H. L. PALMER.

Stove Board, Platform, &c.

No. 197,490. Patented Nov. 27, 1877.

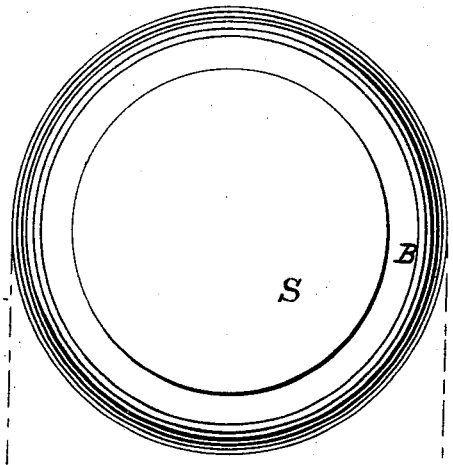

Fig. 1.

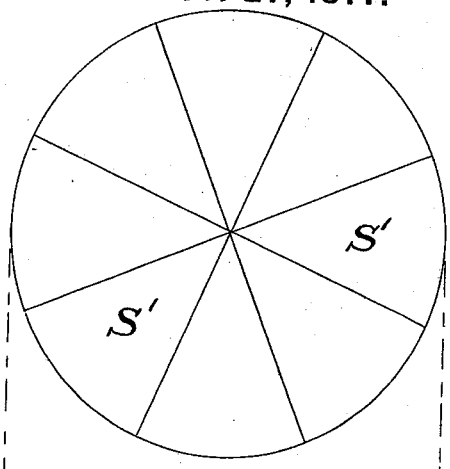

Fig. 2.

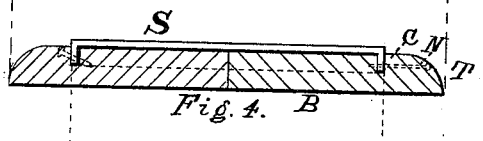

Fig. 4.

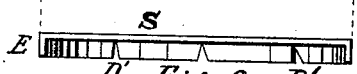

Fig. 6.

Fig. 5.

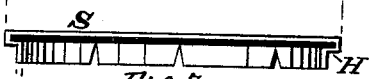

Fig. 7.

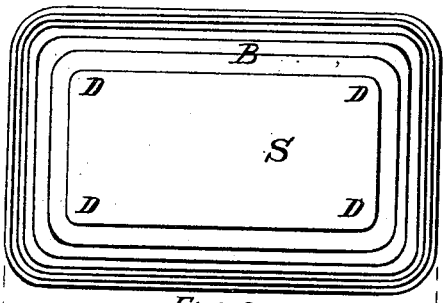

Fig. 8.

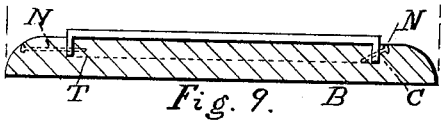

Fig. 9.

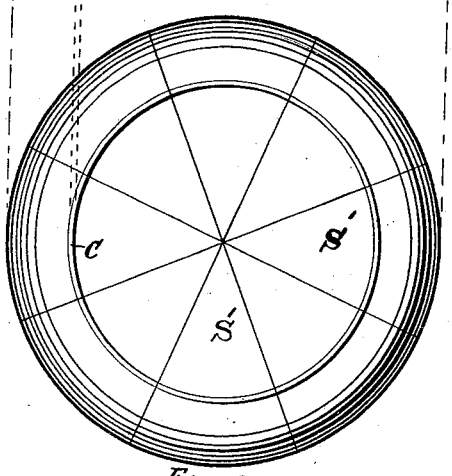

Fig. 3.

Witnesses:

George L. Skilton

George H. Hammel

Inventor:

Henry L. Palmer

UNITED STATES PATENT OFFICE.

HENRY L. PALMER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN STOVE-BOARDS, PLATFORMS, &c.

Specification forming part of Letters Patent No. **197,490**, dated November 27, 1877; application filed September 7, 1877.

To all whom it may concern:

Be it known that I, HENRY L. PALMER, of No. 143 Lawrence street, Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Non-Heat-Conducting Tablets, Stove-Boards, or Platforms, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a plan or top view of the completed platform. Fig. 2 is a bottom view; Fig. 3, a top view of the non-conducting body or support. Figs. 4 and 5 are sectional views cut on a diameter of the whole structure. Fig. 6 is a sectional view cut on a diameter of the sheet-top. Fig. 7 is the same with a variation in the method of forming the edge of the sheet-top, and Figs. 8 and 9 are top and sectional views of a rectangular platform, sheet, and support.

