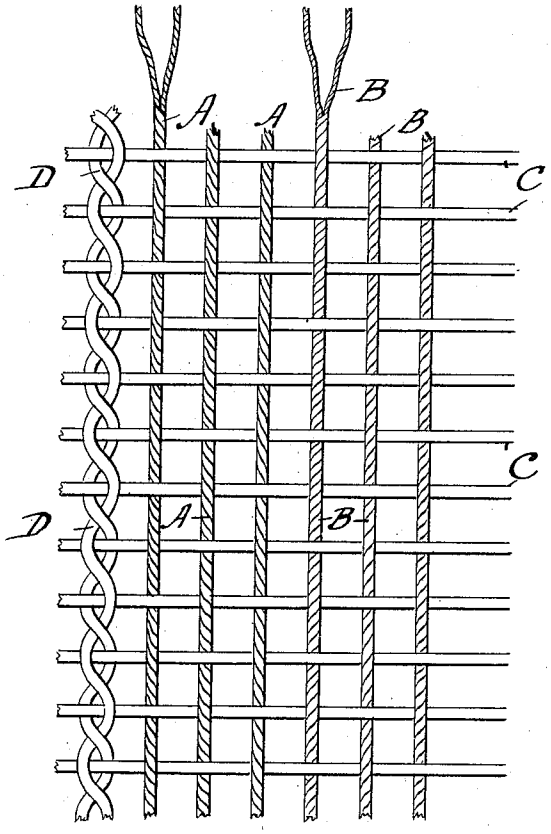
No. 887,886. PATENTED MAY 19, 1908.

M. A. WILLOT.

SURGICAL BANDAGE.

APPLICATION FILED DEC. 17, 1906.



Witnesses

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UNITED STATES PATENT OFFICE.

MARCELLIN ANTOINE WILLOT, OF ROUBAIX, FRANCE.

SURGICAL BANDAGE.

No. 887,886. Specification of Letters Patent. Patented May 19, 1908.

Application filed December 17, 1906. Serial No. 348,184.

To all whom it may concern:

Be it known that I, MARCELLIN ANTOINE WILLOT, a citizen of the French Republic, residing at Roubaix, in France, have invented certain new and useful Improvements in Surgical Bandages, of which the following is a specification.

This invention relates to improvements in surgical bandages.

The accompanying drawing shows diagrammatically a portion of the fabric of which the bandage is composed. A designating three two-strand crape threads with right hand twist on right-hand twist; B three two-strand crape threads with left-hand twist on left-hand twist, C the weft threads and D the border formed by the last two warp threads twisted upon another.

There are various kinds of surgical bandages of pure cotton or a mixture of wool and cotton which are extensible and retractable without the use of rubber or other elastic substance in their manufacture. It will be obvious that elasticity in bandages of this kind is most essential to insure the suppleness and adaptation of the bandages for all possible cases, and at the same time to procure the most hygienic and beneficial results. These qualities however have been but imperfectly obtained by all the forms of hitherto known bandages, however great their general use may have been since their texture and composition are not the most suitable for the purpose desired.

The object of the present invention is a surgical bandage of pure wool or cotton having greater extensibility and retractability and the least heat retaining qualities if of pure cotton and the most heat retaining qualities if of pure wool. This result is obtained by a new combination of known elements differing from all those hitherto in use and of which the following are the fundamental features, firstly; the improved bandage has its warp (in the direction of its length) formed exclusively of thick crape threads of pure wool or pure cotton, and secondly this bandage of pure wool or pure cotton has its warp formed of such thick crape threads regularly disposed in groups or strips formed alternately of three threads twisted with torsion left on left and three threads twisted with torsion right on right. By thick crape threads is here understood threads each consisting of two strands or slivers twisted torsion on torsion, that is to say two slivers twisted upon one another with the same direction of twist as originally given said slivers viz. right on right and left on left, with a number of twists double or even treble that of the torsion normally given, which renders them apt to retract freely if left to themselves or when woven into a fabric by suitable arrangement and assemblage in said fabric.

The weft of the fabric is formed of ordinary cotton or woolen threads. It should be remarked that in the surgical bandages hitherto made the threads used in the warp are twisted in a contrary direction to the torsion of the individual threads or strands, which fact constitutes an important point of difference.

The invention may be briefly stated as follows, firstly exclusive formation of the warp of pure wool or pure cotton crape or "crepon" threads consisting of two strands or slivers twisted with right-hand torsion on right-hand torsion, and with left-hand torsion on left-hand torsion, which has not hitherto been done and secondly the arrangement of the warp is of three such twisted pure cotton or pure wool crape threads with right hand torsion on right-hand torsion, alternating with three such twisted pure wool or pure cotton crape threads with left-hand torsion on left-hand torsion. This combination is entirely novel and constitutes a new article of manufacture having the characteristics of great elasticity and great contractibility. The improved bandage is not closed or selvaged by the weft. The slipping of the border or selvage threads is prevented by entwining the last two warp threads, twisting one on the other to contract on the weft. The bandage can be made of any width used in practice, for instance from 0.03 meters to 0.30 or 0.35 meters.

What I claim as my invention and desire to secure by Letters Patent of the United States is:—

1. An extensible surgical bandage of fabric having the warp composed of two kinds of threads, one kind formed by twisting to the right a plurality of slivers previously separately twisted to the right, and the other

kind formed by twisting to the left a plurality of slivers previously separately twisted to the left.

2. An extensible surgical bandage of fabric having the warp composed of groups of threads, each thread formed by twisting to the right a plurality of slivers previously separately twisted to the right, said groups of threads being alternated with groups of other threads each thread formed by twisting to the left a plurality of fibers previously separately twisted to the left.

In witness whereof I have signed this specification in the presence of two witnesses.

MARCELLIN ANTOINE WILLOT.

Witnesses:

GEORGE LE COQ,

A. D. MATOU.