

(No Model.)

G. F. SUMNER.
KNIT FABRIC FOR MATTRESSES.

No. 573,720.

Patented Dec. 22, 1896.

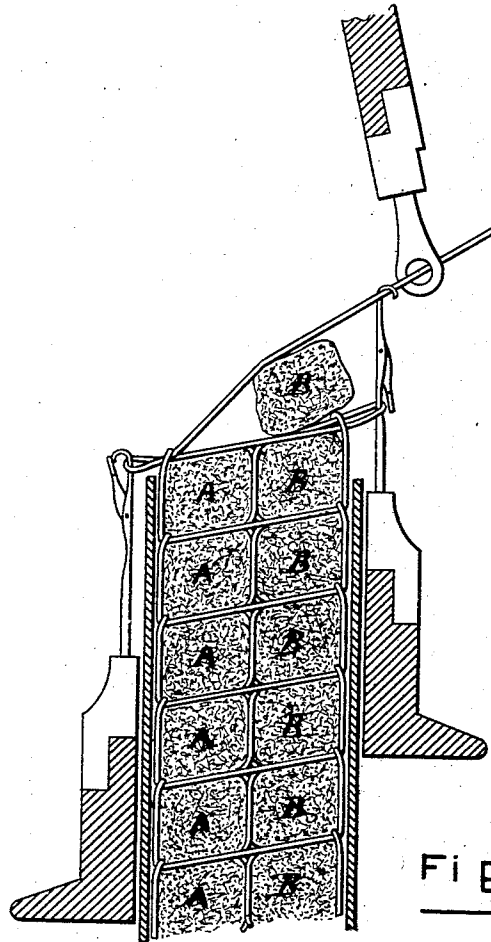


FIG. 1.

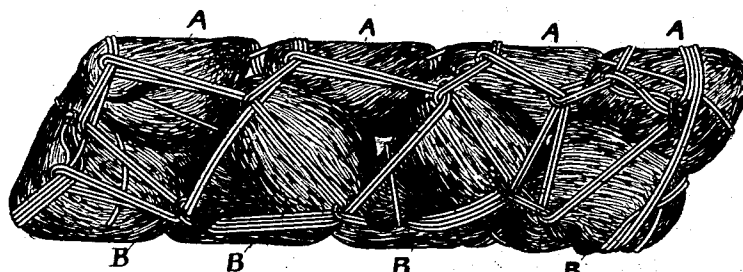


FIG. 2.

WITNESSES

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INVENTOR

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per Franklin S. Parker atty.

UNITED STATES PATENT OFFICE.

GEORGE FREDERICK SUMNER, OF CANTON, MASSACHUSETTS.

KNIT FABRIC FOR MATTRESSES.

SPECIFICATION forming part of Letters Patent No. 573,720, dated December 22, 1896.

Application filed February 24, 1891. Serial No. 382,645. (No specimens.)

To all whom it may concern:

Be it known that I, GEORGE FREDERICK SUMNER, of Canton, in the county of Norfolk and State of Massachusetts, have invented
5 certain new and useful Improvements in Knit Fabrics for Mattresses, &c., of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to provide a
10 new and useful fabric for mattresses, &c. I accomplish this object by taking thick slivers of cotton as they come from the carding-machine and have but little or no twist in them (what twist there is being that given by the
15 rotation of the cans, if they are deposited in cans) and then wind around each of these slivers a piece of thread to hold the fibers in place, so that each sliver becomes a soft rope of cotton, ordinarily about an inch in diameter.
20 These slivers are taken to a knitting-machine adapted to make my new fabric. In this machine the slivers are carried back and forth in double parallel lines, and while this is being done needles carrying thread knit
25 loops firmly around the slivers, binding them together, thus forming a new and useful fabric, differing, essentially, from any other of which I am aware.

In the drawings, Figure 1 is a sectional view
30 taken at right angles to the slivers of the fabric. This view also shows a small part of the machine for making the fabric. In Fig. 2 a selvage edge of the fabric is shown for the purpose of indicating the arrangement of the
35 slivers and the loop-stitch method of uniting these slivers by the interknit binding-threads.

In Fig. 1 of the drawings the fabric is shown with the slivers formally laid and bound together by the interknit threads. The series
40 of slivers A A, arranged in a regular manner

side by side with the slivers B B and the complication of the interknit binding-thread, are shown in a regular arrangement.

Fig. 2 gives the appearance of the selvage edge of the fabric. In this view the fabric appears more as it does in fact, the rigid regularity of formation being modified.

The fabric is shown in Fig. 1 as it theoretically would be in the machine; but in Fig. 2 I have represented it as it really appears,
50 owing to the strain of the knitted threads, the threads acting conjointly to draw the layers in such a manner as to force them to assume wedge shapes and to interwedge with each other, so as to impart a firmness to the fabric
55 that it would not otherwise possess.

It is obvious that fibers other than cotton may be used, such as jute, wool, &c. These fibers may be substituted for cotton, but in practice I have found that cotton is the best,
60 cheapest, and most satisfactory.

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

An improved fabric, particularly adapted to be used for mattresses and cushions, made
65 of two, or more slivers, or ropes of fibers having a little or no twist in them, laid in alternating, parallel lines, and secured together by interknit or binding thread or threads so that these slivers are fastened and held in position in a soft, yielding state, substantially
70 as, and for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 12th day of
75 February, A. D. 1891.

GEORGE FREDERICK SUMNER.

Witnesses:

FRANK G. PARKER,
EDWARD S. DAY.