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(54) A COOKING APPLIANCE

(71) I, WILLIAM MILTON BARDEAU, a Canadian citizen, of 44 Princess Margaret Boulevard, Islington, Ontario, Canada, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a cooking appliance of the type having heat-conductive grilling surfaces constituted by a pair of platens, one overlying the other, to be heated to a controlled high temperature and being adapted for cooking food items, such as hamburger patties, steaks or the like, quickly and evenly from both sides.

It has been observed that with many appliances now in use of the character described the cooked food item produced may have charred portions at the edges or on the upper and lower surfaces which spoil the appearance and the taste. Further with many appliances in use substantial amounts of smoke and greasy vapors tend to be generated in the cooking operation, accompanied by splatter and condensation on the surrounding and overhead surfaces.

There is also a tendency to permit juices and greases to collect on the grilling surfaces or platens which are maintained at high temperatures, thus increasing the generation of smoke and vapors, splatter and condensation, all of which is unpleasant, insanitary and inefficient.

It is therefore the principal object of this invention substantially to overcome the deficiencies outlined above by providing an improved appliance of the character indicated, with which an operator is capable of consistently turning out tender, savoury food items, cooked to the desired degree in a short time and having, in the case of meats in the form of hamburger patties, steaks and the like, an overall browned appearance, all without generating any appreciable amount of smoke or greasy vapours and without any substantial splatter.

It is also an important object to provide a

cooking appliance of the character indicated, in which juices and greases are continuously drained away from those surfaces at the highest temperatures. 50

According to the invention there is provided a cooking appliance including two heat-conductive relatively movable making sections adapted to overlie one another and contoured on opposed surfaces to define a substantially enclosed, internal food receiving cavity opening downwardly through a narrow passage extending peripherally of said cavity into a drainage channel opening to the atmosphere upwardly, peripherally and outwardly of said cavity, wherein one mating section includes a base presenting a heat-conductive platen for supporting thereupon an article of food to be cooked bounded at least throughout a portion of its periphery by said drainage channel which is of generally U-shaped cross section, the surface of said base platen having a contour such that liquid will drain therefrom into said generally U-shaped drainage channel, and wherein the other mating section includes a cover presenting a heat-conductive platen for contacting from above an article of food to be placed upon said base platen, the cover platen being bounded throughout at least a portion of its periphery by a depending wall, the configuration and extent of the base platen and drainage channel and the cover platen and depending wall, respectively, being such that the platens are disposed in spaced apart relation with said lower portion of said depending wall registered within and in closely spaced relation to the inner surface of said drainage channel adjacent said base platen, thereby to define said narrow passage, and means swingably supporting the cover over the base for movement from the above position to an angled raised position above said base. 55 60 65 70 75 80 85 90

It will be appreciated that with the structure described a food item to be cooked within the internal food receiving cavity will be substantially isolated from the atmosphere and particularly while hot vapors, greases and juices pass downwardly peripherally through the narrow passage, the only access 95

opening to the cavity. This arrangement is an important factor in achieving the desired taste and appearance in the cooked food item to be produced as oxygen is prevented from contacting the food, thus inhibiting combustion.

Moreover, the outer surrounding surfaces of the narrow passage and the drainage channel remote from the cavity are preferably at a temperature lower than that within the cavity during the cooking cycle and will have the effect of condensing some of the vapours generated and cooling the juices and greases as they pass therethrough, thereby decreasing the volume of pollutants discharged to the atmosphere.

The drainage channel itself serves as a reservoir for the by-products of the cooking cycle and may also serve to convey them to a receptacle even more remote from the cavity, if that alternative is desired.

In one embodiment of the invention two relatively moveable mating sections are provided in the form of a base presenting a raised heat-conductive platen bounded by said drainage channel, the surface of the raised platen having a contour such that liquids drain therefrom into the channel, and a movable cover adapted to mate with the base in overlying relation thereto, the movable cover presenting on its base a heat-conductive platen bounded by a depending wall, the configuration and extent of the base platen with its drainage channel and the cover platen with its depending wall respectively, being such, that in overlying mating relation a lower or edge portion of the depending wall registers within the channel in closely spaced relation to an inner adjacent surface of the drainage channel, thereby defining said internal food receiving cavity which is located between the two platens and bounded by the depending wall, with the cavity opening downwardly and peripherally to drainage channel through said narrow passage which is defined between the closely spaced edge portion of the depending wall and the inner surface of the drainage channel.

