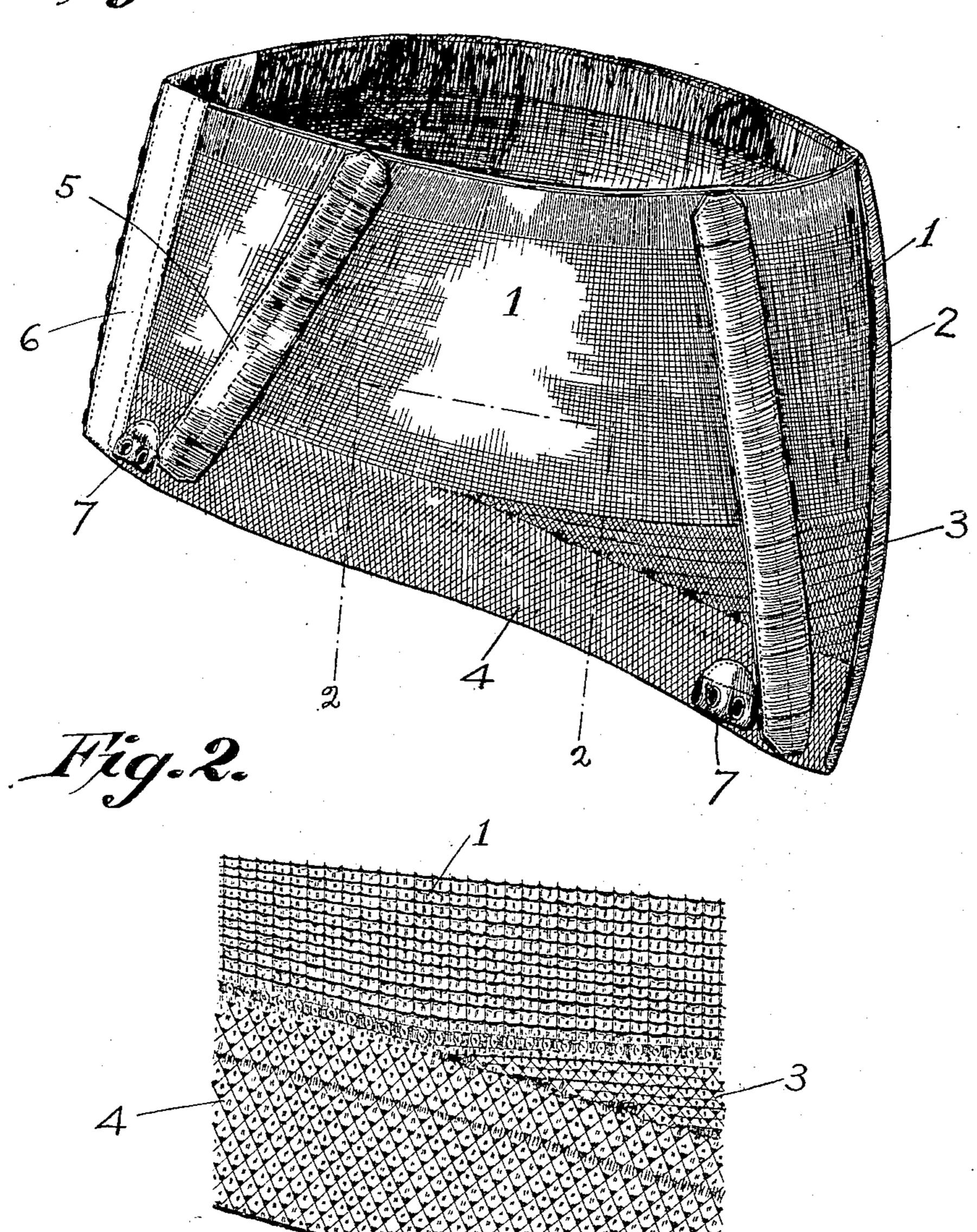
W. R. CARTLEDGE. ABDOMINAL SUPPORTER OR BANDAGE.

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WITNESSES:
Rob. Retakel Edev. W. Vaille Jr.

UNITED STATES PATENT OFFICE.

WRIGHT R. CARTLEDGE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO WALTER F. WARE, OF PHILADELPHIA, PENNSYLVANIA.

