

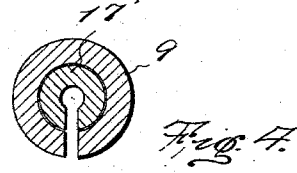
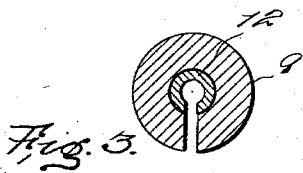
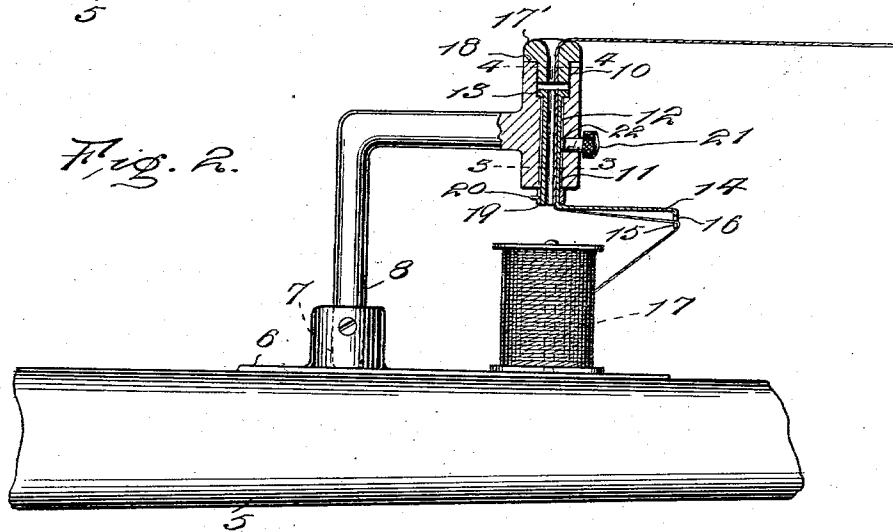
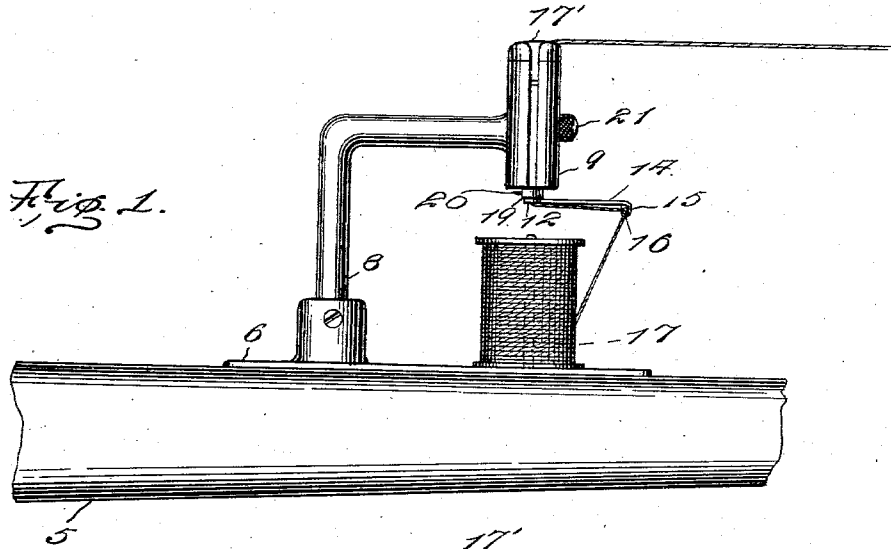
No. 752,043.

PATENTED FEB. 16, 1904.

G. W. COUGHENOUR.
SPOOL HOLDER FOR SEWING MACHINES.

APPLICATION FILED OCT. 18, 1902.

NO MODEL.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE W. COUGHENOUR, OF NORFOLK, VIRGINIA.

SPOOL-HOLDER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 752,043, dated February 16, 1904.

Application filed October 18, 1902. Serial No. 127,875. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. COUGHENOUR, a citizen of the United States, residing at Norfolk, in the county of Norfolk, State of Virginia, have invented certain new and useful Improvements in Spool-Holders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to spool-holders for sewing-machines; and it has for its object to provide a construction, including a thread-guide, wherein the thread from the spool will be unwound while the spool is permitted to remain stationary, thus insuring against excessive unwinding of the thread and consequent tangling.

Other objects and advantages of the invention will be understood from the following description.

