

H. L. PALMER.
Platform or Mat.

No. 216,573.

Patented June 17, 1879.

Fig. 1.

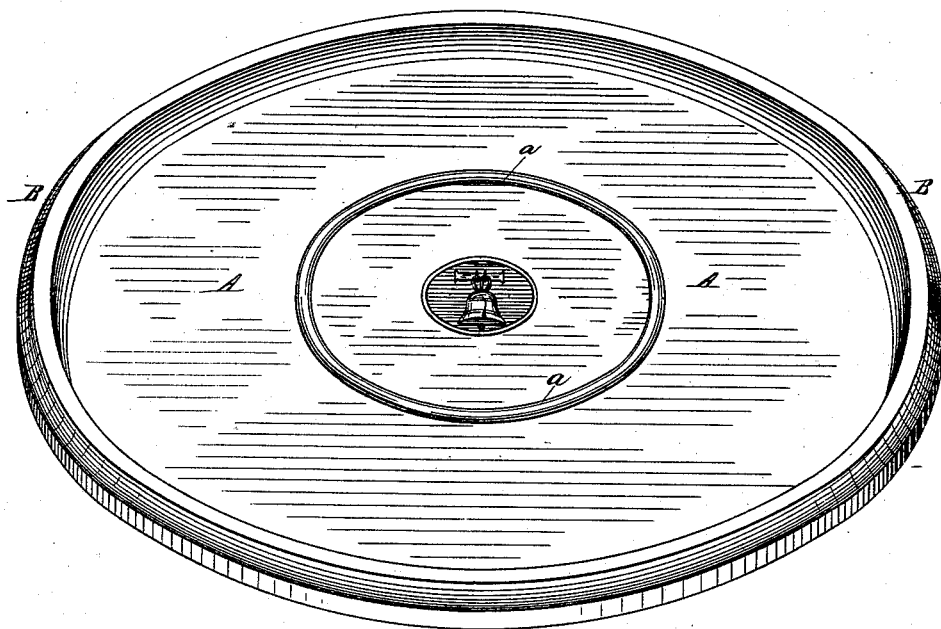


Fig. 2.



Fig. 3.

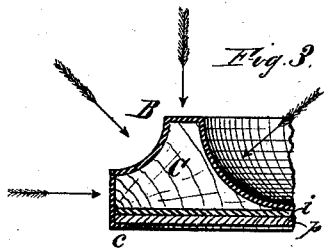


Fig. 4.

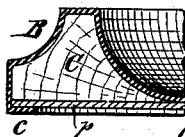


Fig. 5.

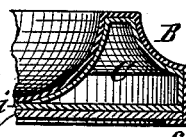
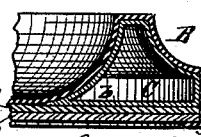


Fig. 6.



Attest:
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UNITED STATES PATENT OFFICE.

HENRY L. PALMER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN PLATFORMS OR MATS.

Specification forming part of Letters Patent No. **216,573**, dated June 17, 1879; application filed April 19, 1879.

To all whom it may concern:

Be it known that I, HENRY L. PALMER, of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Platforms or Mats, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a perspective view, illustrating the exterior of a circular platform or mat constructed in accordance with my invention and completed for use; and Fig. 2 is a vertical sectional view upon a plane passing through the center of device represented in Fig. 1. Figs. 3, 4, 5, and 6 are radial sections, showing only so much of the rim portion of the platform or mat as is necessary to illustrate the application of my invention thereto, Fig. 3 being simply an enlarged representation of device shown in Fig. 2; Fig. 4, the same with one of the lining-plates omitted, and Figs. 5 and 6 illustrating a modified construction of the rim-support.

Like letters in all the figures indicate corresponding parts.

My invention has special relation to that class of platforms or mats wherein the rim or outer portion is considerably elevated above the inner or central part, the said class of devices being primarily intended for use as stove-boards, but may, of course, be employed for other purposes.

In respect to these platforms or mats, especially those of the larger sizes, which are usually made of sheet-zinc, it has been observed that the enlarged rim is extremely liable to become damaged or bruised by contact therewith of extraneous articles, and that the completed structure is liable to warp, and its efficiency thereby be impaired, whenever allowed to rest upon the edge, as is commonly done during storage, exposure in the sales-room, or during transportation.

