working in exactly the same manner and accomplishing the same results.

The arm by continuously following the position of the coil maintains an even tension on the thread, thus preventing the thread being drawn from the spool any faster than the needle uses it, and also prevents the thread 95 slipping off the end of the spool and coiling on the spool-holder, and thus preventing the thread tangling or kinking.

It is preferable to use the plate on top of the spool instead of below it and also instead of of the standard, as by its weight it assists in keeping the spool in its proper relative place on the spool-holder and also assists the arm in preventing the thread creeping off the end of the spool.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. An attachment for a sewing-machine, embracing in its construction a disk, fitted with a bore through which the spool-holder is adapted to pass, and a swinging arm horizontally pivoted to the disk at one extremity and fitted at the other with an eye for the thread to pass through, substantially as specified.

2. An attachment for a sewing-machine, 15 embracing in its construction a disk, fitted with a bore through which the spool-holder is adapted to pass, and having a radial lug fitted with a sleeve, an arm having at one end an eye, through which the thread is adapted 20 to pass, and at the other a loop, one side of which is arranged to be pivotally held by the sleeve, substantially as specified.

Toronto, June 3, A. D. 1898.

ABINA NOLAN.

In presence of—M. A. WESTWOOD, C. H. RICHES.