

(No Model.)

R. E. DEANE.

OVEN PLATE.

No. 353,290.

Patented Nov. 30, 1886.

Fig. 1.

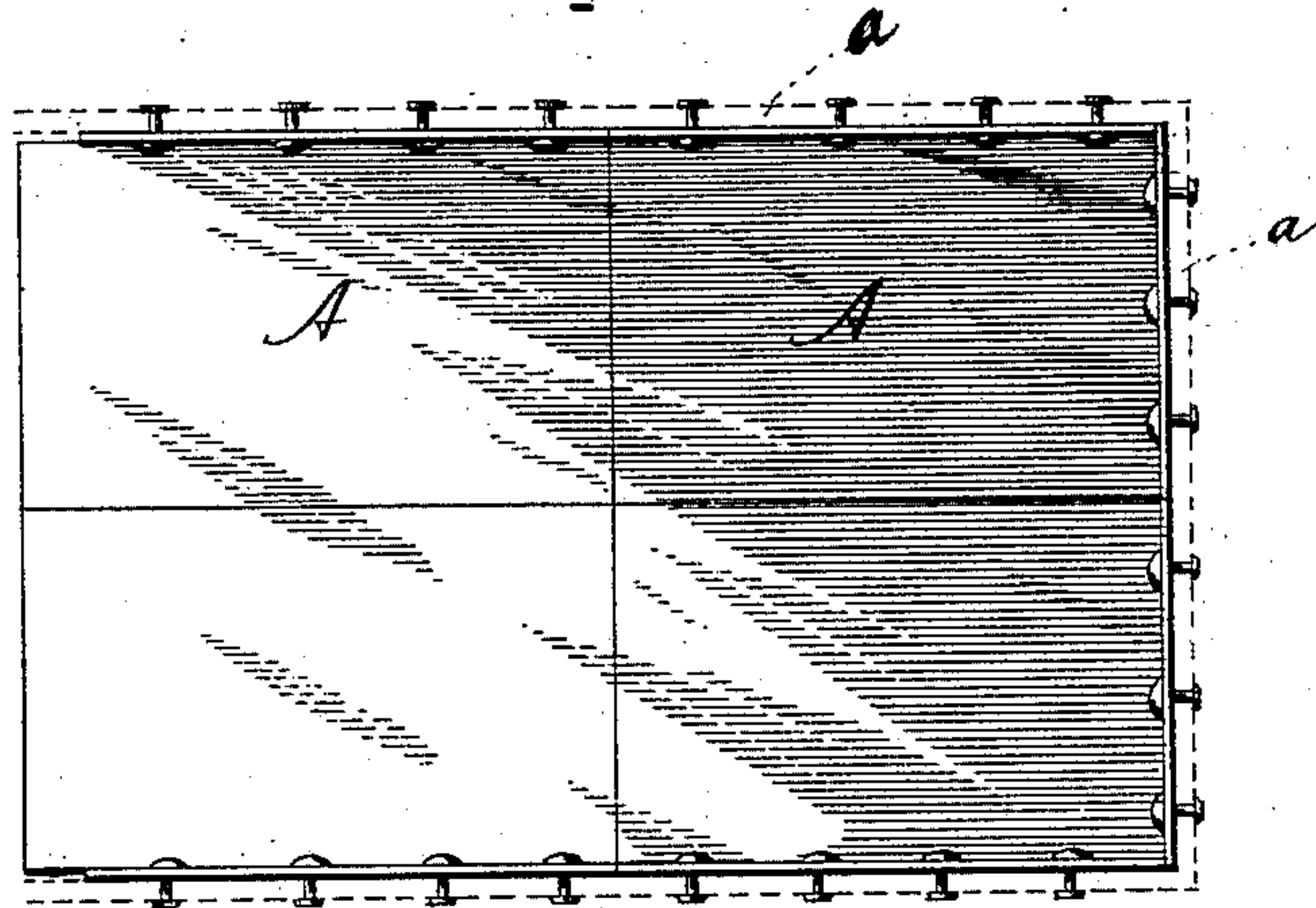
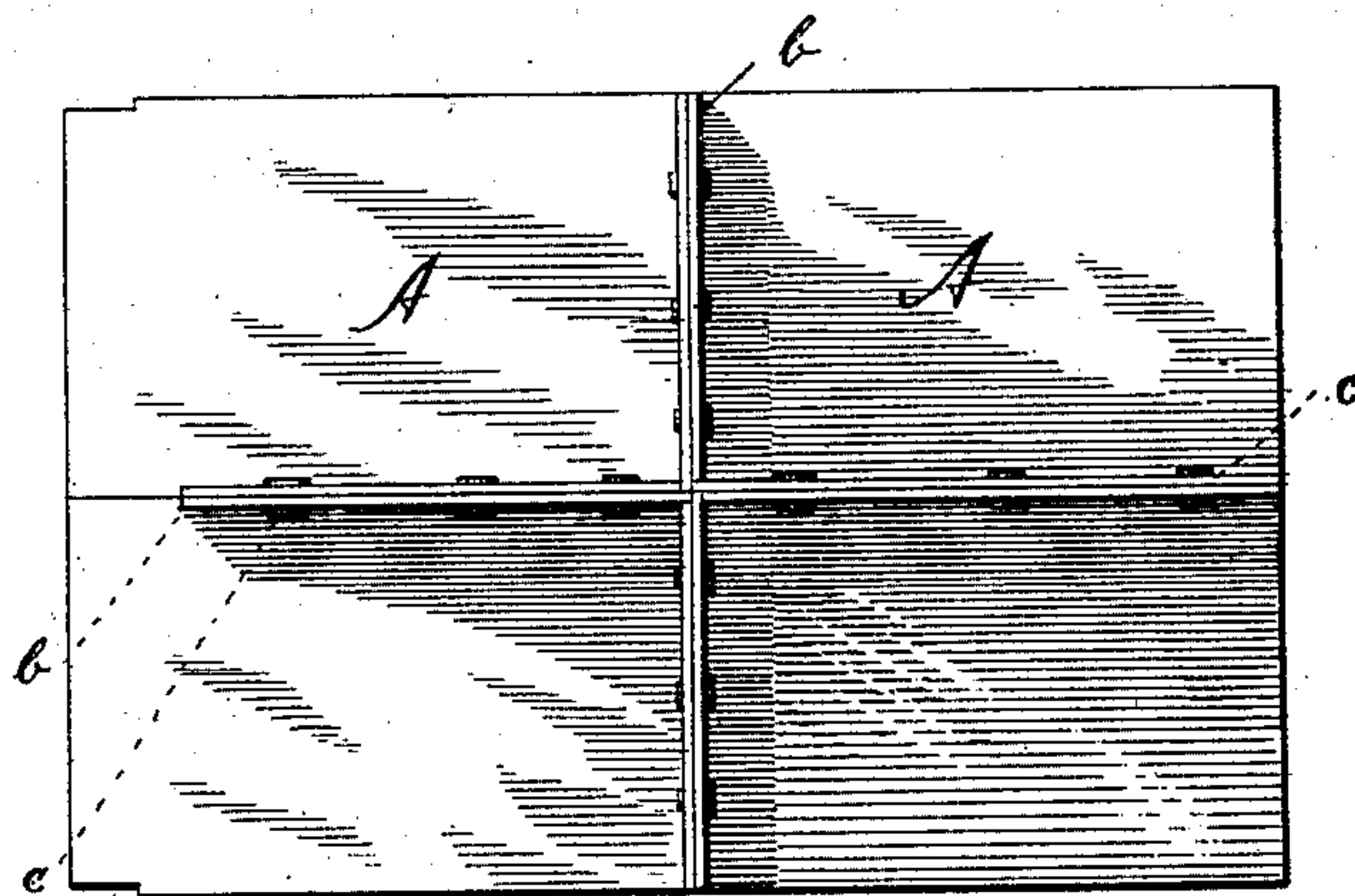


Fig. 2.



