April 4, 1939. R. E. MEEKS 2,153,265

OVEN HEAT REGULATOR

Filed Nov. 29, 1937 3 Sheets-Sheet 1

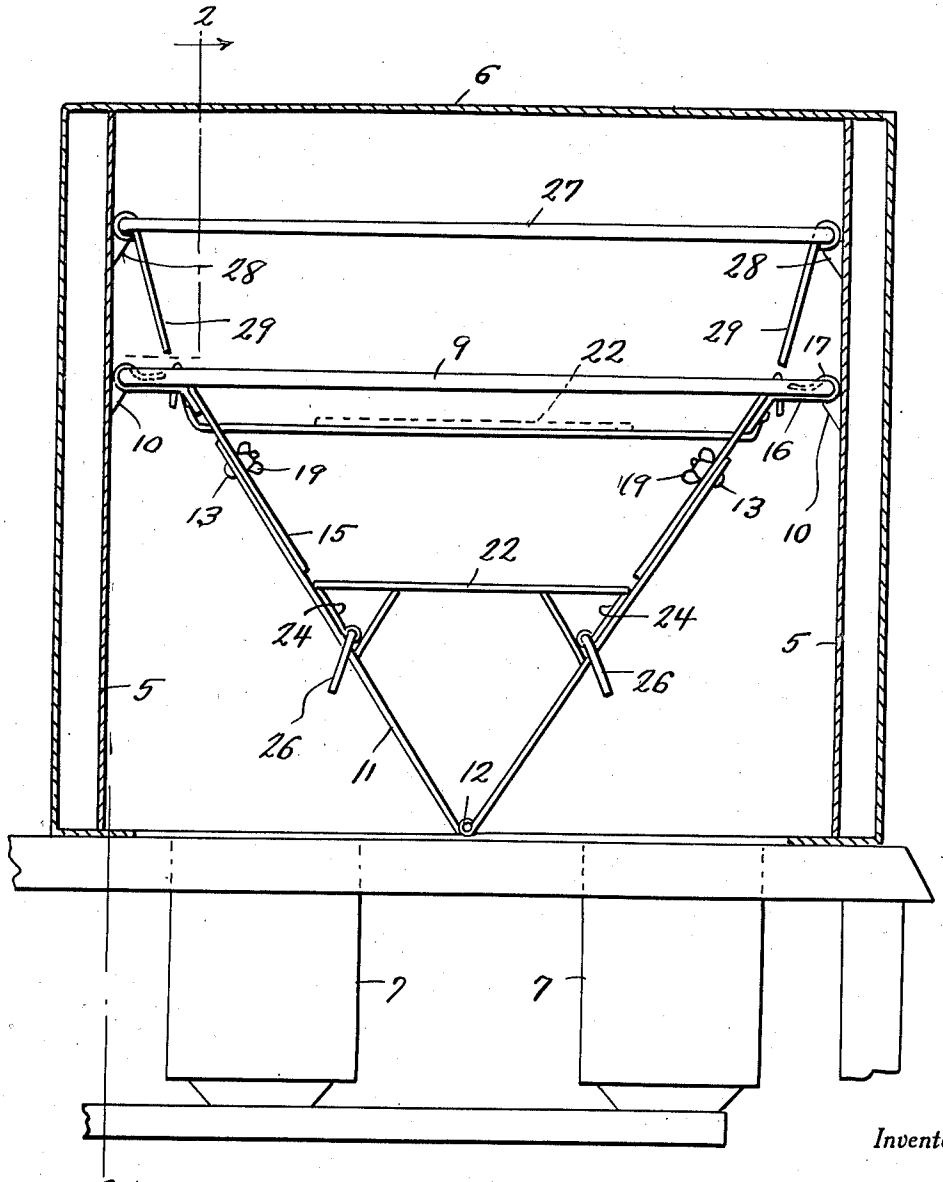



Fig. 1.

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Filed Nov. 29, 1937 3 Sheets-Sheet 2

