H. T. WINDT.

DOOR MAT.

No. 341,116.

Patented May 4, 1886.

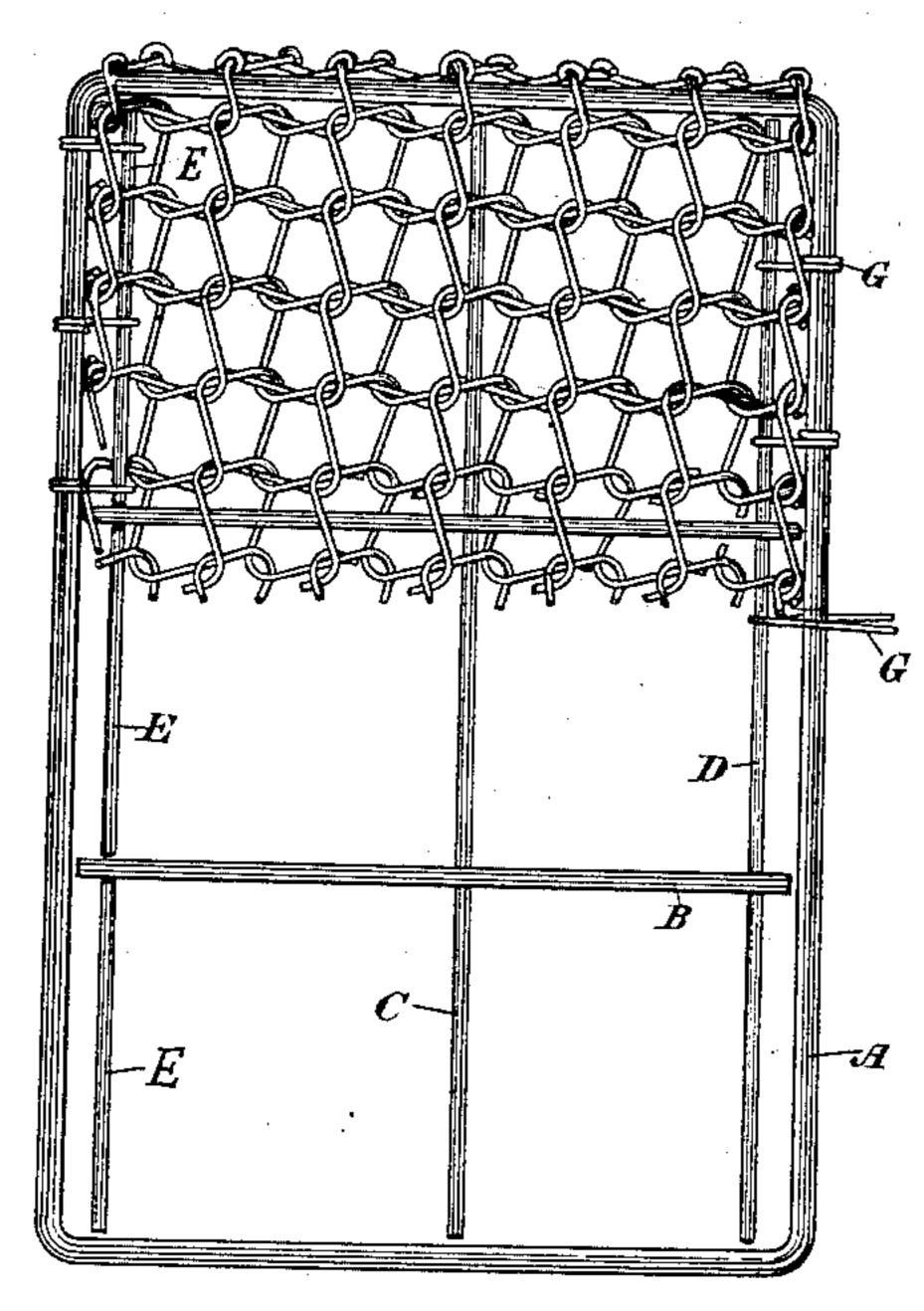


Fig. 1.

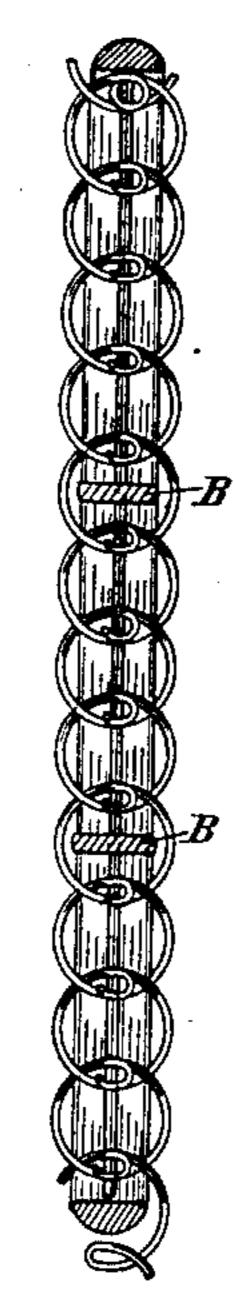
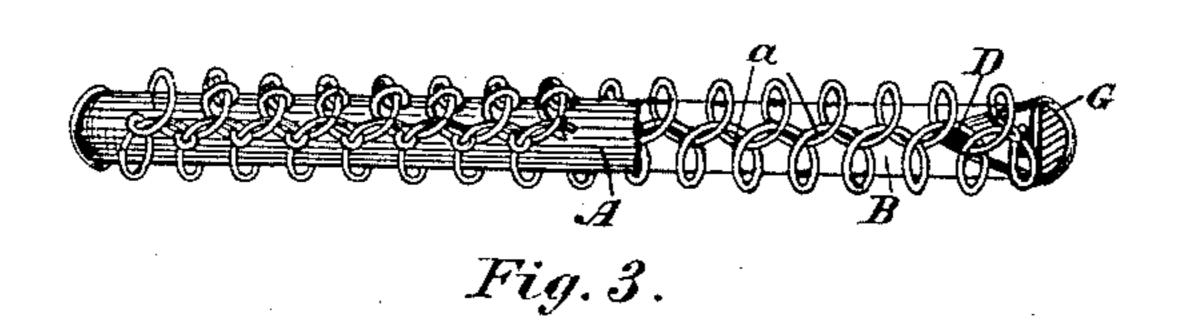


