W. WESTLAKE.

Stove-Platform.

No. 211,676. Patented Jan. 28, 1879.

Fig. 1.

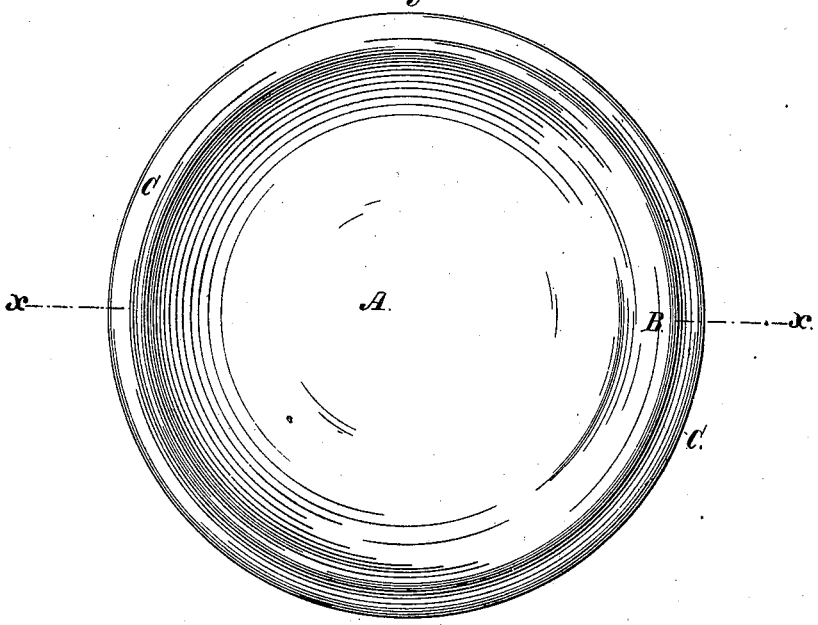


Fig. 2.

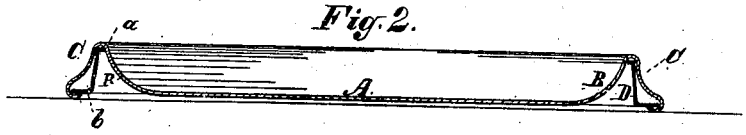


Fig. 3.

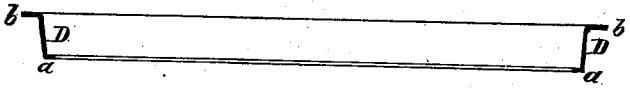


Fig. 4.

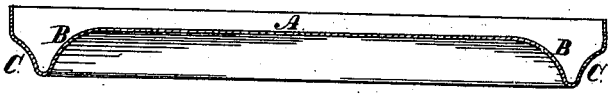
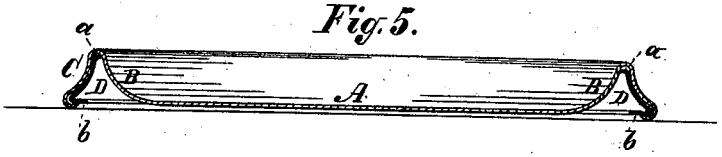


Fig. 5.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN STOVE-PLATFORMS.

Specification forming part of Letters Patent No. **211,676**, dated January 28, 1879; application filed August 9, 1878.

To all whom it may concern:

Be it known that I, WILLIAM WESTLAKE, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Stove-Platforms, of which the following is a specification:

Stove-platforms are generally covered with sheet-zinc, the interiors or linings being of wood or of sheet-iron. Wood-lined platforms are cumbersome, and, unless expensively made, the wood is liable to shrink and warp and the platforms become shaky. Those made of layers of sheet-iron covered with zinc, by reason of the unequal expansion and contraction of the metals used, are liable to turn up around their edges when supporting the weight of the stove, and to buckle and curl to such a degree that they soon become unsightly and inefficient for the purpose designed.

Nearly all stove-platforms heretofore sold in the market, by reason of their imperfect construction, suffer greater injury or depreciation when in transportation and on storage, either awaiting sale or laid aside during the summer months, than when in actual use under stoves. When on storage they are generally leaned against the side of the room, the weight of the structure being brought upon its edge, and, unless the interior is supported by some device sufficiently strong to sustain the entire weight without yielding, the platform will sag and become bent and distorted to such a degree as to impair its appearance and utility.

The invention herein described is designed as an improvement on the construction set forth in Letters Patent No. 177,600, granted May 16, 1876, which, although efficient to accomplish the purpose for which it was intended—viz., to lie flat upon the floor without warping, and to resist great downward force upon its edge—was liable to become injured in storage when placed as above described.

It is the object of this invention to produce a sheet-metal platform which shall fully equal, in style, lightness, durability, and general efficiency for use, any stove-platform in the market, and at the same time possess such strength to resist lateral strain or weight that it can be placed upon its edge for storage either in a perpendicular or inclined position, and allowed to remain a long time in such position without material injury or depreciation.

