No. 616,524. Patented Dec. 27, 1898.

W. R. CARTLEDGE.

BANDAGE FABRIC.

(Application filed Apr. 21, 1898.)

(No Model.)

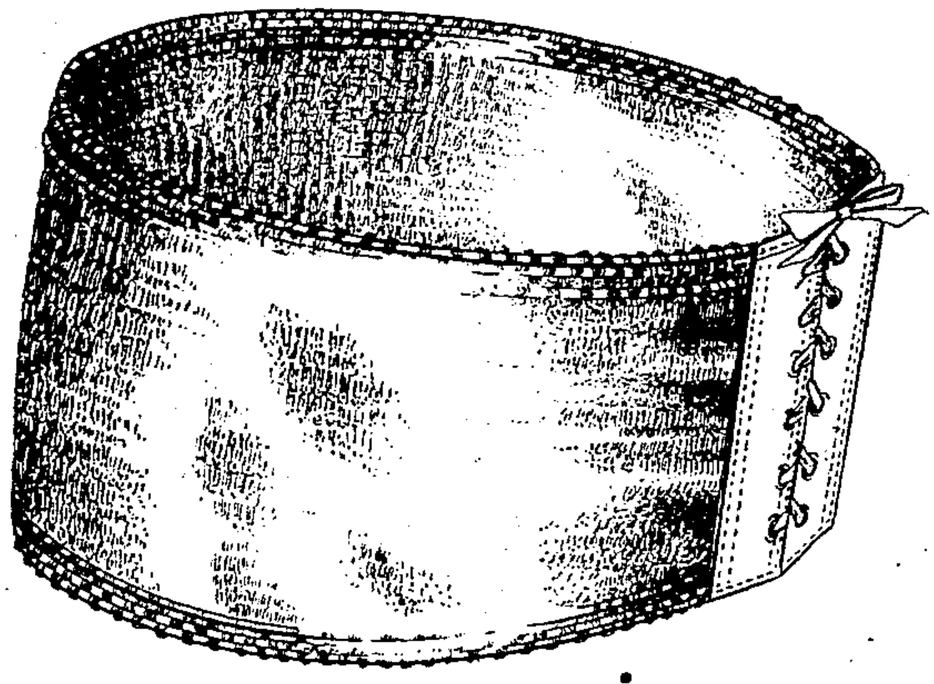

Fig. 1.

