June 2, 1925. 1,539,949

R. H. MacINNES

HINGED OVEN ELECTRIC BURNER

Filed Sept. 12, 1924

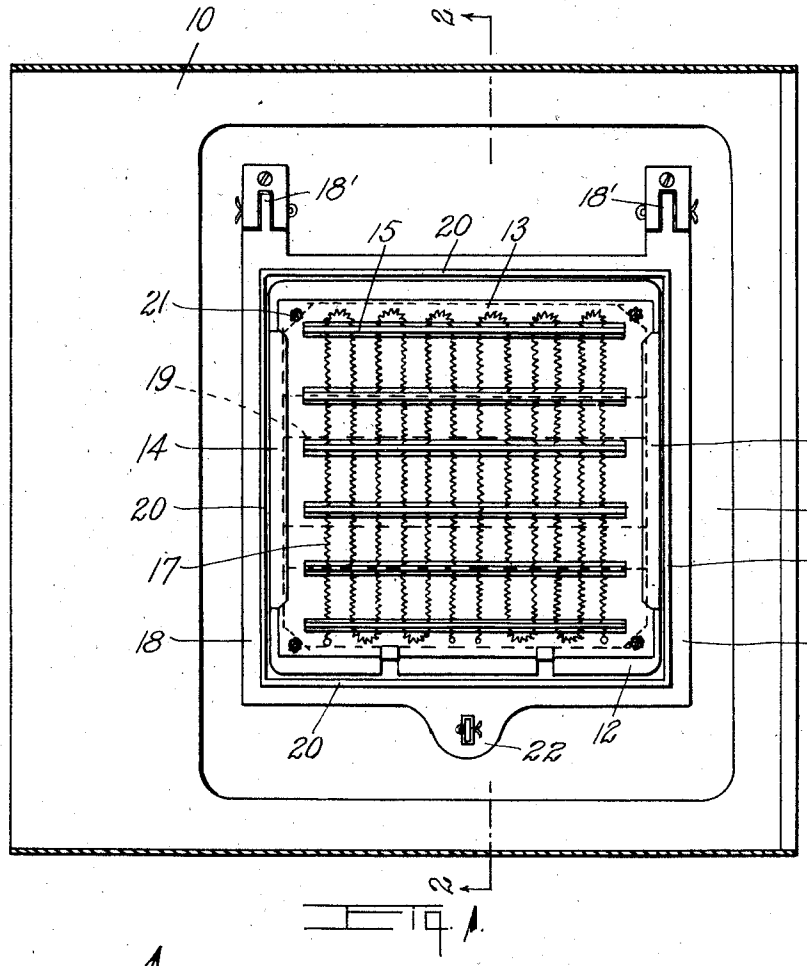


Fig. 1.

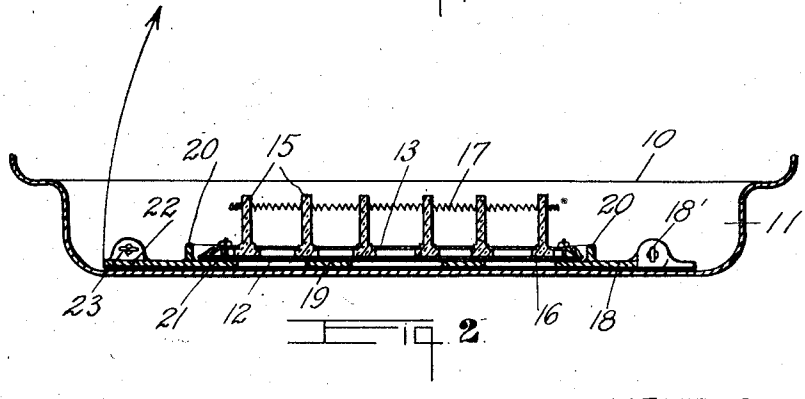


Fig. 2.

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BY

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UNITED STATES PATENT OFFICE.

