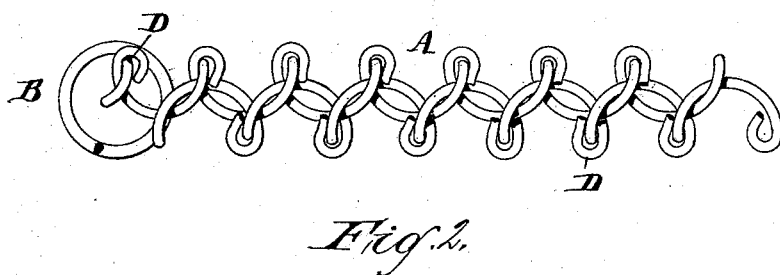
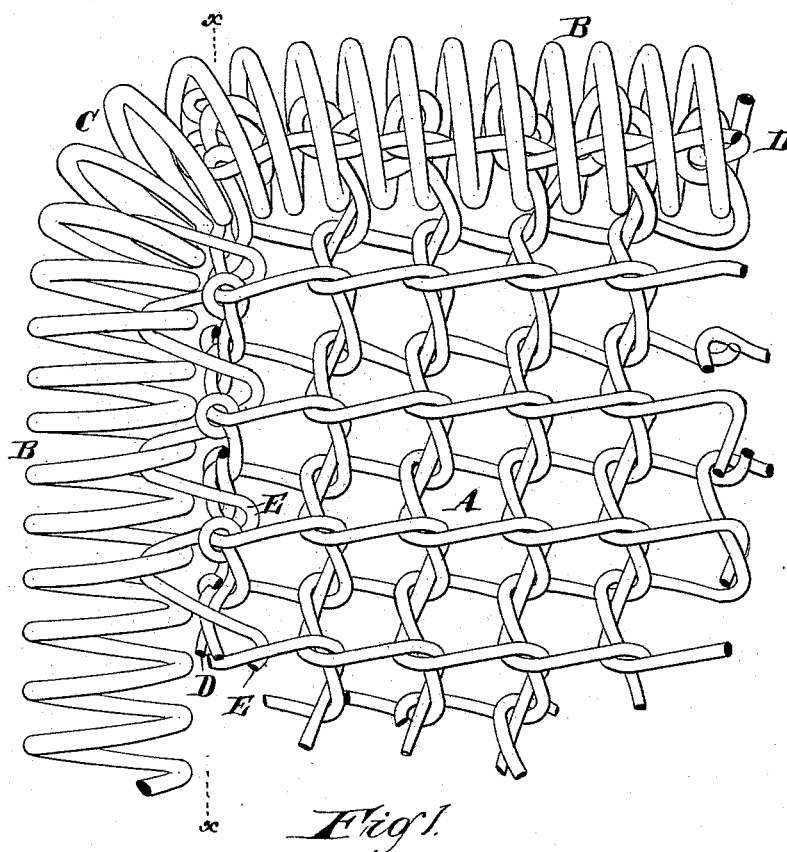


(Model.)

T. MIDGLEY.  
WIRE MAT.

No. 422,960.

Patented Mar. 11, 1890.



WITNESSES:

*Wm Benjamin*  
*Eugene McDonald*

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BY

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# UNITED STATES PATENT OFFICE.

THOMAS MIDGLEY, OF BEAVER FALLS, PENNSYLVANIA, ASSIGNOR TO  
HENRY W. HARTMAN, OF SAME PLACE.

## WIRE MAT.

SPECIFICATION forming part of Letters Patent No. 422,960, dated March 11, 1890.

Application filed December 1, 1888. Serial No. 292,426. (Model.)

*To all whom it may concern:*

Be it known that I, THOMAS MIDGLEY, a citizen of the United States, and a resident of Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Wire Mats, of which the following is a specification.

The object of my invention is to produce a cheap and durable mat consisting of a body portion made entirely of wire and of a bounding portion connected to the body portion, also of wire, so that the mat as an entirety shall be flexible in all directions, with capacity of being rolled up.

In the accompanying drawings, forming a part hereof, Figure 1 is a plan view of a portion of a wire mat embodying my invention; and Fig. 2 is a cross-section of same, taken on line *x x*.

A is the body or center portion, consisting of a series of spirally-wound wires running parallel with each other and which are intertwined or intercoiled with each other, and another series of spirally-wound wires running parallel with each other and which are intertwined or intercoiled with each other, and which series are arranged so as to be intertwined or intercoiled with the other series at about right angles therewith in such a manner as will produce a body portion presenting a surface similar to a series of scrapers.

B is the bounding portion, which consists of a coil of wire, and is flexibly connected to the body portion by being intercoiled with the coils thereof—that is, by being intercoiled into or around the edge D, formed by the ends of the body-coils, and this edge is made secure by the ends of the body-wires being bent over upon themselves, as shown in Fig. 2.

In place of or in conjunction with the above method of attaching the bounding coil B to the body part, it may be connected thereto by a separate tying or binding wire E, as shown at the left-hand part of Fig. 1, as will be readily understood.

The bounding coil B is continuous around all sides and corners of the body portion, and at the corners of the body portion this coil is bent around, as shown at C, so as to produce a rounded and ornamental appearance, as well as a durable and flexible construction.

I have shown in the drawings the bounding coil as being continuous around all sides of the mat in one piece, the two ends being joined together on one end of the mat in any suitable manner; but, as will be readily understood, this bounding coil could be made in two parts running parallel with each other on the sides of the mat, with their ends bent around the corners of the mat so as to meet in the center at the ends of the mat. Thus it will be seen that the mat of my invention is flexible in all directions with capacity of being rolled up, and, besides, the coils constituting the body part are protected and kept in place and prevented from separating in the rough use to which these mats are subjected by means of the border-coil, which, as before stated, is intimately united to the body portion, and is continuous around all sides and corners thereof, giving to the mat a complete finish and adding to its flexibility as an entirety.

What I claim as my invention is—

1. A flexible wire mat consisting of a body or center portion composed of coils of wire intercoiled with each other, and a bounding portion or border consisting of a coil of wire flexibly united to the body portion and which border-coil is continuous around all sides and corners of the mat, substantially as and for the purpose set forth.

2. A flexible wire mat consisting of a body or center portion composed of a series of parallel coils intercoiled with each other and braced by a similar series of parallel coils intercoiled with each other and which are intercoiled with the other series at about right angles thereto, and a bounding portion or border consisting of a coil of wire in one or more parts and flexibly united to the body portion by being intercoiled with the said coils composing the body portion and which border-coil or bounding portion is continuous around all sides of the mat, giving rounded corners thereto, substantially as and for the purpose set forth.

THOMAS MIDGLEY.

Witnesses:

J. F. MERRIMAN,  
H. W. HARTMAN.