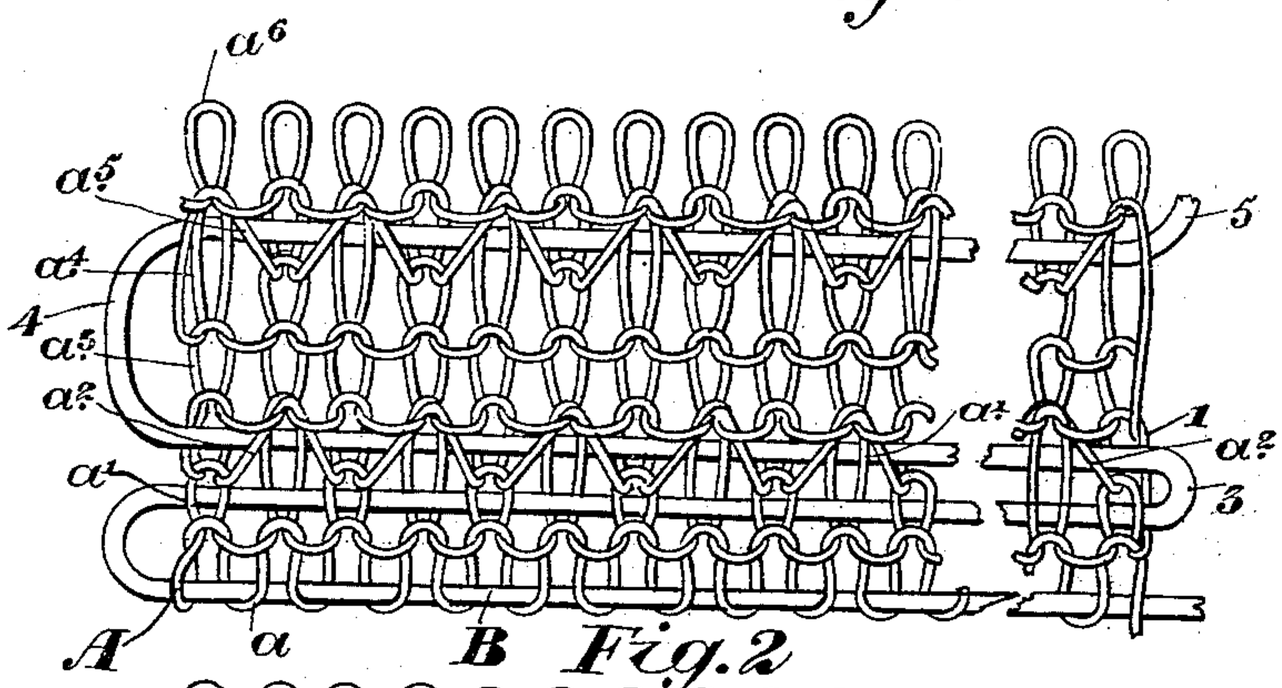

Fig. 2

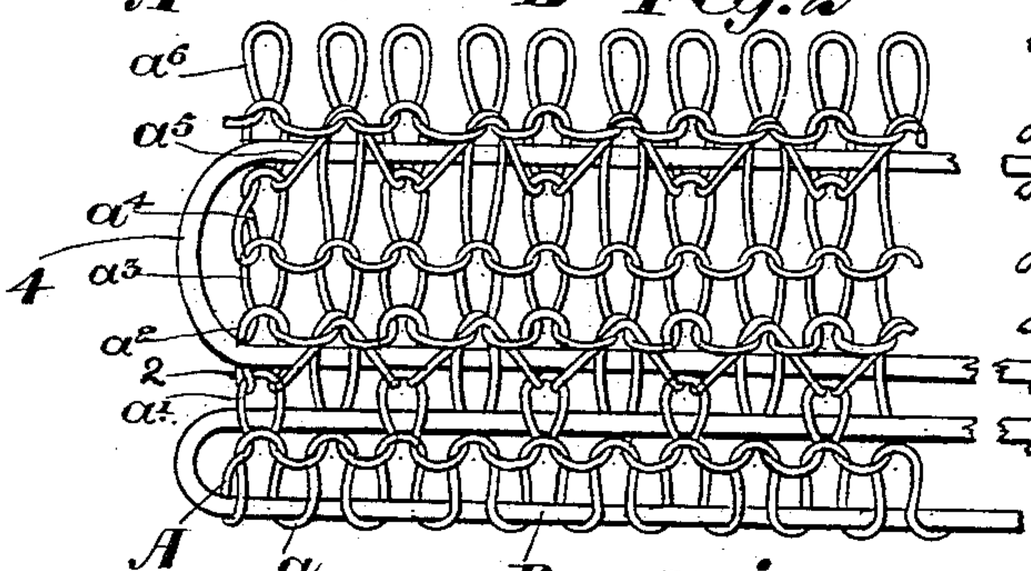

Fig. 3.

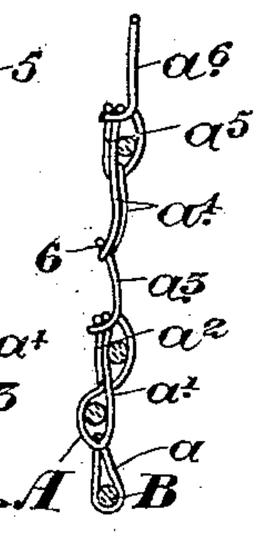

Fig. 4.

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WRIGHT R. CARTLEDGE, OF TORONTO, CANADA, ASSIGNOR OF ONE-HALF TO JAMES HENRY SQUIRE KERR, OF SAME PLACE.

BANDAGE FABRIC.

SPECIFICATION forming part of Letters Patent No. 616,524, dated December 27, 1898.

Application filed April 21, 1898. Serial No. 678,376. (No specimens.)

To all whom it may concern:

Be it known that I, WRIGHT R. CARTLEDGE, manufacturer, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Bandage Fabrics, of which the following is a specification.

My invention relates to improvements in bandages for abdominal and other purposes; and the object of the invention is to devise a fabric for bandages of this class which will not turn up or curl at the outer edges thereof, but will conform closely to the figure or other portion of the body designed to be covered, and thereby maintain an even pressure throughout its width; and it consists, essentially, of a knitted fabric comprising a number of courses looped together and having a supplemental course knitted between the ordinary regular courses and having placed longitudinally therein an elastic thread or cord which is knitted into the fabric from the bottom to the top edge in a continuous thread or cord, the fabric being otherwise arranged so as to leave a smooth portion next the body and the ribs to the outside, as hereinafter more particularly explained.

Figure 1 is a perspective view showing the general appearance of an abdominal bandage constructed in accordance with my invention. Fig. 2 is an exaggerated view of a portion of the fabric, showing the various courses of stitches and the supplemental stitches with continuous elastic threads placed therein, the threads being drawn apart to exhibit the peculiar manner of knitting the courses. Fig. 3 is a similar view to Fig. 2, showing an alternative form of knitting the courses. Fig. 4 is a section either through Fig. 2 or Fig. 3.