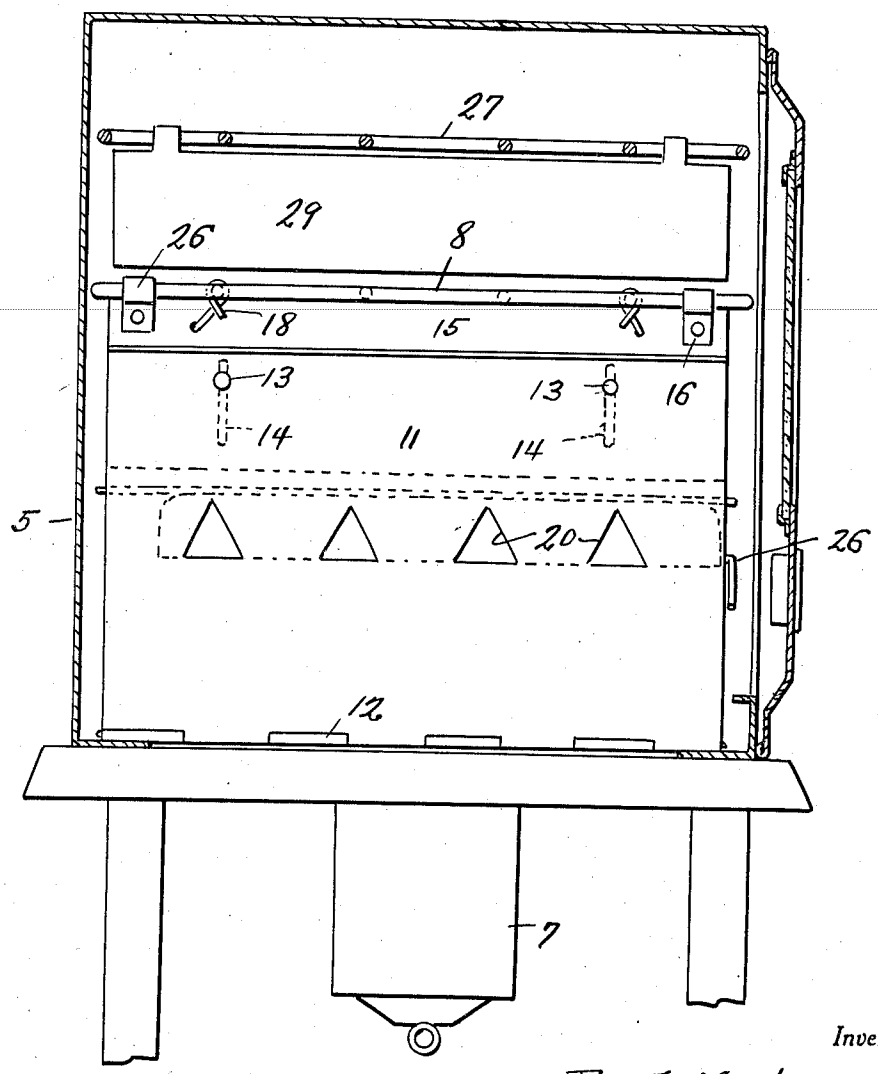



Fig. 2.

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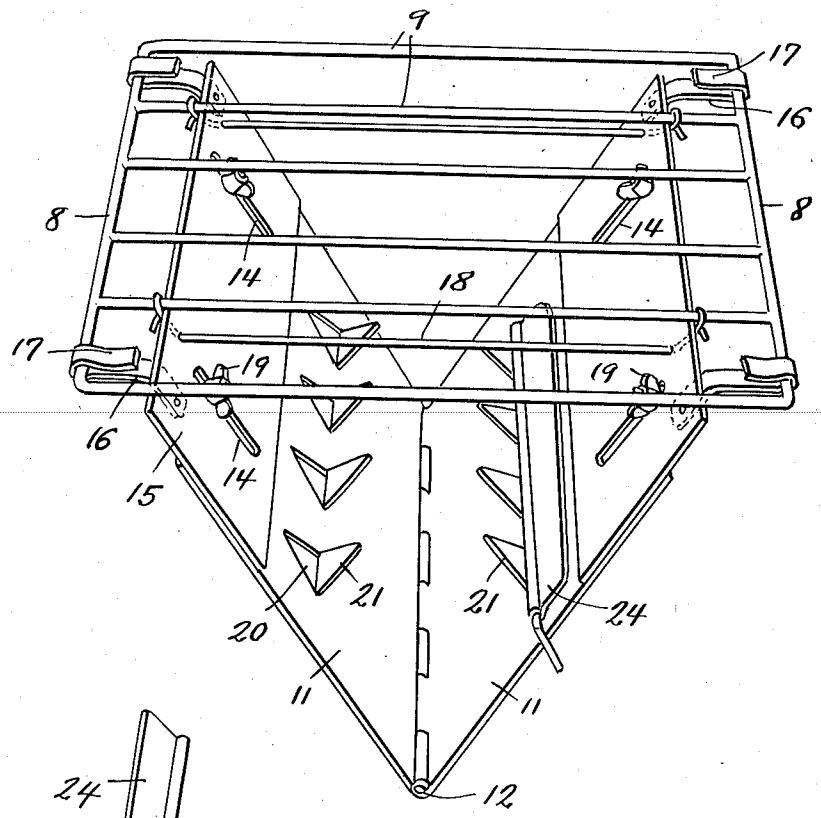
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April 4, 1939. R. E. MEEKS 2,153,265

OVEN HEAT REGULATOR

Filed Nov. 29, 1937 3 Sheets-Sheet 3

Fig. 3.



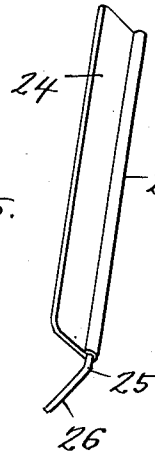




Fig. 5.

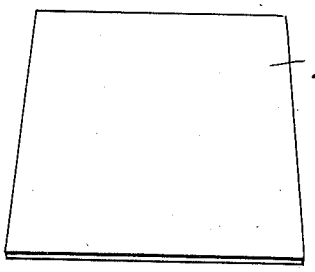



Fig. 4.