In another embodiment of the invention a portion of the depending wall of the cover is replaced by a bearing surface adapted to bear and seal against an upstanding wall on the base platen when the base and cover are disposed in mating relation.

Still another preferred feature of the invention resides in providing a base in which the raised platen has a slight inclination to the horizontal to increase the run-off of greases and juices to the drainage channel.

Another preferred feature resides in providing a base in which the drainage channel itself has a slight inclination to the horizontal to increase the flow of condensed vapours, juices and greases away from those portions of the unit at the highest temperatures, and

further in providing where desired a discharge port or spout from the lowest point of the inclined channel to a remote receptacle, which receptacle, may be removable for replacement or for emptying.

For a better understanding of the invention, and to show how the same may be carried into effect, reference will now be directed, by way of example, to the accompanying drawings, in which:—

Figure 1 is a perspective view of a cooking appliance in accordance with the invention,

Figure 2 is a vertical cross-sectional view of part of the appliance of Figure 1 taken along the line 2—2 in Figure 1, but with the base and cover arranged in overlying spaced relation,

Figure 3 is a vertical cross-sectional view showing only one portion of the edges of the base and cover sections of Figure 2 in mating relation,

Figure 4 is a perspective view of another embodiment of a cooking appliance in accordance with the invention,

Figure 5 is a vertical cross-sectional view along line 5—5 of Figure 4, with the base and cover sections of each pair of mating sections disposed in overlying relation and with the surrounding structure broken away,

Figure 6 is a perspective view of still another embodiment of a base section and supporting structure,

Figure 7 is a vertical cross-sectional view taken along line 7—7 of Figure 6 with a vertical cross-sectional view of its cover section and with the surrounding structure broken away,

Figure 8 is a perspective view taken from the rear and above of the appliance of either Figure 1 or Figure 4 and showing only a portion thereof with a rear cover plate of a housing removed,

Figure 9 is a perspective view of still another embodiment of an appliance constructed in accordance with the invention,

Figure 10 is a vertical cross-sectional view taken along the line 10—10 of Figure 9 and with the surrounding structure broken away, and

Figure 11 is a vertical cross-sectional view taken along the line 11—11 of Figure 9 and with the surrounding structure broken away.

An appliance 10 that is illustrated in Figure 1, 2, 3, and 8 comprises a lower housing 12 preferably having feet or projections 14 at each corner to hold the lower housing above a supporting surface; an upstanding rear housing 16 securely fastened to the lower housing 12; and a pair of identical upper housings 18 each supported for controlled swinging movement over the lower housing 12 and independently of one another within frames 20, each frame 20 supported in turn from spring

biased hinge formations 22 mounted within the rear housing 16.

Each component for the housings of appliance 10 is made from suitable metal sheeting, deep drawn in a metal forming operation, in a manner well known in this field to form a pan or shell.

A top sheet metal component or shell 24 of lower housing 12 is formed with a pair of spaced openings therethrough adapted to receive therein and support a pair of base sections 26 in the manner illustrated in Figure 1, with the mating cover sections 28 mounted within corresponding openings in underneath sheet metal components or shells 30 of upper housings 18 and securely anchored therein in a manner so that each may be removed for repair or replacement in the case of any defect.

Each base section 26 and mover section 28 is cast from a suitable metal, preferably aluminium, each casting including a coiled resistance element 30, 32 respectively, of a wattage sufficient to generate the desired surface temperature of the order of $400^{\circ}\text{F} \pm 20^{\circ}$. Suitable circuits are also provided for resistance elements 30, 32 including switches and temperature control devices for connection to electrical outlets all in a manner well-known in this field.

Each base section 26 has a thicker annular body portion 34 and a integral thinner peripheral portion 36 as best seen in Figure 2 of the drawings. The thicker portion 34 accommodates the embedded resistance coil 30 which must supply the necessary heat of the order of 400°F by conduction to its flat upper surface or platen 38.

