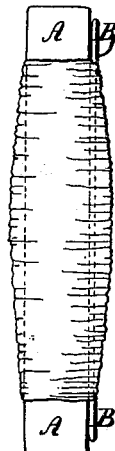


*B. A. Armstrong.*  
*Quill Thread Fastener.*  
*N<sup>o</sup> 109,995.      Patented Dec. 13, 1870.*

*Fig. 1*



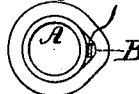
*Fig. 3*



*Fig. 2*



*Fig. 4*



*Witnesses*

*A. Hoermann.*

*C. C. Livings*

*Inventor*

*B. A. Armstrong*  
*by his atty J. H. Stetson.*

# United States Patent Office.

**BENJAMIN A. ARMSTRONG, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO HIMSELF,  
JAMES P. BRAINERD, OF NEW HAVEN, CONNECTICUT, AND LEONARD O. SMITH,  
OF PHILADELPHIA, PENNSYLVANIA.**

Letters Patent No. 109,995, dated December 13, 1870.

## IMPROVEMENT IN HOLDERS FOR SILK, &c.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern:*

Be it known that I, BENJAMIN A. ARMSTRONG, of Jersey City, in the county of Hudson, in the State of New Jersey, have invented certain new and useful Improvements in Holder for Silk or analogous material for sewing; and I do hereby declare that the following is a full and exact description thereof.

I dispense with the usual spools, and in lieu thereof employ small tubes of paper, peculiarly adapted by an additional piece firmly secured to one side to receive and store a small quantity of sewing-silk, sewing-cotton, or other thread.

My invention is particularly well adapted to the putting up and selling very small quantities of silk, but it may be used for carrying larger quantities. It provides ample means for holding the loose end of the silk, both at the commencement or while the goods are kept in store or on sale, and at any subsequent periods during the intervals which occur in family sewing in the consumption of any given quantity of sewing material.

I will proceed to describe what I consider the best means of carrying out my invention.

The accompanying drawing forms a part of this specification.

Figure 1 is a side view of the quill complete, ready to receive the silk;

Figure 2 is an end view of the same;

Figure 3 is a side view of the quill filled with silk ready to be sold or packed and shipped for use; and

Figure 4 is an end view of the same.

Similar letters of reference indicate like parts in all the figures.

A is a small tube or quill of paper formed by winding around previously-prepared sheets and gluing together the edges properly scarfed, or in any other convenient manner. It should be sufficiently sized or otherwise made stiff and strong to enable it to bear ordinary handling.

The sizes I prefer are about two inches long and one-quarter inch in diameter, but this is not material.

B is a flat wire, of brass, laid parallel to and touching the outer surface of the quill, and

C is a piece of strong paper wound spirally around, and glued or otherwise strongly cemented to the quill.

This paper C may be, and preferably is, printed with the name and address of the manufacturer.

I consider it an advantage of considerable practical importance that the address of the manufacturer or dealer shall be distinctly presented or made conspicuous toward the close of the consumption of the goods, rather than alone at the commencement.

The wire B should preferably be glued, or otherwise firmly attached directly to the quill by the applica-

tion of a cementing material along the center of its length. This means, in itself very efficient, is further fortified by the application of the strong paper or label C, which winds around or over the wire and quill, and firmly binds them together.

The winding of the silk is commenced by laying the end under one of the ends of the wire, and, at the termination of the winding, the free end is drawn under the same or the opposite end of the wire. Any convenient or suitable mechanism may be employed for the winding. The material may be laid with all the regularity observed in spooling, if a suitable mechanism be employed. When, at any period in the course of the consumption of the silk, it is desired to put the quill back into the bag, work-basket, or the like, with a portion of the thread or other material unconsumed, it is simply necessary to draw the end of the silk under one of the ends of the wire, and it will safely remain for any period without unwinding.

I have described the quill as paper and the piece B as brass wire. I esteem these the best, but other suitable materials may be substituted for either or both. It is only essential that they be reasonably strong and durable, and that the ends of the piece B which project beyond the coils of thread shall be suitable to confine the end of the thread and to allow it to be readily removed and again inserted and confined at pleasure.

My quills thus prepared are to contain a measured quantity of thread, determined by any ordinary or suitable means, the same as in spooling. The filled quills may be packed in boxes for sale, and may be stuck on a wire or other slender pin to allow the material to be drawn off as from spools.

Although I have described the wire B or its equivalent as held to the quill by glue or analogous cementing means, I believe it practicable to hold it by raising a portion of the quill and allowing the wire to be thrust through such raised surface. In such case the bunch thus produced in the quill should be near the center of its length, and the holding will be equivalent, or nearly so, in effect to the fastening with glue. There may be many variations in the mode of attaching, and a very weak attachment may be found to be sufficient for some uses. I believe it practicable, with proper care in the winding, to lay the silk or other thread on so as to hold the wire B firmly in position of itself by the tension of successive coils of silk alone. In such case no glue would be absolutely required, and the label also might be dispensed with. This would reduce the labor of making the quills, and would produce the same effect in substance after the quill was wound with the silk and put on the market. The loose ends would be held in the same manner, and the quill would serve about the same uses, except that it

would be liable to involve some difficulties when the silk was nearly consumed and the wire B became partially loose. I much prefer to hold the wire B both by glue at a point near the middle, and by a tightly-wound and glued label C, as shown.

I claim as my invention and desire to secure by Letters Patent—

The quill A and wire B or its equivalent, arranged substantially as and for the purposes herein set forth.

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

Witnesses: BENJ. A. ARMSTRONG.

THOMAS D. STETSON,

C. C. LIVINGS.