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Patented Apr. 4, 1939 2,153,265

# UNITED STATES PATENT OFFICE

2,153,265

## OVEN HEAT REGULATOR

Robert E. Meeks, Gatesville, Tex.

Application November 29, 1937, Serial No. 177,113

5 Claims. (Cl. 126—337)

This invention appertains to new and useful improvements in means whereby heat can be regulated in ovens and other cooking compartments.

The principal object of the present invention is to provide a regulator whereby heat can be properly distributed in an oven to enable a cook to increase or diminish the heat on the top or bottom side of the article being cooked.

Another important object of the invention is to provide a regulator of the character stated which will be of simple construction and easy to operate.

These and various other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:

Figure 1 represents a vertical sectional view through an oven showing the appliance installed therein.

Figure 2 is a vertical sectional view taken substantially on the line 2—2 of Figure 1.

Figure 3 is a perspective view of the appliance.

Figure 4 is a perspective view of a transporting plate.

Figure 5 is a perspective view of one of the dampers.

Referring to the drawings wherein like numerals designate like parts, it can be seen that numeral 5 denotes the vertical walls of a conventional oven structure, while numeral 6 denotes the top thereof. Suitable burners or other heat producing means 7 can be located under the oven.

The invention includes a grating made up of the end members 8—8 and the connecting rails 9. The end members 8 rest upon bosses 10 formed on the inner side of the walls 5—5. The appliance further includes a pair of wall member 11—11 hingedly connected together at their lower ends as at 12. The upper edge portion of each of these walls 11—11 is provided with an opening therein through which is disposed a bolt 13. Each of these bolts extends through a slot 14 of the extension plate 15, there being an extension plate for each of the walls 11—11.

The upper edge portion of each of the extension plates 15 is provided with upwardly extending clips 16 which are bent over the adjacent end member 8 of the grating as at 17. A pair of tie wires 18 extend through openings in the upper portions of the extension plates 15 and are bent over the overlying connecting rails of the grating. Thus the grating and the extensible side wall structures are definitely connected together.

As can be seen in Figure 3, each of the bolts 13 is equipped with a wing nut 19 which can be tightened against the corresponding extension plate 15 to firmly hold the extension plate in proper adjusted relation with respect to the corresponding wall section 11.

The wall structures 11—11 are struck out each at certain points as at 20 to define upstanding prop members 21 for supporting a plate 22. Furthermore, these props 21 define crotches in which the rolled edge portion 23 of dampers 24 can rotate. The rolled edges 23 of these dampers are rolled over rod members 25 which are provided with laterally disposed handles 26, each at one end. These rolled edge portions 23 are capable of rotating in the crotches of the props 21 so that the dampers 24 can either close off the openings 20 or be swung against the props 21 so that the openings 20 are uncovered to permit heat to rise therethrough and against the bottom of a pan supported upon the grating.

A super-grating 27 can be supported by bosses 28—28 and it is desirable that the ends of this grating 27 be provided with swingable depending deflector plates 29—29 adjustable to regulate the deflection of heat in the oven. Obviously, by properly setting the dampers 24 and deflector plates 29—29, heat can be directed against the bottom of an article being cooked, against the top of the article and not against the bottom, or uniformly against both the bottom and the top of the article being cooked.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is:

1. A heat regulator for ovens comprising a pair of upwardly diverged wall structures, an article supporting grating at the top of the wall structures, said wall structures being provided with hot air openings therein, and dampers on the walls for closing the said openings, said openings being formed by striking out the wall structures to define prop members, said prop members in turn defining crotches in which the said dampers are operative.

2. A heat regulator for ovens comprising a pair of upwardly diverged wall structures, an article supporting grating at the top of the wall

structures, said wall structures being provided with hot air openings therein, and dampers on the walls for closing the said openings, said openings being formed by striking out the wall structures to define prop members, said prop members in turn defining crotches in which the said dampers are operative, said props being upwardly disposed, and a plate adapted to be supported by the said props.

3. A heat regulator for ovens comprising a pair of upwardly diverged wall structures, an article supporting grating at the top of the wall structures, said wall structures being provided with hot air openings therein, and dampers on the walls for closing the said openings, said wall structures being divided each into a pair of extensible plates adjustably connected for vertical extension.

4. A heat regulator for ovens comprising a pair of upwardly diverged wall structures, an article supporting rack at the top of the wall structure, said wall structures being provided with hot air openings therein, and dampers on the walls for closing the said openings, and connecting meaus between the upper portions of the wall structures and the said grating.

5. A heat regulator for ovens comprising a pair of upwardly diverged wall structures, an article supporting pan at the top of the wall structures, said wall structures being provided with hot air openings therein, members extending from the wall structures adjacent the openings, and dampers freely supported by the said members and being adapted to be moved from a position fully resting on the said members to a position closing the said hot air openings.

ROBERT E. MEEKS.