

(Model.)

C. O. WHITE.
WIRE MAT.

No. 532,508.

Patented Jan. 15, 1895.

Fig. 1.

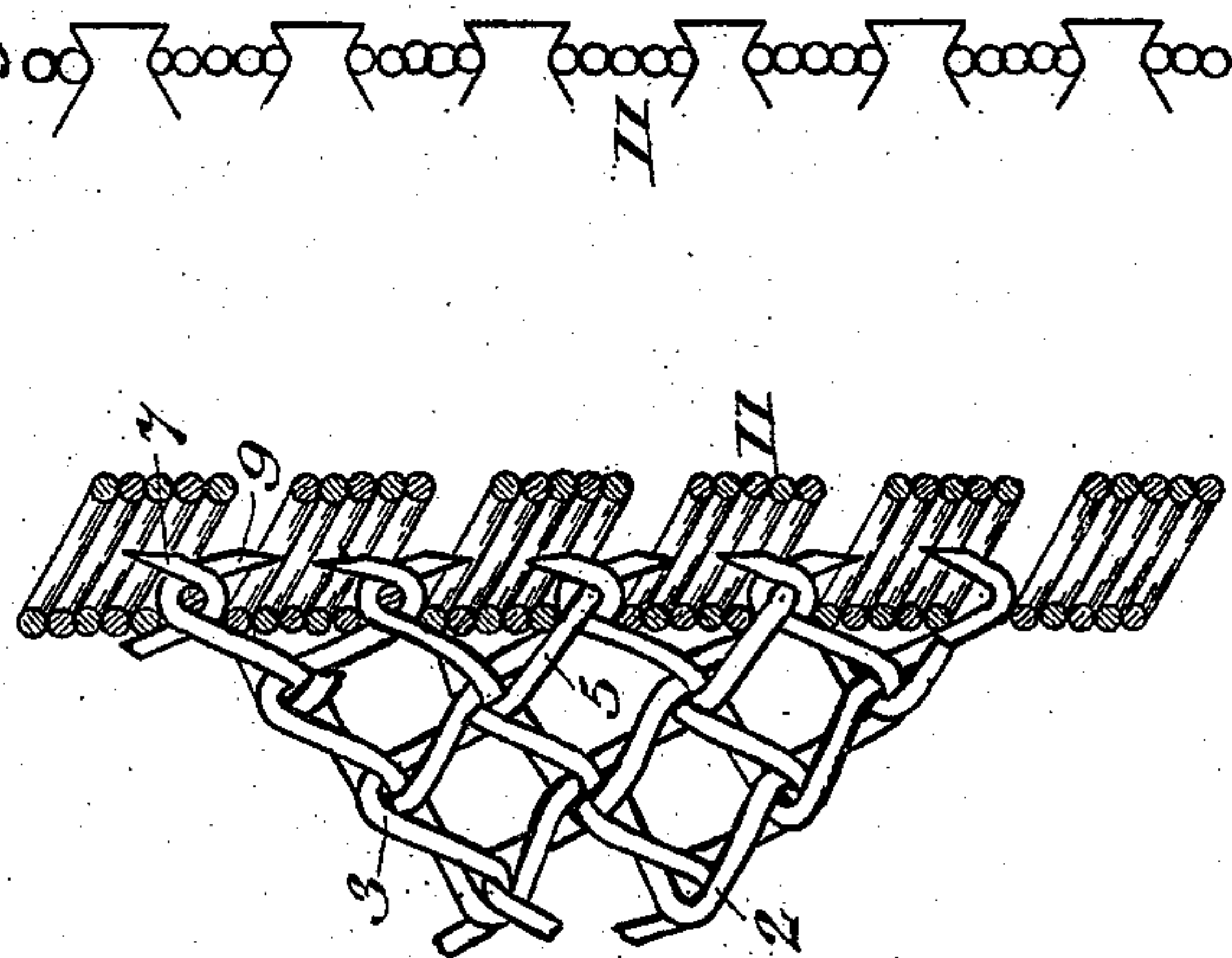


Fig. 2.

