E. W. ANTHONY.

STOVE DOOR AND NAME PLATE.

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To all whom it may concern:

Be it known that I, EDGAR W. ANTHONY, a citizen of the United States, residing at Brookline, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Stove-Doors and Name-Plates, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

It has been customary to attach name-plates to stoves, ranges, &c., to oven-doors and similar supports by means of bolts or screws. Inasmuch as such name-plates and doors are now frequently associated with oven-thermometers which require to be readily placed upon the door and reached and because said nameplates are often finished by nickel or other plating, it has become desirable to so attach said name-plates to oven-doors or other supports that they may be at once removable therefrom, both for the purpose of placing, attaching, and inspecting the thermometer and also for the purpose of cleansing and polishing the plate in a more desirable position, and, further, for the purpose of blacking the door without tarnishing the name-plate; and my invention consists in means formed upon the oven-door and attached to the name-plate whereby the ready placement and removal of the name-plate may be secured and without the loosening, removal, or necessity for any auxiliary fastening device. This result is reached by providing the door with suitable rests and openings above said rests; and the name-plate with hooks which are arranged to enter said holes and engage said rests, the rests and the hooks upon the plate being so arranged as to properly balance the plate upon the door and to also hold its edge in close contact with the door. While these rests and hooks may be of any desired form, I prefer a form which shall permit the engagement between the hooks and the rests to be near a central median line of the plate, taken lengthwise from top to bottom, and so that the weight of the plate shall be very nearly evenly distributed on both sides of the rest, and I also prefer that the rests and the hooks be so formed that they together cooperate to draw the plate toward the door and to hold the edge of the plate in contact with the door. I will now describe the invention in conjunction with the drawings, forming a part of the specification, wherein—

Figure 1 is a view in front elevation of an oven-door and a portion of the name-plate, part of the name-plate being removed to better illustrate the construction. Fig. 2 is a view in rear elevation of the oven-door with the name-plate attached. Fig. 3 is a view in vertical section upon the dotted line 3 3 of Fig. 2 of the door and the name-plate. Fig. 4 is a view in front elevation of the door, showing a slight modification in the position of the rests. Fig. 5 is a view in vertical section upon the dotted line 5 5 of Fig. 4, and Fig. 6 is a detail view of a hook and rest enlarged.

In the drawings, A represents an oven or other door. It is shown as having a large central hole a and as having upon or at each side of the hole the rests a’ a”, over which may be the small holes a’’ a’’. These holes may be separated from the large hole, as represented in Fig. 2, or the large hole may be sufficiently enlarged to include the holes a’ a’’, as in Fig. 4. The hole a provides space for the oven-thermometer. (Not shown.) The rests a’ a’’ preferably extend outward from the face a’ of the door, are relatively narrow, and have the outwardly-inclined inner faces a’’. Upon one or both sides of the rests are walls a’, which form stops for preventing the lateral movement of the name-plate upon the oven-door. The oven-door usually is bowed or curved outward from its edge a’, substantially as shown in Figs. 3 and 5, forming a rounded outer surface a”, against which the edge of the name-plate throughout its length bears. B is the name-plate. It is usually made in the form of a dish-shaped or hollow casting, establishing a cavity within the edge b, which is shaped to fit upon the rounded outer surface of the door. Within this cavity b there are arranged the hooks b’ b” to extend from the inner surface of the plate. Each of these hooks extends downward and has the mouth b’ to a recess which gradually decreases in width and which has the surfaces b’ b” opposite
to each other, the surface $b$ being inclined. These hook-mouths preferably are arranged on or near the median vertical line of the plate, taken from side to side and top to bottom, so as to very nearly, if not quite, balance the weight of the plate upon each side thereof, and the side edges $b'$ of the hooks serve as stops, in conjunction with the walls $a'$ of the rests and holes, to prevent lateral movement of the plate upon the rests and door. The hooks are of a size and location to pass into the rest-holes and over upon the rests. Their engagement with the rests are by means of the inclined surfaces $b'$, which bear upon the inclined faces $a'$ of the rests, which serve also to draw the plate toward the door until its edge $b$ is brought into contact with the face of the door and to hold the plate with its edge in continuous contact with the door. To permit this to be accomplished, the recess of each hook is made of such depth that the rest which enters it does not bottom against the bottom of the recess, but against the inclined wall $b'$ thereof.

It will be seen that with this structure there is a drawing action between the rests and the hooks which while constant is not of a binding nature or one calculated to so hold the plate to the door as to cause the plate to ride upward and off them because of jar, that this drawing action keeps the edge of the plate in continuous contact with the edge of the door, and that its action is dependent upon gravity of the plate only.

While I have described the invention as applied to the name-plate of an oven-door, I would have it understood that any equivalent support for the door may be used. It will be understood that the name-plate may itself support an oven-thermometer and may have an opening to expose a dial and an indicator-hand and also that it serves to cover or partly cover the thermometer and opening $a$ in the oven-door and to thus complete and finish the door. The purpose of making it instantaneously detachable is, as I have stated, to permit the door to be blacked without blacking the name-plate, which is usually nickel plate, to permit the plating of the name-plate to be polished or cleaned without rubbing with the blacking from the door, and to give accessibility to the oven-thermometer.

The outer surface of the oven-door where the edge of the plate bears against it is smooth and plane, so that it offers no obstruction to the seating of the edge against the surface at such point, as may be determined by the relation of the two inclined bearing-surfaces of the hook and rest with respect to each other. This does away with the necessity for finishing these surfaces, as a slight variation in the relation of the seat of the plate upon the surface of the door then becomes immaterial, the edge automatically finding its seat according as the said inclines permit it and the inclines then serving to hold the edge of the plate in contact with the door. I prefer that the rests and hooks be so disposed as to bring the hooks in line with each other and near the ends of the plate.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The improvement in stove-doors and name-plates herein described, the same comprising an oven-door having an opening and a rest on each side of said opening, each rest having an inclined bearing-surface upon its inner side, and in combination with said door a name-plate to cover its opening, said name-plate having a hollow back and a continuous seating edge to bear against the outer surface of the door around its opening outside the rests at the sides thereof, and hooks within the hollow of said name-plate inside its continuous seating edge, the same being disposed to engage with the inclined bearing-surfaces of the said rests, whereby the plate is made to draw in close against the stove-door and to bear against the surface of the same continuously with its seating edge, substantially as described.

2. The improvement in stove-doors and name-plates herein described, the same comprising an oven-door with rests therein having inclined inner faces, and in combination with said door a name-plate, the same having a hollow back and a continuous seating edge to bear against the outer surface of the door outside the rests thereof, and hooks within the hollow of said name-plate, inside its continuous seating edge, the same being disposed to engage with the inclined faces of said rests, whereby the plate is made to draw in close against the door with its continuous seating edge.

EDGAR W. ANTHONY.

Witnesses:
F. F. RAYMOND, 2d,
SAUL SIPPERSTEIN.