

(No Model.)

W. F. BENEDICT.
WIRE FOOT MAT.

No. 420,985.

Patented Feb. 11, 1890.

Fig. 1.

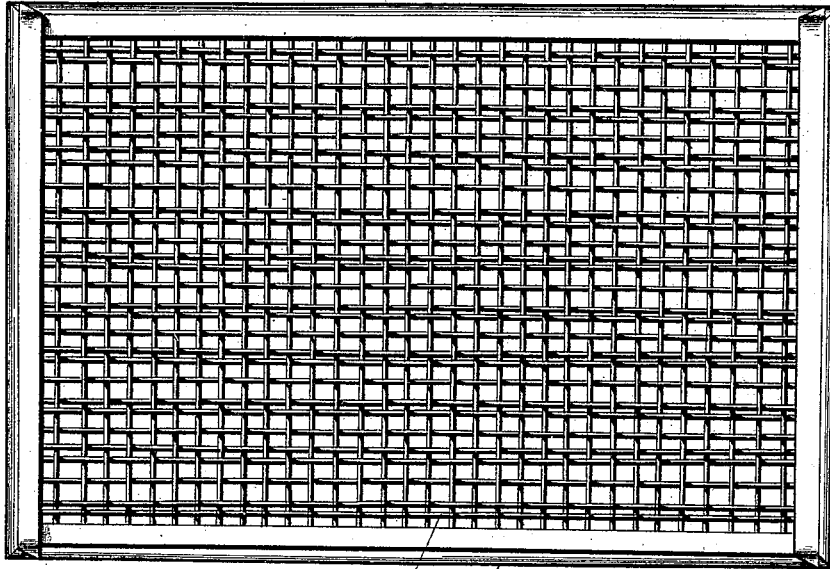


Fig. 2.

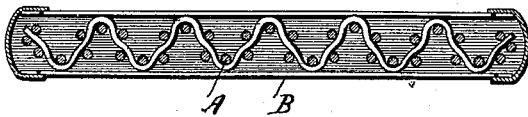


Fig. 3.



Fig. 4.

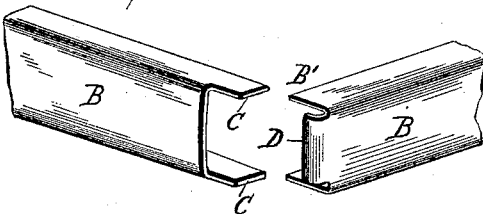
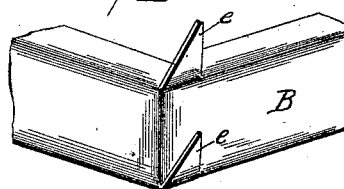


Fig. 5.



WITNESSES
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UNITED STATES PATENT OFFICE.

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WIRE FOOT-MAT.

SPECIFICATION forming part of Letters Patent No. 420,985, dated February 11, 1890.

Application filed July 19, 1887. Serial No. 244,715. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. BENEDICT, of the city and county of New York, in the State of New York, have invented certain new and useful Improvements in Wire Foot-Mats; which improvements are fully set forth in the following specification, reference being made therein to the accompanying drawings.

This invention relates to improvements in wire foot-mats; and it consists in a mat constructed of woven wire corrugated transversely to the selvage, its ends being woven with a selvage and having a strengthening-wire run therethrough to give additional rigidity, and its other sides being closely curled for the purpose of finishing and stiffening the same. Such mat may have or not, as preferred, a surrounding and inclosing metallic frame.

In the drawings, Figure 1 represents a top or plan view of my wire mat having an inclosing-frame. Fig. 2 is a vertical transverse section through one of the ends of the mat and frame, showing the corrugations. Fig. 3 is an end view of the corrugated selvage, showing the additional strengthening-wire and the closely-curved sides. Figs. 4 and 5 are detached views of portions of the frame.

A is the wire-cloth, woven in square meshes of galvanized iron wire or other suitable material of the width desired to be used as the length of the mat, the side edges being woven with a selvage in any known manner, as indicated in Fig. 3, and having an additional stiffening-wire *w* run through the selvage. This wire-cloth so constructed is cut into strips of the desired width and then corrugated in the ordinary manner by compression, such corrugations running transversely to the selvage and the raw edges turned up and curled tightly, and forming thus a strong and neat finish. It is intended that the mat so formed shall be longer than its width, and that the corrugations shall run lengthwise, so that they shall be presented transversely to the foot of the user, thus distributing the weight placed upon it and manifesting its greatest degree of utility as a scraper for cleaning the soles and sides of shoes. The joints of the crossing wires may be either secured by solder or they may be secured by inter-twisting the wires in the process of weaving.

A mat so formed will be durable, strong, light, and inexpensive, and will be complete in itself. I have, however, shown in the draw-

ings such a mat in combination with a sheet-metal frame B in order to guard against possible flattening or spreading of the corrugations from the weight that may be imposed upon them from time to time. This metal frame is made in one piece, bent in a die to such extent and conformation as to receive and inclose the corrugated ends of the mat. It is cut of such length as to extend around and about the four sides of the mat and at each corner, as shown in Fig. 5, and, except at the corner, protected by the meeting of the two ends, as shown in Fig. 4. The frame is slit above and below at an angle of forty-five degrees, bent to a right angle, and the two sharp ears E are bent down and secured to the side of the frame. The ends of the frame, for the purpose of completing the fourth corner, as shown in Fig. 4, are made to clasp each other by means of the hook D and the arms C C. The end B' is passed between the arms C C, the hook D is caught around the end B', and by bending the arms C C against the end B' the frame will be secured. No solder need be used. Such a frame may be employed on a corrugated woven-wire mat whether or not its ends be curled, as described, and it be provided with selvages.

Having fully described my invention, what I claim is—

1. A woven-wire mat having a selvage on two sides, corrugated transversely to such sides, and with its raw edges curled tightly to form a finish, substantially as described.

2. A foot-mat composed of a corrugated fabric of woven wire and a protecting-frame which is made of one piece of sheet metal bent to inclose and receive the four sides of the mat, having its ends secured at one corner by the hook D and arms C C, and its other corners slit and the sharp ears E E bent down to clasp the side of the frame, substantially as described.

3. As an improved article of manufacture, a foot-mat constructed of woven wire corrugated throughout its entire area and presenting an unbroken undulating surface, substantially as described.

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

WILLIAM F. BENEDICT.

Witnesses:

ALEXANDER B. BUTTS,
N. FINLEY.