Around the periphery of base section 26 in the embodiment illustrated in Figures 1 to 3 a channel 40 is formed below the flat upper surfaces of platen 38 to receive juices, greases or any other liquid that may collect upon platen 38.

An outermost flange or wall portion 42 extends upwardly a uniform distance above the surface of platen 38 and serves to support the mating mover section 28 as will be explained in paragraphs following.

As illustrated a spout 44 may be cast into the base section 26 to lead from the channel 40 to a removable receptacle 46 made from sheet metal and mounted to extend along the front wall of the lower housing 12.

Each cover section 28 likewise is provided with a thicker annular body portion 48 and an integral thin flange 50 as best seen in Figure 2 of the drawings. The thicker portion 48 accommodates the embedded resistance coil 32 for supplying the necessary heat to the lower surface of platen 52 by conduction.

Formed integrally with the cover section 28 is a relatively thin depending wall 54 located inwardly of the flange 50 and surrounding the flat lower platen 52 and defining therewith a

cavity 60 opening downwardly, as illustrated in Figures 2 and 3.

Each housing 18 and frame 20 is adapted to support its associated cover section 28 over each base section 26 such that a narrow peripheral passage 58 is defined between the inner adjacent surfaces of the wall 54 and channel 40 as best seen in Figure 3. The narrow peripheral passage 58 leads from the internal cavity 60, which is raised relative to the channel and is bounded by the surfaces of the spaced platens 38 and 52 and by the upper part of the surrounding depending wall 54 to the peripheral channel 40.

In the embodiment of Figures 1 to 3 inclusive the flange 50 of cover section 28 is provided with downwardly extending spaced projections 56 outwardly of wall 54, such that each will bear against the upper surface of lower wall 42, to limit the entry of the depending wall 54 into the channel 40, as illustrated in Figure 3.

It will not be necessary to use projections 56 in all models. If it is intended to bring the platens 38 and 52 very close together so that bacon slices, for example, can be cooked in the cavity 60 then the projections 56 can be omitted and the dimensions of the channel 40 and depending wall 54 selected such that the narrow peripheral passage 58 is always open at the bottom. Such an alternative may be observed in the embodiments illustrated in the remaining Figures.

Alternatively, adjustable stops may be introduced for example by providing tapped openings in the flange 50 of cover section 28 into which suitable threaded posts can be inserted to bear against the support surface of wall 42, the degree of separation between the base section 26 and cover section 28 being determined by threading the posts into the openings as desired, all in a manner well known in the field.

In all embodiments preferably a thin coating of suitable material will be applied to the platen surfaces 38 and 52 to prevent food and particles of food from sticking to them. Such material must be resistant to scarring, capable of withstanding temperatures of the order of 600°F and be a non-contaminant. The characteristics of polytetrafluoroethylene (PTFE) are well suited for this application and recommended.

As illustrated in Figure 8 each spring-biased hinge formation 22 supporting identical frames 20 housings 18 and associated cover sections 28 is adapted to be enclosed within shell components 62, 64 of rear housing 16.

Spaced ends 66a and 66b, 66c, 66d of frames 20 are each connected together by a rigid shaft 68a, 68b respectively.

Shafts 68a, 68b in turn are supported for rotation in spaced bearings 70a, 70b and 70c, 70d respectively, all of which are mounted in alignment within the front shell com-

ponent 62 and below the upper flange thereof.

The centre of the upper flange of front shell 62 is provided with a slot 72 to receive the inner adjacent ends 66b, 66c of frames 20 supported via shafts 68a, 68b supported in bearings 70b and 70c respectively.

Shafts 68a, 68b are provided with pairs of spaced projections or arms 74a, 74b and 74c, 74d respectively, corresponding with the spacing of apertured lugs 78a, 78b and 78c, 78d respectively, the latter being mounted to upstand from the inner surface of the lower flange of front shell component 62.

Extending between each apertured lug and arm are extension spring elements 82a, 82b and 82c, 82d respectively.

To the left in Figure 8 housing 18 and frame 20 are illustrated with cover section 28 in overlying mating relation with the base section 26, exemplified by the illustration in Figure 3.

