Aug. 12, 1941. E. A. GLASBROOK 2,252,625

BOBBIN HOLDER

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Fig. 1.

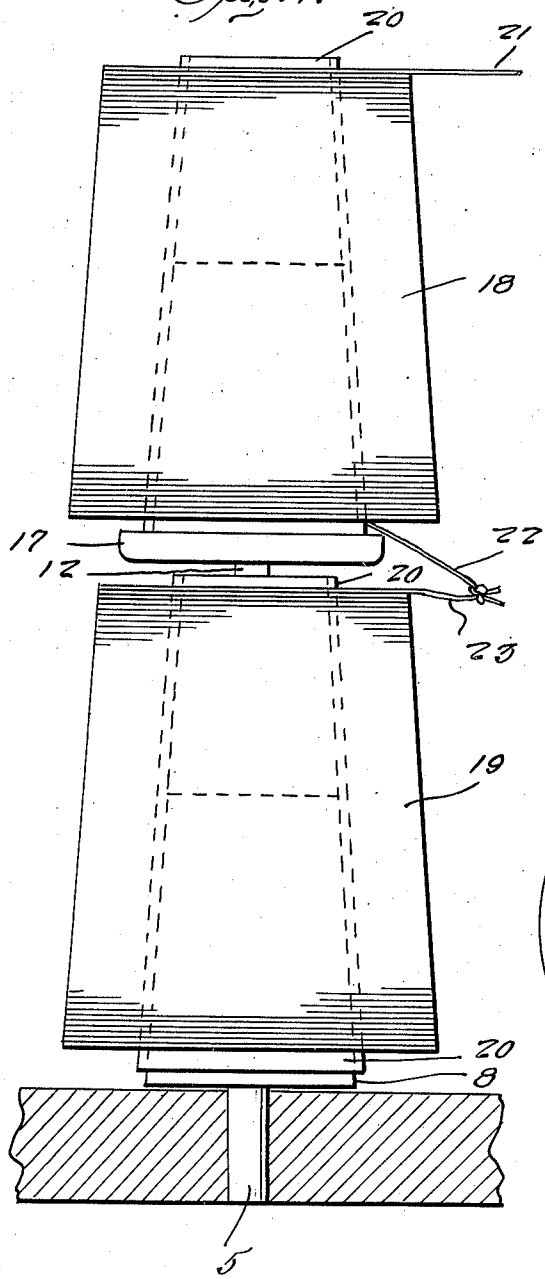


Fig. 3.

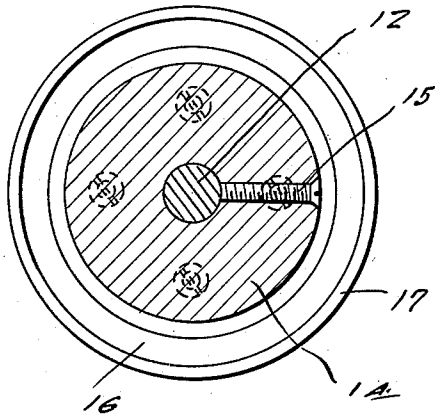
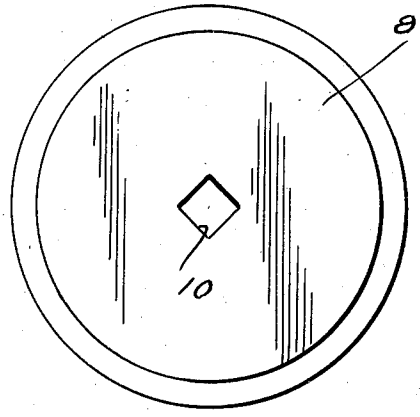


Fig. 4.



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Fig. 2.

