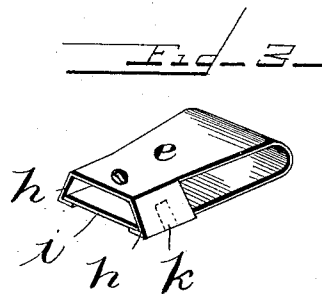
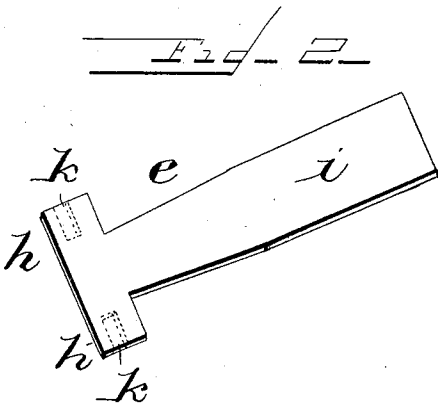
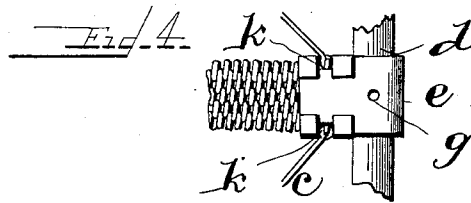
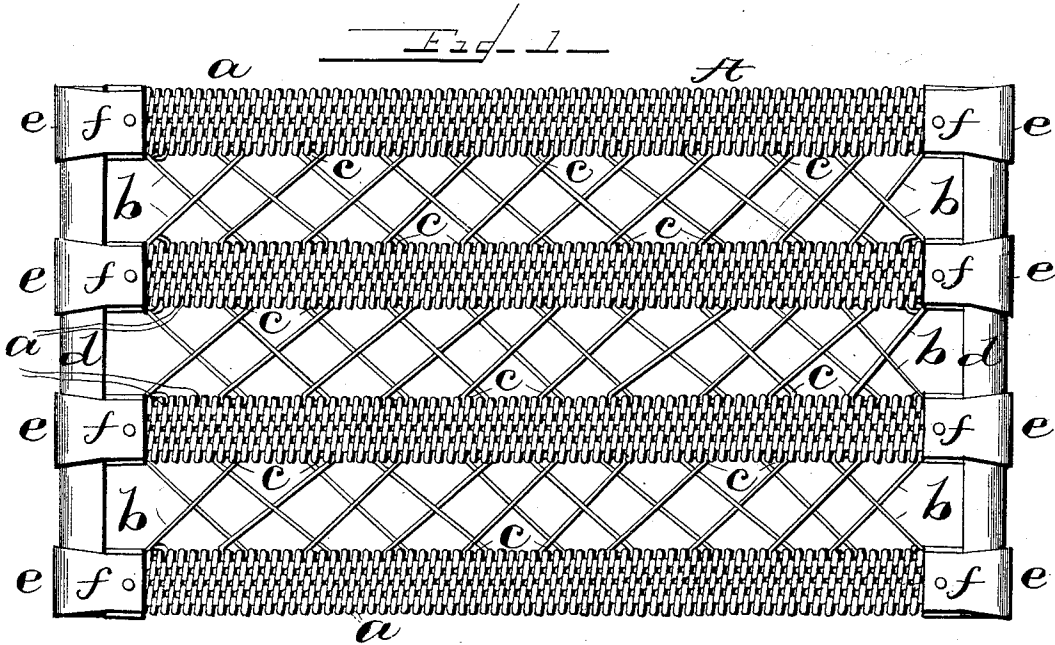


(No Model.)

T. MIDGLEY.
WIRE MAT.

No. 482,061.

Patented Sept. 6, 1892.



Witnesses

G. A. Faubuschni
H. R. Reinohl

Inventor

Thomas Midgley
By Johnstone & Reinohl

Attorneys

UNITED STATES PATENT OFFICE

THOMAS MIDGLEY, OF BEAVER FALLS, PENNSYLVANIA.

WIRE MAT.

SPECIFICATION forming part of Letters Patent No. 482,061, dated September 6, 1892.

Application filed March 21, 1892. Serial No. 425,884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS MIDGLEY, a citizen of the United States, residing at Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Wire Mats; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to wire mats, and has for its object certain improvements on the construction shown in Patent No. 462,941, granted James E. Emerson and myself on the 10th of November, 1891.

The invention will be fully disclosed in the following specification and claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents a plan or top view of my improved mat; Fig. 2, a plan of a blank for forming the clip; Fig. 3, a perspective of the clip, and Fig. 4 an inverted plan of the end of one bar.

Reference being had to the drawings and the letters thereon, A indicates a mat composed of bars or sections *a*, of one or more thicknesses or layers of coiled-wire helices, and intervening sections *b*, of bent wire, with which the bars or sections *a* are connected by intertwining, as shown. The wire helices are coiled in the usual manner and intertwined or screwed into each other as they proceed from the machine, and the strand or strands forming the edges of the bar are intertwined or screwed into the sections *b*, of bent wire. The sections *b* are bent to form eyes *c*, with each of which one or more of the helices engage. The ends of the bars *a* and sections *b* are finished and protected by a bar *d*, of rubber or analogous flexible material, which abuts and is attached to the bars *a* by clips *e*, of sheet metal, which engage the bars *a*, surround the bar *d*, and are secured to the bars *a* by solder or by a rivet *f*, or in any approved manner, and the clips are preferably secured to the bar *d* by indenting the sheet metal, as at *g*. The bars *d* thus applied confer rigidity to the mat without embedding them in the wire.

The blank for the clip is shown in Fig. 2, and consists of the lateral extensions *h* and

the tongue *i*, which are bent into the form shown in Fig. 3.

In applying the clips the lateral extensions *h* are placed over the ends of the bars *a*, the bar *d* laid in position against the ends of the bars *a*, and the tongue *i* passed over the bar *d* and bent back upon the under side of the end of the bar *a*, between the ends of the extensions *h*, and the clips secured to the bars *a* by solder or in any approved manner, such as riveting.

The clips may be provided with slots *k k* in the lateral extensions *h* to engage the end of the sections *b* and the clips thus secured, instead of inserting a rivet through the inner end thereof and the bar. The bar *d* may thus be readily applied and avoid the necessity of heating the ends of the mat to apply the rubber border and vulcanize it, which discolors the wire, and the clips *e* produce a highly-ornamental effect upon the mat.

The clips are preferably made of polished brass or nickel-plated sheet metal.

Having thus fully described my invention, what I claim is—

1. A wire mat having flexible bars forming the ends thereof abutting the metallic body and secured thereto by clips extending around the bars.

2. A wire mat composed of bars and separating sections, in combination with flexible bars abutting the metallic body and secured thereto by clips extending around the flexible bar and secured to the mat.

3. A wire mat composed of bars of coiled-wire helices and separating sections, in combination with flexible bars abutting the ends of the former bars and secured thereto by metallic clips extending around the flexible bars and surrounding the ends of said wire bars.

4. A wire mat having flexible bars at the end, in combination with metallic clips provided with lateral extensions to engage a bar of the mat and a tongue to surround the flexible bar.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS MIDGLEY.

Witnesses:

JAMES F. MERRIMAN,
JOHN T. REEVES.