In this disposition extension springs 82a, 82b are in tension, but the springs are so calibrated that the restorative forces are insufficient to raise the cover section 28 out of registration with the base section 26.

To the right in Figure 8 the housing 18 and frame 20 and cover section 28 are upstanding, almost at right angles to the horizontal surface of lower housing 12. In that disposition the springs 82c, 82d are capable of exerting sufficient force to maintain the structure in upright disposition, but will readily yield to permit downward displacement under slight pressure exerted by the operator upon the handle sections 86 of the frames 20.

An appliance of the type exemplified by the drawings shown in Figures 1 to 3 inclusive and Figure 8 is intended to be used for cooking articles in the following manner.

The operator will set the desired surface temperature of platens 38 and 52 through suitable temperature control devices provided in the unit. The circuits then will be energized through suitable switches connecting them to a source of electricity.

As soon as platens 38 and 52 have reached the desired surface temperature (of the order of 400°F in the cooking of meat articles, for example a small steak) food will be placed upon platen 38 of base section 26 whereupon cover section 28 will be lowered to bring base platen 52 into contact with the upper surface of the food.

There will be a tendency for the operator to apply a slight pressure through handle section 86 as the cover section 28 is lowered into mating relation with the base section 26. Also the weight of housing 18 frame 20 and associated cover section 28 will tend to compress the food.

The projections 56, if included, will prevent undue pressure from being applied to the food.

During the cooking cycle the vapors

generated within the cavity 60 will escape downwardly through the peripheral narrow passage 58 to the atmosphere. Likewise the juices and greases expelled from the food will gather on the surface of the lower platen, flow to its edges and into narrow passage 58 which in turn discharges into channel 40.

A piece of meat, for example a 4 ounce steak or hamburger patty, can be cooked in the manner described in approximately 40 seconds and will have a savory taste and an overall browned appearance, all of which is most appetizing.

It has been observed that during the cooking cycle there tends to be little discharge of vapors or smoke to the atmosphere and since during such cycle the food article is confined to the internal cavity 60 there is no appreciable splatter.

It will be noted that the thinner peripheral portion 36 of base section 26 and the flange 50 and depending wall 54 of cover section 28 are remote from the heat sources, i.e. the resistance elements 30, 32, and will have a temperature lower than the main body of the sections. To some degree the peripheral portions will be cooled by the surrounding atmosphere. During the cooking cycle vapors escaping from cavity 60 will contact the cooler surfaces of the narrow peripheral passage 58 and the surfaces of the channel 40 will tend to condense and flow along with the juices and greases also passing downwardly into the surrounding channel 40.

Moreover, it will be understood that with such structure, food deposited in cavity 60 will be substantially isolated from the atmosphere during the cooking cycle as the hot vapors being generated expand and escape through the peripheral narrow passage 58, thus blocking the entry.

At the same time there must be adequate venting of cavity 60 so that the by-products of the cooking cycle can be continuously removed which can be achieved by altering the dimensions to increase the width of the passage 58. It has been found that passage widths in the range of between 1/32" and 3/32" are adequate.

The appliance 90 illustrated in Figure 4 differs from appliance 10 of Figures 1 to 3 inclusive in the following respects.

Instead of having a pair of separate base sections, the two base sections are combined into one section 92, which presents a pair of spaced upstanding platens 94 and 96 each surrounded on three sides respectively by a narrow channel 98 and 100 and on the fourth side by a common channel 102, from which a spout 104 projects to a removable receptacle 106 extending along the front wall of lower housing 108.

It will also be observed that in place of a circular configuration, the outline, in plan, of the respective parts is square, with cover

sections 110 each having a central straight edged, downwardly-extending platen 112 surrounded by a rectilinear wall formation 114 adapted, as in the case of the earlier embodiment, to register with the lower platen formation 94 or 96 in the manner illustrated in Figure 5.

In Figure 5 it will be observed that channels 98 and 100 are uniformly sloped in the range of between $1/4''$ to $1''$ per foot to the horizontal as indicated by the broken line 115 to drain to central channel formation 102 and from the latter through spout 104 into receptacle 106.

