No. 668,793.

Patented Feb. 26, 1901.

J. BRADLEY.

KNITTED FABRIC.

(Application filed Aug. 6, 1898.)

(No Model.)

FIG. 1.

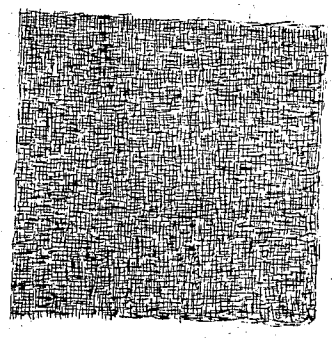
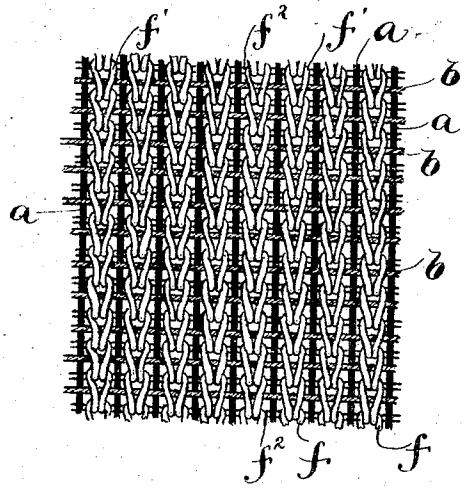


FIG. 2.



WITNESSES:

A. D. Harrison

P. W. Pezzetti

INVENTOR:

John Bradley

by Wright, Brown & Quinby

Attys.

UNITED STATES PATENT OFFICE.

JOHN BRADLEY, OF NORTH CHELMSFORD, MASSACHUSETTS.

KNITTED FABRIC.

SPECIFICATION forming part of Letters Patent No. 668,793, dated February 26, 1901.

Application filed August 6, 1898. Serial No. 687,921. (No specimens.)

To all whom it may concern:

Be it known that I, JOHN BRADLEY, of North Chelmsford, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Knitted Fabrics, of which the following is a specification.

This invention relates to a new and useful improvement in knitted fabrics; and it consists in the novel features of construction and relative arrangement of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claim.

Reference is to be had to the accompanying sheet of drawings, forming a part of this application, in which like characters indicate like parts wherever they occur.

In the drawings, Figure 1 represents in front elevation a fabric constructed in accordance with my invention, the several threads being separated or loosened in order to show their relative arrangement. Fig. 2 represents a conventional view of the finished fabric.

My improved fabric is composed of a series of warp-threads *a* and a series of weft-threads *b*, combined with a knitted web formed from a knitted thread *f* and comprising interlocking loops or stitches *f'* and the part of the thread *f* lying between said loops *f'* and designated by the symbol f^2. This fabric is made upon a spring-beard knitting-machine, its production upon the latch-needle machines being practically impossible.

The knitted web is formed in the usual way, comprising the interlocking loops *f'*. The warp-threads *a* are arranged between these loops or stitches, as shown, and in front of the portion f^2 of the knitted thread between the loops. The weft-threads *b* are arranged in front of the warp-threads *a*, behind the knitted loops *f'*, within a pocket between the warp-threads and the said loops, resting on the part f^2 of the knitted thread that extends around back of the warp-thread. For the purpose of illustration and as shown in the drawings the weft thread or threads may be said to be arranged on top of the part f^2 of the knitted thread. It will be seen that since the warp-threads are introduced into the fabric without being strained or hard-twisted, as is the case with the loom fabric, the cloth has a much softer feeling. Moreover, by reason of the arrangement of the warp and weft threads with each other and with the knitted web my improved fabric may have any desired degree of firmness. After the fabric has been knitted as above described it is fulled and finished by the usual processes, producing a finished fabric having a nap or without a nap, as desired.

It will be seen that the fabric of this application is a finished cloth—that is to say, a marketable product having the characteristics which are secured by the processes which are followed in the treatment of loom-woven goods and having certain structural characteristics which obviate the disadvantages which are incident to knitted webs.

The fabric is distinguished from ordinary knitted webs or fabrics in that the threads are closely arranged, so that, as in the case of woven goods, the fabric may be fulled to form a substantially unyielding body and finished to give thereto the desired surface. Woven goods have not the structural characteristics of my fabric, while the ordinary knitted webs or fabrics are elastic and have no structural features to enable said webs or fabrics to be either fulled, or finished, or formed into the article described and claimed by me.

Having thus explained the nature of my invention and described a way of constructing and using the same, though without attempting to set forth all of the ways in which it may be made or all of the modes of its use, what I claim, and desire to secure by Letters Patent, is—

An improved fabric comprising a knitted web, warp and weft threads interwoven with, and bound by the stitches of said web, the threads of said fabric being closely arranged as in woven goods, said fabric being fulled to produce the effect of woven goods, and finished to give thereto the desired surface.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN BRADLEY.

Witnesses:
HENRY T. RIPLEY,
GEO. Y. HODGE.