ABDOMINAL SUPPORTER OR BANDAGE.

Nc. 808,433.

Specification of Letters Patent.

Patented Dec. 26, 1905.

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To all whom it may concern:

Be it known that I, WRIGHT R. CARTLEDGE, a citizen of the United States, and a resident of the city of Philadelphia, State of Pennsyl-5 vania, have invented certain new and useful Improvements in Abdominal Supporters or Bandages, of which the following is a full, clear, and complete disclosure.

The object of my invention is to provide such 10 a supporter or bandage that the same may be comfortable to the wearer, efficient in its application, and more easily and perfectly manufactured than heretofore has been possible.

Briefly, my invention relates to a band of knit 15 elastric fabric the stitches or courses of which are of two or more kinds and elastic in one or both directions in relation to the length of the fabric, said stitches or courses being arranged so as to obviate any objectionable protuber-20 ances, projections, or knots. Heretofore bandages or supporters of this nature have been varied in width by introducing what are known as "darts" or "loops" at different points throughout the body of the bandage, while 25 said loops decrease in length toward the outer edge or selvage, thus bringing the bandage to a point at the center of the front side. This feature of providing such loops or darts throughout the body of the bandage I do not 30 claim as my invention, my invention residing in certain arrangement of the elastic stitches and the darts or loops hereinafter to be more particularly pointed out.

The stitches or loops preferably employed 35 in the bandage herein described and claimed are those patented by me in my prior United States patent, No. 616,524, issued December 27, 1898. However, I do not wish to be limited to the use of such stitches, as other 40 stitches having the characteristics hereinafter

pointed out may be used.

For a full, clear, and exact description of this form of my invention reference may be had to the following specification and to the accom-45 panying drawings, forming a part thereof, in which—

Figure 1 is a perspective view of a bandage or supporter embodying my improvement. Fig. 2 is a detailed view showing the portion 50 included within the dot-and-dash line 22, Fig. 1.

In the drawings the numeral 1 indicates a strip or band composed of stitches or loops

which are elastic in its width as well as in the direction of its length, said stitches being preferably those described and claimed in my 55 prior patent, No. 616,524, above referred to. This form of stitches for the portion of the bandage just described not only allows of a longitudinal elasticity and length of the bandage, but allows the same to be made a greater 60 width at its central front portion when properly stretched, through the medium of stays, (indicated by the numeral 2,) without the necessity of forming a multiplicity of darts or loops throughout the body of the bandage, such as 65 heretofore has been the custom. Such darts or loops throughout the body of the bandage are objectionable in that the same add to the discomfort of the wearer by causing increased thicknesses or knot-like projections, which are 7°

impressed in the flesh of the wearer.

In the manufacture of my improved bandage I first preferably knit the welt 4 of double width, which is then folded longitudinally and its edges knit together and into the stitches 75 of the rest of the bandage. I form then a series of loops or darts of gradually-increasing length, so that the shortest loops or darts forming the lower point of a triangular portion are preferably elastic in one direction 80 only—that is, only in the direction of the length of the bandage—while said triangular portion is practically non-elastic in the direction transverse to the length of the bandage. To the upper edge of the triangular portion 85. just described and the double welt 4, which are of the same kind of stitch or loop, I attach or knit the main portion 1 of the bandage, which is preferably of stitches of the sort disclosed and claimed in my prior patent 9° above referred to and which result in a fabric elastic in two directions. The upper edge of the main portion 1 is finished in the usual manner.

The manner of knitting the band above de- 95 scribed is the usual and preferable one; but the process may be reversed or practiced in any other suitable way to produce the same results. The welt 4, which is knitted into the main portion of the fabric and the gusset 3, 100 owing to the fact that it is less elastic than the other portions of the bandage, relieves the pressure upon the raised darts, thereby also increasing comfort to the wearer. The

stays or strips 5 and 6 for keeping the belt stretched to its normal width are preferably made of thin aluminium, whalebone, or other strong flexible material incased in soft flexible 5 coverings, which are preferably sewed to the outer surface of the bandage. At the ends of the strip I provide the usual bindings 7, which are provided with suitable means for lacing the ends together at the back in the usual manner.

