

SPECIFICATION

A cooking device

5 This invention relates to cooking devices and in particular to such devices as may be used at barbecues.

Such cooking devices are usually portable having a source of heating which may be electrically powered or using charcoal. This invention is primarily concerned with such devices as use an electrically powered source of heat which have hitherto been relatively complicated in construction, have emitted much smoke and odour, and have not been easily controllable as to the distance between the heat source and the food.

An object of the invention is to provide a cooking device in which at least some of these disadvantages are obviated.

20 According to the invention a cooking device comprises a pair of spaced apart outer end plates, each end plate including an integral, generally L-shaped, handle on an upper portion thereof and integral leg means on a lower portion of the plate; an upwardly open housing including a pair of end walls, a bottom wall and a pair of side walls, the end walls being attached to and held between the end plates, the housing defining openings between the lower edges of the side walls and the bottom wall for receiving a removable tray; a heat source in the housing; and a grille detachably mounted on the housing above the heat source.

Preferably the lower portions of the side walls of the housing are inwardly inclined towards one another.

Conveniently the grille includes supporting members extending outwardly from opposite sides of the grille and arranged to engage notches formed in the top edges of the end walls of the housing, the supporting members having spaced upper and lower support surfaces so that the grille may be supported in an upright or an inverted position on the housing, the height of the grille being different in said two positions.

45 Further features of the invention will appear from the following description of an embodiment of the invention given by way of example only and with reference to the drawings, in which:

Fig. 1 is a plan view of an electric cooking device,

50 Fig. 2 is an end elevation of the device of Fig. 1,

Fig. 3 is a side elevation partially in section on the line A-A in Fig. 1,

Fig. 4 is a perspective view of a housing of the device of Figs. 1 to 3,

55 Fig. 5 is an end view of the housing of Fig. 4,

Fig. 6 is a perspective view showing the grille of the device, and

Fig. 7 is a perspective view of part of the grille of Fig. 6 in another position.

60 Referring to the drawings, the cooking device in the nature of a barbecue grille includes a housing 1 best seen in Figs. 3, 4 and 5 including a body 2 of generally U-shape in transverse cross-section and a pair of side walls 3, 3' extending between the upright end walls of the body 2 and attached thereto. The

side walls 3, 3' have their lower portions 3a, 3a' inwardly inclined towards one another and openings 4, 4' are formed between the lower edges of the side walls 3, 3' and the upper surface of a bottom wall of the body 2 to allow the entry of a tray 17, as will be described.

As seen in Figs. 4 and 5, each upright end wall of the body 2 has cut out portions towards the lower part of each side edge corresponding to the positions of the inclined portions 3a, 3a' such that the upper edges of the cut out portions are enclosed and engaged by edges of the respective inclined portions 3a, 3a'. However, the cut out portions can be omitted so that each end wall of the body is of generally rectangular shape.

80 The body 2 and side walls 3, 3' are preferably formed of polished stainless steel sheet to enhance reflection of radiation from a heat source onto food being cooked.

85 End plates 5, 5' made of thermo setting synthetic resin include integral lips 6, 6' of generally inverted L-shape to act as handles, and integral depending legs 7, 7' extending downwards from the lower edges of the plates. The end plates 5, 5' are secured to the end walls of the body 2 by means of screws and have cut-out portions aligned with the cut-out portions in the end walls of the body 2, if present.

Notches 8, 8' are formed in the upper edges of the end walls of the body at two spaced locations in each wall. A sheathed electric heating element 9 (Figs. 1 and 2) is in a loop extending along the sides of the housing with a middle portion at one side forming an inverted U-shape, to provide even heat distribution.

100 A terminal opening 10 for the element protrudes from the end plate 5' but it may be located at the end plate 5. A terminal base 11 formed of ceramics is located in the opening 10 and a pair of wires connect the terminals of the heater 9 with connector pins 12, 12'.

A metal grille 13 is formed by welding at predetermined spacing wires or rods 14 to a rectangular frame 15 of suitable size and subsequently chrome plating or otherwise processing the assembly. Two of the rods 14 are extended at each end, as best seen in Figs. 6 and 7, so that both ends extend beyond the sides of the grille frame and the ends are bent over to form closed squares or supporting members 16, 16'. The squares 16, 16' present upper and lower supporting surfaces and engage in the notches 8, 8' so as to support the grille from the walls of the body 2 in a generally horizontal position at a distance H from the element 9. The members 16, 16' may alternatively be formed as part of the frame 15.

120 The tray 17 is removably received in the opening 4 in the lower portion of the body 2 and, in such position, water may be contained in the tray to catch substances released from the food during cooking and inhibit odour, smoke and like omissions. The tray 17 can also be used as a frying pan for cooking food such as eggs by mounting the tray on the grille 13.

The body 2 with its attached side walls 3, 3' forms an upwardly open housing 1 whose end walls are attached to and held between the end plates 5, 5'.

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This form of construction is simple and inexpensive and incorporates integral handles and legs of the utensil. Accordingly fastening parts such as screws or rivets for attaching handles or legs are not required and the utensil requires a reduced number of parts overall. This reduces the time spent on assembly.

Furthermore the provision of the inwardly inclined portions 3a, 3a' together with the side walls 3, 3'

improves the heat reflection capacity of the heater.

The supports 16, 16' for the grille enable the grille to be supported upright or inverted and, as seen in Figs. 6 and 7, the upper surface of the grille is a distance h higher in one position (Fig. 6) than in the

inverted position (Fig. 7). Thus the distance between the heater 9 and food supported by the grille can be varied to give different heat intensities according to the nature of the food or the preference of the user.

The construction of the supports 16, 16' is simple and enables said change in height to be easily effected.

Moreover, the tray 17 can be removed from the lower portion of the housing and mounted on the grille for use as a frying pan.

CLAIMS

1. A cooking device comprising a pair of spaced apart outer end plates, each end plate including an integral, generally L-shaped, handle on an upper portion thereof and integral leg means on a lower portion of the plate; an upwardly open housing including a pair of end walls, a bottom wall and a pair of side walls, the end walls being attached to and held between the end plates, the housing defining openings between the lower edges of the side walls and the bottom wall for receiving a removable tray; a heat source in the housing; and a grille detachably mounted on the housing above the heat source.

2. A cooking device according to claim 1 wherein the lower portions of the side walls of the housing are inwardly inclined towards one another.

3. A cooking device according to claim 1 or 2 wherein the grille includes supporting members extending outwardly from opposite sides of the grille and arranged to engage notches formed in the top edges of the end walls of the housing, the supporting members having spaced upper and lower support surfaces so that the grille may be supported in an upright or an inverted position on the housing, the height of the grille being different in said two positions.

4. A cooking device substantially as described with reference to the drawings.



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The supports 16,16' for the grille enable the grille to be supported upright or inverted and, as seen in Figs. 6 and 7, the upper surface of the grille is a distance *h* higher in one position (Fig. 6) than in the inverted position (Fig. 7). Thus the distance between the heater 9 and food supported by the grille can be varied to give different heat intensities according to the nature of the food or the preference of the user. The construction of the supports 16,16' is simple and enables said change in height to be easily effected. Moreover, the tray 17 can be removed from the lower portion of the housing and mounted on the grille for use as a frying pan.

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30 including a pair of end walls, a bottom wall and a pair of side walls, the end walls being attached to and held between the end plates, the housing defining openings between the lower edges of the side walls and the bottom wall for receiving a removable
35 tray; a heat source in the housing; and a grille detachably mounted on the housing above the heat source.

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