(No Model.)

C. C. SKILTON.

Stove Platform.

No. 237,137. Patented Feb. 1, 1881.

Fig. 1.



Fig. 2.

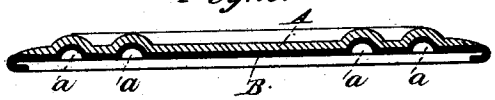


Fig. 3.

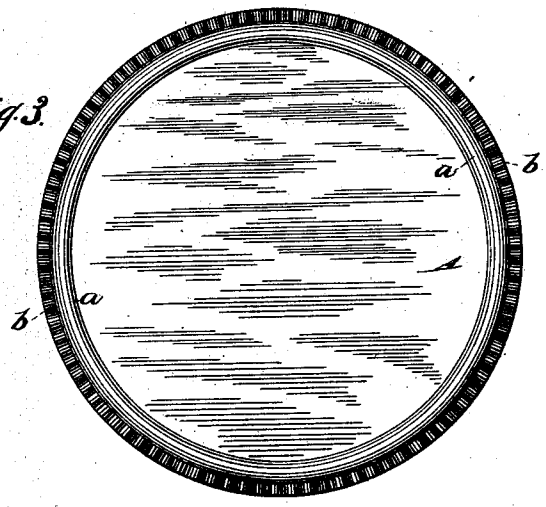


Fig. 4.

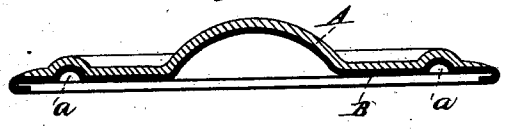


Fig. 5.

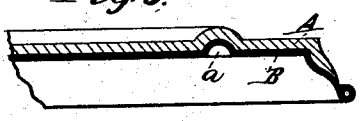


Fig. 6.

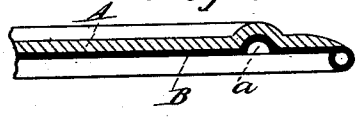


Fig. 7.



Fig. 8.



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UNITED STATES PATENT OFFICE.

CHARLES C. SKILTON, OF BROOKLYN, NEW YORK.

STOVE-PLATFORM.

SPECIFICATION forming part of Letters Patent No. 237,137, dated February 1, 1881.

Application filed July 31, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. SKILTON, of Brooklyn, county of Kings and State of New York, have invented certain new and useful Improvements in Stove-Platforms, 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.

My invention has relation to that class of non-conducting platforms which are ordinarily employed for protecting the carpet or floor beneath stoves, and which are commonly called "stove-boards" or "stove-platforms;" and the object of the said invention is to produce a neat, cheap, durable, and serviceable article, having greater heat-resisting properties than the ordinary forms, which is easier to clean and keep clean, and upon which the lighter forms of stoves have a foundation or bearing more secure against accidental slipping or disarrangement than upon the plain metal or metal-covered boards.

To accomplish all of this the invention consists, essentially, in coating the previously-prepared metallic base of the platform, mat, or board with vitreous, porcelain, or similar enamel upon one or both sides, as occasion may require, and in certain novel and useful combinations or arrangements of parts and peculiarities of construction, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is a vertical section of a plain stove-platform coated upon one side with enamel. Fig. 2 is a vertical section of a corrugated platform treated in the same manner. Fig. 3 is a plan view of a portion of an enameled platform having, in addition to the marginal corrugation or bead, a series of radial flutes or furrows near the periphery. Fig. 4 is a vertical central section of an enameled platform having a central raised portion; and Figs. 5, 6, and 7 are fragmental sections of platforms, showing different forms to which I propose to apply my improvements. Fig. 8 is a central vertical section of a lined platform or mat enameled on one side in accordance with my invention.

Like letters of reference, wherever they occur, indicate corresponding parts in all the figures.

As to form, the platform may be made oval, square, or oblong, or of any desired contour, and it may be made of sheet or cast metal after any of the approved methods of manufacture. Upon the metallic surface of the platform I apply a coating, A, of vitreous, porcelain, or equivalent enamel, and bake it, as in the application of enamel to various patterns of cooking-vessels calculated to withstand a high degree of heat. This enamel is of a mineral character, and affords a very efficient non-conductor of heat. It may be applied to one or both sides of the platform B, at pleasure. Under ordinary circumstances its application to one side only will be found amply sufficient; but when the platform is required to withstand extraordinary degrees of heat, then it will be found advantageous to coat both sides, in which case the metal simply affords a foundation upon which the enamel is supported. To a certain extent the non-conducting properties of the improved platform may be increased by simply increasing the thickness of the coating. It may therefore be varied at pleasure; but from one thirty-second to one-sixteenth of an inch thickness will afford the most desirable results in respect to durability and elasticity, while giving a heat-resisting power quite sufficient for all ordinary purposes.

