

No. 750,903.

PATENTED FEB. 2, 1904.

P. J. SHRUM & K. J. HENDRICKS.

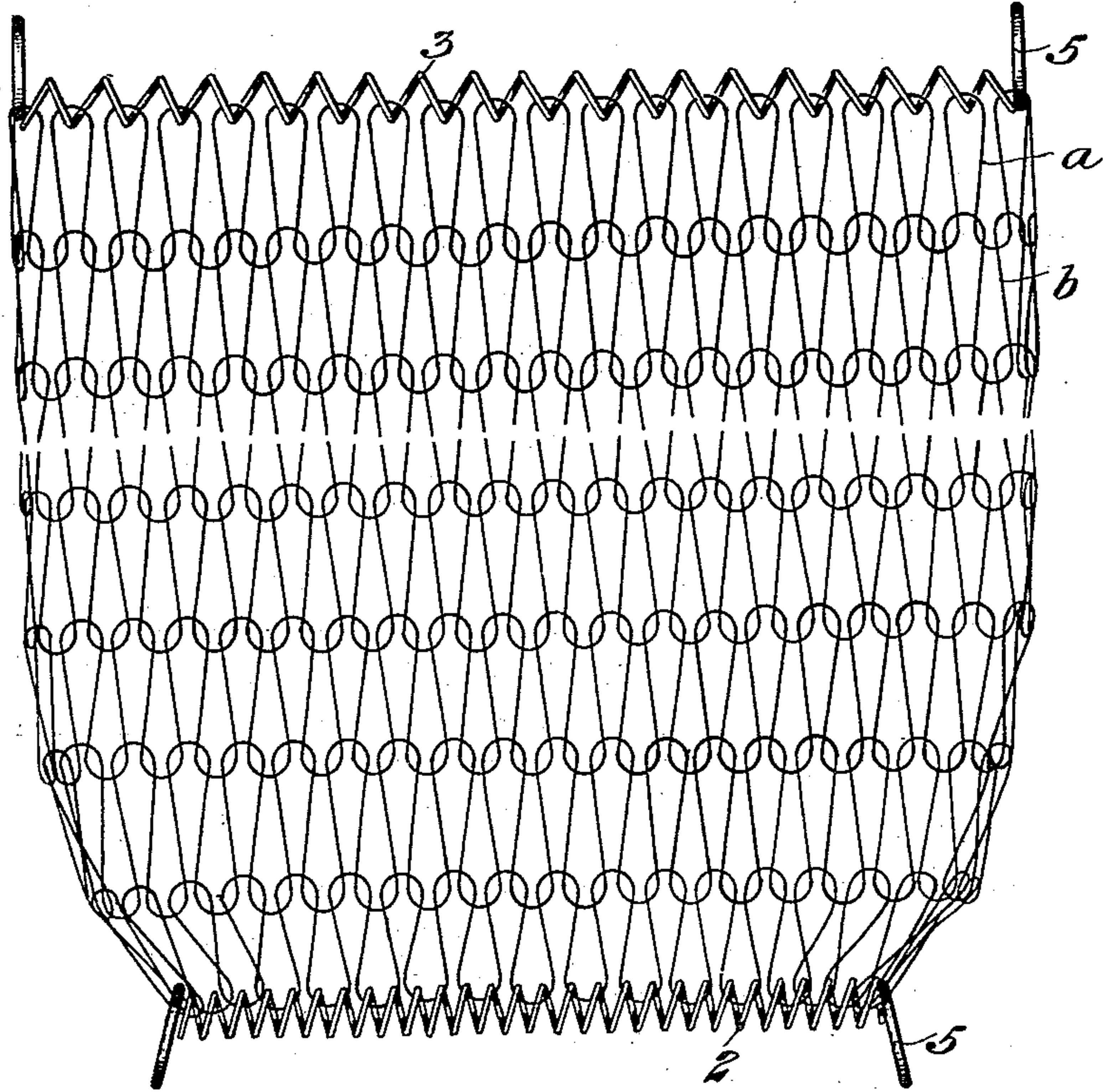
WIRE ARTICLE.

APPLICATION FILED OCT. 9, 1902.

