(No Model.)

B. L. ARMSTRONG.

SPOOL FOR CONTAINING THREAD.

No. 594,190. Patented Nov. 23, 1897.

Fig. 1.

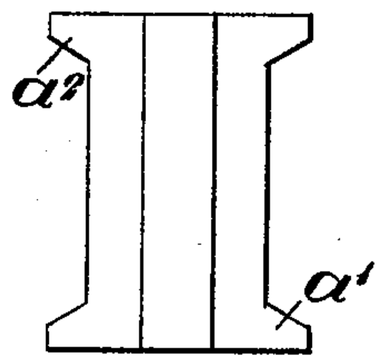


Fig. 2.

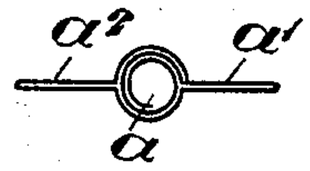


Fig. 3.

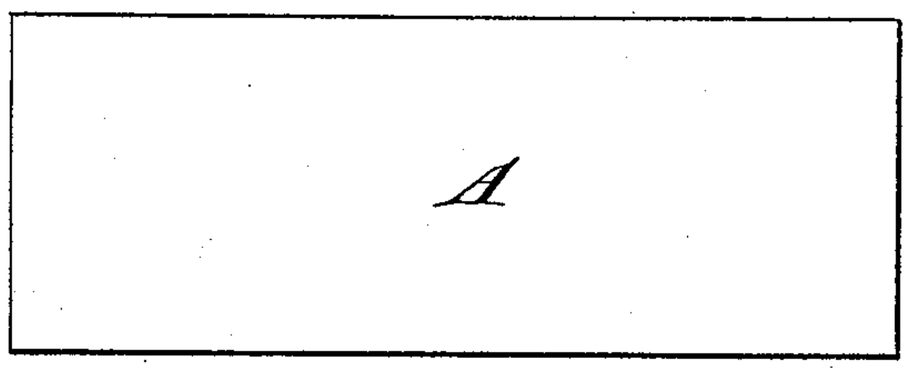
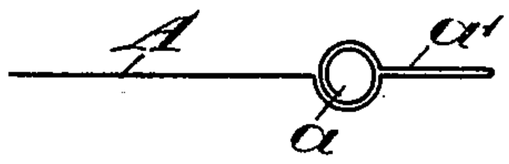


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

BENJAMIN LATHAM ARMSTRONG, OF NEW LONDON, CONNECTICUT.

SPOOL FOR CONTAINING THREAD.

SPECIFICATION forming part of Letters Patent No. 594,190, dated November 23, 1897.

Application filed June 3, 1896. Serial No. 594,128. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN LATHAM ARMSTRONG, of New London, in the county of New London and State of Connecticut, have invented a new and useful Improvement in Spools for Containing Thread, of which the following is a specification.

My invention relates to an improvement in spools for containing thread for the market, with the object in view of providing a light inexpensive spool and one capable of being placed upon a spindle to rotate freely when it is desired to use the thread on a sewing-machine.

The wooden spool in common use is comparatively costly and for purposes of shipment weighs so much that its use greatly increases the cost of the thread to the consumer.

The paper quill, while overcoming the objectionable weight and cost of the wooden spool, must be made of awkward length or else shed the thread from its ends and at best permits the thread to become spread and liable to snarl.

My present invention contemplates a spool made of paper or other suitable light cheap material having a central socket for the reception of a spindle, both for arresting the thread on and unwinding it from the spool, and provided with flaring ends to retain the thread neatly and securely in position.

In the accompanying drawings, Figures 1 and 2 represent, respectively, in side and end elevation the completed spool. Fig. 3 represents the blank from which the spool is made. Fig. 4 represents the first step in the formation of the spool, and Fig. 5 represents the second step in the formation of the spool.

The spool consists of an oblong strip of paper or its equivalent coiled to form a tubular core and folded to form a flattened body portion which embraces the tubular core and extends in opposite directions from the core to form suitable retaining ears or wings.

The oblong strip of paper is denoted by A, and it is first coiled at one end to form the core a, as shown in Fig. 4. The coiled portion a is then bodily laid over onto the strip of paper at a distance from where it was coiled, forming a folded wing or ear a', as shown in Fig. 5. The opposite end of the strip is then folded over onto itself to form the opposite wing or ear a^2 and over the coiled portion a and secured to the said coiled portion by some suitable glue, the coil being secured to the strip of paper where it was first laid over.

The folded wings a' a^2 may be cut away intermediate of their ends to form a contracted body portion, as shown in Fig. 1.

In speaking of the spool as adapted to contain thread I wish to be understood as including silk, yarn, or any flat cord or tape as might be suitable for spooling purposes.

What I claim is—

A spool formed of paper or its equivalent and consisting of a single strip coiled to form a tubular core and folded to form a flattened body portion embracing the tubular core and extending in opposite directions from the core to form retaining-ears, substantially as set forth.

BENJAMIN LATHAM ARMSTRONG.

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