





# UNITED STATES PATENT OFFICE.

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## MAT.

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*To all whom it may concern:*

Be it known that I, ARTHUR S. BURNELL, a resident of Marshalltown, in the county of Marshall and State of Iowa, have invented certain new and useful Improvements in Mats, of which the following is a full, clear, and exact description.

The present invention designs to provide an improved construction for mats or matting which embodies an elastic body and metallic liners which relieve the elastic body of compression, which renders the elastic body porous, which serve as scrapers and protect the body from wear, thus providing a mat which is as effective in removing dirt from shoes as metallic matting and which also possesses the advantages of rubber mats.

The present invention consists in the several novel features hereinafter set forth, and more particularly defined by claims at the conclusion hereof.

In the drawings, Figure 1 is a plan of a mat embodying the invention. Fig. 2 is a section on line 2 2 of Fig. 1. Figs. 3 and 4 are perspectives of the metal liners. Fig. 5 is a vertical section showing another form of the invention.

A denotes the body of the mat, which is formed of elastic material, such as rubber. Said body is provided with series of pockets  $a$ , in which the dirt removed by the mat is collected, and said recesses are formed by cutting from or molding in the body openings which extend vertically through the body. These recesses may be any suitable shape, circular openings  $a^4$  and polygonal openings  $a^3$ , arranged in alternative series, being shown. The edges of the body around each pocket  $a$  are protected from cutting and wear by a liner B, which is made of flat metal bent to fit snugly and adapted to be pressed into said openings and of substantially corresponding shape to frictionally engage the body, thus providing a metallic lining or wall for the opening. The upper and lower edges of the liners lie, respectively, in substantially the same planes as the top and bottom surfaces or tread portions of the mat, so the liners, in addition to protecting the pocket or recess edges of the body, provide

metallic scraping edges or surfaces which effectively remove dirt and scrape the shoes. Liners B may be provided with projecting ribs  $b$ , which will be pressed into the elastic body to more firmly secure the liners therein. By extending openings  $a$  and liners B entirely through the body the mat is reversible, and either the bottom or top surfaces can be used. Liners B are formed of thin metal strips bent into desired shape or may be formed of a tubular strip pressed into desired shape. Side portions  $b'$  of liners B are bent inwardly around correspondingly-shaped portions  $a'$  of the body to provide interlocking portions, which will prevent separation of the mat in event the body becomes cracked or broken at these points. Liners C fit into openings  $a^4$ , within which pockets  $a'$  are formed, and said liners are formed of rings adapted to fit snugly into said openings, so that when pressed thereinto the rings will be frictionally held.

In the form of the invention illustrated in Figs. 1 to 4 the pockets for collecting dirt are formed so the dirt therein will lie on the floor or surface beneath the mat. Upon removal of the mat the dirt can be removed. In some instances it is desirable to retain the dirt in the mat, so that the dirt and mat can be removed together. For this purpose a bottom D, of flexible material, such as fabric, is secured to the bottom surface of the elastic body  $A'$ , as shown in Fig. 5. Portions  $a^2$  of body  $A'$  may be cut away to render the mat somewhat lighter; but the tread portions  $a^5$  are left around the pockets and liners.

It will be manifest from the foregoing that the invention provides a mat which comprises an elastic body having pockets therein and metallic liners or strips which have scraping edges and tread portions, whereby destructive straining of the elastic body due to compression is avoided, because the liners relieve the elastic material of severe strains. Furthermore, the liners extending around the pocket edges form protective walls for the elastic material adjacent said edges.

The details of construction above set out may be modified without departing from the spirit and scope of the invention.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a mat, the combination of an elastic  
5 body having a plurality of pockets therein,  
and metallic liners held in said pockets and  
forming the pocket-walls.

2. In a mat, the combination of an elastic  
body having a plurality of pockets therein,  
10 and metallic liners held in said pocket and  
having scraping edges.

3. In a mat, the combination of an elastic  
body having a plurality of openings extend-  
ing from the top to the bottom thereof, and  
15 forming pockets and metallic liners forming

the pocket-walls, extending vertically through  
said openings, and having scraping edges at  
the upper and lower surfaces of the elastic  
body.

4. In a mat, the combination of an elastic 20  
body having a plurality of pockets therein,  
and metallic liners extending around said pock-  
ets and forming the walls thereof, said body  
and liners being respectively formed with in-  
terfitting portions to secure the liner against 25  
vertical displacement.

ARTHUR S. BURNELL.

Witnesses:

FRED GERLACH,  
MEYER LEVY.