

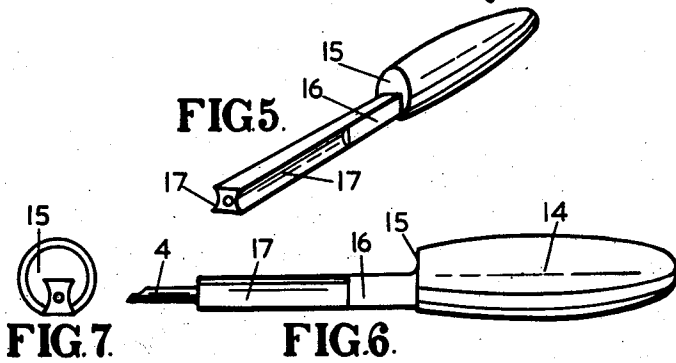
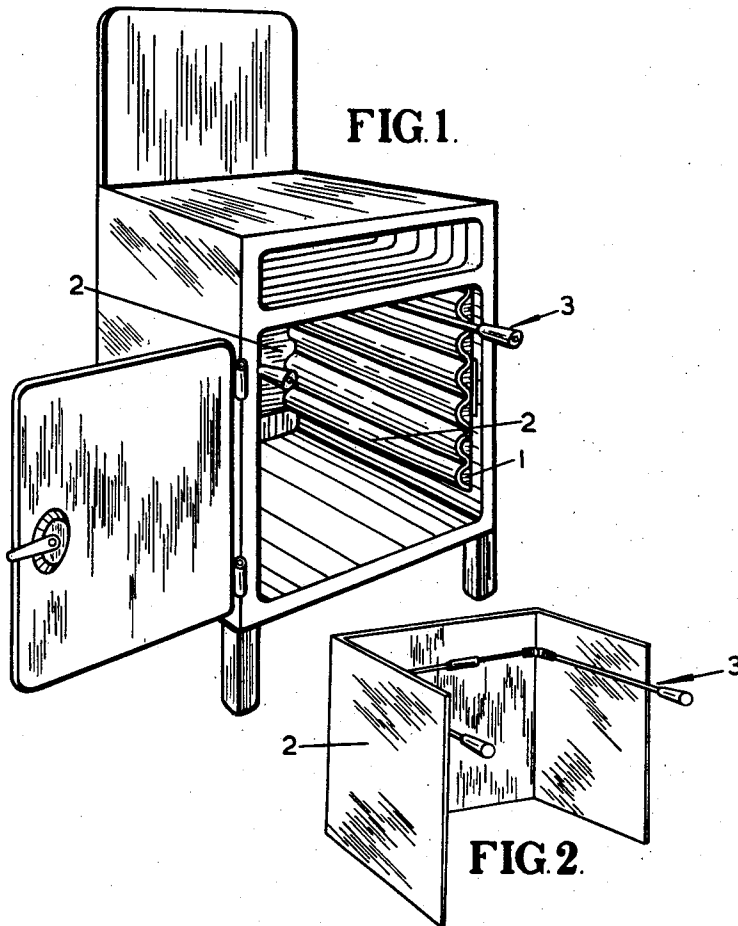
Jan. 1, 1963

