

# UNITED STATES PATENT OFFICE.

JOHN H. BLOODGOOD, OF RAHWAY, NEW JERSEY.

## IMPROVEMENT IN PROCESSES OF FORMING YARN BY FELTING.

Specification forming part of Letters Patent No. 9,613, dated April 5, 1853.

*To all whom it may concern:*

Be it known that I, JOHN H. BLOODGOOD, of Rahway, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in the Manufacture of Woolen Rovings or Untwisted Thread; and I do hereby declare that the following is a full, clear, and exact description of the same.

The nature of my invention consists in the production of a strong felted roving or untwisted thread of wool capable of being employed for warp or weft in making woven cloth, or for knitting, sewing, and other purposes.

All threads made of wool for the purposes of knitting or sewing are made by twisting after the wool is carded and condensed into rovings. The twisting or spinning processes are expensive, owing to the machinery, time, and labor employed in the said processes.

No roving or untwisted woolen thread as now made by the common processes, or that has been made heretofore, can be employed for either weaving or knitting purposes, because the fibers of the wool are loose, do not adhere together, and draw apart when the least tension force is applied to them. This difficulty is obviated by felting the rovings as they come from the carding-machine. This is done by allowing the rovings to pass through a steam-box, where they are submitted to the action of steam and a rolling rubbing motion of a plate, by which the said rovings are felted, and thereby made into strong, beautiful, and durable untwisted thread, and in that state capable of being employed for weaving, knitting, &c., and all the purposes for which twisted threads or yarns are now employed. The felted roving or felted untwisted thread

is capable of producing a soft, strong, and beautiful fabric of cloth, and it covers up cotton warping, which is now so abundantly employed in our manufactures, in a much superior manner to woolen twisted weft. Cloth made of my felted roving thread is more easily napped by the teasel than cloth made of twisted thread, and it is capable of taking a far finer finish in the dressing process. In weaving, the felted roving weft is capable of being driven up so close with the "lay" or driver that it covers up a cotton or linen warp so completely that the cotton cannot be detected, and it never can wear out in the same manner as the cotton warps of satinets do, which are made with a weft of twisted woolen thread, (yarn.)

The producing of a strong felted roving or untwisted felted thread capable of being employed for weft, or thread for knitting, &c., saves all the troublesome and expensive processes of spinning and doubling and twisting.

I do not claim any new improvement in machinery in this specification, as the new manufacture of felted rovings or untwisted felted thread is a new invention and improvement in itself, and it can be applied to different branches of manufacturing textile fabrics, &c.

What I claim as my invention, and for which I desire to secure a patent, is—

The formation of thread or yarn from woolen rovings by the process of felting instead of twisting or spinning, substantially as herein set forth.

JNO. H. BLOODGOOD.

Witnesses:

S. D. BROWN,

WM. E. BLOODGOOD.