This invention relates to stove-boards, platforms, table-mats, or other non-heat-conducting bodies or tablets, consisting of an underlying body or support and an overlying sheet or top secured thereto, and made round, oval, square, oblong, or polygonal in form.

In such structures it has been customary hitherto to connect the overlying sheet with the supporting-body in one of two ways: first, and earliest, by bending the outer edge of the top sheet, made of sheet tin, zinc, or iron, over and upon the edge of a wooden body, and fastening the edge of the former to the edge of the latter by nails, tacks, or like instrumentalities; second, later, and as an improvement upon the former, by forming an exterior bead or slope upon the supporting-body, molding the top sheet thereto, so that it shall receive support therefrom, both as to its plain upper surface and as to its molded edge, and then turning a surplus portion of the metal edge, left for the purpose, under the edge of the bottom of the body concentrically, so as to hold the two together without the aid of tacks or like instrumentalities.

The plan first mentioned is crude or imperfect, and does not result in the tasteful structures now required both for public and domestic uses. The last-mentioned plan is an improvement in these respects, since there are no fastenings, and no rough corners or folds of metal exposed to view. It has, however, the following disadvantages and defects: It requires a considerable amount of surplus sheet metal, which increases the cost of manufacture, and must be carefully shaped on a spinning-lathe, by means of expensive dies or by other special tools, so as to conform to and be supported by the interior body everywhere. When most carefully done it leaves the sheet-metal edge exposed to inevitable contacts and consequent indentation and defacement. The interior body being usually made of wood, when put into use and exposed to the action of heat, the tendency is to shrink away from the sheet-metal edge, and thus leave it more or less unsupported. When indentation is once produced it becomes practically permanent, since it cannot be remedied without taking the two elements of the combination apart and re-forming one or both of them; and, finally, the plan has a limited scope as to effects, presenting a certain inevitable sameness in an exterior edge covered with sheet metal, uniform with the adjoining flat top surface in material, color, &c.

The object of my invention is to provide a plan of construction by which, while the top sheet is secured to the underlying body by nails, tacks, or like fastenings, they are so located as to be concealed from view, and yet perform their required functions; by which the amount of sheet material required and the amount of labor necessary in working it may be lessened, while the exterior edge of the body, which can better endure and carry them, is exposed to blows, and the usual contacts and wear, to receive colors or any desired style of ornamentation, to shrink according to exposure and the nature of the material without injury to the structure, and, finally, to permit an almost unlimited range of effects by the combination and harmony of colors between the article, the material upon which it may rest, and the surrounding furniture.

The invention consists in the channel or groove for receiving and concealing the edge of the top sheet, cut in the supporting-body; in the exposed edge or molding of the supporting-body itself; in the combination of a top sheet and a supporting-body, secured together by inserting the edge of the sheet in the channel provided for it, and holding it therein by nails, tacks, or other like instrumentalities;

in a wooden body composed of segments, and fastened as above described; in the folded edge of the top sheet overlapping and concealing the channel; and also in the exposed edge of the supporting-body, ornamented by colors, and polished and hardened, so as to resist heat and ordinary contact without defacement.

In the drawing, B is the underlying and supporting body. I prefer to construct this body of wood, and from one-half to one inch in thickness, cut in segments S′ S′, and made round, oval, square, or polygonal, tongued and grooved, and put together, as shown in the drawing, so as to furnish a level top for the sheet to rest upon; but it may be made from plain boards of same thickness, tongued, grooved, and secured together, side by side, in any known way and of any known shape, as oval, round, square, or polygonal. I give to the edge of this body, which I prefer to have solid, or composed of a single thickness of wood, a beveled, rounded, or any ordinary molded form or shape. Upon its upper side, and at any desired distance (uniform or not uniform, at will) from its outer edge, I cut a channel, C, about one-quarter of an inch in depth, and wide enough to receive the edge of the sheet.

That part of the supporting-body which is exposed should be made hard and heat-proof, so as to endure rough contact in many instances. This I accomplish as follows: Taking a body made of pine or any soft wood, I first give that exposed part its proper and desired shape—say upon a lathe. I then subject it to the action of a burnishing-tool until the fibers of the wood are compacted, hardened, and reduced to a glassy smoothness. I then apply thereto, while still upon the lathe, a preparation consisting of one part mineral coloring matter to five parts of shellac varnish, by measure, and set it aside to dry. When dry I again burnish the exposed part until it is perfectly smooth, finishing with a coat of surface-varnish.