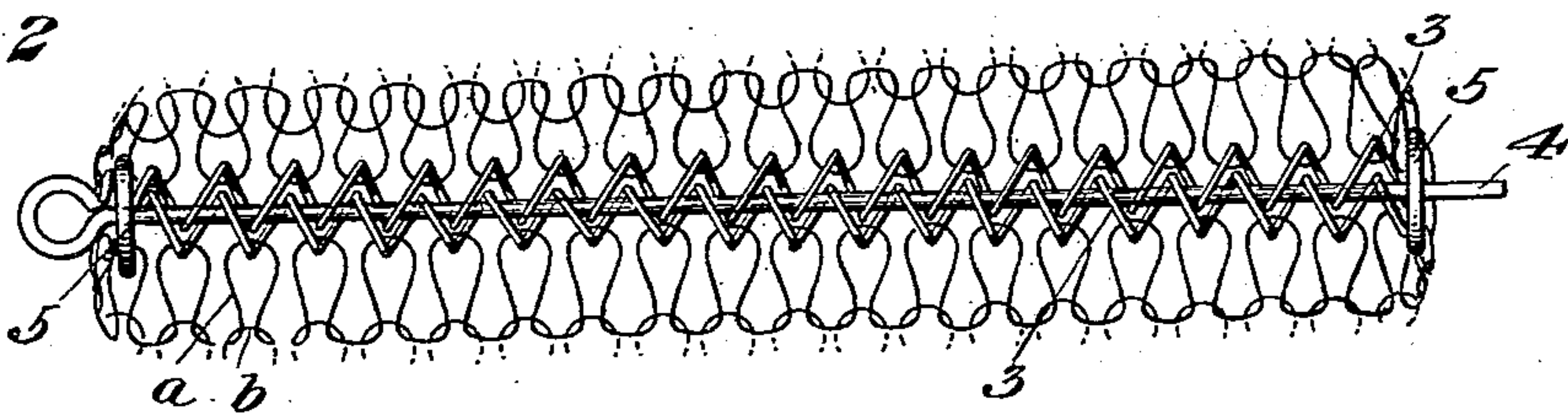
NO MODEL.

2 SHEETS—SHEET 1.

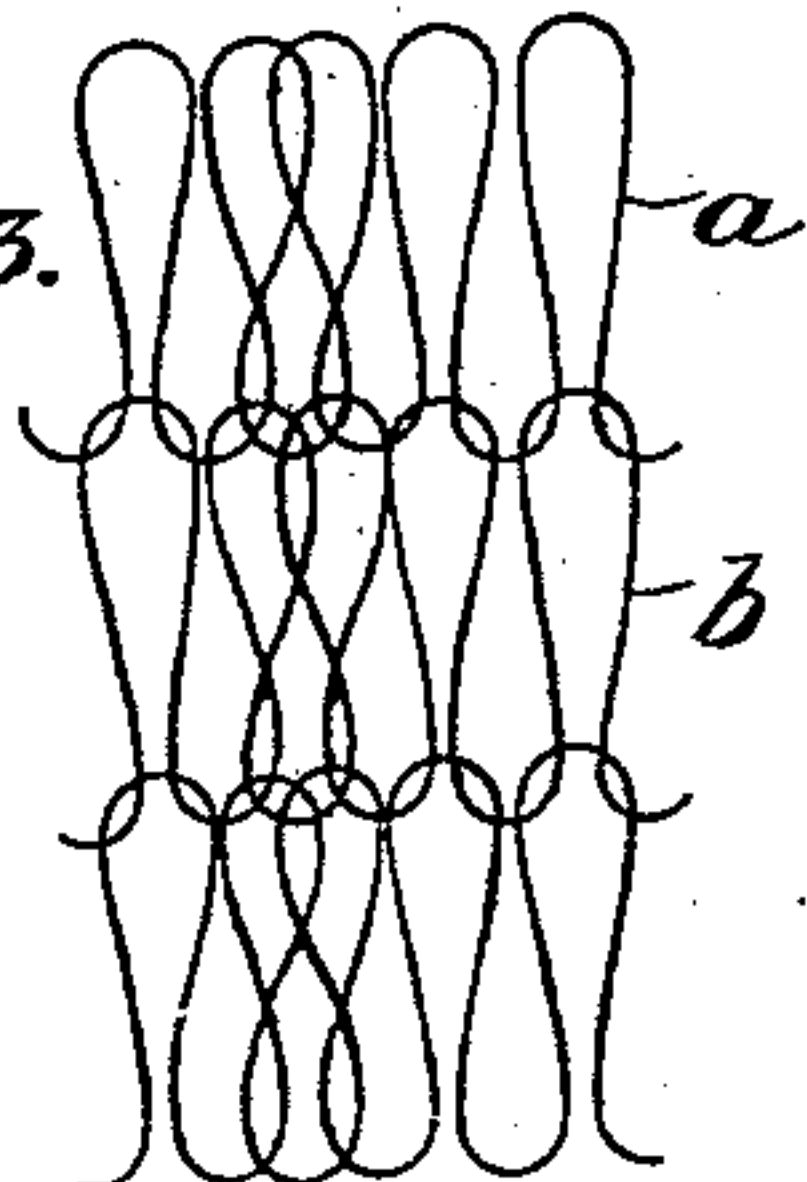
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES

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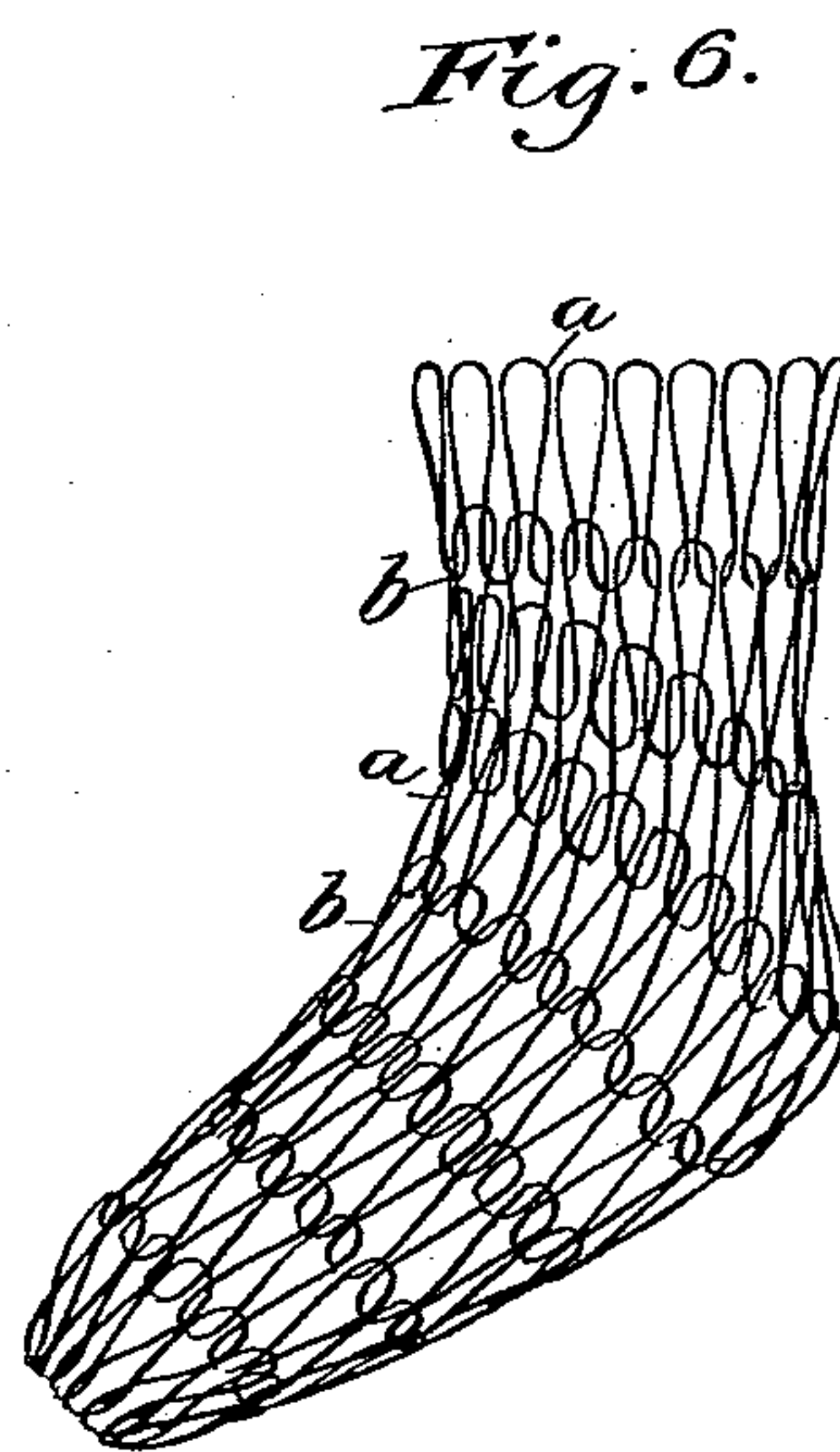