G. H. R. S. SEALE
METHOD OF PROTECTING THE WALLS OF AN
OVEN FROM BECOMING FOULED

3,070,879

Filed May 11, 1959

2 Sheets-Sheet 1



Inventor
GEORGE H. R. S. SEALE
By *Mawhinney & Mawhinney*
Attorney

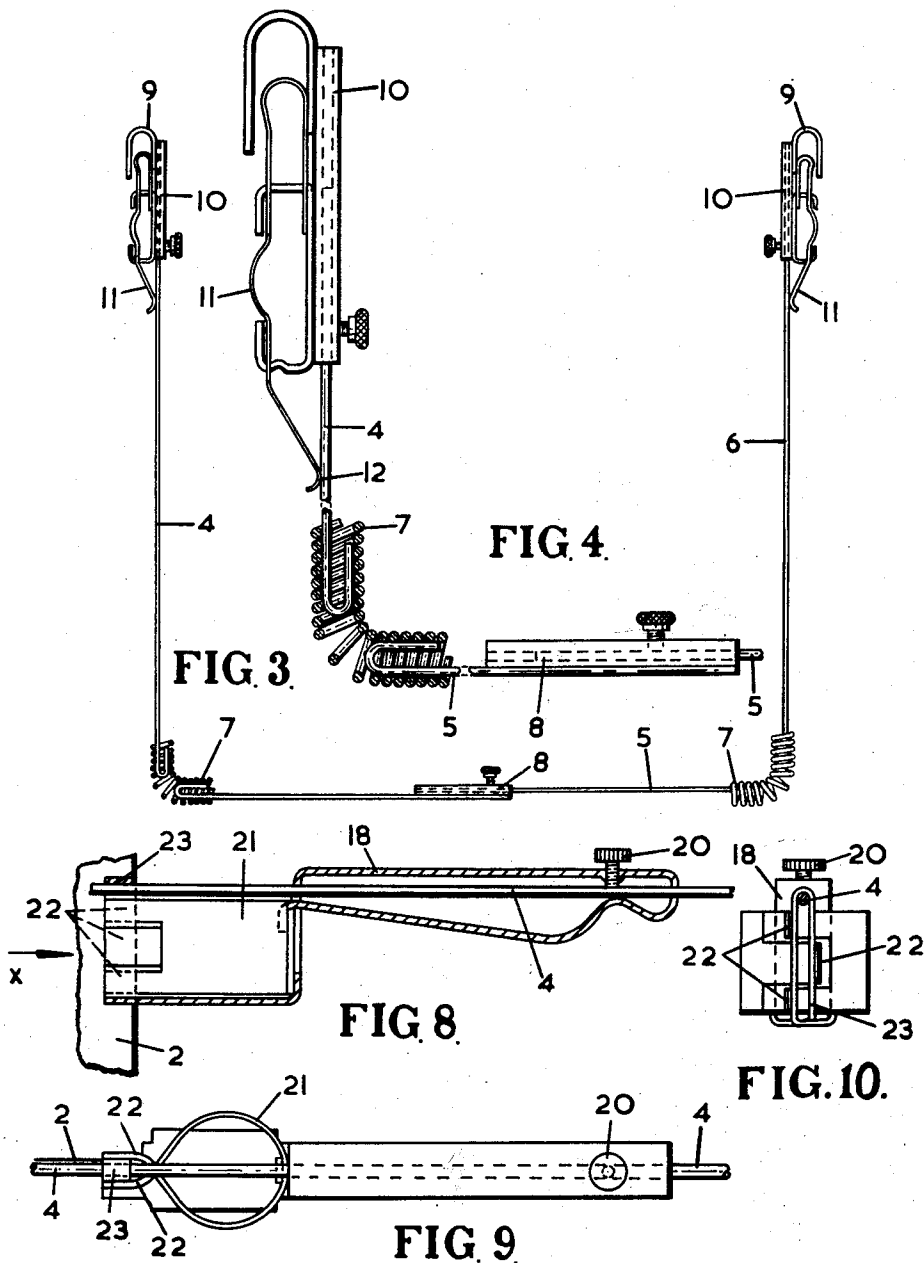
Jan. 1, 1963

G. H. R. S. SEALE
METHOD OF PROTECTING THE WALLS OF AN
OVEN FROM BECOMING FOULED

3,070,879

Filed May 11, 1959

2 Sheets-Sheet 2



Inventor

GEORGE H. R. S. SEALE

By *mauldeney &*

mauldeney

Attorney

1

3,070,879

METHOD OF PROTECTING THE WALLS OF AN OVEN FROM BECOMING FOULED

George Henry Roland Shenton Seale, 35 Hartington Crescent, Coventry, Warwickshire, England
 Filed May 11, 1959, Ser. No. 812,252
 2 Claims. (Cl. 29—423)

The invention relates to a method for protecting the walls of an oven from becoming fouled.

It is a common experience that the interior walls of an oven become fouled, for example, by spurts of fat from a joint being cooked; and owing to the heat within the oven the fat becomes carbonised on the walls and makes them difficult to clean. Objects of the invention are the provision of a method for mitigating that disadvantage.

Accordingly, the invention provides a method of protecting the vertical interior walls of an oven from becoming fouled, which method includes masking the walls by a heat-resistant sheet which is configured to engage guides for at least one shelf, whereby to enable the sheet to be held in the masking position.

Conveniently the sheet is of metal foil, e.g., aluminium or an aluminium alloy.

According to a further feature, the method includes bending the sheet about a former, so as to fashion the back and two lateral sides of the mask, and then inserting the former and the mask into the guides for a shelf, so that the material of the lateral sides is shaped between the former and the shelf guides, so as to provide the said lateral sides with outwardly-extending beads engaging in the shelf guides.