In all other material respects the structure of appliance 90 of Figures 4 and 5 corresponds to the appliance 10 of Figures 1 to 3 inclusive and Figure 8.

In Figures 6 and 7 another variation in an appliance embodying the invention is illustrated.

In Figure 6 a single unit base section 116 is illustrated with a peripheral channel 118 inclined as described in relation to the embodiments of Figures 4 and 5 and indicated by the broken line 125 so that greases and juices will run to a spout 120 and into a receptacle 122. In this alternative, however, a slight inclination has been given to the upper surface of central platen 124 in the range of between $1/4''$ to $1''$ per foot to the horizontal, as best seen in Figure 7 to increase the run-off of juices and greases.

The surface of platen 126 of the cover section may likewise be given a slight inclination to correspond with the inclination of the surface of platen 124, as shown in Figure 7, in order that contact between the platen 124 and food will be maintained during the cooking cycle.

Still another embodiment of the invention is illustrated in Figures 9 to 11 inclusive. As compared with the earlier embodiments base section 127 is mounted directly on lower housing 128 and is provided with an upstanding rectangular platen 130 surrounded on three sides only by a narrow channel 132 and presenting in place of the channel along the fourth side an upstanding wall 134 of uniform height.

As in the case of the embodiments of Figure 4 to 7 inclusive the channel 132 is suitably sloped as seen in Figure 10 to increase the run-off of juices and greases to the drain opening or spout 136 into a lower receptacle 138.

Also preferably the surface of platen 130 is uniformly slightly inclined from front to rear to increase the run-off during the cooking cycle.

Cover section 140 is provided with a central platen 142 surrounded by a thin depending wall 144 on three sides only, corresponding in extent and location to the channel 132,

and defining a narrow passage 133 as explained for earlier embodiments.

As seen in Figure 10, along the rear periphery of cover section 140 the depending wall 144 is omitted with the rear surface 146 to cover section 140 being adapted to register with and seal against the forward vertical surface 150 of the upright wall 134 when the base and cover sections are disposed in mating relation as depicted in Figures 10 and 11 and so close the cavity 162 along their juncture.

It will be observed in Figure 9 that housing 152 for the cover section 140 is supported on pivots 154 between the spaced bars 156 and 158 of frame 160 supported for swinging movement about a pivot axis 163, as shown in Figure 9.

The pivot axis 161 of the pivot members 154 is parallel to the axis 163 and is selected such that the combined cover section 140 and housing 152 is in substantial balance and will not swing sharply upon movement from a position in overlying registration with base section 127 upwardly or when moved from an upward position downwardly. With such an arrangement the cover section 152 will swing slightly to accommodate itself to any variance in the thickness of the article of food to be placed within the cavity 162 as illustrated in Figure 10 of the drawings.

It will be understood that in all other respects the structure of the appliance of Figures 9 to 11 inclusive corresponds to the structure of appliance of Figures 1 to 3 inclusive and Figure 8 and that when operated in a similar manner will produce similar results.

Moreover, it will be appreciated that the modifications disclosed in the embodiment of Figures 9 to 11 inclusive can be incorporated into the earlier embodiments if desired and vice versa.

Further, it will be understood that the several embodiments of the invention described and illustrated are intended to be illustrative only and that the invention is not limited thereto.

WHAT I CLAIM IS:—

1. A cooking appliance including two heat-conductive relatively movable mating sections adapted to overlie one another and contoured on opposed surfaces to define a substantially enclosed, internal food receiving cavity opening downwardly through a narrow passage extending peripherally of said cavity into a drainage channel opening to the atmosphere upwardly, peripherally and outwardly of said cavity, wherein one mating section includes a base presenting a heat-conductive platen for supporting thereupon an article of food to be cooked, bounded at least through a portion of its periphery by said drainage channel which is of generally U-shaped cross-section, the surface of said base platen having a contour

sections 110 each having a central straight edged, downwardly-extending platen 112 surrounded by a rectilinear wall formation 114 adapted, as in the case of the earlier embodiment, to register with the lower platen formation 94 or 96 in the manner illustrated in Figure 5.

