

No. 612,065.

Patented Oct. 11, 1898.

C. SPICKERMANN.

DOOR MAT.

(Application filed Jan. 31, 1898.)

(No Model.)

Fig. 1.

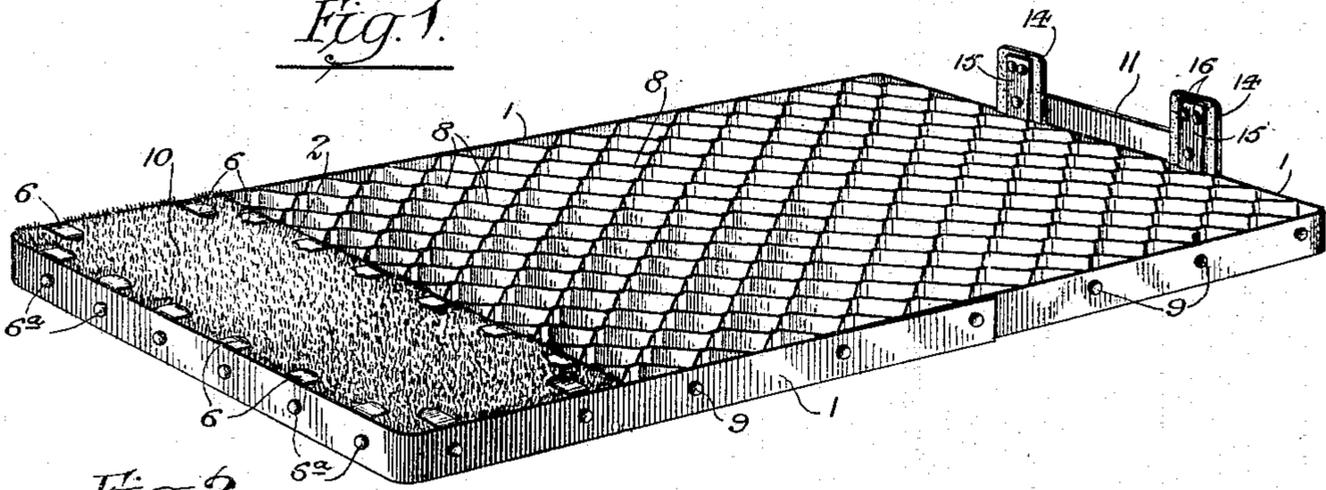


Fig. 2.

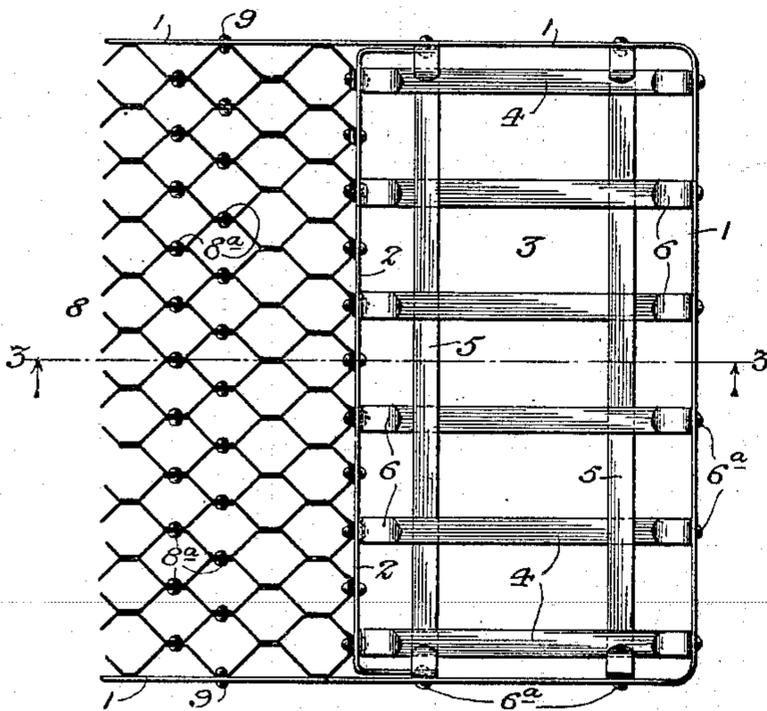


Fig. 4.

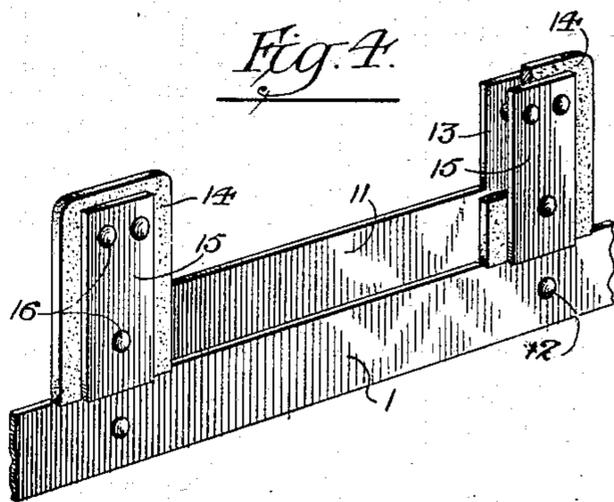


Fig. 5.

