Feb. 2, 1954 C. J. PETERSON 2,667,654

MAT

Filed Feb. 24, 1951

FIG. 1.

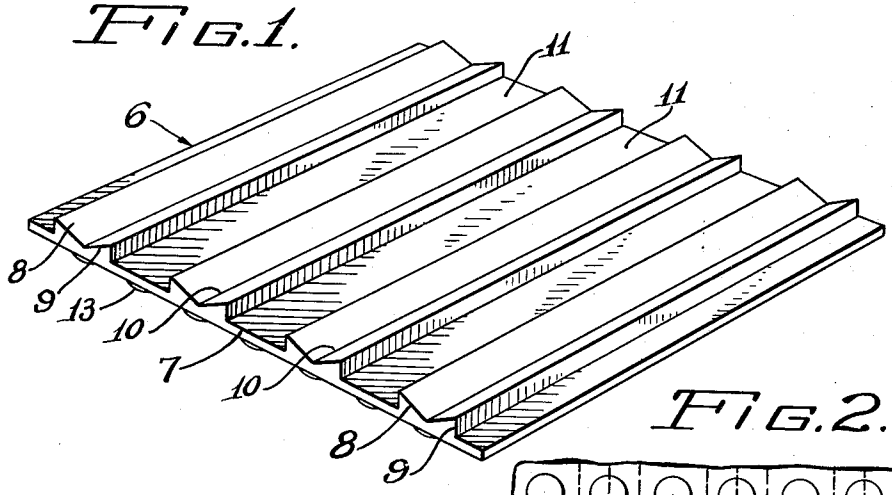


FIG. 2.

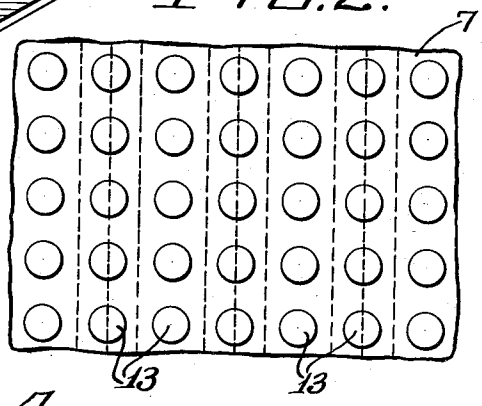


FIG. 3.

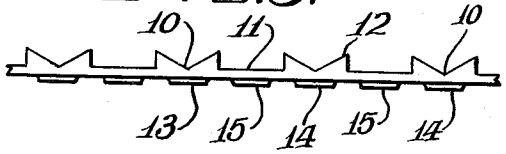


FIG. 4.

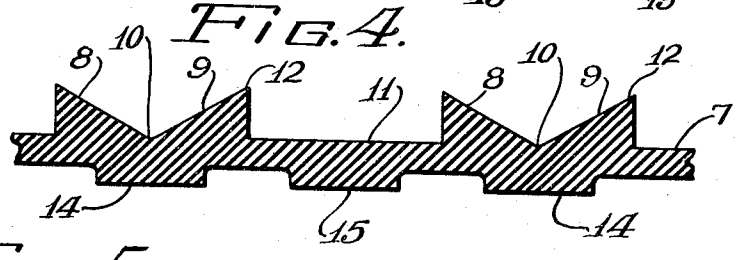
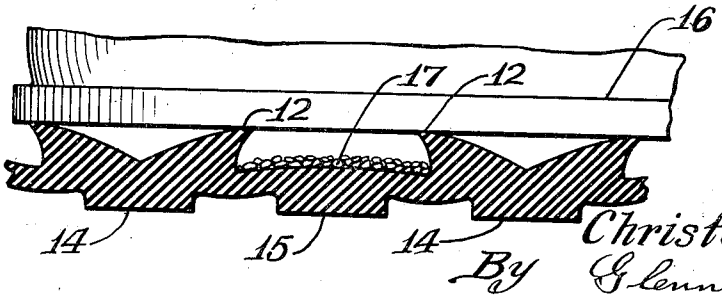


FIG. 5.



Inventor:
Christen J. Peterson
By Glenn S. Noble Atty.

Patented Feb. 2, 1954

2,667,654

UNITED STATES PATENT OFFICE

2,667,654

MAT

Christen J. Peterson, Chicago, Ill.; George Goessele, Theodore M. Dunlap, and City National Bank & Trust Company, executors of said Christen J. Peterson, deceased, assignors to Wear Proof Mat Company, Chicago, Ill., a corporation of Illinois

Application February 24, 1951, Serial No. 212,540

2 Claims. (Cl. 15—215)

1

This invention relates in general to floor mats or floor covers and is essentially an improvement on the mat disclosed in my Patent No. 1,948,826, February 27, 1934.

