No. 665,982. Patented Jan. 15, 1901.

H. J. STEFFEN.

EDGING FOR WIRE FABRIC.

(Application filed Apr. 18, 1900.)

(No Model.)

Fig. 1.

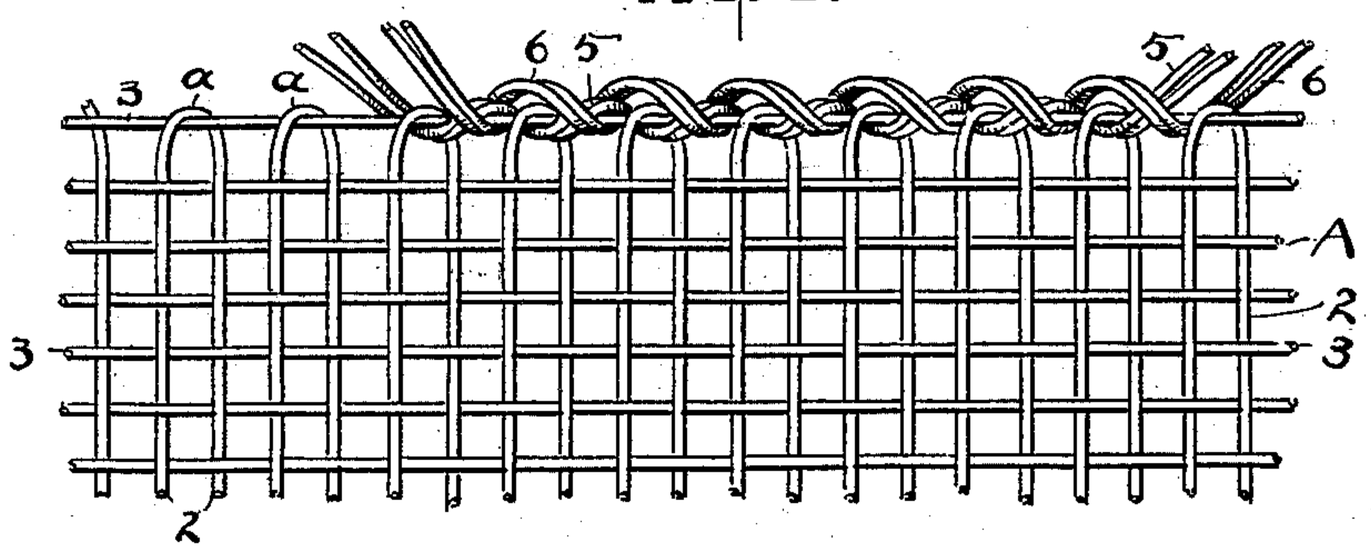


Fig. 2.

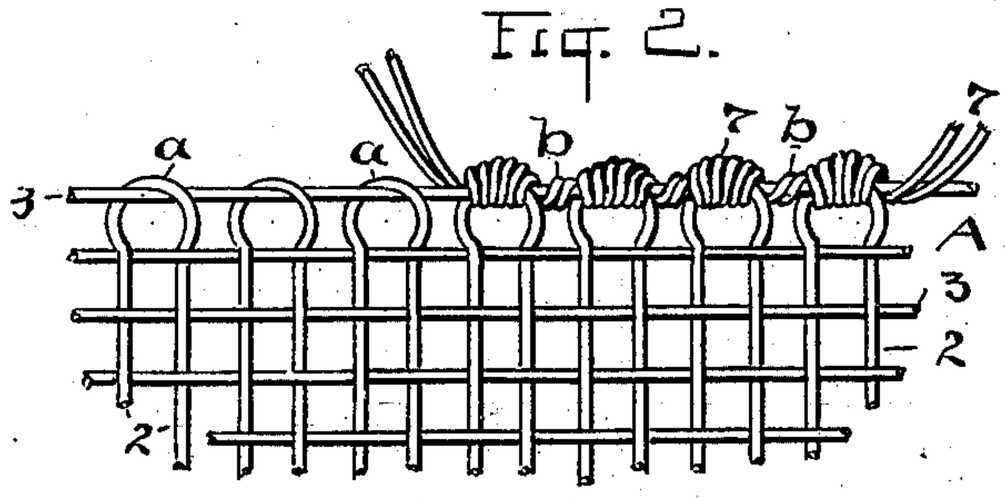
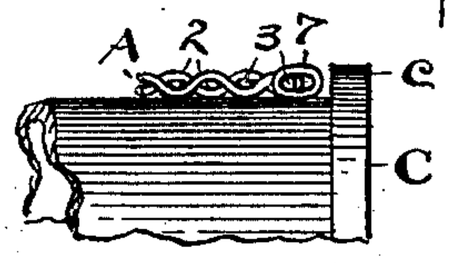


Fig. 3.



