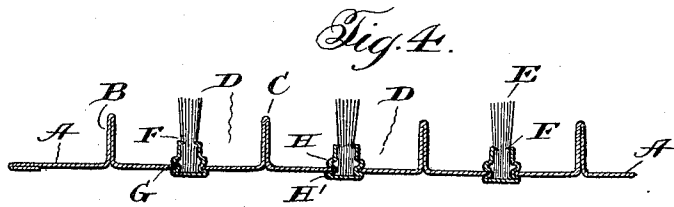
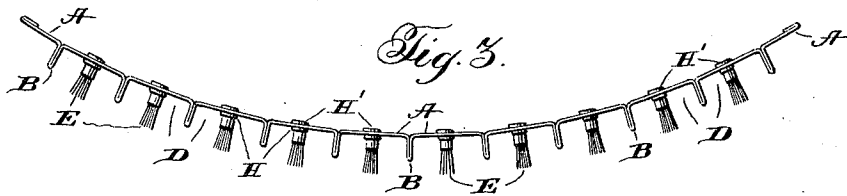
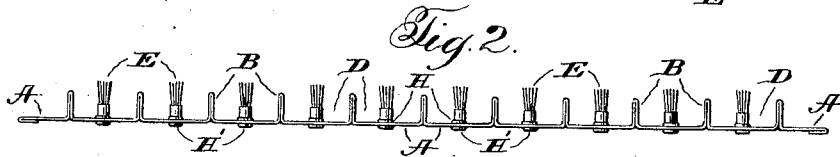
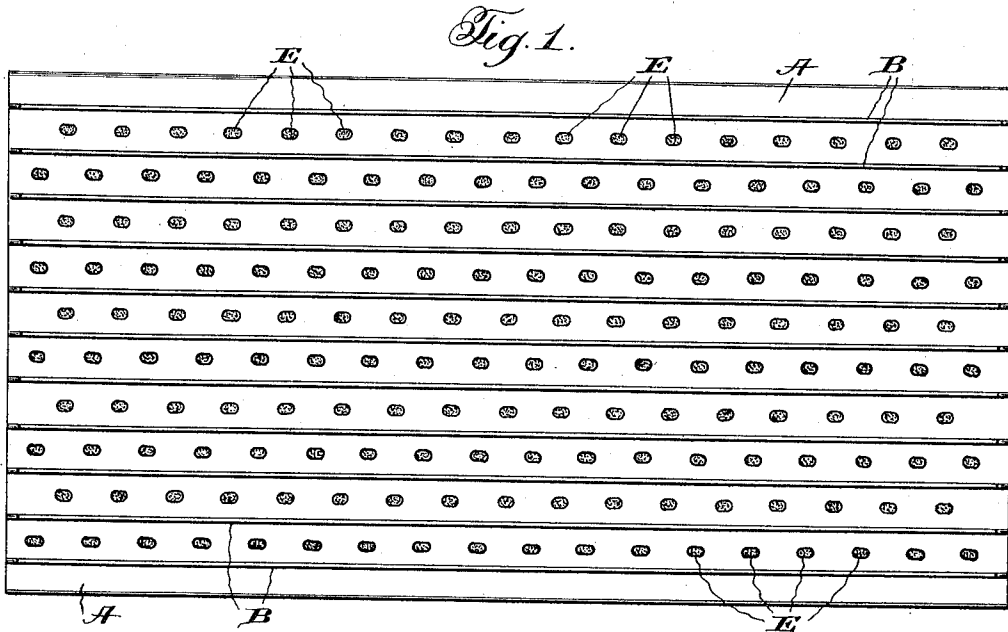


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DOOR MAT.

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1,029,802.

Patented June 18, 1912.



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DOOR-MAT.

1,029,802.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LOUIS GICLAS, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Door-Mats, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to door mats, and has for its primary object the provision of a metallic mat of simple and cheap construction and capable of the satisfactory service expected of devices of the character stated.

In keeping with the foregoing object, the invention embraces a mat formed of flexible sheet metal having upstanding ribs or projections constituting scraping edges, and more specifically such a construction formed entirely of the sheet metal with the ribs formed by bending the metal upon itself to impart the desired rigidity and strength to the scraping ribs while permitting a bending or deflection of the base to spread the ribs and thus open the spaces therebetween. The desirability of this bending or spreading action is to crack or loosen ice, snow and the like, to enable removal of the same, as well as the escape of dirt, accumulating in the grooves or spaces intermediate of the ribs.

The invention further has for its object the provision of fiber brushes secured to the metal base of the mat and projecting upwardly between the ribs somewhat above the scraping edges of the ribs to enable proper brushing action while preserving the fibers by means of the juxtaposed ribs, against undue breaking down or crushing, usually incident to the weight of the user.