The objects of this invention are to provide an improved mat for various purposes; to provide a mat having unique means for removing dirt, or the like from the soles of shoes; to provide a mat with downwardly extending projections or protuberances which will assist in making the cleaning action more effective and which will also provide draining and ventilating space on the under side of the mat; to provide a mat such as shown in my prior patent with a plurality of regularly spaced buttons or projections on the lower surface thereof; and to provide such other advantages or improvements as will appear more fully from the following description.

In the accompanying drawings illustrating this invention,

Fig. 1 is a perspective view;

Fig. 2 is a bottom plan view;

Fig. 3 is an end view;

Fig. 4 is an enlarged sectional detail; and

Fig. 5 is a view similar to Fig. 4 showing the wiping or cleaning action of the upwardly projecting ridges and intermediate channels of a surface of the mat.

As shown in these drawings, the mat 6, which may be of any desired size or shape and which for commercial use are frequently made in long strips, is formed of any suitable material such as rubber, synthetic rubber, or rubber composition. It consists of a sheet 7 with a plurality of substantially triangular ridges formed in pairs as indicated at 8 and 9. These ridges are preferably right angled triangles with their diagonal faces opposed to form grooves 10 between each pair and grooves or channels 11 between the adjacent pairs. The ribs are tapered toward the upper edges 12 and these edges are relatively sharp and also flexible or yielding in order to provide for the cleaning action.

The lower face of the sheet is provided with a plurality of short round knobs or projections 13 which are arranged in rows, some of the rows 14 being opposite the centers of the pairs of ribs as shown particularly in Figs. 4 and 5 and other rows 15 being intermediate of the first named rows. These buttons or projections serve to hold the lower surface of the sheet away from the floor or support on which the mat is placed. This provides space for drainage which is particularly desirable when the mats are used in a bath tub or shower, and also provides for ventilation so that the bottom of the mat will become dry after being used.

Another important feature of these buttons as shown in Fig. 5 is that they provide narrow supports or fulcrums under the scraper strips 8 and 9. On account of such narrow support and the flexibility of the edges 12, the sheet under the outer walls of the edge portions will tend to be curved as shown in Fig. 5 while at the same

2

time the sharp or thin edge portions will be forced outwardly when pressed down as by means of a boot or shoe 16. This accentuated spreading or outward relative movement of the edge portions of the ribs under pressure of the soles will cause the edges to clean or scrape off dirt or the like from the sole as indicated at 17, Fig. 5.

It will be apparent that the buttons or knobs 13 may be made of any suitable shape, and other changes may be made in the shape of the mat without departing from the spirit of the invention as set forth in the following claims in which I claim:

1. A mat comprising a sheet formed of flexible rubber, with a plurality of parallel ridges on the upper surface, said ridges being in the form of right angled scalene triangles in cross section, the ridges being in pairs with the longer sides of each pair opposed to each other and forming longitudinal grooves, the several pairs being separated by channels bounded by the right angled faces of the ribs, downwardly extending projections arranged in rows on the lower side of the sheet opposed to the center lines of said grooves which serve as fulcrums for flexing the ridges laterally when pressed downwardly, and downwardly extending projections arranged in rows opposed to the center lines of the channels and coacting with said projections to assist in permitting the lateral flexing of the ridges when the mat is being used.

2. A flexible rubber mat comprising a sheet having a plurality of parallel ridges on the upper surface, each of said ridges being in the form of a right angled scalene triangle in cross section, said ridges being in pairs with the longer sides of each pair opposed to each other and forming longitudinal grooves, the several pairs being separated by depressions and having a plurality of integrally formed fulcrums on the lower side of the sheet in the form of buttons spaced apart longitudinally of the mat and opposed to the center lines of said longitudinal grooves and integrally formed bearings in the form of protuberances spaced apart longitudinally on the lower side of the sheet and positioned opposite to the center lines of said depressions whereby each ridge is supported so that its acute upwardly projecting portion will readily flex sidewise when pressed downward by the foot of a person using the mat, the buttons and protuberances serving to permit the easy flexing of the sheet adjacent to the ridges.

CHRISTEN J. PETERSON.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
115,345	Neefus	May 30, 1871
863,054	Dickerson	Aug. 13, 1907
1,190,179	Livingston	July 4, 1916
1,948,826	Peterson	Feb. 27, 1934
2,512,310	Corson	June 20, 1950