In the drawings forming a portion of this invention, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation showing a portion of the arm of a sewing-machine equipped with a thread-holder embodying the present invention. Fig. 2 is a vertical section through the spool-holder, the arm of the machine being in elevation. Fig. 3 is a section on line 3 3 of Fig. 2. Fig. 4 is a section on line 4 4 of Fig. 2. Fig. 5 is a detail perspective view of the slip-band on the lower end of the central or tubular core of the guide.

Referring now to the drawings, there is shown a portion of the arm 5 of a sewing-machine, to which is secured the base-plate 6 of the spool-holder, said base-plate having a socket 7 at one end, in which is received the angular arm 8, comprising a vertical portion which is directly engaged with the socket, and an upper laterally-extending portion, which latter terminates in a vertical sleeve 9. The bore of the sleeve 9 is greater at its upper end, as shown at 10, than at its lower end, as shown at 11, and within the sleeve is disposed a tubular core 12, having a circumscribing flange 13 at its upper end, said flange lying within and resting upon the bottom of the portion 10 of the bore, while the core below

the flange fits snugly but freely in the reduced portion of the bore and projects from the lower end of the sleeve, as illustrated. The core is thus free to rotate, but is held from dropping from the sleeve.

At the lower end of the core 12 is a laterally-extending arm 14, having a depending lug 15 at its outer extremity provided with a perforation 16, the length of the arm 14 being somewhat greater than the diameter of any spool that may be held by the holder, the spool or thread, as illustrated, being disposed upon the stud 17 on the plate 6 and in axial alinement with the sleeve 9.

In the upper or enlarged portion of the bore of the sleeve 9 is loosely fitted a porcelain bushing 17', having a circumscribing flange 18, that rests upon the upper end of the sleeve and holds the bushing with its lower end free from the upper end of the core 12.

In practice the thread from the spool is engaged in the eye or perforation 16, after which it is engaged or passed through the core 12 and bushing 17'. To facilitate engagement of the thread in the core and bushing, said core and bushing are split longitudinally, so that the thread may be passed laterally into them, and no threading is required, the sleeve 9 being also split longitudinally, so that by bringing the slits of the core and bushing into registration with the slit of the sleeve the thread may be quickly engaged without removing the bushing and core from the sleeve. As the thread is drawn through the upper end of the bushing when the machine is operated the pull upon the lug at the outer end of the arm 14 is such as to cause the core to rotate, and the lug travels around the spool and unwinds the thread therefrom instead of the spool rotating, as is usual. To prevent the thread from passing outwardly through the longitudinal slit of the core as the latter rotates, a retaining-band 19 is employed and is engaged over the lower end of the core. This retaining-band has a finger 20 struck up therefrom, which may be grasped to place the band and remove it. The retaining-band is split, and by pushing it around on the core its split may be brought into registry with that of the core and may be as easily moved from registration.

It will be seen that with the present construction the arm of the core rotates to carry its lug around a spool and unwind the thread from the spool as it is required instead of rotating the spool, and to prevent too speedy rotation of the core and the consequent possibility of tangling of the thread a set-screw 21 is engaged with the sleeve 9 and has a felt or other yieldable end 22, which bears against the core, and by adjusting this screw the desired friction and consequent breaking effect may be obtained.

It will be understood that in practice modifications of the specific construction shown may be made, and any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A device of the class described comprising a sleeve, provided with supporting means and a tubular core rotatably mounted in the sleeve and having a radiating arm having thread-receiving means at its outer end disposed for movement with the arm about a spool when held in axial alinement with the core, and a bushing in the sleeve beyond the core, said bushing and core being adapted to

receive the thread from the arm; the sleeve, the core and the bushing being slotted longitudinally for registration of the slots of the core and bushing with the slot of the sleeve at times.

2. A device of the class described comprising a sleeve, provided with supporting means and a tubular core rotatably mounted in the sleeve and having a radiating arm beyond the sleeve having thread-receiving means at its outer end and disposed for movement with the arm about a spool when held in axial alinement with the core, a bushing in the sleeve beyond the core, said bushing and core being adapted to receive the thread from the arm; the sleeve, the core and the bushing being slotted longitudinally for registration of the slots of the core and bushing with the slot of the sleeve at times, and a split ring sprung onto the outer end of the core and adapted for rotation thereon to open and close the slot of the core.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. COUGHENOUR.

Witnesses:

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W. A. ROSS.