The darts above described are preferably composed of two threads or courses or one continuous thread or course doubled upon itself to form the loop, said threads or courses thereby giving an increased width to the ma-15 terial at every point where said darts or loops

occur.

A further advantage of the above-described arrangement resides in the fact that the bandage may be knit at one operation without re-20 moving the fabric from the knitting-machine, and owing to the parallel courses of the main body of the bandage the machine does not have to be stopped in order to allow the continual insertion of darts throughout the body 25 thereof. This not only accomplishes a great saving in time of knitting the fabric, but also increases the strength in the wearing qualities of the bandage. A small number of darts which are inserted in forming the widened 3° portion also permits a considerable saving in the time required to weave the bandage.

It will thus be seen that I have produced a bandage or supporter which is composed of regular elastic stitches throughout the main 35 body of the bandage without the use of darts therein, said stitches providing elasticity in both directions, while the widened portion of the bandage is formed by stitches which are elastic only in the direction of the length of 4° the bandage, while the welt attached to both of these portions provides a somewhat stronger and tighter strip at the points in the bandage where it is most needed, while at the same time the number of darts or loops necessary 45 to produce the widened effect are greatly decreased in number and are located at points where they cause the least discomfort to the wearer.

Suitable supporting devices or fastenings 5° may be attached to this supporter, as indicated by the numeral 7.

It is obvious that changes may be made in the arrangement, form, and proportion of parts to adapt the bandages to different uses 55 and different figures of the wearers; and I do not wish to be understood as being limited to the exact arrangement, form, and proportion of parts herein set forth. For example, the triangular portion, consisting of loops or darts, 60 may be applied to the top of the bandage as well as the bottom if it is necessary to increase the width upwardly as well as downwardly, or the darts may be applied to any other portion or portions to the edge of the bandage l

where it is necessary to design the bandage of 65 a particular shape for a particular use, for I consider such variations still within the scope of my invention, which relates particularly to the manner of arranging the darts or loops in connection with the body of the bandage and 70 the double welt.

Having thus described my invention, what I claim, and desire to protect by Letters Patent

of the United States, is—

1. A bandage or supporter, comprising a 75 main portion of knitted fabric elastic in two directions, said bandage being increased in width at its central portion by double courses or darts gradually diminishing in length.

2. A bandage or supporter, comprising a 80 main portion of knitted fabric elastic in two directions, said bandage being increased in width at its central portion by double courses or darts gradually diminishing in length, and elastic only longitudinally of the bandage.

3. A bandage or supporter, comprising a main portion of knitted fabric consisting of parallel courses which provide elasticity both longitudinally and transversely of the length of the fabric, said bandage being increased in 9° width at its central portion by double courses or darts gradually diminishing in length, and elastic only longitudinally of the bandage.

4. A bandage or supporter, comprising a main portion of knitted fabric elastic in two 95 directions, said bandage being increased in width at its central portion by courses or darts gradually diminishing in length, the lower edge of said portions being provided with a welt of less elasticity and greater strength.

5. A bandage or supporter, comprising a main portion of knitted fabric elastic in two directions, said bandage being increased in width at its central portion by double courses or darts gradually diminishing in length, and 105 elastic only longitudinally of the bandage, the lower edge of said portions being provided with a double welt of the same character of stitches as that composing the widened portion of the bandage.

6. A bandage or supporter, comprising a main portion of knitted fabric, said bandage being increased in width by double courses or darts, a thickened welt for the edge of the bandage, the darts or ends of the courses be- 115 ing arranged adjacent the edge of said thick-

ened welt.

7. A bandage or supporter, comprising a main portion of knitted fabric, said bandage being increased in width at its central portion 120 by double courses or darts of the material gradually diminishing in length, and a double welt attached to said widened portion and to said main portion, the ends of said courses or said darts being arranged adjacent the inner edge 125 of said welt so that said darts are relieved of pressure.

8. A bandage or supporter, comprising a

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main portion of knitted fabric elastic in two directions, said bandage being increased at its central portion by double courses or darts gradually diminishing in length, the lower edge of said portions having a double welt which is also elastic only in a longitudinal direction.

In witness whereof I have hereunto set my hand this 10th day of October, A. D. 1904.

WRIGHT R. CARTLEDGE.

Witnesses:

Lewis H. Van Dusen, Edw. W. Vaill, Jr.