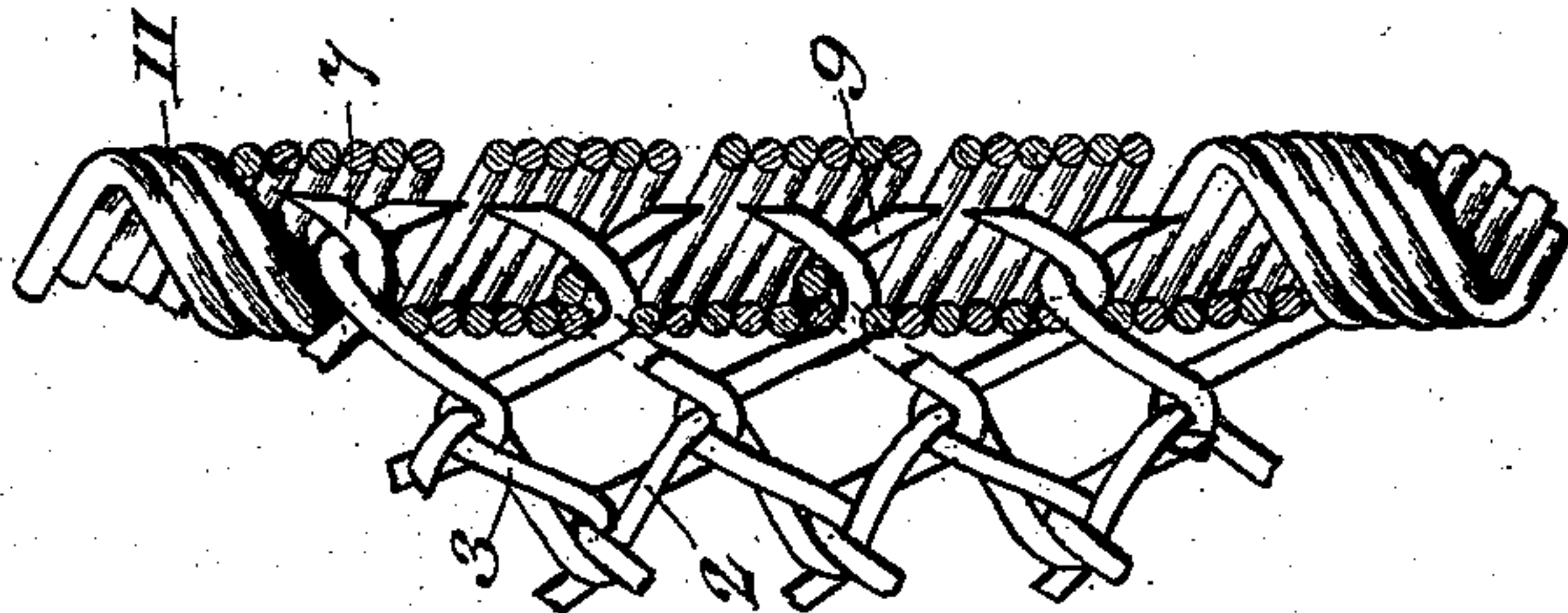