Characteristic features of the preferred embodiment of the invention will be apparent from the detailed description hereinafter contained when read in connection with the accompanying drawing forming part hereof and wherein said embodiment of the invention is illustrated.

In the drawings: Figure 1 is a perspective view of the mat; Fig. 2 is an end view of the same; Fig. 3 is a similar end view with the mat inverted and bent for the purpose of cleaning out the grooves, etc., and, Fig. 4 is a longitudinal sectional view.

Referring more specifically to the drawings wherein like reference characters designate corresponding parts in the several views, A represents the base of the mat, the same being formed of sheet metal, conveniently

galvanized steel of a flexible character,—for example, 27 gage,—the metal of the base being folded upon itself at right angles to the plane of the base to constitute upstanding ribs B, the walls of which are pressed closely together to give the ribs sufficient strength and stiffness to withstand the weight to which they are subjected, and to provide the sharp scraping edges C. The ribs are closely associated to prevent the heel or toe of the shoe entering the spaces or grooves D therebetween, which might tend to deflect or bend over the ribs.

From the foregoing construction it will be appreciated that while the scraping ribs are substantially rigid, the single-thickness metal base A is relatively flexible to permit the mat being sprung into the curved form illustrated in Fig. 3 to spread the ribs somewhat and crack and loosen any ice or other foreign accumulation in the grooves and permit the same being readily shaken out of the grooves or swept therefrom, to clean the mat, as occasion may require.

A mat formed as hereinbefore outlined will constitute a serviceable and practical article, but in some instances it is desirable to supplement the same with the additional feature of a brush. To this end I provide a brushing means of effective arrangement, while preserving the flexibility of the base to which I have previously alluded.

E designates the brushes which are in plan a multitude of tufts elongated longitudinally of the mat, and in staggered arrangement as shown, so that the tufts in one of the grooves will be disposed opposite the spaces between the tufts in the adjoining grooves, clearly seen in Fig. 1. The fiber tufts are secured to the base through the medium of metal ferrules embedded therein, as at F, and secured to the base by the introduction of the ferrules through suitable openings G in the latter and the embracing of the base between the beads H, H' at the lower closed ends of the ferrules. The ferrules may be initially formed with the beads H, the beads H' being formed after the introduction of the ferrules through the base by crushing down the closed ends of the latter. The upper ends of the brushes project slightly above the plane of the scraping edges of the ribs B so that they may perform their expected brushing action, undue crushing or breaking down of the bristles under the action of

the foot being prevented by the close relation of the ribs B thereto, adapted in turn to firmly support the weight which would otherwise bear entirely upon the bristles as in an ordinary fiber mat.

While I have herein suggested specific embodiments of the invention, it will be clear to those skilled in the art that the invention is capable of embodiment in still other forms and devices.

I claim:—

1. A door mat of the character described comprising a metallic base of flexible sheet metal and a series of upstanding rigid scraping ribs separated suitable distances apart by intermediate yieldable portions of said base free to bend to loosen accumulations within the spaces between the ribs.

2. A door mat of the character described formed of flexible sheet metal having a base, and a series of upstanding rigid scraping ribs separated suitable distances apart by intermediate yieldable portions of said base, free to bend to loosen accumulations within the spaces between the ribs, said ribs being formed by bending the metal upon itself at approximately right angles to the base.

3. A door mat of the character described comprising a base provided with a series of rigid scraping ribs, secured along their lower margins to project upwardly from said base and a series of brushes intermediate of said ribs projecting at their ends outwardly beyond the scraping edges of the ribs.

4. A door mat of the character described comprising a metallic base of flexible sheet metal and a series of upstanding rigid scraping ribs, separated suitable distances apart

by intermediate yieldable portions of said base, in combination with a series of brushes secured to the base projecting at their ends outwardly beyond the scraping edges of the ribs.

5. A door mat of the character described comprising a base provided with a series of rigid scraping ribs, and a series of brushes intermediate of said ribs projecting at their ends outwardly beyond the scraping edges of the ribs, said brushes being arranged in staggered relation.

6. A door mat of the character described comprising a metallic base of flexible sheet metal and a series of upstanding rigid scraping ribs, separated suitable distances apart by intermediate yieldable portions of said base, in combination with a series of brushes secured to the base projecting at their ends outwardly beyond the scraping edges of the ribs, the means for securing the brushes to the base comprising ferrules carrying the brush material and riveted to the base.

7. A door mat of the character described comprising a metallic base having a series of upstanding rigid scraping ribs, in combination with a series of brushes secured to the base projecting at their ends outwardly beyond the scraping edges of the ribs, the means for securing the brushes to the base comprising ferrules carrying the brush material and riveted to the base.

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

LOUIS GICLAS.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."