(No Model.)

J. ASHWORTH.

COVERED ELASTIC ENDLESS BAND.

No. 345,660. Patented July 20, 1886.

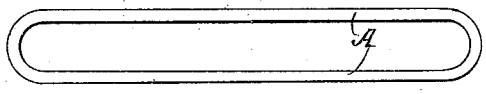

Fig. 1.

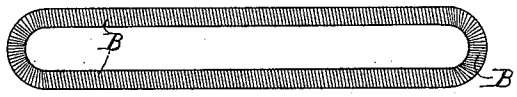

Fig. 2.

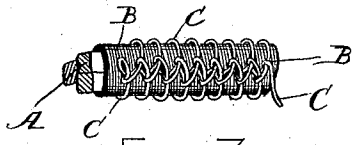

Fig. 3.

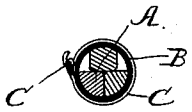

Fig. 4.

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UNITED STATES PATENT OFFICE.

JOHN ASHWORTH, OF SOMERVILLE, MASSACHUSETTS.

COVERED ELASTIC ENDLESS BAND.

SPECIFICATION forming part of Letters Patent No. 345,660, dated July 20, 1886.

Application filed October 3, 1885. Serial No. 178,884. (No model.)

To all whom it may concern:

Be it known that I, JOHN ASHWORTH, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Covered Elastic Endless Bands, of which the following, taken in connection with the accompanying drawings, is a specification.

My present invention is a new article of manufacture—viz., an elastic endless band having a double extensible cover or envelope.

My invention also consists in an elastic endless band provided with a double extensible covering, the inner layer being formed by braiding or winding threads around the elastic core, and the outer coat made up of crocheted or other knitted stitches.

My invention also embraces a covered elastic endless band having a central core composed of two or more endless elastic bands inclosed side by side within the same covering.

In the drawings, Figure 1 shows one strand of the endless elastic core, and Fig. 2 the same covered with the first or innermost covering. Fig. 3 represents an enlarged portion of the completed band, and Fig. 4 an enlarged transverse section of the same, these bands having a triple core.

A is the endless elastic core, made of one, two, three, or more endless bands of india-rubber, preferably of three such strands lying side by side, and together inclosed within the covering, so that in the event of breakage of one, or even two, of the strands, the remaining one will be likely to serve for some time. Should all the strands of the core break within the covering, the fractures would probably occur at different points, and in such a case the band would still be serviceable.

B is the inner covering, wound or braided around the elastic core while said core is stretched over suitable supports and held in a state of tension. The winding is continued in either or both directions a sufficient length of time to form a cover of the desired thickness for the inner layer. This inner wrapping may be of cotton or other cheap material, as it is not conspicuous after the outer coat is applied.

C is the outer coating, preferably of colored silk threads, knitted over the inner cover with a crochet or other ornamental stitch. I usually go over the band two or three times in applying this finishing-coat, so as to bring the stitches sufficiently near together to largely conceal the inner winding and keep it from raveling. The external crochet-stitches give to these double-covered bands a very neat and attractive appearance.

In the manufacture of my improved bands I employ machinery suitable to apply successively the extensible coverings B and C over the endless elastic core A while opened out and stretched. I have devised mechanism especially adapted to this work, which apparatus will form the subject of another application for Letters Patent.

I claim as my invention—

1. As an improved article of manufacture, an elastic endless band having a double extensible cover or envelope, substantially as set forth.

2. An elastic endless band having an extensible covering formed of threads wound or braided upon the elastic core, and provided with a knitted external covering, substantially as set forth.

3. An elastic endless band consisting of a central core formed of two or more endless elastic bands in lateral contact with each other, and an extensible fibrous covering formed thereon, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 7th day of September, A. D. 1885.

JOHN ASHWORTH.

Witnesses:
A. H. SPENCER,
C. G. KEYES.