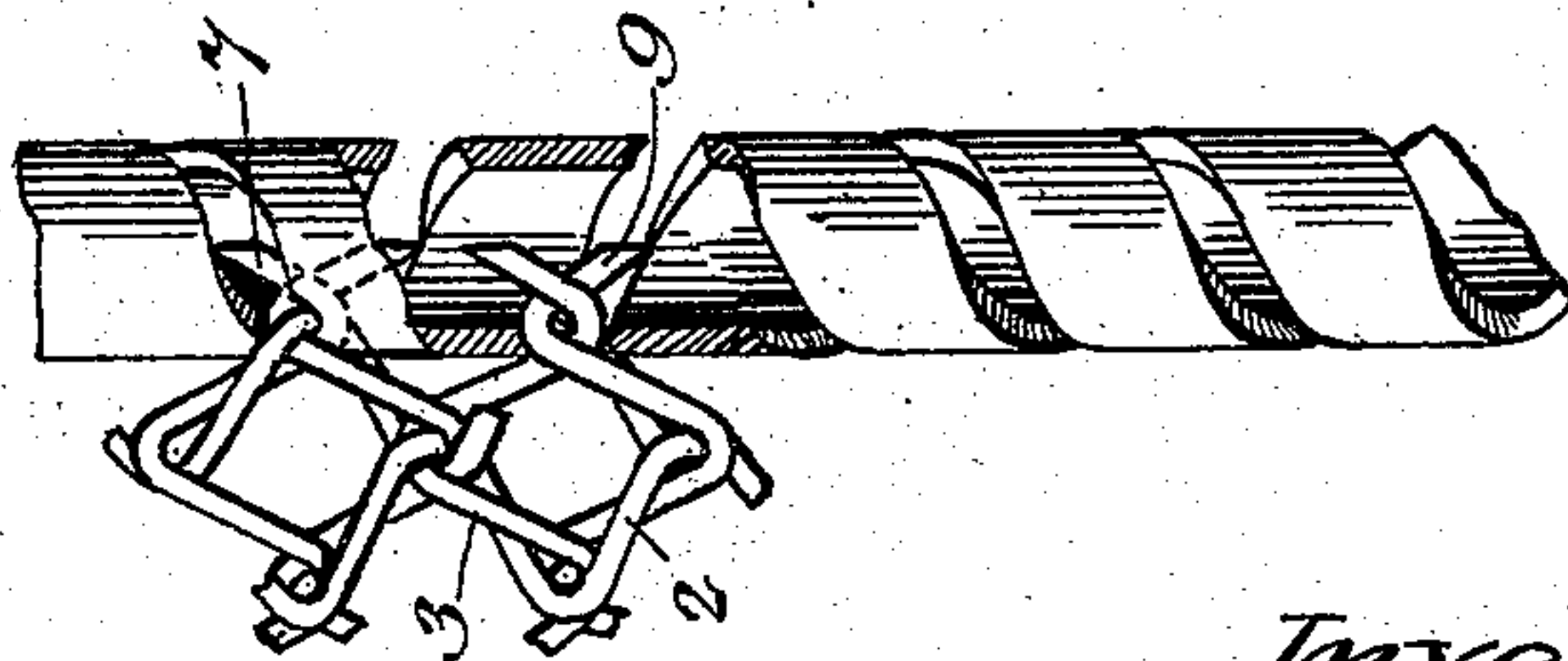