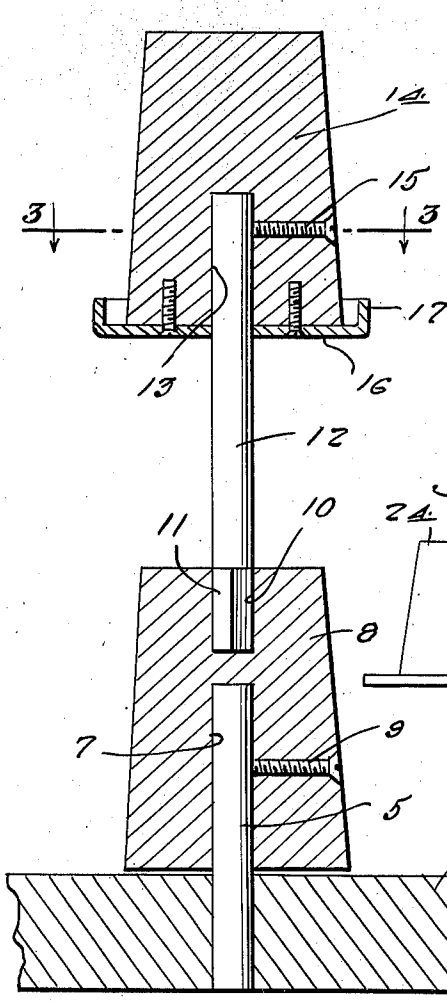


Fig. 6.

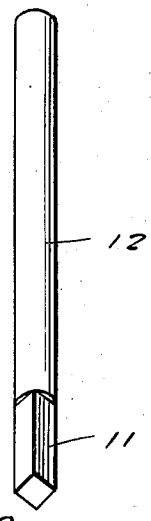


Fig. 7.



Fig. 9.

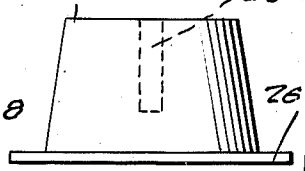


Fig. 5.

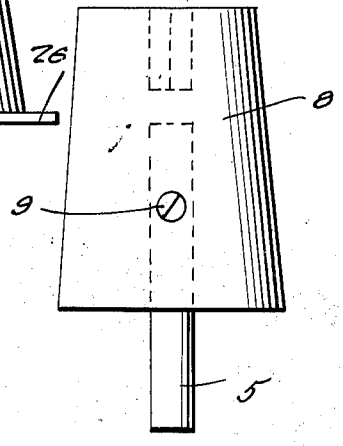
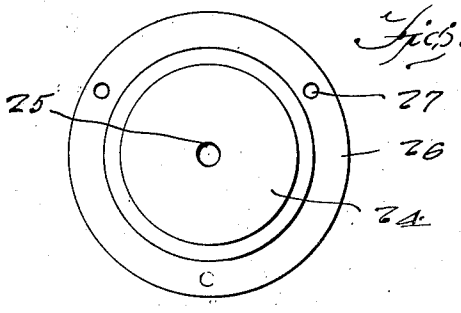


Fig. 8.



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UNITED STATES PATENT OFFICE

2,252,625

BOBBIN HOLDER

Emile A. Glasbrook, Valdese, N. C.

Application July 23, 1940, Serial No. 347,075

3 Claims. (Cl. 242—130)

The present invention relates to new and useful improvements in holders or supports for bobbins or spools of thread, yarn or the like used upon hosiery machinery and has for its primary object to provide a plurality of spindle supports on which the bobbin or spool may be rotatably mounted while the thread is being unwound from the bobbin.

More specifically the present invention comprises a plurality of bobbin or spool supports arranged in superposed relation in order that a plurality of the spools may be rotatably mounted thereon in a manner so that the end of the thread on the uppermost bobbin may be attached to the thread of the lowermost bobbin whereby the thread may be removed from the entire group of bobbins without necessitating the replacement thereof when one bobbin has been exhausted.

A further object is to provide a support of this character of simple and practical construction, which is efficient and reliable in performance, relatively inexpensive to manufacture and install in operation on the machine and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout and in which—

Figure 1 is a side elevational view.

Figure 2 is a vertical sectional view through the upper and lower supporting cones.

Figure 3 is a transverse sectional view taken substantially on the line 3—3 of Fig. 2.