WITNESSES
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OVEN-PLATE.

SPECIFICATION forming part of Letters Patent No. 353,290, dated November 30, 1886.

Application filed July 17, 1885. Serial No. 171,857. (No model.)

To all whom it may concern:

Be it known that I, ROYAL E. DEANE, a citizen of the United States, and a resident of the city, county, and State of New York, have
5 invented a certain new and useful improvement in bottoms or plates particularly adapted to ovens used for cooking, but also suitable for use in similar situations where heat is applied or contained; and I do hereby declare the fol-
10 lowing to be a description of said invention in such full, clear, concise, and exact terms as to enable any skillful person to make and use the same, reference being had to the accompany-
ing drawings, wherein like letters of reference
15 indicate corresponding parts throughout the several views.

The chief object of my invention is to prevent the warping or "buckling" of the oven bottom or plate under the varying tempera-
20 tures to which they are necessarily subjected, resulting usually in open cracks or uneven surfaces, and diminishing their efficiency and requiring frequent repairs and renewals.

As ordinarily constructed the oven bottoms
25 or plates of cooking ranges and stoves consist of a single piece of cast, wrought, or sheet iron, and are especially liable to warp or crack. I accomplish my object by making the oven
30 bottom or plate in sections or parts and connecting these sections or parts together so as to form an even and flat surface covering the entire space, each section or part having down-
turned flanges at all adjacent edges, by and
35 through which the component sections or parts may be securely bolted or riveted together. The number of sections or parts advisable or
necessary will depend, of course, upon the size and shape of the whole area or surface, and can
40 easily be determined and regulated according to the necessities of each particular situation by any skillful mechanic.

Referring to the accompanying drawings for illustration, Figure 1 shows a top, and Fig. 2
45 a bottom, plan of an oven bottom or plate of my improved construction, consisting, as shown, of four sections or parts covering an oblong area. It is here shown detached.

Each of the sections or parts is furnished
50 with downturned flanges upon all the inside edges and with upturned flanges on its outside edges. Where the area is large enough in length or breadth, or both, to require several sections or parts in either or both directions,

all the inner sections or parts should have downturned flanges on all sides, and only the
55 outer rows of sections or parts be provided with upturned flanges on their outside edges. Each section can be cast, wrought, or stamped into its peculiar form by ordinary methods well known to the art. Adjacent flanges are
60 correspondingly punched or perforated and secured together by bolts or rivets through the downturned flanges, whereupon all the sections form an even whole, much stiffer and better adapted to resist varying temperatures and
65 maintain its shape than any of ordinary construction. Besides, each section, being of smaller surface and braced by its flanges, is in itself stronger than usual. When all the
70 sections are secured together, as described, forming a whole with a smooth and even upper surface, the upturned flanges on the outside edges of the outer sections together form a continuous upturned flange around the out-
75 side of the oven bottom or plate, whereby it can be secured to the walls of the oven by bolts or rivets, as just described. No flanges should be formed upon the sides of the sections next to the oven-door when in place.

Besides the advantages of stiffness and re-
80 sistance above enumerated the downturned flanges form, as it were, a series of compartments confining the heat, and causing quicker heating with more even distribution of the heat. There is also an additional advantage
85 secured by my construction, for single sections can be removed and repaired, or a new section substituted, without detaching or repairing the whole bottom or plate and with greater economy.

What I claim as my invention, and desire to
90 secure by Letters Patent, is—

A bottom or plate for ovens, consisting of sections constructed with downturned flanges
95 on all inner or inside edges and upturned flanges on all outer or outside edges, secured together by bolts or rivets, and forming a whole with even and smooth upper surface adapted to be similarly secured to the wall of an oven, in the manner and for the purpose
100 substantially as specified.

ROYAL E. DEANE.

Witnesses:

EDMUND E. VAN DIEU,
GEORGE RAWLINS.