ROBERT H. MacINNES, OF HAMILTON, ONTARIO, CANADA, ASSIGNOR TO D. MOORE COMPANY, LIMITED, OF HAMILTON, CANADA.

HINGED OVEN ELECTRIC BURNER.

Application filed September 12, 1924. Serial No. 737,317.

To all whom it may concern:

Be it known that ROBERT H. MacINNES, a subject of the King of Great Britain, residing at Hamilton, in the county of Wentworth and Province of Ontario, Canada, has invented certain new and useful Improvements in a Hinged Oven Electric Burner (Case 2), of which the following is a specification.

This invention relates to electric stoves and has special reference to oven heater elements, sometimes called an oven burner, for such stoves.

One important object of the invention is to generally simplify and improve the construction of devices of this character so that the element constitutes a unitary structure of novel arrangement specially adapted for use as a hinged burner. Hinged burners have been in use heretofore for the purpose of permitting the burner to be elevated to a standing or perpendicular position so that the bottom of the oven beneath their normal position may be cleaned out, but these burners have been too cumbersome and complicated to be efficient.

A second important object of the invention is to provide an improved form of such heater element wherein the swivel parts are so constructed and arranged that they may be readily assembled in manufacture or disassembled for repairs and replacement.

With the above and other objects in view as will hereinafter be apparent, the invention consists of certain novel details of construction and combination of parts as will be hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereunto appended.

Referring to the drawing:—

Figure 1 is a plan view of an oven heater element or burner constructed in accordance with this invention; and

Figure 2 is a sectional front elevation taken on the line 2—2 in Figure 1.

Similar reference characters refer to similar parts throughout both views.

The preferred use of the improved oven burner is with the type of oven having a recess, or well, as it is sometimes called, in the bottom thereof, in which the burner is confined. This type of oven is shown on the drawing, the bottom thereof being indicated by the numeral 10, and the recess or well by the numeral 11. The heating resistance holder part of the burner is preferably of the rectangular type comprising a lower reflector or heater plate 12, and an upper reflector plate 13, the upper plate being removably slidable in parallel overturned edges 14 of the lower plate. The upper plate is provided with a plurality of parallel slots through which project upwardly the webs 15 of a plurality of refractory resistance supports having base flanges 16 held between the two plates. Through openings in the webs 15 is woven the resistance wiring 17. This rectangular structure is recessed in a hinged frame which normally rests upon the bottom of the well 11. The frame is comprised of lateral rails 18 and a plurality of cross connecting members 19 integral therewith. A perpendicular flange or rib 20 extends around the frame, and this flange forms the recess for the heating resistance holder. The heating resistance holder is bolted to the frame, the bolts 21 passing through the frame and said upper and lower plates, so that the entire structure may be disassembled by the removal of said bolts.

The frame is hinged to the bottom of the oven recess 11 at a point designated by 18′ by means of the projecting ends of the lateral rails 18 which form or constitute hinge leaves, and the end cross member on the opposite end of the structure is provided with a projecting hasp 22 to receive an eye 23 for pinning the burner in normal position.

There has thus been produced a simple and efficient device of the class described and for the purpose specified.

Having now fully disclosed the invention, what I specifically claim, is:—

1. In an electric oven burner, lateral rails or straps, a plurality of cross members connecting the rails, flanges on said rails and on the end cross members, said flanges forming a recess in the structure constituted by the rails and cross members, and a heater element resting in said recess.

2. In an electric oven burner, lateral rails

or straps, a plurality of cross members connecting the rails, flanges on said rails and on the end cross members, said flanges forming a recess in the structure constituted by the rails and cross members, the rails at one end of the structure being hingedly secured to an oven, a hasp formed on the end cross member at the opposite end of the structure engaging a fixed eye, and a heater element resting in said recess.

In testimony whereof I have affixed my signature.

ROBERT H. MacINNES.

Witnesses:

H. G. HENDRY,

H. S. GOFFER.