Numerous constructions have been proposed with a view to obviating these defects, notably such as involve the employment within the rim of a band of metal, particularly calculated to resist vertical pressures thereon. These have heretofore, at most, formed, in addition to the vertical support, a bearing for

one of the exposed sides of the rim, leaving the other side totally unprotected, and have been found impracticable and inefficient for the purposes intended—first, because of the imperfect support aforementioned; secondly, because of the labor and time involved in their construction and application; thirdly, on account of their inefficiency to prevent the warping and twisting alluded to, and for other reasons. All these previous constructions, moreover, fail to provide any means for rendering this class of devices more perfectly non-conducting than is the sheet metal alone of which they are composed.

The purposes or objects of my invention are, therefore, to overcome these several defects, and to produce a platform or mat with a rim elevated considerably above its central portion, which rim has a light, strong, and easily constructed and applied interior support, capable of protecting the rim against damage or bending at any point; to produce a structure which, while it is at the same time light and strong, is capable of withstanding all tendency to warp or twist or bend; to provide for the application of suitable additional non-conducting surfaces to this class of devices; and, withal, to produce a simple, cheap, and desirable, as well as practically efficient, platform or mat.

To accomplish all of this the invention consists in certain new and useful peculiarities of construction and relative arrangements or combinations of parts, all of which will be hereinafter first fully described, and then pointed out in the claims.

A is the flat or central portion of the sheet-metal platform or mat, which may or may not be provided with one or more stiffening and ornamental beads, corrugations, or other elevations, as at *a*. B is the exterior rim, elevated above the central portion A, the latter being intended to afford the surface upon which the stove or other article is to be sustained. This rim is manifestly exposed to injury from the striking thereon of any article, either upon the interior surface, top, or exterior, as indicated by the arrows in Fig. 3.

When used as a stove-board the interior of the rim is especially liable to damage by contact of the stove-legs therewith as the stove may be accidentally or otherwise moved about

upon its platform. It is, therefore, desirable that the rim be supported at all these points, for which reason I provide the interior support, C, which is made to completely fill the space inclosed by the walls of the rim abutting against these walls at all points, as plainly shown in the sectional views.

The rim-support C is preferably made of wood, not alone because of the facility with which it may be formed and applied, but also because of its lightness and adaptability for the purposes intended. It may be cut or turned out of a single block, or it may be made of any desired number of segments properly joined, according to the size of the platform, or according to the convenience of the manufacturer. It should be carefully formed to fit the annular recess within the rim; or the rim, if formed by the spinning process, may be spun directly upon it, thus insuring the desired contact.

However the rim may be formed, the block or support C is maintained within the recess by simply turning, spinning, or otherwise bending the extreme edge *c*, as shown.

The width of this bent portion *c* may be, perhaps advantageously, a trifle wider than shown in the drawings in case no lining-plates be employed; but with the lining-plates an ordinarily narrow bent portion will be found amply sufficient.

The lower surfaces of the rim-support C and the body A are, as near as may be, upon the same level, so as not to bear unequally upon the surface upon which the mat may be located. The same complete support would be afforded by a specially-formed metallic ring, such as indicated in Figs. 5 and 6, in the former of which the ring is not provided with a base-piece, as at *b* in the latter. This style of support would, of course, be more expensive and more difficult to make than that of wood, though the principle of operation of the two will be readily seen to be the same.

It will be observed that the separate block C does not extend beneath the main portion of the platform, or that part intended to receive the articles to be supported, as it is made to do in some previous forms of boards or mats; and the rim is continued up from the base of the board, and back to about the same plane, being continuous and uncut. This renders it easy to make the device light and quite thin, and avoids the necessity of trimming the central portion of any lining which may be used, so as to make its upper surface even.

To increase the non-heat-conducting properties of the improved mat, the application thereto of a lining of suitable material is desirable; and for this application the general form and arrangement of the principal feature of the invention—viz., the completely supporting interior block—is peculiarly well adapted.

