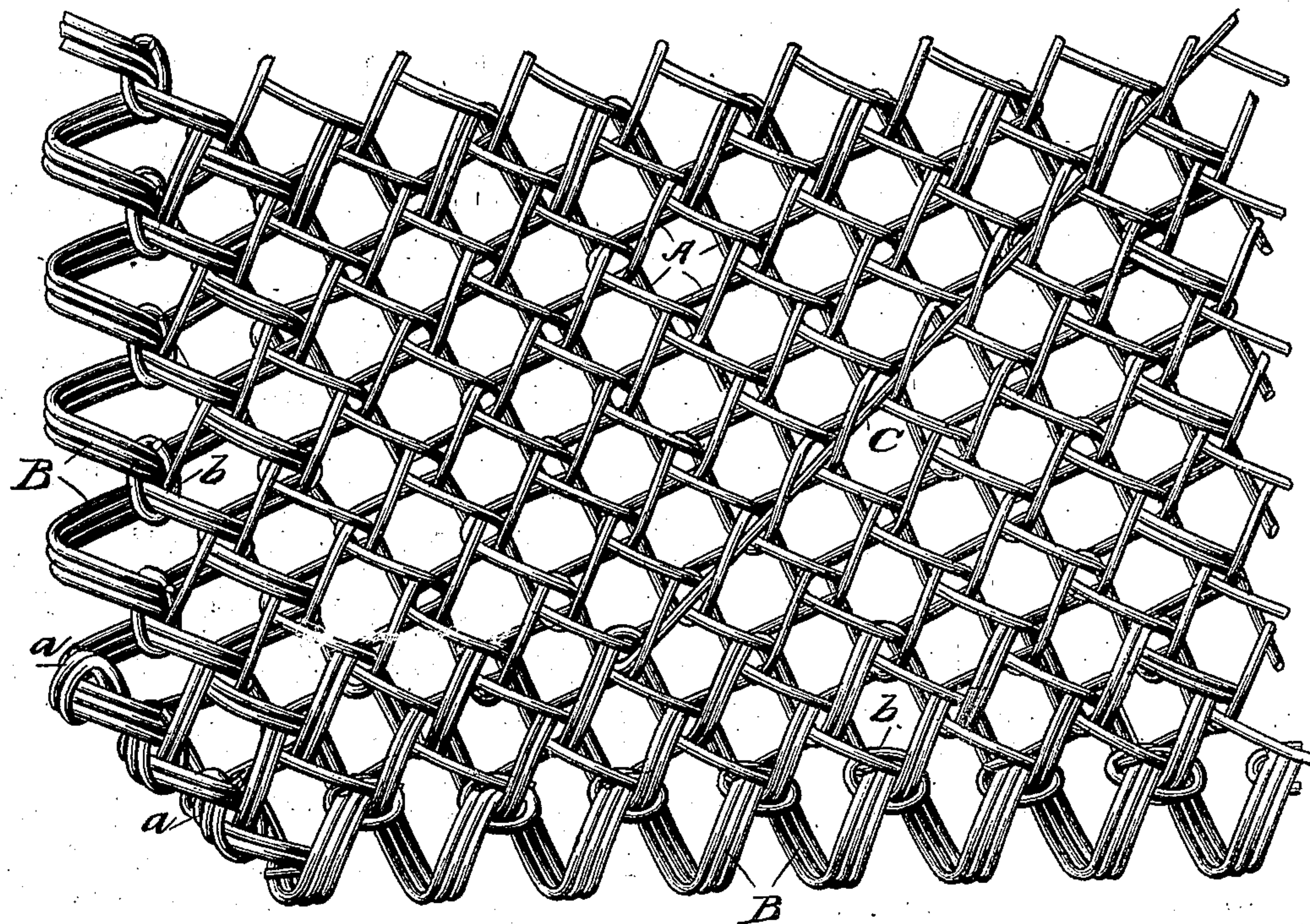


(Model.)

T. W. KLIPFEL.
COILED WIRE FLOOR MAT.

No. 432,244.

Patented July 15, 1890.



Witnesses,
L. J. Mann
E. A. Powers

Inventor,
Thomas W. Klippel

UNITED STATES PATENT OFFICE.

THOMAS W. KLIPFEL, OF CHICAGO, ILLINOIS, ASSIGNOR TO CHARLES E. SIMMONS, OF SAME PLACE.

COILED-WIRE FLOOR-MAT.

SPECIFICATION forming part of Letters Patent No. 432,244, dated July 15, 1890.

Application filed July 8, 1887. Serial No. 243,752. (Model.)

To all whom it may concern:

Be it known that I, THOMAS W. KLIPFEL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Coiled-Wire Floor-Mats, which I desire to protect by Letters Patent of the United States, of which the following is a specification.

My invention consists in an improvement in borders or selvages for mats of the above-entitled class, and also in certain bracing diagonal wires for supporting the main fabric in proper position; also the manner of securing the ends of the coils.

The drawing shows a section of a floor-mat and border and also a portion of a diagonal supporting-wire.

In constructing this mat I first interlock one set of spirals of the proper length and number to make a mat of the size desired. Then I interlock crosswise into this fabric another set of spirals with each other and into the first fabric, as shown in drawing A, after which I run in double and treble coils B B upon each margin, more or less, but sufficient to secure the desired strength, and at the intersection of the cross-coils and border I coil the ends of said cross-coils around them, as seen at *b*. I also lock the ends of the coils around each other at the corners, as seen at *a a*, thus securing and firmly connecting the two sets of coils upon the borders and corner margins of the mat, and thus disposing of the ends of the wires in an effectual manner.

The tie-wires C are applied, as shown, diagonally across the body of the mat, one or more, as found desirable, to support and keep the mat from getting out of square.

The coiled-wire border as applied to my mat is less expensive than the iron frame usually used for a border. It is also lighter and more flexible, and thus more nearly resembles a jute or grass mat.

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

1. In a coiled-wire floor-mat composed of a series of parallel coils having interlocked therewith a similar series crossing the first, a bracing-wire extended through the mat diagonally to both of said series of coils, substantially as and for the purpose described.

2. A coiled-wire floor-mat composed of two sets of coils run across or diagonally into each other with a margin of duplicated wire coils, around which are coiled the ends of the respective cross-coils of the body of the mat, substantially as shown and described.

3. In a coiled-wire floor-mat composed of parallel coils having interlocked therewith transverse or diagonal coils, a border also composed of coiled wire extending along its margins and so interlaced as to form a selvage for said mat, substantially as described and shown.

4. In a coiled-wire floor-mat composed of a series of parallel coils having interlocked therewith a similar series crossing the first, a bracing-wire extended through the mat diagonally to both of said series of coils, and a coiled-wire border, substantially as and for the purpose described.

THOMAS W. KLIPFEL.

Witnesses:

JOSEPH RIDGE,
FREDERICK C. GOODWIN.