J. MAITLAND.

THREAD STAND.

APPLICATION FILED SEPT. 24, 1912.

1,074,553.

Patented Sept. 30, 1913.

Fig. 1.

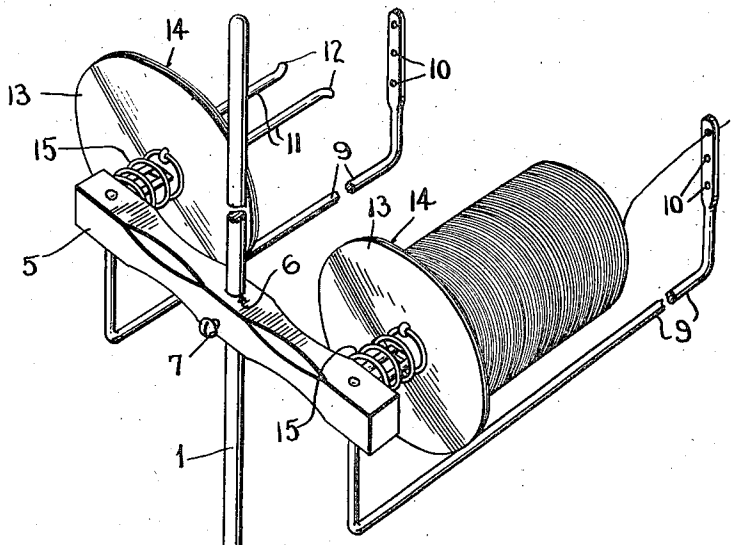


Fig. 3.

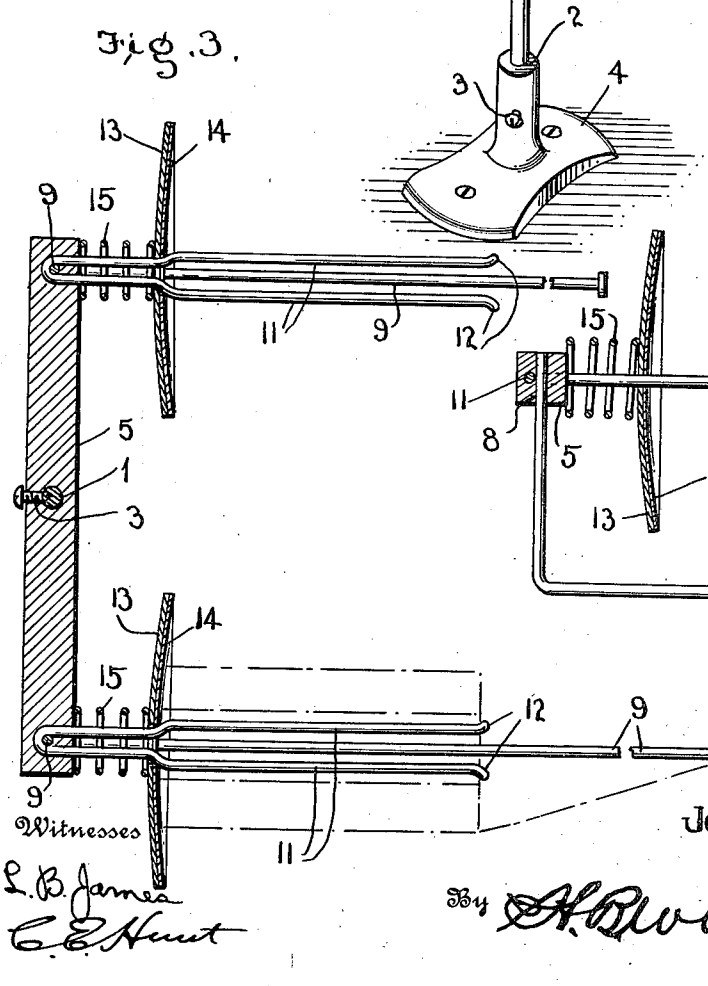
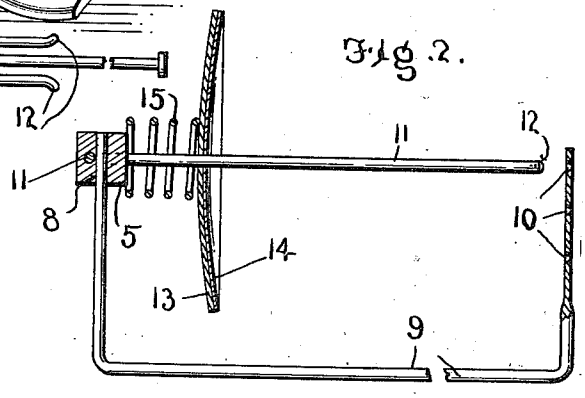


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN MAITLAND, OF LYNN, MASSACHUSETTS.