Fig. 2.



Witnesses.

W. Fraham, Clurtes & Baldwin Inventor:

Henry T. Windt. by Donald & Ridout & Co. Attys.

United States Patent Office.

HENRY T. WINDT, OF TORONTO, ONTARIO, CANADA, ASSIGNOR TO THE TORONTO WIRE MAT COMPANY, OF SAME PLACE.

DOOR-MAT.

SPECIFICATION forming part of Letters Patent No. 341,116, dated May 4, 1886.

Application filed June 20, 1885. Renewed April 8, 1886. Serial No. 198,304. (No model.) Patented in Canada July 3, 1885, No. 21,982.

To all whom it may concern:

Be it known that I, Henry Theodore Windt, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, manufacturer, have invented certain new and useful Improvements in Door-Mats, of which

the following is a specification.

My invention relates to certain improvements in the construction of a mat patented 10 by me in the Dominion of Canada on the 30th April, 1884, under No. 19,254, and described in application filed under Serial No. 126,489 at the Patent Office at Washington on the 3d April, 1884, and the object of the 15 present invention is to provide an effective frame and bracing for holding the wire mat described in the said patent and application perfectly flat and square; and it consists of a light rectangular frame corresponding in 20 shape and size to the mat to which it is to be applied. The said frame is connected to the mat by its coils passing around it, as indicated in Figure 1. Cross-bars are placed through the web of the mat at certain intervals, so as to 25 prevent the sides of the mat bulging in, and parallel rods are placed near the edge of two sides of the mat, so as to form a hold-fast for the wires employed in binding these sides to the metal frame, the whole being constructed 30 substantially as hereinafter explained.

Fig. 1 is a plan of my improved mat, a portion of the wire coil being left off so as to expose the arrangement of the bracing-bars. Fig. 2 is an enlarged edge section of the said mat, showing the ends of the coil set back so as to receive the frame. Fig. 3 is an end view

of Fig. 1, but partially in section.

The coil forming the mat is exactly the same as that described in the patent and application before referred to; but instead of using the angular stiffening-bar described in the said application I employ the bars and rods shown.

The mat is cut the required size, so that it will fit within the frame A, in its side measurement, but a little longer in its end measurement, so as to extend beyond the end bars of said frame, so that the end of all the coils of the mat may be wrapped round the ends of

the frame A and form a substantial connection 50 thereto.

On reference to Fig. 2 it will be noticed that there are a series of holes formed by the coils and extending straight across the mat. I take advantage of these holes to fit in at proper 55 intervals along the mat cross-bars B, which are the proper length to extend from side to side of the mat. A rod, C, extends from end to end of the mat, being slipped through the link-holes a, formed by the coil, as shown in 60 Fig. 3. This rod C is intended for the purpose of bracing the ends of the frame A, and although I have only shown one in the drawings for that purpose, it will of course be understood that more may be used, if necessary. 65

D is a rod, which also passes from end to end of the mat, but is not intended for the purpose of bracing. Both rods C and D pass through holes in the bars B, but for the purpose that rod D is used it would not be neces- 70 sary that it should pass through these bars. On the opposite edge of the mat to rod D, I provide the rods E, for the same purpose as rod D. These latter rods E do not pass through holes in the bars B, but are merely 75 divided so as to extend from bar to bar; but it will be understood that both the rods D and E pass through the link-holes a, formed by the web. The ends of the coils on the sides of the mat are neatly twisted together, and do 80 not embrace the frame A; but as the tendency of the mat under wear is to curve in at its sides and ends, it becomes necessary to rigidly fasten both the sides and ends to a frame which will not be easily bent.

If I were to make the frame A sufficiently heavy to resist the strain of the contracting mat, it would make the mat too heavy for general use; consequently I am obliged to introduce the system of bracing the frame so as 90 to accomplish the desired purpose without making the mat too heavy.

The object of the rods D and E is to provide a hold-fast for the wires G, which securely fasten the sides of the mat to the frame A.

What I claim as my invention, is—

1. A coiled-wire mat formed substantially

as described and attached to the frame A, in

combination with the bracing-bar B, arranged substantially as and for the purpose specified.

2. A coiled-wire mat formed substantially as described and attached to the frame A, in combination with a bracing-bar, B, and rod C, slipped through the coils, as described.

3. A coiled-wire mat having two of its ends secured to the frame A by the coils, as described, in combination with the bars D and E, inserted within the coils, as described, and

forming holdfasts for the wires G, which are wrapped round the sides of the frame A, for the purpose of securing the edges of the mat to the side frame, substantially as and for the purpose specified.

Toronto, May 30, 1885.

H. T. WINDT.

In presence of— Charles C. Baldwin, F. B. Fetherstonhaugh.