In Figure 5 it will be observed that channels 98 and 100 are uniformly sloped in the range of between $1/4''$ to $1''$ per foot to the horizontal as indicated by the broken line 115 to drain to central channel formation 102 and from the latter through spout 104 into receptacle 106.

In all other material respects the structure of appliance 90 of Figures 4 and 5 corresponds to the appliance 10 of Figures 1 to 3 inclusive and Figure 8.

In Figures 6 and 7 another variation in an appliance embodying the invention is illustrated.

In Figure 6 a single unit base section 116 is illustrated with a peripheral channel 118 inclined as described in relation to the embodiments of Figures 4 and 5 and indicated by the broken line 125 so that greases and juices will run to a spout 120 and into a receptacle 122. In this alternative, however, a slight inclination has been given to the upper surface of central platen 124 in the range of between $1/4''$ to $1''$ per foot to the horizontal, as best seen in Figure 7 to increase the run-off of juices and greases.

The surface of platen 126 of the cover section may likewise be given a slight inclination to correspond with the inclination of the surface of platen 124, as shown in Figure 7, in order that contact between the platen 124 and food will be maintained during the cooking cycle.

Still another embodiment of the invention is illustrated in Figures 9 to 11 inclusive. As compared with the earlier embodiments base section 127 is mounted directly on lower housing 128 and is provided with an upstanding rectangular platen 130 surrounded on three sides only by a narrow channel 132 and presenting in place of the channel along the fourth side an upstanding wall 134 of uniform height.

As in the case of the embodiments of Figure 4 to 7 inclusive the channel 132 is suitably sloped as seen in Figure 10 to increase the run-off of juices and greases to the drain opening or spout 136 into a lower receptacle 138.

Also preferably the surface of platen 130 is uniformly slightly inclined from front to rear to increase the run-off during the cooking cycle.

Cover section 140 is provided with a central platen 142 surrounded by a thin depending wall 144 on three sides only, corresponding in extent and location to the channel 132,

and defining a narrow passage 133 as explained for earlier embodiments.

As seen in Figure 10, along the rear periphery of cover section 140 the depending wall 144 is omitted with the rear surface 146 to cover section 140 being adapted to register with and seal against the forward vertical surface 150 of the upright wall 134 when the base and cover sections are disposed in mating relation as depicted in Figures 10 and 11 and so close the cavity 162 along their juncture.

It will be observed in Figure 9 that housing 152 for the cover section 140 is supported on pivots 154 between the spaced bars 156 and 158 of frame 160 supported for swinging movement about a pivot axis 163, as shown in Figure 9.

The pivot axis 161 of the pivot members 154 is parallel to the axis 163 and is selected such that the combined cover section 140 and housing 152 is in substantial balance and will not swing sharply upon movement from a position in overlying registration with base section 127 upwardly or when moved from an upward position downwardly. With such an arrangement the cover section 152 will swing slightly to accommodate itself to any variance in the thickness of the article of food to be placed within the cavity 162 as illustrated in Figure 10 of the drawings.

It will be understood that in all other respects the structure of the appliance of Figures 9 to 11 inclusive corresponds to the structure of appliance of Figures 1 to 3 inclusive and Figure 8 and that when operated in a similar manner will produce similar results.

Moreover, it will be appreciated that the modifications disclosed in the embodiment of Figures 9 to 11 inclusive can be incorporated into the earlier embodiments if desired and vice versa.

Further, it will be understood that the several embodiments of the invention described and illustrated are intended to be illustrative only and that the invention is not limited thereto.

WHAT I CLAIM IS:—

1. A cooking appliance including two heat-conductive relatively movable mating sections adapted to overlie one another and contoured on opposed surfaces to define a substantially enclosed, internal food receiving cavity opening downwardly through a narrow passage extending peripherally of said cavity into a drainage channel opening to the atmosphere upwardly, peripherally and outwardly of said cavity, wherein one mating section includes a base presenting a heat-conductive platen for supporting thereupon an article of food to be cooked, bounded at least through a portion of its periphery by said drainage channel which is of generally U-shaped cross-section, the surface of said base platen having a contour



such that liquid will drain therefrom into said generally U-shaped drainage channel, and wherein the other mating section includes a cover presenting a heat-conductive platen for contacting from above an article of food to be placed upon said base platen, the cover platen being bounded throughout at least a portion of its periphery by a depending wall, the configuration and extent of the base platen and drainage channel and the cover platen and depending wall, respectively, being such that the platens are disposed in spaced apart relation with a lower portion of said depending wall registered within and in closely spaced relation to the inner surface of said drainage channel adjacent said base platen, thereby to define said narrow passage, and means swingably supporting the cover over the base for movement from the above position to an angled raised position above said base.