The coloring matter employed may be of any usual color; and I do not confine myself to the use of the precise preparation described, but employ other known preparations for hardening wood, or giving it such a fire or heat proof surface as described. In some instances I japan the wood in any desired color or colors, and thereafter subject the same to a proper degree of heat to bake and harden it suitably.

The sheet S, I cut of the proper form, but, say, from one-quarter to three-quarters of an inch larger than the space within the channel C, so as to project beyond it on all sides. I then bend this projecting edge of the sheet down at right angles to the rest of the sheet, taking care to cut it at the corners or curves wherever the channel and the nature of the sheet material requires it, as at the curves D D, where the surplus metal may be removed by cutting, or as at other places, where a simple slit, D′ D′, made by a single cut, may answer. I then drop this cut edge E into the channel C, taking pains to press it down therein until the sheet rests everywhere upon the top of the body B, within the channel C. The sheet S and the body B are then secured together by driving nails or brads N N, in the usual manner, through the turned-down flange of the sheet into the body B; or they may be driven straight in through the exposed edge of the body B, and through the turned-down edge of the sheet into the body within, as at T T. Or, instead of cutting the channel C into the body B, I describe it as a line to bound the exposed part of the body, and instead of turning the edge of the sheet down, as before described, I simply form it into a bead, conforming to this boundary-line C, and then secure the sheet S to the body B by nails, ornamental or otherwise. Or the sheet S may be simply cut of a size to conform to the line C, with a plain edge, and, in the case of pliable sheet materials, be cemented to the top of the body by suitable cement, or by paints of any kind.

In this way I obtain an edge, and also, if I wish, a border for my platform, composed of the uncovered or exposed substance of its supporting-body, which may be colored to match the carpet or other floor-covering, and which is not so easily indented and defaced as the exposed sheet-metal flange, which has hitherto been considered necessary or desirable to extend over, upon, and under the edge of an interior body.

The part of the channel C which is outside of the turned-down portion of the sheet I fill with paint or cement, so as to hide it from sight; or I accomplish the same object—that is, conceal the joint between the sheet and the supporting-body—as follows: I form the top sheet as shown in Figs. 5 and 7. In this instance the projecting edge of the sheet is not turned down back to or on a line with the groove or channel C, but to a uniform line outside of it, forming the double or folded rim R′. It is then folded up under the sheet S, to the extent of one-quarter of an inch or more, and back on a line with the groove, as shown at H, and then turned down, inserted in the groove, and secured, as before described.

That part of the sheet S which is turned down is cut, and also nailed, as shown in Figs. 5 and 7.

I have previously made stove-boards as shown in Letters Patent of the United States granted to me, and dated August 12, 1873, in which an independent beading, molding, or frame is secured to the outside edge of the platform, leaving the surface of the wood uncovered or exposed; but this invention differs therefrom in having an external and exposed edge formed from the supporting-body itself, outside of a channel, C, in its top, made to receive the edge of the top sheet. I thus obtain a more solid edge outside the turned-down edges of the sheet, through which the nails pass to hold the body and the sheet together, and the heads of which are concealed from

view by that part of the body which is outside of them.

I claim as my invention—

1. An underlying and supporting body of a non-heat-conducting mat, tablet, platform, or stove-board, provided with the channel C.

2. The improvement in the art of making mats, tablets, platforms, and stove-boards, consisting in channeling the upper surface of the underlying and supporting body itself, in the manner and for the purpose set forth.

3. A wooden supporting-body of a stove-board or platform, provided with an external exposed edge, formed from the supporting-body itself, outside of a channel, C, in its top, made to receive the edge of a top sheet.

4. As an improved article of manufacture, a non-conducting platform, consisting of a top of sheet material, S, combined with an underlying and supporting body, the edge of the former being turned down and inserted in the channel C, and secured in place by nails, screws, or like instrumentalities, as set forth.

5. The combination, in a non-conducting platform, of an underlying and supporting body consisting of the segments S′ S′, with the sheet-material top S applied thereto, substantially as and for the purposes set forth.

6. As an improved article of manufacture, a non-conducting platform, consisting of a supporting-body provided with an exposed external edge, and of a top sheet provided with edges, turned down, inserted in a channel in the upper side of the supporting-body, and secured thereto by tacks, nails, or other like instrumentalities, as shown and described.

7. An underlying and supporting body, B, provided with a channel, C, in combination with an overlying sheet provided with the folded rim R′, covering and concealing the channel C, as shown and described.

In testimony whereof I have hereunto subscribed my name this 6th day of September, in the year 1876.

HENRY L. PALMER.

Witnesses:

GEORGE S. SKILTON,

GEORGE A. HAMMEL.