Fig. 4.



Witnesses.
Char. E. Van Dorn.
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Inventor,
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By Paul & Hawley
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UNITED STATES PATENT OFFICE.

CLARENCE O. WHITE, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO THE
WHITE MANUFACTURING COMPANY, OF SAME PLACE.

WIRE MAT.

SPECIFICATION forming part of Letters Patent No. 532,508, dated January 15, 1895.

Application filed December 1, 1893. Serial No. 492,538. (Model.)

To all whom it may concern:

Be it known that I, CLARENCE O. WHITE, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Wire Mats, (Case No. 4,) of which the following is a specification.

My invention relates to woven wire fabrics for employment in fencing, office railings and screens, and particularly in door-mats.

The object of this invention is to increase the durability of a finished piece of fabric by thoroughly securing the edges thereof, my particular object being to provide a firm and durable, but at the same time flexible and neat appearing border for the fabric.

To this end my invention consists in means for securing the border coils to form a firm non-detachable border, all as hereinafter described and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 illustrates a portion or section of a piece or mat of wire fabric provided with a border embodying my invention. Fig. 2 shows a slightly modified construction. Fig. 3 illustrates the position and form of the locking parts of the fabric edge and the border. Fig. 4 illustrates the substitution of sheet metal for wire in the border.

In the drawings, I have illustrated my border as applied to a fabric of the particular construction shown and described in my Letters Patent No. 507,865, dated October 31, 1893, but it may be understood that my border may be applied to any fabric which from its formation exhibits a series of notches or indentations in its edges.

The fabric shown is composed of a series of primary and transverse coils 2 and 3 arranged at right angles to each other in such manner that all parts intersect and interlock with the others and are firmly held in place at the edge of the fabric, as shown in Fig. 1. The last coil 5 parallel to the edge intersects with the turned ends 7 and 9 of these coils which extend at right angles thereto. The border coils 11 are coiled in an opposite direction to the last parallel coil 5 of the edge and are of such

number as to completely fill and tightly fit into the notches in the edge of the fabric formed between the turned ends 9 and 7. These notches considered with respect to the turned ends of the transverse coils present an outline or contour similar to that shown in Fig. 3, and the inwardly curved parts 7 and 9 of the transverse coils form so much of a bar as is necessary to effectually prevent the pulling out of those parts of the border contained therein.

Where, as shown in Fig. 2, the last parallel coil of the fabric is omitted, the ends 7 and 9 of the transverse coils collapse slightly upon one another, and thus permit the insertion of an extra or additional coil in the border. The border coils are preferably of the same pitch as the coils making up the fabric. The closely pressed series of coils complete a practically full and solid, but flexible, border or roll upon the edge of the fabric and entirely cover the sharp points or ends of the fabric wires from sight and touch. As the border coils do not interlock with any part of the fabric, the border may be very readily removed by simply uncoiling one or more of the coils of the group, after which the remainder will slip out of the notches in a body. The coil or group of coils which make up the solid border roll may be forced into place in the notches by pressure, or they may be coiled into place one after the other, the last coil pressing forward the others and completely filling successive gaps or notches. The latter method is preferred owing to the great power which is necessary to force the coils laterally against the edge of the fabric and into the notches.

The wires of the border and fabric are coiled in opposite directions, that is to say, if the fabric is made up of left hand coils, the border is of right hand coils, and vice versa. This is essential, as a border formed of wires coiled in the same direction as the body of the fabric could not be connected to the edges of the fabric by filling the spaces between the ends of the wires in the manner shown and described by applicant.

In place of using a series of coils of wire to make up the border, I may substitute the sheet metal coil 13 composed of a strip of metal

of the same width as the group of coils of which it takes the place. (See Fig. 4.)

A further and greater advantage than that of simple neatness lies in the fact that the solid border perfectly locks the ends of the coils extending into the same, thus preventing the loosening or uncoiling of the wires.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with the woven wire fabric, of a border coil confined in the edge thereof and filling the spaces between the intersections of the fabric wires and pressing upon and locking the wires at such intersections, substantially as described.

2. The combination with the woven wire fabric, of a border coil made up of a series of coils of wire, said coil containing so many wires as to fill the spaces between the intersections of the fabric wires and press upon and lock said wires at such intersections, and said coil covering the ends of said fabric wires, substantially as described.

3. The combination of the fabric composed of the interwoven transverse and longitudinal coils of wire with a border coil confined within the spaces between the intersections of the fabric coils at the edge of the fabric, said border coil filling said spaces and locking the ends of the fabric coils and said ends extending within and being covered by said border coil, substantially as described.

4. The combination with the fabric composed of interwoven transverse and longitudinal coils of wire, of a border coil confined within the spaces between the intersections of the fabric coils at the edge of the fabric and filling said spaces and said fabric coils being coiled in one direction and the border coil being a coil of the opposite hand or direction, substantially as described.

In testimony whereof I have hereunto set my hand this 28th day of October, 1893.

CLARENCE O. WHITE.

In presence of—

M. E. GOOLEY,

C. G. HAWLEY.