In the drawings like letters and numerals of reference indicate corresponding parts in each figure.

A is the thread or yarn, of which a is the lower course or series of loops.

B is the elastic thread or cord, which passes through the lower or edge portions of the loops first under one loop and over the adjacent loop alternately, as indicated. The course of loops a are on the edge of equal length. The next course of loops a' are alternately of unequal length, and the continuous elastic thread B is looped at the end and passes alternately behind one loop and in front of the other from end to end of the fabric. The next course (marked a^2) passes from the end marked 1 in substantially V-shaped loops and ordinary loops alternately through the shorter loops of the course marked a'. The end marked 2 of the course a^2 passes up into the course a^3, which consists of a series of loops of equal length. The course of the loops a^3 passes through the ordinary loops and V-shaped loops of the course a^2, and the alternate loops of the course a^3 pass through the elongated alternate loops of the course a' at the same point as they pass through the V-shaped alternate loops of the course a^2.

It will be noticed that the continuous elastic thread or cord is looped at the end 3 and passes through under the elongated loops of the course a' and the V-shaped alternate loops of the course a^2 and over the ordinary loops of the course a^2. It will thus be seen that the continuous elastic thread or cord is completely incased, and especially will this be understood when it is comprehended that all the courses lie close together, as shown in the drawings, the V-shaped loops being practically parallel with the rest of the loops. This form so far described is for the outer edge of the bandage and may be repeated into as many rows or courses as may be desired.

In the interior portion I preferably provide the continuous elastic thread with looped ends on the ends of the fabric in every second course of loops instead of every course of loops at the edge, where it is necessary to have the elastic thread or cord close together, so as to prevent curling up. It will therefore be noticed that the next courses a^4, comprised of long and short loops, are knit through the loops of the course a^3, and the next course a^5, containing the V-shaped loops in alternation with the ordinary loops, are knit through the loops of the course a^4. The inner end of the V-shaped loop portion of the course extends to the end of the loops of the course a^5. The course a^6, following, as to the loops thereof, are of equal length and half pass through the elongated loops of the course a^4, as well as the apexes of the V-shaped loops

alternately. The other half of the loops pass through the ordinary loops of the course a^5. The end 4 of the continuous elastic thread or cord passes through under the elongated loops of the course a^4 and the V-shaped loops of the course a^5, but over the ordinary loops of the course a^5, thus completely incasing such elastic cord or thread, so that when the courses are of the exact size no such thread appears except when stretched, and this is just exactly similar to the passage of the elastic cord or thread, hereinbefore described, as to the former V-shaped loops and the corresponding loops of the course. At the end 5 the elastic thread or cord is turned again and passes two sets of loops similarly formed to the loops of the courses a^4 and a^5, and this form will be maintained until the opposite edge of the bandage is reached, when it is formed, as hereinbefore described, corresponding to the loops of the courses $a\,a'$ and a^2 and a^3.

I have only shown three sets of courses of loops on the edge; but it will of course be understood that there may be as many rows of courses as may be desired to give the requisite strength and prevent curling up. Under ordinary circumstances I find that ten courses make the material at the edges sufficiently wide to produce the desired effect.

In the manner in which I have described my knitted fabric with its elastic thread it will be noticed on reference to Fig. 4 that the ends of the loops will be presented on the left-hand side of Fig. 4, while the smooth portion, which will be next the body, will be on the opposite side, as indicated in this figure, thus making the side next the body softer, and thus more comfortable.

In Fig. 3 I show an alternative form in which the supplemental courses, which I term "V-shaped," are arranged somewhat differently—that is, the apexes of the oppositely-situated V-shaped loops in each supplemental course all point the same way instead of in opposite directions, as described in Fig. 2. The same principle, however, in the knitting and arrangement of the elastic cord is carried throughout.

It must be again stated and clearly understood that when the knitting is of the actual size and not stretched out, as appears in the drawings, the loops will all of course lie together and the supplemental rows of V shape will have the sides of the loops parallel to each other.

What I claim as my invention is—

A bandage fabric comprising a plurality of series of courses, each series having the first course thereof composed of a series of loops of equal size, the second course composed of short and long loops alternately arranged, the third course composed of oval and V-shaped loops alternately disposed, and the first course of the second series composed of loops of equal length, said loops alternately passing through the oval loops of the said third course and through both the elongated loops of the second and the V-shaped loops of said third course and the elastic cord passed alternately over and under the loops of the first course and then doubled and passed alternately over and under the loops of the second course and doubled again and passed over the oval loops of the third course and under the V-shaped loops of said course and the long loops of the second course and doubled around the first course of the second series and passed between the loops of the third course of said second series, substantially as described.

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