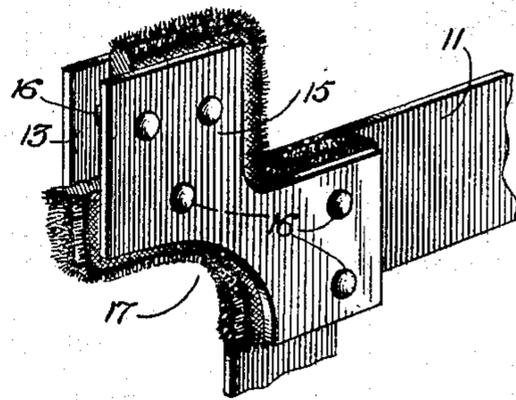
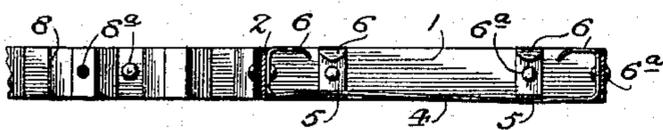


Fig. 3.



Witnesses:-

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DOOR-MAT.

SPECIFICATION forming part of Letters Patent No. 612,065, dated October 11, 1898.

Application filed January 31, 1898. Serial No. 668,612. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN SPICKERMANN, a citizen of the United States, residing at Sandwich, in the county of De Kalb and State of Illinois, have invented a new and useful Door-Mat, of which the following is a specification.

This invention relates to improvements in door-mats; and the object that I have in view is to provide an improved construction in which is combined a metallic scraping-surface and a fibrous wiping-surface, the whole arranged in substantially the same horizontal plane within a common marginal frame of the mat.

A further object is to provide an improved mat in which the fibrous wiping-surface may be removed when worn, replaced by a new piece or section of cocoa matting or brush, and securely held in place within the marginal frame of the structure.

A further object is to provide the mat with means for cleaning the side and top of a boot or shoe, and as the mat embodies the scraping and wiping surfaces it is well adapted to the purposes of thoroughly cleaning a boot or shoe.

With these ends in view the invention consists in the novel construction and arrangement of parts which will be hereinafter fully described and claimed.

To enable others to understand the invention, I have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of a door-mat constructed in accordance with my invention. Fig. 2 is a plan view thereof with the fibrous wiping-surface removed and illustrating the basket or crate by which said fibrous wiping-surface may be held securely in place within the mat. Fig. 3 is a longitudinal sectional view through the mat illustrated by Fig. 1. Figs. 4 and 5 are detail perspective views of different forms of scrapers detached.

Like numerals of reference denote like and corresponding parts in each of the several figures of the drawings.

In carrying my invention into practice I

provide a substantial marginal frame 1, which is common to both the metallic scraping-surface and the fibrous wiping-surface forming elements of my improved door-mat for the purpose of enabling a person to thoroughly clean and to remove mud and dirt from the soles of shoes and boots before entering a dwelling or building. The marginal frame 1 may consist of a strong piece of bar metal of any suitable dimensions and having its ends secured together in a substantial manner. Within this marginal frame, adjacent to one end thereof, I provide a transverse intermediate bar 2, which is arranged parallel to an end rail of the frame and is flanged at its ends to bear against the side rails of the frame, whereby the intermediate transverse bar 2 may be secured rigidly to the frame and constitute a division-bar between the metallic scraping-surface and the fibrous wiping-surface.

In the space between the end rail of the frame and the transverse bar 2 I arrange a basket or crate 3, which in the preferred embodiment of the invention consists of a series of strips 4 5, which are interwoven together and are suitably attached to the sides and one end of the marginal frame 1 and the intermediate bar 2 within the same. The longitudinal and transverse strips forming the basket or crate 3 are bent to form the clips 6, and these clips are riveted, as at 6^a, to the marginal frame 1 and the intermediate bar 2 thereof. The free ends of the clip 6 project inwardly from the frame 1 and the bar 2 thereof, and they serve to confine the fibrous or wiping surface within the basket or crate and the marginal frame. The clips 6 thus serve as the means for the attachment of the fasteners by which the basket or crate is secured to the frame and its bar 2, and they also serve to confine the fibrous wiping-surface in position within the basket or crate and in the horizontal plane of the metallic scraping-surface of the mat.