Preferably, the sheet is bent on a hinged former, the sheet and the former being bent together from the flat to conform to the shape of the rear and side vertical walls of the oven.

The former may be used as a support for the mask while the beads of the latter are being engaged in the shelf guides.

The invention also includes a former, for bending an oven mask from a heat-resistant sheet and for inserting the mask into the oven, comprising three elongate members connected end-to-end, the two outer members being of length at least equal to the internal depth of the oven and arranged to form the outwardly-extending beads for engagement in the shelf guides and having handles at the ends remote from the centre member, whereby the former can be withdrawn from the oven, and the centre member being of length such that the outer members are spaced apart by a distance substantially equal to the internal width of the oven.

The members may be hinged at their adjacent ends. Preferably the members are of stiff wire and are hinged together by short helical springs attached to adjacent ends of the members.

The centre member and/or the outer members may be adjustable in length.

Each outer member may have means whereby the foil sheet forming the mask can be located on the former until the mask has been placed in position in the oven.

The handles may constitute the locating means and each may have an end face nearer to the centre member and which forms a stop to engage the front edge of the oven and so to limit the insertion of the former into the oven. By way of example, a method of protecting the vertical interior walls of an oven and three formers according to the invention will now be described with reference to the drawings in which:

FIGURE 1 is a perspective view of an oven;

FIGURE 2 is a diagrammatic perspective view of a lining mask for an oven and a former;

FIGURE 3 is a plan view of the first former;

2

FIGURE 4 is part of FIGURE 3 drawn to a longer scale;

FIGURE 5 is a perspective view of a handle of the second former;

FIGURE 6 is a side view of part of the second former and the handle shown in FIGURE 5;

FIGURE 7 is an end view of the handle in the direction of arrow VII in FIGURE 6;

FIGURE 8 is a sectional side view of a handle of the third former;

FIGURE 9 is a plan view of the handle shown in FIGURE 8, and

FIGURE 10 is a view in the direction of arrow X in FIGURE 8.

FIGURE 1 shows an oven having fluted internal side walls 1 which support and guide the oven shelves (not shown). The mask 2 provided by the method according to this invention is bent from a sheet of aluminium or aluminium alloy foil around a former 3, as shown diagrammatically in FIGURE 2.

Referring now to FIGURES 3 and 4, it will be seen that the former comprises three elongate members 4, 5, 6 of stiff wire or plastic rod which are hinged together at adjacent ends by short helical springs 7, engaging doubled-over end portions of the wire. The central member 5 is constructed in two parts connected together by an adjustable connector 8, whereby the effective length of the member 5 can be adjusted to substantially the internal width of the oven. The other members 4 and 6 carry at their outer ends handles 9 mounted on sleeves 10 which are adjustably connected to the members. The sleeves 10 each carry a spring clip 11 which bears at 12 against the wire member, to which the sleeve is connected, to grip an end edge of the sheet of foil which will form the mask. The inner end of the sleeve 10 forms a stop which will engage the front face of the oven to limit the depth of insertion into the oven of the former. The points of contact 12 of the clips 11 on the members 4 and 5 are at a predetermined distance from the inner ends of the sleeves 10 according to the distance between the front edges of the mask and the front face of the oven. The effective lengths of the side members 4 and 6 are adjusted by sliding the sleeves 10 along the members.

The former is used to form a mask in the following manner: Firstly, the former is laid out straight with the members 4 and 6 in line with the member 5, the effective lengths of the members being adjusted to the dimensions of the oven by adjusting the connector 8 and the sleeves 10. A sheet of foil is laid over the former and is cut to the total width determined by the distance between points of contact 12 of the clips 11 on the members 4 and 6. When the sheet has been cut to the required length the end edges are placed under the clips 11 and the sheet and the former are bent to fashion the back and sides of the mask.

While still supported by the former the mask is slid into the oven, the former being engaged in a shelf guide, thereby causing the sheet to be shaped between the side members 4 and 6 and the shelf guide, to form a pair of beads, which support the mask in the oven. The side walls of the mask are then pressed against the side walls of the oven and into other shelf guides by hand. When a shelf has been inserted into another shelf guide the former is withdrawn. This may be performed by shortening the effective length of the member 5 by means of the connector 8 or by bending inwards the side members 4 and 6. Instead of bending the mask to the shape shown in FIGURE 2, before inserting the mask and former into an oven, one side wall only may be bent and the mask and former inserted obliquely into the oven. The other side wall is then gradually bent and the mask correctly aligned as the mask and the former are further inserted into the

3

oven. When the mask has become fouled by use of the oven, the mask can easily be removed and a new one inserted.

