E. M. MENZL.

BOBBIN UNWINDING ATTACHMENT FOR SEWING MACHINES.

APPLICATION FILED JUNE 10, 1920.

1,368,820. Patented Feb. 15, 1921.

Fig. 1.

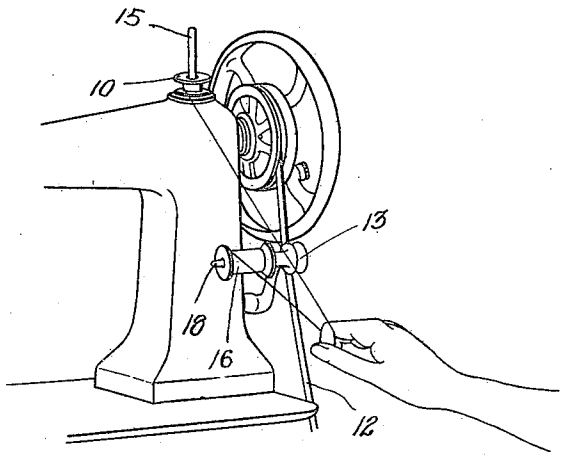


Fig. 2.

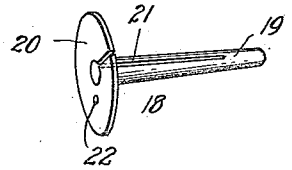


Fig. 3.

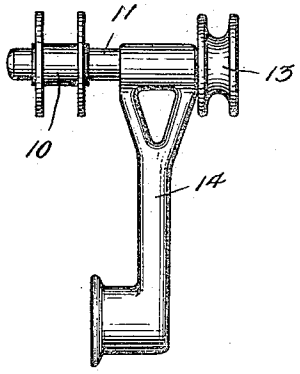
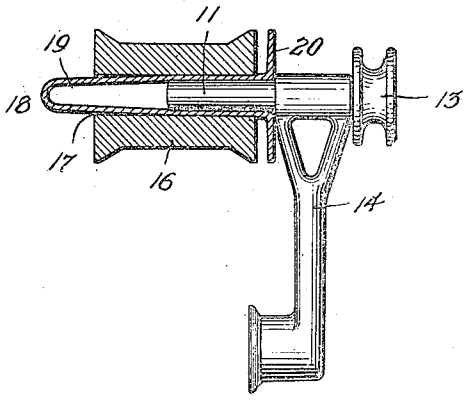


Fig. 4.



WITNESSES

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BOBBIN-UNWINDING ATTACHMENT FOR SEWING-MACHINES.

1,368,820. Specification of Letters Patent. Patented Feb. 15, 1921.

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To all whom it may concern:

Be it known that I, ELIZABETH MARIE MENZL, a citizen of the United States, and a resident of Steinway, Long Island City, borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Bobbin-Unwinding Attachment for Sewing-Machines, of which the following is a full, clear, and exact description.

This invention relates to sewing machine attachments and has particular reference to bobbin winding and unwinding devices. Ordinarily there are provided for a sewing machine but a few bobbins, and this fact makes it necessary frequently for the seamstress to unwind the thread of a certain color or quality from a bobbin previously filled in order to use such bobbin in connection with a thread of a different color or quality according to the nature of the work to be done by the sewing machine. Under ordinary circumstances the unwinding of a thread from a bobbin must be performed by hand, an operation that is not only tedious, but one which is apt to be accompanied with more or less soiling of the thread.

Among the objects of this invention therefore is to provide a means or attachment for the bobbin winding spindle adapting the same to receive any convenient empty spool upon which the thread may be readily wound mechanically by operation of the machine.

With the foregoing and other objects in view the invention consists in the arrangement and combination of parts hereinafter described and claimed, and while the invention is not restricted to the exact details of construction disclosed or suggested herein, still for the purpose of illustrating a practical embodiment thereof reference is had to the accompanying drawings, in which like reference characters designate the same parts in the several views, and in which—

Figure 1 is a perspective view indicating a portion of a sewing machine head with the fly wheel and adjacent parts, and showing my invention in operation.

Fig. 2 is a perspective view of my improved attachment.

Fig. 3 is a front elevation of the usual bobbin winding spindle and arm that supports it.

Fig. 4 is a front elevation of the same spindle and arm indicating in longitudinal section one of my improved thimbles serving to hold a spool upon the spindle.

The bobbin 10 of any usual or conventional nature comprises a hub adapted to fit upon the spindle 11 frictionally or otherwise, and is adapted to be rotated with the spindle by the operation of the fly wheel or the belt 12 coöperating with the pulley 13 connected to the end of the spindle and journaled in the upper end of the arm 14.

Assuming that the bobbin 10 is filled or partially filled with thread of a color or character different from that desired to be used next on the machine and no other bobbin is empty and available for such purpose, it is ordinarily necessary for the thread on the bobbin to be removed by hand because the bobbin winding means provided as a part of the machine is not adapted for unwinding the thread from the bobbin. To dispose therefore of the thread on the bobbin in order to empty the same for a different thread I place the bobbin having the thread thereon upon the spool stand 15 at the top of the machine head, upon which it will be held free to rotate in a manner similar to the action of a spool of thread.

16 indicates an empty thread spool, one of which will always be kept on or around the machine, for the purpose of receiving thread to be removed from the bobbin. The hole 17 in the spool, however, is too large for the spindle 11 so in order to adapt the wooden spool 16 to the spindle 11 I provide a thimble 18 comprising a conical body portion 19 and an end flange 20. This thimble may be made of any suitable material, preferably resilient. It may be of india rubber, but preferably for the sake of cheapness and durability it may be made of sheet metal or other sheet material suitably molded. If made of metal it is preferably split longitudinally as indicated at 21 to afford ample resiliency for adapting it to spindles of varying diameters, but being tapered will always receive and hold by friction any ordinary empty wooden spool in quite the same manner as the bobbin is fitted upon the spindle 11. The purpose of the flange 20 is to facilitate the manipulation of the thimble not only for ordinary handling thereof, but also for removing it from the spindle or from the spool 16 if the thimble follows the spool when it is withdrawn from the spindle. In some types of sewing machines the bobbin is provided with a hole

for coöperation with a pin or stud and for such machine I provide a hole 22 through the flange portion of the thimble, but for ordinary purposes this hole is idle so far as the operation of the unwinding of the bobbin is concerned.

From what has been said above and from the illustrations the operation of my improvement will be obvious. Having placed the loaded bobbin on the spool stand 15 I then slip the thimble upon the spindle 11 and the spool 16 upon the thimble, the free end of the thread is then attached to the spool in the usual manner and with the operation of the winding spindle 11 in the usual manner for filling the bobbin the thread will be withdrawn from the bobbin and wound neatly upon the spool where it may be kept for subsequent use. The attachment is then removed from the spindle so that the bobbin may be placed thereon for loading from another spool of thread as will be understood.

I claim:

1. The herein described bobbin winder spindle attachment comprising a conical thimble of sheet material including an open end and a closed end, and having a longitudinal slit adjacent its open end.

2. The herein described bobbin winder spindle attachment comprising a conical thimble of sheet material including an open end and a closed end, and having a longitudinal slit adjacent its open end, and an external flange around the open end having a slit therein registering with the first mentioned slit.

ELIZABETH MARIE MENZL.