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Improvements in or relating to cookers.

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A cooker has an electrically operated grill chamber 10, a control panel 28 above an opening at the front of the grill chamber 10 and a grill chamber roof 18 that leads rearwardly and upwardly to an exhaust duct 32 at the back of the grill chamber 10 that opens above the grill chamber 10 whereby in use there is a chimney-like convective flow from front to back of the grill chamber 10 and upwardly through the exhaust duct 32. The control panel 28 is located between a front door 20 of the grill/oven and an electrical cooker hob 22 that fits into a casing. The grill/oven may be located over a main oven in the casing which is of larger dimension and the base of the casing is adapted to stand freely on a floor.

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IMPROVEMENTS IN OR RELATING TO COOKERS

This invention relates to a cooker in which a control panel is located immediately above a grill. It is applicable to gas cookers, but more particularly
5 electrical cookers in which it is desired to locate on the control panel electrical or electronic components such as timer units and hotplate regulators that are sensitive to heat.

In electrical cookers of the free-standing kind it
10 has been usual to locate the hotplate, grill and oven controls on the back of the cooker above the hob. More recently we have introduced a free-standing cooker called the Belling format Cook-Centre in which the control panel is located between a double oven unit in which the grill
15 oven is uppermost and an overlying hob unit. The grill has to be located in the upper rather than the lower oven for reasons that are obvious in the context of a floor standing unit but problems arise in that the heat from the

grill heating element brings the hotplate grill and oven controls to an undesirably high temperature and there is a region of very hot air at the mouth of the grill through which the user's hands must pass in order to access the controls. For this reason the format cooker includes a fan that blows air through the cooker casing and over the cooker controls.

Even with conventional built-in ovens where a control panel overlies a grill/oven it may be desirable to direct the air flow away from the control.

It is an object of the invention to provide a cooker of the aforesaid kind in which natural rather than forced cooling is used.

According to the invention there is provided a cooker having a grill chamber and a control panel above an opening at the front of the grill chamber and a grill chamber roof that overlies the grill heating element and leads rearwardly and upwardly to an exhaust duct at the back of the grill chamber that discharges above the grill chamber.

The aforesaid arrangement serves to exhaust hot air and cooking fumes through the rear of the grill chamber by natural convection which keeps the front of the grill chamber cool and allows front positioned controls to be used without overheating and the control knobs to remain touchable. Venting at the rear of the cooker avoids hot air and cooking fumes from being discharged towards the user.

An embodiment of the invention will now be described by way of example only with reference to the accompanying drawing which is a diagrammatic sectional view of the oven/grill cavity of the top small oven of a free standing double oven cooker.

In the drawing an oven/grill chamber 10 overlies a main oven chamber 12 and is defined by floor 14, rear wall 16 roof 18 and side walls. A front opening drop down door 20 is hinged to the front of the oven/grill chamber and a

radiant ring or glass-ceramic cooking hob 22 is fitted above the grill-oven 18. The cooker is free-standing but is particularly adapted for use with built-in kitchen units. For this purpose the hob 22 stands at standard
5 worktop height and nothing projects above it except for a small splash-back 24 intended to be fitted to the wall. A control chamber 26 is located at the front of the cooker between the hob 22 and the door 20 which it overlies and in the chamber 26 are fitted electrical cooker controls
10 28. It will be noted that the cooker control panel is angled away from the opening to reduce the proportion of hot air from the grill chamber that encounters the controls 28 and to improve control visibility.

As will be observed the roof 18 of the cooker
15 slopes rearwardly and upwardly and there is a removable deflector plate 30 that is slideably supported underneath the roof 18. The rear wall 16 and roof 18 lead to an exhaust duct 32 which may be the full width of the oven or only part width and which opens to the rear of the cooker
20 above the hob 22. Advantageously a vent pipe 34 from the lower oven 12 passes behind the rear wall 16 and also opens into the exhaust duct 32. When the grill heating element 36 is on, there is a chimney-like flow of hot air towards the rear of the oven/grill as indicated by the
25 arrows, the deflector 30 being spaced from the rear of exhaust duct 32. When the grill-oven is being used for roasting, the plate 30 is slid rearwardly (dotted lines) so that it occludes the exhaust duct 32 except at a small opening at its rear edge whereby there is a diminished
30 area of flow from grill/oven 10 up the chimney 32.

CLAIMS:

1. A cooker having a grill chamber 16 and a control panel 28 above an opening at the front of the grill chamber 10 and a grill chamber roof 18 that leads 5 rearwardly and upwardly to an exhaust duct 32 at the back of the grill chamber 10 that opens above the grill chamber 10 whereby in use there is a chimney-like convective flow from front to back of the grill chamber 10 and upwardly through the exhaust duct 32.
- 10 2. A cooker according to Claim 1 wherein the grill chamber 10 is a grill/oven operated by an electrical heating element 36.
3. A cooker according to Claim 1 or 2 whereby the control panel 28 is located between a front door 20 of 15 the grill/oven and an electrical cooker hob 22 that fits into a casing.
4. A cooker according to Claim 3 wherein the grill/oven is located over a main oven 12 in the casing which is of larger dimension and the base of the casing is 20 adapted to stand freely on a floor.
5. A cooker according to Claim 4 wherein a vent pipe 34 from the main oven 12 discharges into the exhaust duct 32 of the cooker above the grill/oven.
6. A cooker according to any preceding claim wherein a 25 deflector plate 30 is slideably supported under the grill/oven roof for movement 18 between a grilling position in which it is spaced from the rear of the grill/oven to admit a large flow into the exhaust duct 32 and a roasting position in which it abuts the rear of the 30 grill/oven to admit a restricted flow into the exhaust duct.