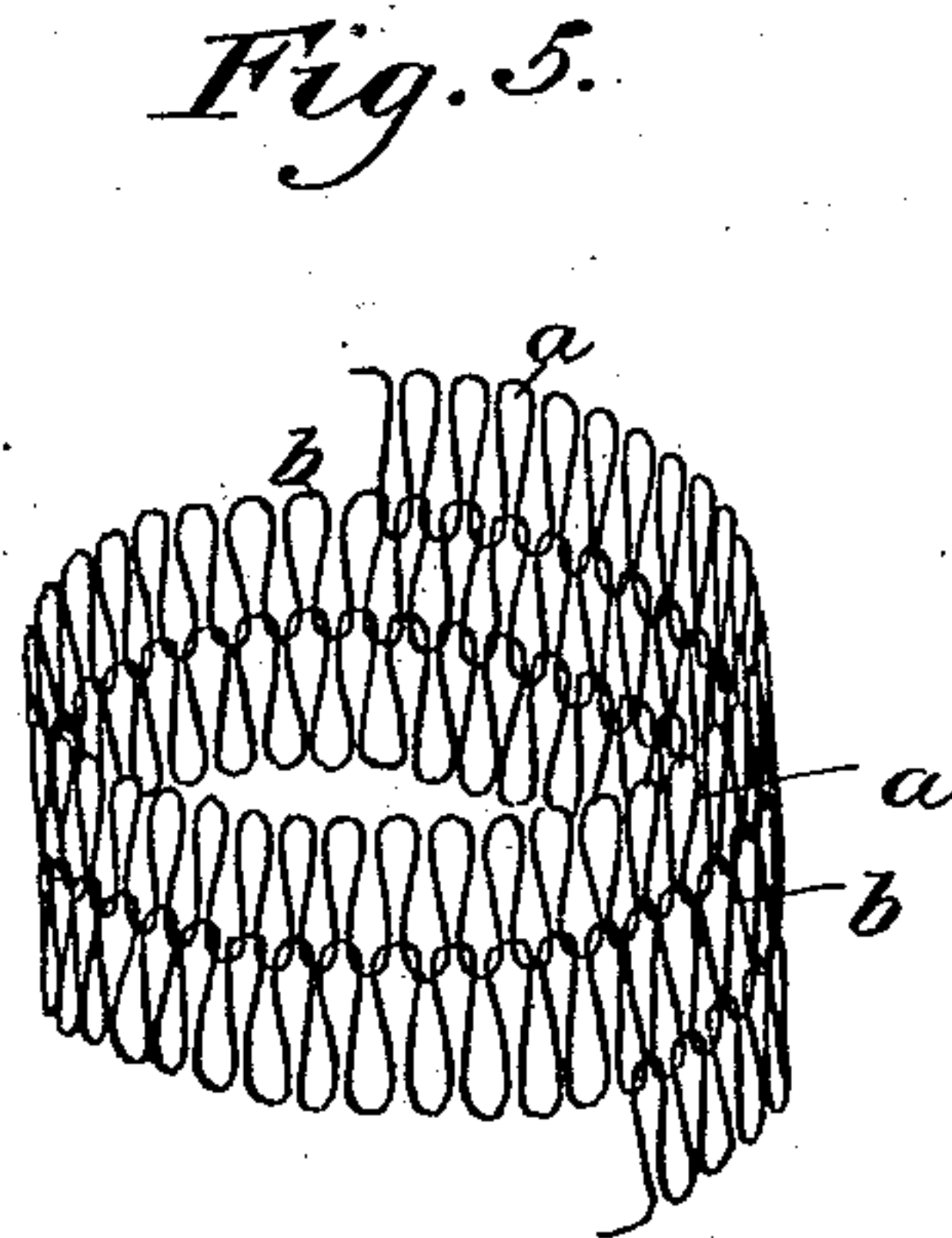
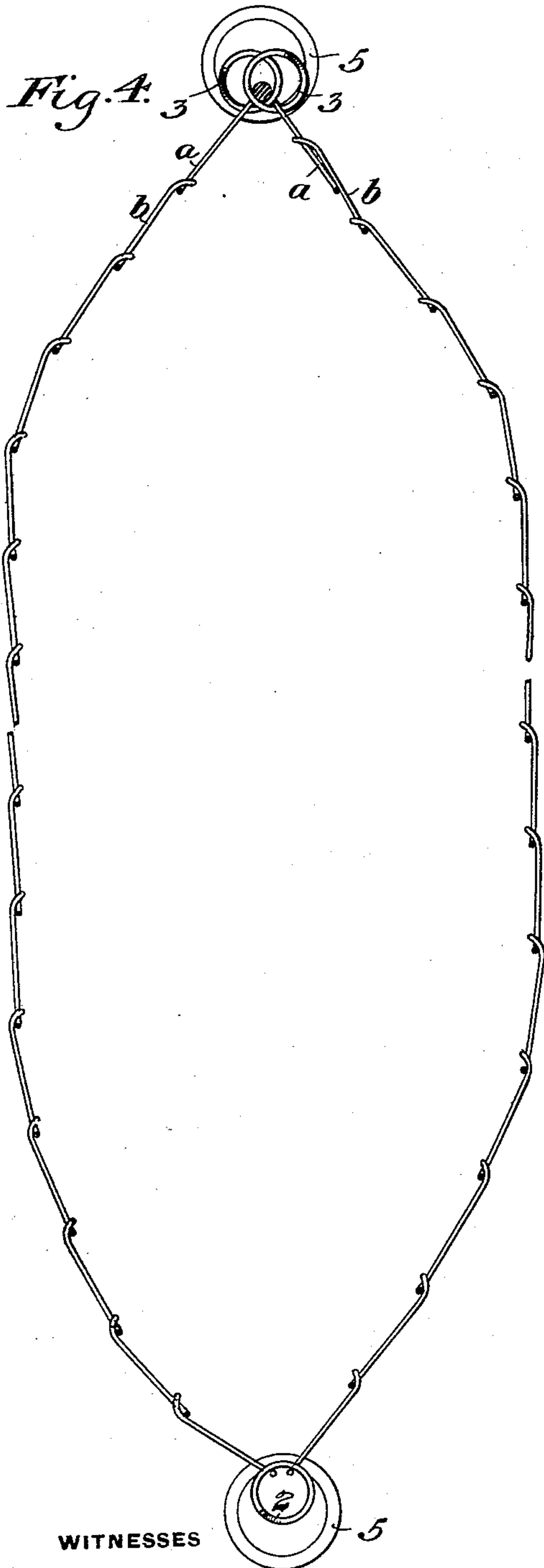
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NO MODEL.