When the former is to be employed for ovens of different breadth and depth, the effective lengths of the centre and side members are adjusted accordingly.

The second former shown in FIGURES 5-7 has a handle 14 of solid construction, for example, of plastic or wood. The wire constituting the side member 4 or 5 is inserted into the handle. The end face 15 of the handle acts as a stop to engage the front face of the oven. The handle has an integral extension 16 formed over part of its length with fluted faces 17 into which the foil sheet is pressed. The flutes hold the sheet while it is being bent on the former and until the mask has been located by another shelf guide in the oven. The extension 16 has a plane portion between the end face 15 and the flutes 17 and the length of this plane portion is equal to the distance between the front edges of the mask and the front face of the oven. The handle may be made adjustable on the wire members 4 and 6 or they may have connectors such as 8, whereby their effective lengths can be adjusted. In use, the end edges of the sheet are positioned at the ends of the flutes adjacent the said plane portions.

FIGURES 8, 9 and 10 show a handle for the third former. The handle comprises a body portion 18 bent from metal strip. Holes 19 are drilled in the handle to permit a side member 4 of the former to be passed through it. The handle is gripped in position on the member by means of a screw 20. The body portion 18 is bent at the end which will be adjacent the front wall of the oven to receive and to support a spring 21, bent from a strip of flat spring steel to form a closed loop with intermeshing ends 22. The body portion 18 has an integral end portion 23, through which the side member 4 is passed and which is engaged at each side by the ends of the spring 22. The sheet 2 is gripped, as shown, between one of the spring ends 22 and the end portion 23. The former, with the exception of the handles, is similar to that shown in FIGURES 3 and 4. It will be seen that in the handle shown in FIGURES 8-10, the sheet is gripped between the spring and the handle, instead of, as in FIGURES 3 and 4, between the spring 12 and the side member 4.

It is common practice to remove dishes and other articles from an oven shelf by partly withdrawing the shelf from the oven; but when a shelf is in position in a guide after the mask is in position, difficulty may be experienced in withdrawing the shelf. To overcome this difficulty a dish or other article on the shelf may be withdrawn by a loop or wire placed over the article and

4

pulling the article to the front of the shelf. The former could be used for this purpose.

The former may also be used to fashion a mask from a sheet having extensions of the sides or back at the upper edges thereof, said extensions being bent at right angles to the sides and back of the mask to form a top, which can be fashioned to conform with the top of the oven.

What I claim as my invention and desire to secure by Letters Patent of the United States is:

1. A method of protecting, from becoming fouled, the interior surfaces of the sides and back of an oven, having guides in the side walls thereof for removable shelves, the method including the steps of cutting a sheet of heat-resistant foil to provide a mask having a length to fit the total width of said sides and back, bending said sheet to a U-shape to fit said sides and back, assembling the U-shaped mask adjacent said sides and back, pressing the side walls of said mask against said sides of the oven and the shelf guides thereof and inserting at least one shelf into the oven in engagement with shelf guides therefor to hold the mask, the mask being removable after it has become fouled and being replaceable by a new mask.

2. A method of protecting, from becoming fouled, the interior surfaces of the sides, back and top of an oven, having guides in the side walls thereof for removable shelves, the method including the steps of cutting a sheet of heat-resistant foil to provide a mask having a length to fit the total width of said sides and back, the sheet having at least one flap along an edge thereof to form a top on the mask, bending said sheet to fit said sides, back and top of the oven, assembling the mask adjacent said sides, back and top of the oven, pressing the side walls of said mask against said sides of the oven and the shelf guides thereof and inserting at least one shelf into the oven in engagement with shelf guides therefor to hold the mask, the mask being removable after it has become fouled and being replaceable by a new mask.

References Cited in the file of this patent

UNITED STATES PATENTS

950,280	Everson	Feb. 22, 1910
1,344,960	Raff	June 29, 1920
2,236,992	Broadley	Apr. 1, 1941
2,423,810	Goulding	July 8, 1947
2,771,668	Lindsey	Nov. 27, 1956
2,826,105	Gardner	Mar. 11, 1958
2,841,132	Philipp	July 1, 1958
2,882,890	Shaw	Apr. 21, 1959