The application of the enamel on both sides will serve, also, to prevent any possibility of the metal rusting, as is frequently liable in unprotected platforms during times when the stove thereon is not in use.

The high degree of heat required for the successful application of the enamel will, without some provision to obviate it, warp and twist the metallic base so much as to render it too uneven for use; and unless the platform be even the enamel will crack when it is straightened out by the weight of the stove. To prevent this I strengthen or stiffen the edge of the metallic base in a variety of ways, as illustrated in the drawings, either by turning the edge under, as in Fig. 1, or by the addition of one or more circumferential beads or grooves, or by radial flutes at or near the edge, as shown. The turned edge in the sheet-metal

platform affords the desired finished periphery and contributes stiffness. This edge being covered, as well as the remainder of the base, is protected from rust, and the whole presents a uniform appearance.

The beaded edge (shown in Figs. 2, 3, 4, 5, 6, and 7) is preferred to the flat form, because the bead *a* strengthens the structure and preserves the required shape while the board is standing on edge, as when exposed for sale, or while in storage or transportation. The edge may be further stiffened by use of the radial flutes or corrugations *b*, (shown in Fig. 3;) and if desired the enamel may be applied upon a board having a raised central dome, as in Fig. 4, which gives a considerable air-space beneath it, augmenting the non-conducting properties, and contributing to the strength of the structure at its central part.

The edge of the board may be variously shaped, as indicated at Figs. 5, 6, and 7, the enamel conforming, in all respects, to the contour and section of the board, and these edges may be used either with or without the wire stiffening, such as is ordinarily adopted in thin metal articles or vessels of various patterns and for various uses.

The improved board may, if desired, be lined with paper, wood, metal, or other suitable material, as indicated at C, Fig. 8, which lining is applied after the enameling is completed, and may be the same as indicated in the patent to Cottrell, May 28, 1872, and Palmer, December 2, 1876. Upon the construction shown in those patents I desire it understood that I make no claim.

The enamel may be either white or colored, so as to form a pleasing harmony or contrast with the color of the carpet, and the surface may be ornamented with a variety of patterns, in colors, and the coloring may be baked in during the process of application, so as not to be erasable; or the surface may be variously colored and ornamented after the baking or firing is completed.

The surface of the enamel A might, of course, be made smooth; but if necessary to provide a firmer bearing for the stove-feet, in order to secure the stove against accidental displacement, (as when the grate is being shaken,) the surface may be slightly roughened, in whole or in part. This roughened surface may be communicated by the addition to the enameling-mixture of some coarse composition, or by stippling the surface before baking, after manners well known. The surface being vitreous, or of a mineral nature, and hard, retains its color against the action of the elements, and it is therefore easier to clean, and is not subject to discoloration, deterioration, or rusting, as in the unprotected metallic platforms.

The invention is to be distinguished from the application of a mere coating of paint, which will not withstand any intense heat, and is liable to crack and liable to be scratched or marred, as well as from frosted surfaces of metal produced by the application of acids and heat, and protected by a coating of varnish, as heretofore employed in numerous articles.

The invention is also to be distinguished from such forms of boards or platforms as require a separate and distinct metallic ring or rim to protect and stiffen the edge of the coated plate, which rim remains unprotected. To these old forms I make no claim; but,

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a non-conducting stove board or platform composed of a metallic base having a stiffened edge or periphery formed continuous therewith, and a layer of vitreous or porcelaneous enamel applied thereto by heating, in the manner and for the purposes set forth.

2. In combination with a metallic stove-platform having a strengthening corrugation or bead at or near its periphery, and a finished edge, a layer of vitreous or porcelaneous enamel applied thereto by heating, substantially as shown and described.

3. In combination with a metallic stove-platform having a raised central portion and a stiffened and finished edge, a layer of vitreous or porcelaneous enamel applied thereto by heating, substantially in the manner 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.

CHARLES C. SKILTON.

Witnesses:
ARTHUR M. PIERCE,
WORTH OSGOOD.