2 SHEETS—SHEET 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

PETER J. SHRUM AND KEARNEY J. HENDRICKS, OF PITTSBURG, PENNSYLVANIA; SAID SHRUM ASSIGNOR TO SAID HENDRICKS.

## WIRE ARTICLE.

SPECIFICATION forming part of Letters Patent No. 750,903, dated February 2, 1904.

Application filed October 9, 1902. Serial No. 126,574. (No model.)

*To all whom it may concern:*

Be it known that we, PETER J. SHRUM and KEARNEY J. HENDRICKS, both of Pittsburg, Allegheny county, Pennsylvania, have invented a new and useful Wire Article, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a partial side elevation showing the upper and lower portion of the wire bag constructed in accordance with our invention. Fig. 2 is a top plan view of the upper portion, showing the method of closing. Fig. 3 is a diagrammatic view showing the method of weaving and illustrating the method of changing the shape of the hollow article. Fig. 4 is a vertical cross-section of the wire bag. Fig. 5 is a perspective view showing the method of weaving a tubular article, and Fig. 6 is a side elevation of the lower part of a stocking form of woven wire.

Our invention relates to the making of hollow articles of any desired shape from wire, and is designed to provide a new and improved article in which the shape or cross-sectional area may be varied in different parts of the article and which can be readily and cheaply made. It is further designed to provide for the distribution of strain throughout the bag or article and to provide such an article having horizontal rows of meshes or stitches.

In the drawings, referring to Figs. 1 to 4, inclusive, we show a bag formed of one integral piece of wire woven with a horizontal stitch. In forming the article a row of loops or stitches, such as shown at *a* in the upper part of Fig. 3, is formed of a continuous length of wire, and this wire is then used to form the next row of stitches *b*, which interlock with those of the upper row. The article is thus formed of any desired length, according to the number of rows of these stitches, while its cross-sectional area and shape at any point is varied by varying the interlocking of the stitches. Thus in Fig. 3 we show some of the loops of the row *b* interlocking with successive loops of the row *a*, while others are returned and interlocked with the same loop. It is evident that the cross-sectional area may be varied by

the well-known method of dropping a stitch or threading two stitches into one and by changing the interlocking or interweaving of the loops. The bag is shown as of elliptical form, and the edges are strengthened by the closer interlocking of the loops at this point in changing the cross-sectional shape. The bag may be closed at the bottom by means of a spirally-coiled wire 2, which engages the opposite loops of the lowermost row, and the upper end of the bag may be temporarily closed by finishing the edge with two spiral springs 3, one with left-hand coils and the other with right-hand coils, the opposite coils of which may be interengaged to receive a securing-rod 4, as shown in Fig. 2. The bag may be provided with suitable loops 5 at the top or bottom corners, or both, for ease in handling.

Fig. 5 shows the manner of weaving a circular article, and Fig. 6 shows how the shape may be varied, this showing the forming of a foot shape or the lower end of a stocking to receive candy or other merchandise. The upper and lower ends of the article may be closed by means of a wire threaded through the loops or by the wire itself, which acts like a draw-string. The fabric may be made either by bending wire into the stitches and then interlocking the successive row or by forming the stitches from a straight wire as the article is shaped.

The advantages of our invention result from the forming of a hollow wire article with horizontal rows of interlocking stitches and also from the making of the article, or at least a section thereof, from one piece of wire. The system readily adapts itself to different shapes and sizes, and strain in any part will be distributed throughout the other part. The articles may be cheaply made and present a very attractive appearance. Hammocks, pillows, dolls, and other articles may be formed in this manner, and many changes may be made in the form and arrangement of the article, stitch employed, &c., without departing from our invention.

We claim—

1. A hollow woven-wire article, having at least a section of its length formed of a con-



tinuous length of wire with rows of stiff open stitches extending spirally around it, each intermediate row having its successive stitches slidingly engaging those of the adjacent rows above and below it, forming a universally yielding hollow body; substantially as described.

2. A hollow woven-wire article formed of a continuous length of wire, with rows of stiff open stitches extending spirally around it, each intermediate row having its successive stitches slidingly engaging those of the adjacent rows above and below it, the cross-section of the article being varied by varying the arrangement of the stitches in successive rows, forming a universally yielding hollow wire body; substantially as described.

3. A hollow wire woven article formed of a continuous length of wire, with rows of stiff open stitches extending spirally around it, each intermediate row having its successive stitches slidingly engaging those of the adjacent rows

above and below it, forming a universally yielding hollow body, said body being given a varying dimension by a change in the dimensions of the stitches; substantially as described.

4. A hollow woven-wire article formed of a continuous length of wire with rows of stiff open stitches extending spirally around it, each intermediate row having its successive stitches slidingly engaging those of the adjacent rows above and below it, said article being contracted in its lower portion and having a wire closure at the bottom end, forming a universally yielding hollow wire body; substantially as described.

In testimony whereof we have hereunto set our hands.

PETER J. SHRUM.  
K. J. HENDRICKS.

Witnesses:

L. M. REDMAN,  
H. M. CORWIN.