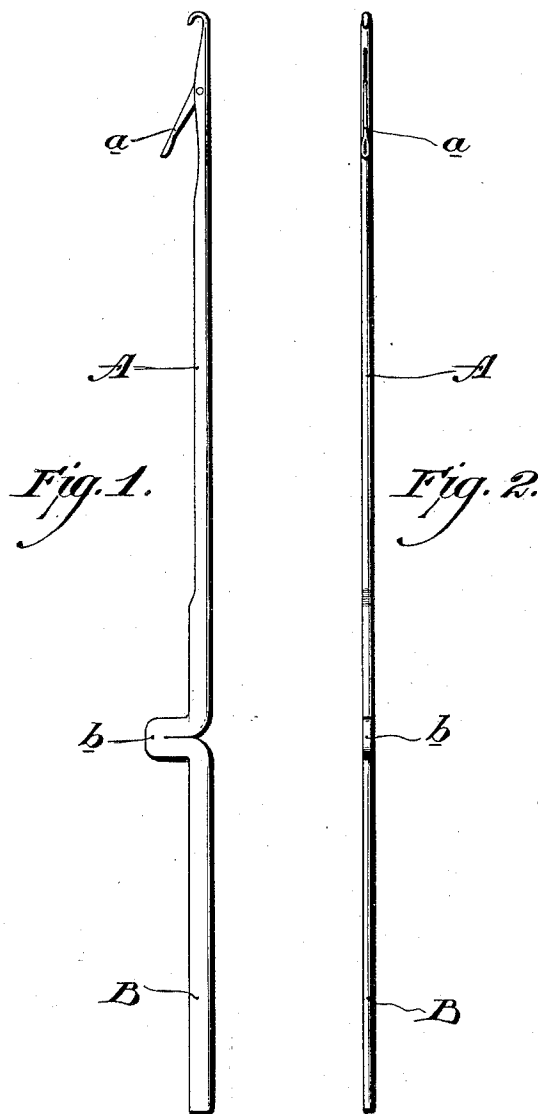


(No Model.)

C. B. M. SPROWLES.
KNITTING MACHINE NEEDLE.

No. 485,021.

Patented Oct. 25, 1892.



WITNESSES:

Wm. E. Dudley
Jed. W. Cassidy

INVENTOR:

Christian B. M. Sprowles.

UNITED STATES PATENT OFFICE.

CHRISTIAN B. M. SPROWLES, OF PHILADELPHIA, PENNSYLVANIA.

KNITTING-MACHINE NEEDLE.

SPECIFICATION forming part of Letters Patent No. 485,021, dated October 25, 1892.

Application filed May 24, 1892. Serial No. 434,213. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN B. M. SPROWLES, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Knitting-Machine Needles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object the production of a needle for circular-knitting machines, in which the lower portion is of greater width than the upper portion. To this lower portion is attached the butt upon which the knitting-cams act. Many attempts have been made to accomplish this, among which is the method which consists in doubling the tail-piece over and soldering together the two arms of the loop; but the two parts often break apart.

My improvement consists in a needle in which both the top and the tail-piece are one unitary piece of metal; but the tail-piece, to which the butt is attached, is of greater width than the top portion of the needle.

In the drawings, Figure 1 is an enlarged side elevation of my improved needle. Fig. 2 is an enlarged edge view of my improved needle.

The needle is formed of the top portion A, to which is connected the stitch device a. B

is the tail-piece, formed with the butt b. This needle in its entirety is formed of one piece of metal, substantially of the width of the tail-piece B, and then by swaging the upper portion A is reduced to a width less than that of the tail-piece B. I thus form a knitting-needle adapted for use in circular-knitting machines in which the tail-piece is of a width greater than the width of the top or upper portion, and both the tail-piece and top portion are one unitary structure.

Having now fully described my invention, what I claim and desire to protect by Letters Patent, is—

1. A knitting-machine needle formed throughout in a unitary structure, the tail-piece of which is of a width greater than the remainder of the needle.

2. The hereinbefore-described method of manufacturing an improved knitting-machine needle, which consists in forming the tail-piece and upper portion of said needle in a unitary structure of substantially the same width throughout and then reducing the width of the upper portion of said needle.

In testimony of which invention I have hereunto set my hand.

CHRISTIAN B. M. SPROWLES.

Witnesses:

FRANK S. BUSSEY,
M. F. ELLIS.