June 8, 1954 H. C. ESTIN 2,680,385

ANTISCUFFING HEEL MAT

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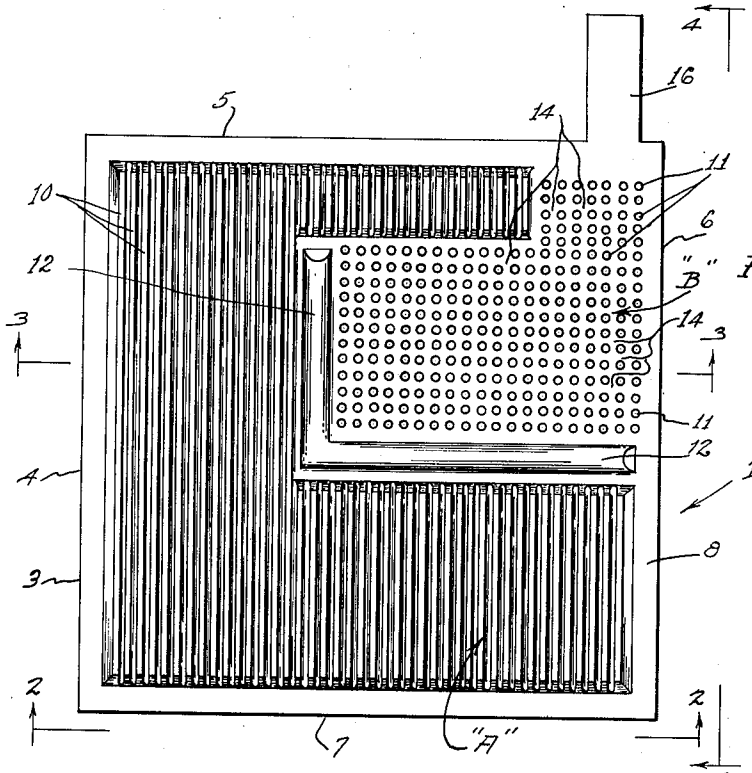


Fig. 1

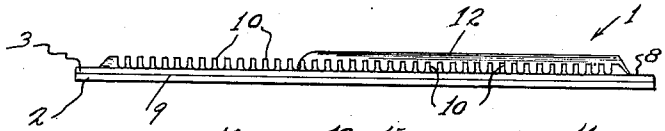


Fig. 2

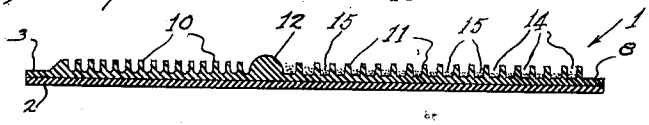


Fig. 3

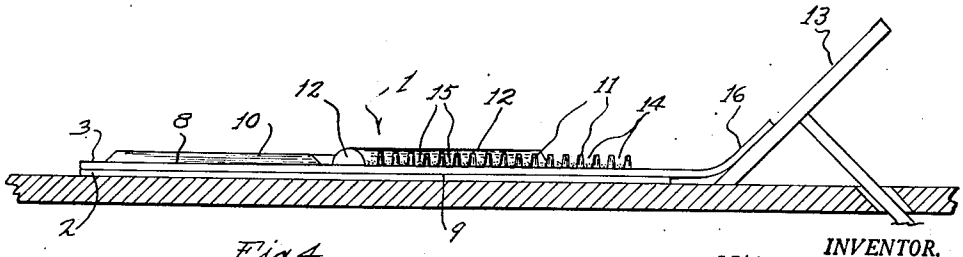


Fig. 4

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ANTISCUFFING HEEL MAT

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2 Claims. (Cl. 74—564)

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It is a very common experience among motor car drivers to find that the heels of their shoes, especially of the right shoe, become scuffed to a point of substantial ruin as a result of working the pedal controls with the feet, due in a great extent to the abrasive action of accumulated sand and like material carried upon the shoes and subsequently deposited upon the floor boards of the motor vehicle and, such abrading is generally made possible by reason of the fact that the feet are disposed at an acute angle to the horizontal (floor-boards) when the accelerator is being pressed and the pedal controls actuated because at this time or during such intervals, the shoes of the feet are literally dragged side-wise through such abrasive matter as may have accumulated upon the floor-boards.

To obviate this condition I have conceived and make as an object of my invention the provision in a floor mat for containment of abrading matter within a combination of trap-like pockets, within which pockets abrading matter may fall and accumulate without being presently available to scuff or abrade the finish surface of the back of the shoes.

Another object of the invention resides in the provision in a floor mat formed of rubber or equivalent material, of an area or zone having parallel ribs and grooves in its top surface and of an area or zone comprising a cluster of flexible and pliant nibs extending therefrom for yielding under pressure of the shoes so as to create a multicellular surface within which abrading matter may accumulate without deleterious effect upon the heels of shoes imposed thereon or brought into contact therewith.

Another object of the invention resides in the provision in a floor mat having the aforementioned characteristics wherein the said zones of the mat are substantially separated by a buffer rib, which buffer rib is adapted to additionally function as a support surface upon which a foot may rest so as to prevent undue wear of the adjacent nibs when the foot is not actively used for pedal control operation.