THREAD-STAND.

1,074,553. Specification of Letters Patent. Patented Sept. 30, 1913.

Application filed September 24, 1912. Serial No. 722,156.

To all whom it may concern:

Be it known that I, JOHN MAITLAND, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Thread-Stands; and I do 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 improvements in thread stands.

One object of the invention is to provide a stand of this character having an improved construction and arrangement of spool or thread tube supporting devices and an improved means for preventing the thread from being wound onto the tube supporting devices.

With this and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of my improved thread stand; Fig. 2 is a vertical section through one end of the spool supporting bar and arms of the stand; and Fig. 3 is a horizontal section through the tube supporting bar and the parts attached thereto.

My improved thread stand comprises a standard or post 1 which has its lower end removably and adjustably supported in a socket 2 by a set screw 3. The socket 2 is provided with a base flange 4 adapted to be secured to a shelf, table or other support. Adjustably secured to the standard or post 1 is a spool supporting member which may be in the form of a cross bar, block or the like and which is here shown as a bar 5, the ends of which project a suitable distance beyond the post or standard with which the bar is adjustably engaged. The bar or member 5 is preferably formed of cast metal and has in its center an aperture 6 to receive the post or standard 1, to which the bar is adjustably secured by a set screw 7, as shown. In the ends of the bar are also formed vertical passages 8, in which are secured thread guiding rods 9, said rods having their inner ends bent at right angles and driven or otherwise rigidly secured in the passages 8. The rods 9 may be of any suitable length and have their outer ends bent upwardly and flattened near their extremities, said flattened extremities of the ends of the rods having therein series of thread guiding passages 10, as shown.

Secured to the ends of the bar 5 in any suitable manner are spool or thread tube holding arms 11, said arms being here shown and are preferably constructed from a spring rod bent upon itself midway between its ends to form a fork. The looped ends of the forks are here shown and are preferably cast into the ends of the bar 5 around the passages 8 and rods 9, thereby rigidly securing the arms to the bar. The fork-arms 11 are bent outwardly a short distance from the bar 5, and their extremities are bent or turned outwardly to a slight extent, as shown at 12, for a purpose hereinafter described. When the forks are thus arranged and secured to the supporting bar 5, the spools or tubes of thread are slipped over their arms and held thereon by the frictional engagement of the arms with the inner surfaces of the tubes and by the outwardly turned ends or extremities 12 which engage and hook over the outer ends of the tubes to a slight extent, as shown in Fig. 3 of the drawings.

In order to prevent the loops or coils of the thread from slipping off of the inner end of the tubes and becoming wound or coiled around the inner portion of the arms, I provide thread guards or shields comprising metal plates or disks 13, which are preferably of circular form and are slightly dished or concaved, as shown. On the inner side of the plate or disk 13 is secured in any suitable manner a lining 14 of felt or other suitable fabric which engages and forms a tight contact with the end of the spool and the coils of thread at this end of the latter. The disks 13 are yieldingly held in tight engagement with the inner end of the tube by coiled springs 15 arranged around the inner portion of the forks and secured at their outer ends to the rear sides of the disks while their opposite ends engage the adjacent side of the bar 5, as shown.

While I have herein shown and described my improved tube holding forks and thread guard or shield as being secured in the bar 5 and adjustably supported on the standard or post 1, it is obvious that these parts may be adjusted and supported in any desired manner.

From the foregoing description, taken in

connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention, as claimed.

Having thus described my invention, what I claim is:

1. In a thread stand, a suitably mounted spool supporting member having in its ends apertures, thread guiding rods secured in said apertures, thread holding forks each comprising a spring metal rod bent midway between its ends to form a loop embedded in the end of the supporting member around the guide rod therein, the fork arms being spaced apart and having their extremities bent outwardly to engage the ends of the thread tubes, and means to prevent the coils of thread from falling off the tubes and onto said forks.

2. In a thread holder, a supporting stand, a tube supporting member adjustably secured to said stand, tube holding arms secured to the ends of said member and adapted to receive a tube of thread whereby the latter is held in operative position, a thread guard comprising a concaved plate having a sliding engagement with the inner portion of said tube holding arms, a soft lining on the inner side of said plate to engage the end of the thread tube and the coils of thread thereon, and a spring arranged between said plate and the tube supporting member whereby said guard is yieldingly held in close engagement with the inner end of the tube and with the coils of thread thereon.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN MAITLAND.

Witnesses:
JAMES W. SULLIVAN,
FRANK C. STUART.