The metallic scraping-surface of the mat is formed by a plurality of corrugated strips 8, which are arranged within the marginal frame and between its end rail and the cross-bar 2 thereof. These corrugated strips 8 are positioned in the frame 1 to present their

edges to view and thereby form an efficient scraping-surface, and said strips are riveted together, as at 8^a, and they are fastened to the marginal frame at 9. In the drawings I have illustrated the longitudinal strips 8 as being corrugated to abut or lap against each other at intervals throughout their length, and through the looped parts of the corrugated strips are passed the fasteners or rivets 8^a. The strips which form the metallic scraping-surface of the mat are joined together and to the marginal frame to take up the major portion of the area of the mat, and said strips are so united or joined as to impart thereto a certain amount of flexion movement or play, which provides a suitable scraping-surface on the mat.

The fibrous wiping-surface is indicated by the numeral 10, and it may consist of a section of cocoa matting or a suitable brush structure. This fibrous surface 10 is adjusted within the marginal frame 1 to completely occupy the area of the crate or basket 3, and with the edges of said fibrous surface 10 engage the clips 6, that serve to confine the fibrous surface securely in place within said crate or basket. When the fibrous wiping-surface becomes worn, its edges may be detached from the clips 6 and the entire piece or section of matting or brush may be readily removed from the basket or crate, to be replaced by a new piece of matting or brush.

At one end of the mat, preferably the end opposite from the wiping-surface 10, I provide a cleaner-plate 11. The cleaner-plate (shown by Figs. 1 to 4, inclusive) is riveted or otherwise fastened securely to one end rail of the frame, as at 12, and said cleaner-plate is provided with the upwardly-projecting arms 13. Against these arms of the cleaner-plate is fitted the pliable strips 14, preferably of rubber fabric, and said strips are held in place by the clamping-plates 15, which are securely united to the cleaner-plate by means of rivets 16, which pass through the arms of the cleaner-plate, the fabric strips 14, and the clamping-plates 16. These pliable strips project beyond the edges of the arms 13 of the clamping-plates 15 above the upper edge of the cleaner-plate 11, and the pliable strips are thus securely held in place and arranged to engage with the sides of a shoe and its sole for the purpose of thoroughly cleaning the shoe from mud or dirt which may adhere thereto.

In Fig. 5 of the drawings I have represented another embodiment of the cleaner for the side and upper of a shoe, and in this form of the invention the cleaner-plate is provided with the curved recesses 17, which may be lined with fabric, brushes, or matting to form a friction-surface against which the shoe may be rubbed for thoroughly removing the dirt and mud therefrom. Said modified embodiment of the cleaner-plate illustrated by Fig. 5 also contains the upwardly-extending

arms, which may be provided with brushes or other suitable cleaners, as clearly shown.

I am aware that changes in the form and proportion of parts and in the details of construction may be made by a skilled mechanic without departing from the spirit or sacrificing the advantages of my invention, and I therefore reserve the right to make such modifications as clearly fall within the scope of the invention.

A door-mat having a metallic scraping-surface formed by a series of bent or corrugated strips arranged to present their edges to view is a desirable feature, because such a mat is capable of sustaining the greatest weight without bulging at the sides or becoming displaced vertically, and at the same time it does not involve an increase in weight as compared with other mats on the market. The spaces between the corrugated strips are of sufficient area to let the dirt pass through the metallic scraping-surface without requiring cleaning of the mat itself, because the mat may be readily lifted up to permit the surface of the floor below the mat to be cleaned of the accumulations of dirt. The metallic part of the mat does not warp at the ends, which is one of the objections to the ordinary wire mats, and the improved mat possesses a certain degree of elasticity, which enables it to conform to the surface of the shoe, thus overcoming an objection to the stiff and rigid working surface. The cleaner-plate at the end of the mat is advantageous in a structure of this character, because it enables the shoe to be cleaned on the side of the upper and sole, thus overcoming an objection to ordinary flat mats.

Having thus described the invention, what I claim is—

1. A door-mat comprising a stiff boundary-frame having an intermediate cross-bar and a metallic scraping-surface within said frame and the cross-bar thereof, a crate or basket formed by a series of bars which are bent to form a series of overhanging clips which are attached to the frame and its intermediate cross-bar, and a fibrous wiping-surface fitted removably within the crate or basket and confined against vertical displacement by the overhanging clips, substantially as described.

2. The combination with a marginal frame, of a basket or crate having its strips provided with clips which extend at intervals around the sides and ends of said crate and are attached to said frame, and a fibrous wiping-surface fitted within said basket or crate and confined removably therein by the clips, substantially as described.

3. A door-mat consisting of a marginal frame attached to an intermediate bar, a metallic scraping-surface secured within said frame between one cross-rail, its side rails and the intermediate bar, a metallic basket or crate having its strips formed with the clips which are attached to the frame be-

tween its other end rail and the intermediate bar, and the fibrous wiping-surface removably fitted within the basket or crate and confined therein by engaging with the clips of said crate, substantially as described.

4. The combination with a door-mat, of a cleaner-plate attached to said mat and provided with the curved recesses, the upwardly-extending arms, and the friction cleaning-

surfaces around said recesses and the arms of the cleaner-plate, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHRIS. SPICKERMANN.

Witnesses:

T. W. SLY,

F. S. MOSHER.