The invention consists of a platform for stoves composed of a piece of sheet metal, having its edge supported by an interior flanged or corrugated hoop, such hoop being flanged upon its lower or upper edge, or both, or corrugated, so as to resist lateral pressure or strain, and to furnish a bearing for the turned-under edge of the covering metal.

In the accompanying drawings illustrative of the invention, Figure 1 is a plan view of the platform. Fig. 2 is a vertical section through the line *x x* of Fig. 1. Fig. 3 is a vertical section of the flanged hoop. Fig. 4 is a vertical section of the sheet-metal cover in form to receive the hoop. Fig. 5 is a section of a platform in which the hoop D is flanged and corrugated to conform to the edge of the metal cover.

In these drawings, A represents the main central part of the platform; B the upward bevel, extending to the top of the edge of the platform; C, the edge projecting downward, and adapted to rest upon the floor; and D, the interior supporting-hoop, *a* being the upper, and *b* the lower, flanged edge thereof.

All parts of the central portion, A, need not be in the same plane; but, leaving a sufficient space or ring adjacent to the bevel B for the legs to stand upon, the remaining or central part of A may be corrugated or raised to provide an air-space directly beneath the stove, or otherwise disposed.

The portion of A on which the legs are to rest should be raised slightly—say, from one-sixteenth to one-eighth of an inch—above the part of the edge of C which rests upon the floor, so that when the stove is in place its weight will cause the edge C to be brought and held in close contact with the floor all the way around.

The bevel B should be extended upward till it reaches a plane (say, from one-fourth to one-half inch) above the plane on which the legs are to rest. The pitch or inclination of this bevel may be varied to conform to the taste of the designer or facility in working the metal used. It may be made slightly concave or convex, and the appearance thereby be improved.

The edge C is formed by turning over the metal at the top or outward limit of the bevel B and extending it downward in any desired form or curve, as the ogee, until, as above-described, it reaches a plane slightly below the rest for the legs of the stove, when the free edge of C is bent around under the lower flange, *b*, of the hoop D.

The hoop D is shown in the drawings as having flanges formed on both its upper and lower edges and thrown off in opposite directions from the body of the hoop, and at nearly right angles thereto, the lower flange being about twice the width of the upper one, and the body of the hoop—the part between the flanges—occupying nearly a vertical position in the platform. It is believed that this arrangement of the hoop will give the greatest strength to resist both vertical and lateral pressure or strain. The upper flange, however, may be omitted without seriously affecting the strength of the structure; and the body of the hoop, instead of being in a vertical position, may be made to conform to the curve or pattern of the edge C without departing from the principle of the invention, which is to give strength to resist lateral pressure or strain by flanging or corrugating some portion of the hoop, and at the same time to preserve its vertical strength, so that it will sustain a heavy weight or pressure upon the top of its edges.

In case the body of the hoop is made to conform to the edge C, the lower flange, *b*, is thrown off in the opposite direction from that shown in Fig. 2 of the drawing.

In addition to the flanged edges, the body of the hoop may be corrugated to give still greater lateral resistance, as shown in Fig. 5 of the drawing.

Sheet-iron of good quality and of the proper thickness should be used for the hoops D, and by the use of machinery such iron can be cut into strips or hoops of the desired width and flanged, corrugated, or reduced to any desired form, and can then be cut off to the proper lengths and riveted together for use.

The hoop D, when formed, is inserted inside of the edge C, the upper narrow flange, *a*, being brought up directly under the apex formed by the top edge, C, and the bevel B, and is secured in place by turning the lower part of the edge C around and under the lower flange, *b*. This edge, instead of being turned over flat, may be left somewhat rounded, or beaded by methods well known to workers of sheet metal.

It is preferred to use a single sheet of zinc to form the body, bevel, and edge of the platform. In circular or oval platforms the zinc may be conveniently brought into shape for inserting the hoop within its edge, as shown in Fig. 4 of the drawing, by spinning it over formers, and, after the hoop is placed in position, the edge of the zinc may also be closed around under the edge of the hoop by spinning. The sheet-zinc may, however, be struck up into the desired forms by the use of dies; and this method would naturally be used if the shape of the platforms were to be square or square with rounded corners, or any other forms to which the metal could not be spun. In all such cases the hoops could easily be made to conform to the periphery of the edge of the platform, and inserted and secured, as shown in the drawings, upon the circular or oval platforms.

What is claimed as new is—

1. In a stove-platform, a sheet of metal having its edge combined with an interior flanged hoop, to resist both lateral and vertical strain, substantially as set forth.

2. In a stove-platform, a sheet of metal whose edge is combined with an interior corrugated hoop, to resist both vertical and lateral strain, substantially as set forth.

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