T. SLOPER.

ANCHORING MEMBER FOR FABRIC ARTICLES.

APPLICATION FILED DEC. 27, 1913.

1,093,213. Patented Apr. 14, 1914.

Fig. 1.

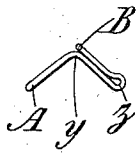


Fig. 2.

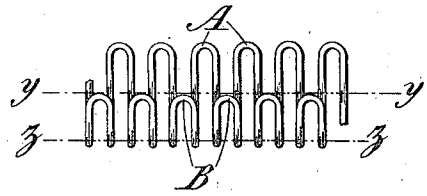


Fig. 3.

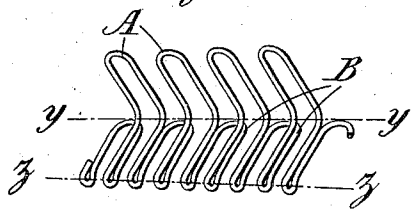


Fig. 4.

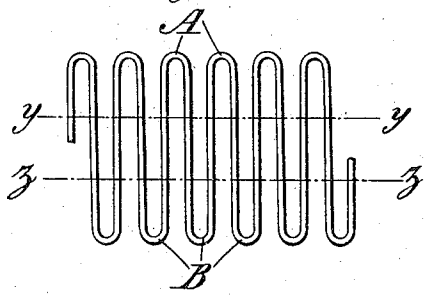


Fig. 5.

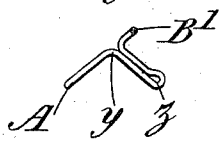
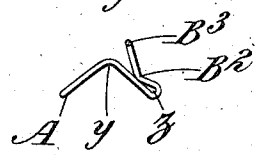


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

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ANCHORING MEMBER FOR FABRIC ARTICLES.

1,093,213. Specification of Letters Patent. Patented Apr. 14, 1914.

Application filed December 27, 1913. Serial No. 809,077.

To all whom it may concern:

Be it known that I, THOMAS SLOPER, a subject of the King of England, residing in Wiltshire, England, have invented certain new and useful Improvements in Anchoring Members for Fabric Articles, of which the following is a specification.

This invention is an improvement in or modification of the anchoring strips or rings forming the subject-matter of my earlier Letters Patent No. 1009192 dated November 21st 1911 for improvements in "the manufacture of articles or fabric built up from lengths of rubbered cord or other material." The anchoring strips constituting the subject-matter of the present invention are intended for the same purpose as those described in my said earlier patent specification.

The anchoring strips or rings described in the earlier patent specification referred to are made from sheet material, for example by stamping, and the present invention comprises such an anchoring strip when formed from wire bent into sinuous or zigzag form one edge of such strip being folded back close upon the main body and the whole strip being further bent about a longitudinal axis, so that the portion on one side of said axis is made to lie in a different plane from that on the other side.

The object of folding one edge of the strip back is to produce thereby the projections or pins which are to receive the cords as the looped ends provided by the sinuous or zigzag wire would in themselves be too wide for this purpose. If desired, the edge which is folded back can be again bent outward to give a backing to the cords on the pins and to obtain a further hold upon the bead.

In the accompanying drawings Figure 1 is an end elevation of a strip constructed according to one method of carrying out the present invention; Fig. 2 is plan of Fig. 1; Fig. 3 is a perspective view of the strip shown in Figs. 1 and 2; Fig. 4 is a diagram or a view of strip partly formed; Fig. 5 is an end elevation of a slightly modified form of strip constructed according to the present invention, and Fig. 6 is an end elevation of a slightly modified form of strip shown in Figs. 1–3.

Like letters indicate like parts throughout the drawings.

In making up the strip, the wire may be first bent into sinuous or zigzag form as shown in Fig. 4. At this stage, all parts of the wire lie in the same plane and it will be seen that all the laps of the wire lie approximately parallel to each other and the bends which so far constitute the sides of the strip are rounded as shown at A and B respectively. The edge B is now folded back about the line z—z so that it lies close to the main body of the strip as shown in Figs. 1 and 2, and the whole strip is then bent about a longitudinal axis y—y so that that portion on one side of said axis is made to lie in a different plane from that on the other side. Conveniently the folding back of the edge B is such as to bring the bends formerly constituting that edge to coincide with the longitudinal axis y—y. The bends A or B are too wide to receive the cords but the folding back of the edge B close upon the main body of the strip causes a series of comparatively narrow pins or projections C to be formed at the new edge thus provided, these pins project laterally from the A portion of the strip which corresponds to the flat plate or base of the strips described in my earlier patent specification No. 1009192 dated November 21st 1911. If desired the folded back portion of the strip can be of such length as to overlap the longitudinal axis y—y about which the strip is bent and the portion which would so overlap can be again bent outward as shown at B^1. This projecting part B^1 would constitute a backing for the cords placed over the pins or projections C and would be embedded in the bead or fabric of the cover to assist in firmly securing the same to the anchoring strip.

In Fig. 6 a form of strip is shown in which the folded-back portion may be of the same length as that in Figs. 1–3 but is nevertheless bent outward. The folded over part is brought close to the main body of the strip at B^2 and then bent out so that the loops B^3, which correspond to the parts B of Fig. 4, stand away from the main body of the strip. In building the strip into a tire, it can be easily curved to form segments of a ring, or to form a continuous ring, the ends in each case being either merely butted, twisted together, or otherwise fastened as desired. Folding back one edge in addition to providing the requisite pins or projections C serves to stiffen the whole strip which is an advantage. It is known to use for the purpose of stiffening the edges of tires, sinuous wires, all the laps

of which lie in one plane, and also sinuous wires folded about a longitudinal axis so that the one portion lies parallel with the other, a space being provided between to receive an inter-locking tongue; further, it is known to use a strip formed from a sinuous wire, which strip is secured at one edge to the edge of a tire and has its other edge bent over to form a series of hooks to engage the rim of the wheel, and no claim is made in the present specification for such devices *per se*.

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

1. An anchoring member having projections to receive lengths of cord in forming a fabric said anchoring member consisting of a wire bent into a continuous zigzag upon itself to form a strip one edge of such strip being folded about a longitudinal axis back upon itself toward the center portion of the strip and the other edge being folded about another longitudinal axis into a plane inclined to that of the center portion substantially as set forth.

2. An anchoring member having projections to receive lengths of cord in forming a fabric said anchoring member consisting of a wire bent into a continuous zigzag upon itself to form a strip one edge of such strip being folded about a longitudinal axis back upon itself toward the center portion of the strip and the other edge being folded about a longitudinal axis adjacent to the edge of that portion of the strip already folded back into a plane inclined to that of the center portion of the strip substantially as set forth.

3. An anchoring member having projections to receive lengths of cord in forming a fabric said anchoring member consisting of a wire bent into a continuous zigzag upon itself to form a strip one edge of such strip being folded about a longitudinal axis back upon itself toward the center portion of the strip and the other edge being folded about a longitudinal axis adjacent to the edge of that portion of the strip already folded back into a plane inclined to that of the center portion of the strip and then outward again into a plane inclined to the center portion of the strip and the other edge of the strip being folded about a longitudinal axis into a plane inclined to that of the center portion of the strip substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS SLOPER.

Witnesses:

ROBERT CANTWELL,

CHARLES PRICHARD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."