At *p*, Figs. 2, 3, and 4, is indicated a paper lining extending completely over the entire surface of the bottom of the mat and over the supporting-block. This lining operates not

only as an additional non-conductor, but also as a preventive against admission of moisture to the support, which, when the latter is made of wood, is particularly advantageous in obviating the swelling and consequent disarrangement thereof.

To add strength and durability to the structure, the application of a metallic lining-plate, as at *i*, is oftentimes found desirable; and this, when used either with or without the paper lining *p*, also increases the non-conducting properties of the complete device. These lining-plates, one or all of them, are extended to the outer edge of the support C, and are secured by turning the flange *c* upon them, as indicated, and the base of the support C rests evenly upon the lining. The linings are intended to be suitably cemented together throughout their surfaces of contact, whereby a plain bottom surface is maintained during any or all exposures of the board to heat and moisture.

The exterior wall of the rim is preferably made vertical, or nearly so, though any immaterial modification of the contour of the cross-section may, of course, be made without altering the character of the invention.

The advantages of this class of platforms or mats over the heretofore common form, having a thick lining of wood extending entirely or nearly over the surface of the bottom, are sufficiently obvious to need no particular explanation here; and the advantages of the particular constructions or arrangements herein described will commend the adoption of the principal features of the invention to the manufacturer, as well as to the salesman and purchaser.

The several purposes and objects of the invention, as previously stated, are successfully accomplished by the manner of constructing the board as herein explained; and the completed device is found, in practice, to answer all the requirements of a thoroughly first-class, light, strong, cheap, and durable stove-board or other platform or mat; and the principles of the invention are easily applicable to any desired size or form of mat, whether round, oval, square, or other figure in plan.

Having thus fully described my invention, I desire to add that, in addition to the previous constructions hereinbefore alluded to, I am also aware that a simple wire has heretofore been used to stiffen a narrow bead upon the edge of a platform or mat made of sheet metal. This does not admit of the complete support of the exterior bead, as herein intended; neither does it admit of any extended bearing upon the surface upon which laid, prevent the warping or twisting of the board, admit of the suitable application of the lining-plates, nor otherwise fulfill the offices of my invention; and, further, I am aware that an enlarged bead upon the rim of a platform has heretofore been filled with plaster or cement. This construction necessitates the turning of the walls of the bead up and over the plaster lining, so as to insure a tight chamber for holding it. The

plaster is extremely liable to become cracked; is in no way efficient in preventing the tendency of the board to warp; cannot effectually prevent damage to the walls of the rim; is easily affected by moisture; and, above all, it is found, in practice, when used in connection with a zinc board, to cause the rapid corrosion of the material with which it is in contact. The constant crumbling or pulverization of the plaster (which it is practically impossible to thoroughly confine) affords a very objectionable continuous supply of dust and dirt upon and around the platform. To these old forms I make no claim; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. In a platform or mat of the character herein specified, the combination, with the interior body or center of the exterior rim rising from the lower plane of said center and returning to the same plane, the separate supporting-block C, made of wood, conforming to the interior surface of said rim, adapted to support the same at all points thereof, leaving the center of the mat free of any support from the block, and being held in place by the flange *c*, the flange, rim, and center being made of one continuous uncut plate, as shown and described.

2. In a platform or mat of the character

herein specified, the combination of the interior body or center, the exterior rim, elevated thereabove, the separate support C, conforming to the interior surfaces of said rim, and an extra lining-plate extending beneath the support, the whole being secured by the flange *c*, and all constructed and arranged substantially as shown, and for the purposes set forth.

3. In a platform or mat of the character herein shown and described, the combination, with the interior body or center, A, of the exterior rim, B, elevated thereabove, a supporting-block, C, conforming to the interior surfaces of said rim and adapted to support the same at all points of its interior, top and outside walls, a lining-plate composed of a sheet of metal, *i*, and a sheet of paper, *p*, extending beneath the supporting-block, the several parts being secured by the flange *c*, and all being constructed substantially as shown, and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

HENRY L. PALMER.

Witnesses:

WORTH OSGOOD,
S. W. HOLCOMB.