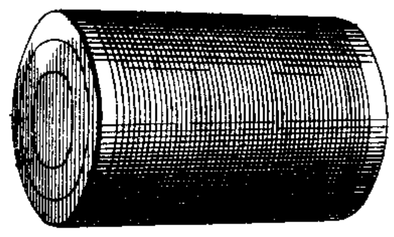
No. 675,801. Patented June 4, 1901.

M. B. STILES.

SPOOLED THREAD.

(Application filed Nov. 6, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

MARY B. STILES, OF CHICAGO, ILLINOIS.

SPOOLED THREAD.

SPECIFICATION forming part of Letters Patent No. 675,801, dated June 4, 1901.

Application filed November 6, 1899. Serial No. 736,037. (No model.)

To all whom it may concern:

Be it known that I, MARY B. STILES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Spooled Thread, of which the following is a specification.

My invention relates to improvements in the commercial spooled thread or spool of sewing-thread, which as a distinctive article of commerce is the universally-established means for providing the finer threads in one long and continuous length, and particularly cotton-thread, to the trade.

Spooled thread as hitherto provided has objectionable features which it is desirable to correct—namely, the thread of the spool is exposed to the deleterious influences of the atmosphere, which tend in time to knot the thread and cause the thread if colored to fade and the thread unwinds too readily and when unwound tends to tangle and knot.

My object is to improve the commercial spool of thread, whereby the thread is preserved against rotting and fading, if colored, is held against too ready unwinding, and is ready for use in the sense of being already waxed to prevent its tangling, give it the desired strength, and render it easy to thread upon the needle. The common expedient of waxing thread for hand-sewing as distinguished from use in sewing-machines has been to draw it, usually repeatedly, across a lump of suitable wax held in the hand; but in this practice the wax forms a mere superficial coating unevenly applied, which tends to clog the eye of the needle and to soil the fingers and fabric. It has been suggested that for use more especially in shoe-sewing machines shoemakers' thread might by the employment of an especially-constructed and necessarily-expensive machine be unwound from the ball, spool, skein, or whatever form it may be provided in and passed under tension through a bath of melted wax and wound upon bobbins or into hollow cylindrical cops to be slipped upon especially-constructed bobbins. No thread-waxing machine such as described is adapted for domestic use and even the common expedient of waxing thread by hand is often dispensed with, in spite of the desirability of waxed thread, on account of the trouble of the operation and annoyance of soiling the fingers.

My invention involves as a new article of manufacture a commercial spool of sewing-thread above defined, having the thread coated and saturated throughout with wax and cohesively held thereby against free unwinding.

The drawing shows a commercial spool of thread involving my invention.

In the way I prefer to practice my invention a spool of sewing-thread, such as described, is immersed bodily into a bath of melted paraffin or liquefied wax or waxy substance of any suitable kind for a sufficient length of time to cause the thread to be coated throughout with the wax. The paraffin or other wax should be liquefied, preferably by heat, to a degree of thinness which will cause it to penetrate readily through the thread and drain off quickly when the spool is removed from the bath. Immersing the spool bodily into a bath of suitably-liquefied wax I believe to be the easiest and best way, and, in fact, the only practical way of producing the results desired. It involves the use of no complicated and expensive machinery and the cost of material and labor need be scarcely more than nominal when a single spool is considered.

The invention may be practiced at a spool-thread factory without necessitating any change in the construction or operation of the spooling machinery. When the operation is properly performed, it will be found that the thread is saturated and coated throughout its entire length with a uniform volume of the wax, and each layer of the thread upon the spool is covered with a thin film of the wax, which tends lightly to cement the adjacent lying thread-surfaces together. Although the surface of the wood of the spool will also be covered with the wax, the coating is so thin that it is not objectionable.

Some of the benefits resulting from the treatment of spools of thread of any absorbent material by my invention are the following: The thread is not only strengthened and prevented from ready tangling and knotting in use, but is preserved against rotting on

the spool, colors are preserved against fading, the thread is cohesively held against unwinding too easily from the spool and is given a smooth even surface free from frays, the waxed thread may be used upon a sewing-machine without danger of clogging the eye of the needle, and thread hitherto considered too fine for sewing-machine use is strengthened and rendered capable of such use without danger of breaking, and spools of cotton thread are improved in appearance by being given a gloss resembling that of silk.

What I claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture, the herein-described commercial spool of cotton or like sewing-thread having the thread completely coated and saturated throughout with wax and cohesively held thereby against free unwinding from the spool.

MARY B. STILES.

In presence of—
F. J. MARTIN,
D. W. LEE.