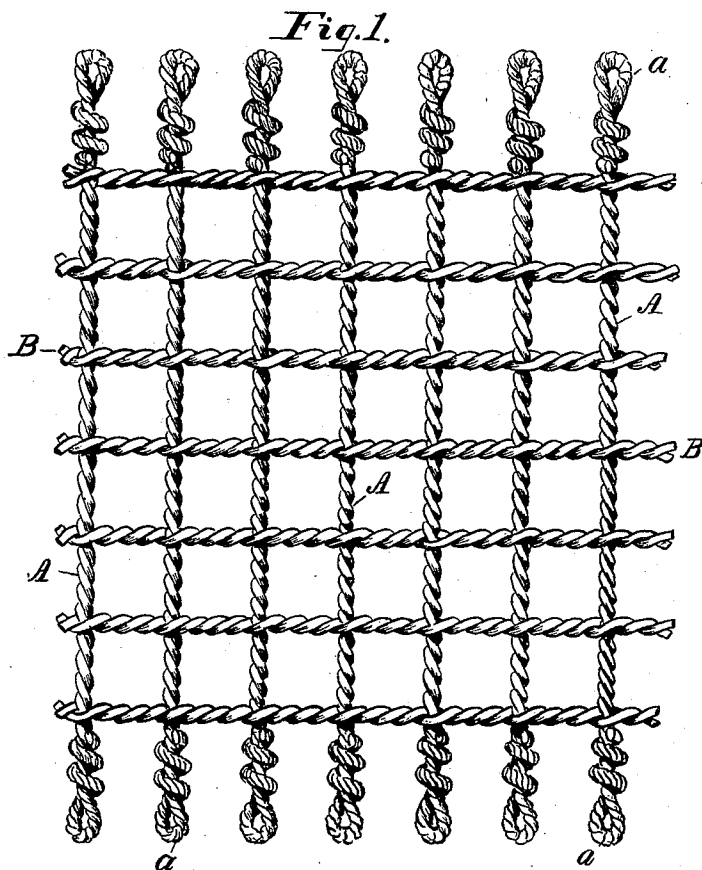


(No Model.)

W. HEWITT.  
WIRE CLOTH OR FABRIC.

No. 322,933.

Patented July 28, 1885.



WITNESSES:  
*John Doleys*  
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INVENTOR  
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*Bonsall Taylor*

# UNITED STATES PATENT OFFICE.

WILLIAM HEWITT, OF TRENTON, NEW JERSEY, ASSIGNOR TO THE TRENTON  
IRON COMPANY, OF SAME PLACE.

## WIRE CLOTH OR FABRIC.

SPECIFICATION forming part of Letters Patent No. 322,933, dated July 28, 1885.

Application filed October 20, 1884. (No specimens.)

*To all whom it may concern:*

Be it known that I, WILLIAM HEWITT, a citizen of the United States, residing in Trenton, New Jersey, have invented an Improvement in Wire Cloths or Fabrics, which I term a "Cable Fabric," and of which the following is a specification.

The object of my invention is the construction of a metallic fabric composed of strands or threads—or a warp and woof, so to speak—of twisted wires or cables, which, as a fabric, will be adapted for any of the ordinary uses to which fabrics of metal are applied.

To the above end my invention consists of a metallic fabric composed of a series of completed cables, each formed of two or more intertwisted wires parallel with each other and spaced at suitable distances apart, in combination with a second series of cables parallel with each other, disposed, preferably, at right angles with the first series of cables, spaced at suitable distances apart, and, as to their component strands, wrapped around or embracing the completed cables at the points of intersection with the latter, all substantially in the manner shown in the drawings.

In the drawings, Figure 1 is a face view of a section of fabric embodying my invention. Fig. 2 is an end sectional view through one of the completed cables, representing, also, the strands of one of the transverse cables which interlocks with it.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the cables, which I for convenience term the "completed cables," and which are each composed of two or more strands closely twisted together. B are what I term the "interlocking cables," which are each composed of two or more strands, which embrace the completed cables at the intersections of the interlocking cables therewith. All of the strands of each series of cables are disposed in parallelism, and are, preferably, equally spaced, so that the mesh of the completed fabric is rectangular and the weave preferably uniform—that is to say, the open spaces of the mesh preferably squares. It is also important that the strands of the respective series should intersect at right angles. The extremities of the completed ca-

bles are conveniently formed into loops *a*, whereby the fabric, when employed, for instance, as a bed-bottom, may be conveniently secured. That represented in the drawings is a convenient way of forming the loops. Other methods of forming may, however, be resorted to.

In making the fabric the completed cables are first to be made, and are then, preferably in the operation of twisting or weaving the interlocking cables, put into position and secured in place. In other words, the interlocking cables are formed about the completed cables, and when completely formed serve, by the bite which their strands have upon the twisted exterior surfaces of the completed cables, to lock the latter in position in the fabric, and to prevent their longitudinal movement with respect to the series of said interlocking cables.

It is obvious that by reason of the above construction the completed cables, even if not provided with loops at their ends, cannot be pulled out or drawn from the fabric. This is a most important consideration, for were the completed cables simply single wires and not cables, as such—that is to say, composed of twisted strands—it would be possible to pull them out of the fabric and so destroy its integrity.

I am aware that a fabric has been made in which single wires provided with loops at their extremities have been united by interlocking cables, and to such device, which is, moreover, inoperative for the purpose to which mine is applicable, I lay no claim.

I am also aware that a wire-netting has been made in which wires, twisted to form a lattice fabric the mesh of which is hexagonal, have been stiffened by the introduction, through eyes formed in the intertwisted wires which form the hexagonal mesh, of single and of twisted wires, and to such a fabric I lay no claim.

Having thus described my invention, I claim—

1. As a new article of manufacture, a metallic fabric composed of a series of parallel continuous straight cables, each composed of two or more wires twisted together, in combination with a second series of parallel continuous straight cables the strands of which are

twisted about or embrace the first-mentioned cables, so as to form a rectangular mesh therewith and retain the latter against displacement in either direction, substantially as set forth.

2. As a new article of manufacture, a metallic fabric composed of a series of parallel continuous straight cables, each composed of two or more wires twisted together, and provided at their extremities with loops, in combination with a second series of parallel continuous straight cables the strands of which are

twisted about or embrace the first-mentioned cables, so as to form a rectangular mesh therewith and retain the latter against displacement in either direction, substantially as set forth.

In testimony whereof I have hereunto signed my name this 15th day of October, A. D. 1884.

WM. HEWITT.

In presence of—

F. C. LOWTHORP, Jr.,  
J. BONSALE TAYLOR.