Still another advantage of the present floor mat construction resides in the ease and general facility with which accumulated abrasive matter may be emptied therefrom.

A feature of the mat resides in the provision of a tongue extending therefrom to lay upon the lower end-portion of the accelerator whereby surface continuity is had between the floor mat and accelerator so that the forward edge of the mat is not caught and lifted by the heel of a shoe

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when the foot is removed from actuation of the accelerator.

A still further advantage of the improvement resides in the fact that it readily lends itself to production moulding whereby costs are lowered and whereby the item may be formed in such color as may best harmonize with the interior finish of the vehicle in which it is to be installed.

Other objects, as well as features and advantages of the improvment may be noted from the accompanying drawing, the detailed description and the sub-joined claims.

In the drawing:

Figure 1 is a top plan view of the mat of this invention showing the pockets in the surface thereof within which abrading material may accumulate without deleterious effect upon the shoes of the user; and

Figure 2 is an elevational view thereof as seen along line 2—2, Figure 1; and

Figure 3 is a transverse sectional elevation as seen along line 3—3, Figure 1; while

Figure 4 is a side-elevational view as seen along line 4—4, Figure 1, this view shows the functional use of a tongue formed on and extending from the mat.

In the drawing the numeral 1 indicates the floor mat comprising the improvement of this invention.

Preferably, the mat is formed of rubber or an equivalent material having those requisite qualities of flexibility and pliability which are natural to rubber and, which are desirable in a floor mat, whereby the mat will readily conform with the surface contour of the automobile floor upon which it is placed. Also, the material of which the mat is formed should be such that pigments may be added to the raw ingredients thereof and such pigmented material should be mouldable whereby rapidity of production may be had a low cost without impairment of quality.

Reference to Figures 2, 3 and 4 will show that the mat 1 is composed of rectangular base elements 2 and 3 of identical length and breadth except as to one feature which will be subsequently set forth and, of these elements, 2 is formed of flat commercial sheet rubber stock preferably having cording or other material preformed therein for added strength but concurrently possessing those over-all qualities of flexibility and pliability generally considered to be necessary in a flooring material.

The element 3, which is the principal part of the mat, is formed as a moulded item having side edges 4, 5, 6 and 7, a contoured top surface

8 and a flat under-side 9 which is adapted to be bonded to the top-surface of the part 2 whereby the parts 2 and 3 are joined substantially as shown in the elevational views of the mat.

The contoured top-surface of the part 3 is in the form of ribs 10 and nibs 11 and a single L-shaped rib 12. The ribs 10 are multi-numbered and the nibs 11 are likewise multi-numbered, being generally separated by the singular rib 12 into zones A and B. The ribs 10 and the nibs 11 and the singular rib 12 are integrally moulded upon and as parts of the mat element 3.

It is to be noted that the rib 12 extends above the nibs 11 and this feature of the construction is had for the purpose of providing a guard against unnecessary wear of the nibs which would otherwise be caused by the left foot if it rested on the nibs for extended periods of time. The nibs 11 as confined by the rib 12 form a protective zone B within which the right foot moves from the accelerator 13 to the brake and vice versa and, by reason of the flexibility of the nibs and the depth of the cellular spaces 14 between the tip ends of the nibs and their roots, abrading material 15 is pocketed and shielded from coming into contact with the highly finished surfaces of shoes, so that the shoes, especially the heels and back portions thereof are protected from abrasion in a very real sense of the word.

A tongue 16 formed as an element of the part 3 extends therefrom substantially adjacent the intersection of the edges 5 and 6 of the mat and is adapted to lay in an inclined position upon the accelerator 13 as shown in Figure 4 whereby surface continuity between the mat and the accelerator is had so as to prevent lifting the mat by the heel of a shoe when the foot is lifted and drawn back from the accelerator.

It is believed that from the preceding description of my preferred form of the invention it will be apparent to all those to whom the invention is addressed that I have conceived a novel type automobile floor mat, a floor mat wherein the zone B with its cellular arrangement in combination with the L rib 12 provides a most efficient

trap for finely divided abrading material whereby such matter is removed from likelihood of marring the finer finish of shoes, especially the heels and back portions or counters thereof.

Having thus described my invention in its presently preferred form, that which I believe to be patentably novel is to be found in the following sub-joined claims.

I claim:

1. An anti-scuffing heel mat for use in automobiles, said heel mat comprising a rectangular sheet of rubber having in the top-surface thereof a cellular area constituted by a plurality of upwardly directed nibs, said area being provided on certain of its sides with a convex surfaced rib, whose height is greater than that of said ribs, which is adapted and arranged to direct a shoe on a person's foot out of contact with said cellular area, said cellular area and said rib being adapted to confine abrading matter carried thereover and subsequently gravitationally deposited therein from said shoe.

2. An anti-scuffing heel mat for use in automobiles, said heel mat comprising a rectangular sheet of flexible and pliable moulded material having a top surface zoned into an area comprising spaced parallel rows of ribs and an area comprising a multi-number of pliant nibs, said area of ribs and said nibs generally being defined by an L-shaped convex surfaced rib interposed therebetween and having its crest terminal in a plane above a plane coinciding with the upper surfaces of said ribs and nibs whereby a shod foot in moving from a point of rest on said spaced and parallel rows of ribs is essentially guided upwardly and over said nibs.

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