Figure 4 is a top plan view of the lower cone support.

Figure 5 is a side elevational view thereof.

Figure 6 is a perspective view of the upper spindle connecting the upper and lower cones.

Figure 7 is a perspective view of the lower spindle.

Figure 8 is a plan view of a modified form of base support.

Figure 9 is a side elevational view thereof.

Referring now to the drawings in detail wherein for the purpose of illustration I have disclosed a preferred embodiment of the invention the numeral 5 designates a lower spindle having its lower end supported in a base, the upper end of the spindle being inserted in a socket 7 formed in the lower end of a frusto-conical bobbin or spool support 8, the support being secured to the spindle by means of a screw 9.

A bore 10 is formed in the upper end of the support 8, said bore being of square shape in cross section and within which is conformably fitted the square shaped lower end 11 of an upper spindle 12. The upper end of the spindle 12 is inserted in the bore 13 of an upper frusto-conical support 14 and secured therein by means of a screw 15.

Secured to the underside of the upper support 14 is a plate 16 having an upturned flange 17 at the edge thereof which is spaced outwardly from the walls of the support 14, as shown to advantage in Fig. 2 of the drawings.

An upper bobbin or spool of thread is designated at 18 and a lower bobbin or spool of thread is designated at 19, each of the bobbins including a core 20 of tapering formation and adapted to conformably fit on the respective supports 14 and 8. The free end of the upper bobbin 18 is designated at 21 which leads to the machine for unwinding the thread from the bobbin and the other end of the thread of the upper bobbin 18 is designated at 22 which is adapted to be tied to the free end 23 of the thread for the lower bobbin 19, as illustrated in Fig. 1 of the drawings. Accordingly after the thread has been removed from the upper bobbin 18 the thread will then be removed from the lower bobbin 19 without interruption so that the machine may continue to operate without interruption so that the machine may continue to operate without the necessity of changing the bobbin until the entire set of bobbins has been exhausted.

The upturned flange 17 of the plate 16 serves as a guide and spacing member between the adjacent ends of the bobbins 18 and 19 whereby to prevent the adjacent ends of the bobbin from coming into contact with each other.

In Figures 8 and 9 I have illustrated a modified base support for the lower spindle 5, and comprising a block 24, preferably of frusto-conical form having a bore 25 in its upper end for rotatably supporting the spindle and provided with a flange 26 at the base of the block having screw holes 27 for securing the same to the machine.

It is believed the details of construction, operation and advantages of the device will be readily understood from the foregoing without further detailed explanation.

What is claimed is:

1. A bobbin support comprising a plurality of frusto-conical supporting members adapted for conformably fitting in a tapering core of a bobbin, a spindle connecting the members in superposed relation for uniform rotation and a spindle

rotatably supporting the lowermost members, and a spacing plate secured to the bottom of the upper member, said plate having an upturned flange spaced from the surface of the adjacent member and providing a channel for receiving the lower end of the core of the bobbin.

2. A bobbin support comprising a spindle rising from a supporting base, a lower frusto-conical member having an upper bore and a lower bore spaced from each other, said lower bore receiving the upper end of the spindle and secured therein for rotation as a unit, a second spindle having its lower end fitted in the upper bore and connecting the member for uniform rotation and a second frusto-conical member secured to the upper end of said second spindle and supported in spaced relation above the first member.

3. A bobbin support comprising a fixed base having a bore therein, a spindle having one end journaled in the bore and rising from the base, a lower bobbin supporting member having a bore in its bottom portion for receiving the upper end of the spindle, means for attaching the member to the spindle for rotation therewith, said member also having a bore in its upper portion of non-circular form and spaced from the lower bore, a second spindle having one end conformably fitted in the upper bore and rising therefrom, an upper bobbin supporting member having a bore in its bottom for receiving the upper end of said second spindle and means connecting said upper member to the second spindle for uniform rotation with the lower member, said members being adapted for supporting individual bobbins thereon with the threads of the bobbins connected.

EMILE A. GLASBROOK.