2. A cooking appliance as claimed in claim 1 in which the heat-conductive base platen is bounded throughout its periphery by said drainage channel, and said cover presenting said heat-conductive cover platen is bounded throughout its periphery by said depending wall, whereby with said means swingably supporting the cover over the base in overlying mating relation, the internal food receiving cavity is bounded by the cover and base platens and the depending wall formation, with said cavity opening throughout its periphery to the drainage channel through the narrow passage defined by the closely spaced lower portion of said depending wall formation and inner surface of the drainage channel adjacent said base platen.

3. A cooking appliance as claimed in claim 1 in which the heat-conductive base platen is bounded throughout a portion of its periphery by the drainage channel and throughout the remainder of its periphery of an upstanding wall, the heat-conductive cover platen is bounded throughout a portion of its periphery by said depending wall formation and throughout the remainder of its periphery by a bearing surface, the configuration and extent of the cover platen, drainage channel, upstanding wall, base platen, and depending wall formation and bearing surface, being such that in said overlying mating relation, the lower portion of said depending wall is adapted to register within and in closely spaced relation to the inner surface of said drainage channel and said bearing surface is adapted to seal against said upstanding wall.

4. An appliance as claimed in any of claims 1, 2 or 3 in which the upper surface of the base platen is inclined slightly to the horizontal.

5. An appliance as claimed in claim 4 in which the lower surface of the cover platen is inclined slightly to the horizontal and at an

inclination equal to the inclination of the surface of the base platen.

6. An appliance as claimed in any of claims 1 to 5 in which said base is provided with a spout leading outwardly from said channel, whereby the channel may be drained.

7. An appliance as claimed in any of claims 1 to 5 in which the base is provided with a spout leading from the channel outwardly and the channel is slightly inclined to the horizontal to drain towards the spout.

8. An appliance as claimed in any of claims 1 to 7 in which the base is mounted upon a lower support structure to extend thereabove and the cover is mounted within an upper support structure to extend therebelow, and said means supporting the cover over said base comprises means hingedly connecting said lower and upper support structures together such that said cover may be raised from a position in overlying mating parallel relation to the base to a raised position above the base.

9. An appliance as claimed in claim 8 in which the means hingedly connecting the lower and upper support structures together include biasing means urging said base and cover out of overlying mating relation.

10. An appliance as claimed in any of claims 1 to 7 in which the base is mounted upon a lower support structure to extend thereabove and the cover is mounted upon an upper support structure to extend therebelow, said upper support structure including a housing for the cover, a frame, means extending centrally of the housing pivotally mounting said housing to swing within the frame, and means hingedly connecting the frame and the lower support structure together, the axes of the latter two means being parallel and arranged in spaced relation such that said cover may be raised from a position in overlying mating relation to said base to a raised position above said base.

11. An appliance as claimed in any of claims 1 to 10 in which the edges of the platens, drainage channel and depending wall have curved configurations in plan.

12. An appliance as claimed in any of claims 1 to 10 in which the edges of the platens, drainage channel and depending wall have rectilinear configurations in plan.

13. An appliance as claimed in any one of claims 1 to 12 in which said appliance includes more than two heat-conductive relatively movable mating sections, wherein the mating section including said base presents more than one said heat-conductive platen each provided with a drainage channel and arranged in horizontally spaced relation, and wherein other mating sections comprise a plurality of covers each corresponding to said cover first mentioned and each presenting a heat-conductive platen for contacting from above an article



of food to be placed upon each respective base platen.

14. A cooking appliance substantially as hereinbefore described with reference to
5 figures 1 to 3 and 8, or figures 4, 5 and 8, or figures 6 and 7 or figures 9 to 11 and 8 of the accompanying drawings.

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