

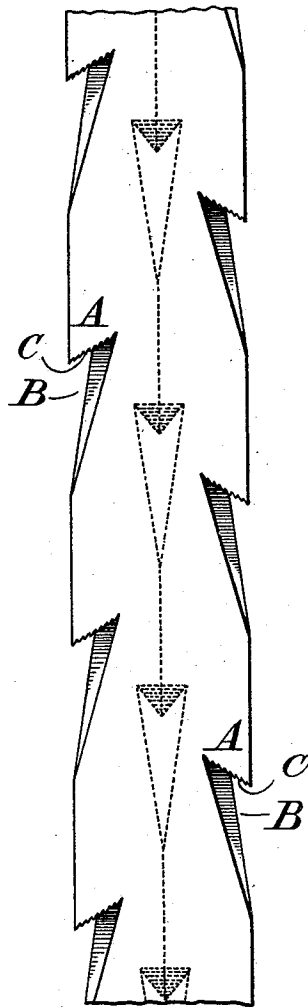
(No Model.)

C. A. WHIPPLE.

NEEDLE EMPLOYED IN THE MANUFACTURE OF FELTED FABRICS.

No. 469,762.

Patented Mar. 1, 1892.



Witnesses:

H. S. McArthur
E. L. Thrasher

Inventor:

C. A. Whipple
by Foster Freeman
attys

UNITED STATES PATENT OFFICE.

CAROLINE AUGUSTA WHIPPLE, OF LONDON, ENGLAND.

NEEDLE EMPLOYED IN THE MANUFACTURE OF FELTED FABRICS.

SPECIFICATION forming part of Letters Patent No. 469,762, dated March 1, 1892.

Application filed November 27, 1891. Serial No. 413,301. (No model.)

To all whom it may concern:

Be it known that I, CAROLINE AUGUSTA WHIPPLE, a subject of the Queen of England, residing at London, in England, have invented certain new and useful Improvements in Needles Employed in the Manufacture of Felted Fabrics, of which the following is a specification.

This invention relates to needles; and the object of the invention is to increase the holding power upon the fibers upon the barbs. The shape of the needle in section is immaterial; but conveniently a three-cornered or triangular needle will give good results.

The accompanying drawing, in which the needle is shown enlarged, shows this invention applied to a needle of ordinary construction.

The barbs A are usually formed by recessing or cutting out a portion B of the needle, and I prefer to adopt this course with my improved needles, although the invention may

be applied to other forms of barbs. The working face C of the barb is, as shown in the drawing, roughened, jagged, or toothed for the purpose of increasing the hold upon the fibers with which the barb as it passes through the material engages. The exact form and arrangement of the roughened surface C is quite immaterial so long as sufficient hold is provided to give the required grip upon the fibers.

I claim—

A needle provided with a barb, the working face of which barb is roughened, substantially as described.

In testimony whereof I have hereto set my hand in the presence of subscribing witnesses.

CAROLINE AUGUSTA WHIPPLE.

Witnesses:

ALFRED J. BOULT,
JOSEPH LAKE,
HARRY S. BRIDGE.