Attest

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UNITED STATES PATENT OFFICE.

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EDGING FOR WIRE FABRIC.

SPECIFICATION forming part of Letters Patent No. 665,982, dated January 15, 1901.

Application filed April 18, 1900. Serial No. 13,306. (No model.)

To all whom it may concern:

Be it known that I, HENRY J. STEFFEN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Edging for Wire Fabric; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to edging for wire fabrics; and the object of the invention is to provide a wire fabric which is used as an endless apron or carrier with a reinforced edge so constructed as to protect the edge proper and promote the life of the belt or carrier, all substantially as shown and described, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan view of wire fabric or netting having edging of one form or style; and Fig. 2 is a similar view with edging of a different form or style, as hereinafter fully described. Fig. 3 is an elevation of a section of a roller and of a wire apron thereon, as hereinafter fully described.

In Figs. 1 and 2 the fabric A is the same and the strands of wire 2 and 3 run at right angles and pass alternately under and over each other, and the cross-wires 2 are looped back at *a* about the outer wire 3. This is the construction at both edges, though only one is shown here. Now it will be understood that one of the uses to which wire woven up in this way is applied is in what may be endless carriers, belts, or aprons for drying tobacco. In such machines, as well as in others, the carrier is stretched over and travels on suitable rollers C, a portion of one of which is seen in Fig. 3. These rollers have flanges *c* at their ends to confine the carrier or apron, and while said flanges generally are of wood they may be of metal. In either and all cases it has been found that there is such rubbing of the edges of the carrier against the flanges that they are worn out at a very expensive rate and in such manner as to render the entire carrier worthless for this purpose. Possibly the fact that wire for these uses has to be galvanized may somewhat account for its crystallization and tendency to break and give away at the edge where wear and breakage originate, as above described. This experience and the attendant cost of refurnishing with new belts or carriers led me to experiment with a view to overcoming the obvious defect in carriers as they have hitherto been constructed and used, and the present invention is the outcome of these experiments. Thus, as seen in Fig. 1, I employ two double strands 5 and 6 of wire wound one upon the other and entered through alternate openings in the edge of the carrier and as tightly stretched as practicable, so as to make a firm strong binding or edging which will protect the loops *a* and itself take the flange wear. In addition to this it gives the apron or carrier more character than before and makes it better in all particulars so far as durability and service are concerned.

The exact form of this edging is not so material; but some form of it is deemed absolutely essential to protect the loops *a*. Hence in Fig. 2 I show a different wrapping of the edge, where two strands 7 are wound continuously along the edge and having the windings deepest over the loops *a*, while they are closely drawn at *b* about the wire between said loops. This also makes a very effective protection, as is obvious.

Obviously the matter of use of the wire netting or fabric thus shown and described is not in itself material; but it is also obvious that an edge wrapping or binding of the character herein set forth must have its chief value as a protection or shield to the edge proper and that its use is therefore naturally restricted to endless carriers or aprons or to such places as bring wear and tear to the edge of the fabric; but in addition to this it does contribute materially to the strength of the edge, and the winding also sustains much of the surface wear on the rolls, which is of decided advantage.

What I claim is—

A wire fabric for endless carriers consisting of strands of wire woven at right angles to each other and the transverse strands formed of a continuous wire looped back at the edges of the carrier, and the loops thereof exposed

outside the longitudinal side strands, and separate strands of wire threaded and twisted about said edges and inclosing the loops along the same, thereby protecting the otherwise exposed loops from wear and tear and maintaining the carrier intact, substantially as described.

Witness my hand to the foregoing specification this 3d day of April, 1900.

HENRY J. STEFFEN.

Witnesses:
H. T. FISHER,
H. E. MUDRA.