May 2, 1950 J. L. STERISS 2,506,318

FRANKFURTER GRILLING DEVICE

Filed Oct. 9, 1947 3 Sheets-Sheet 1

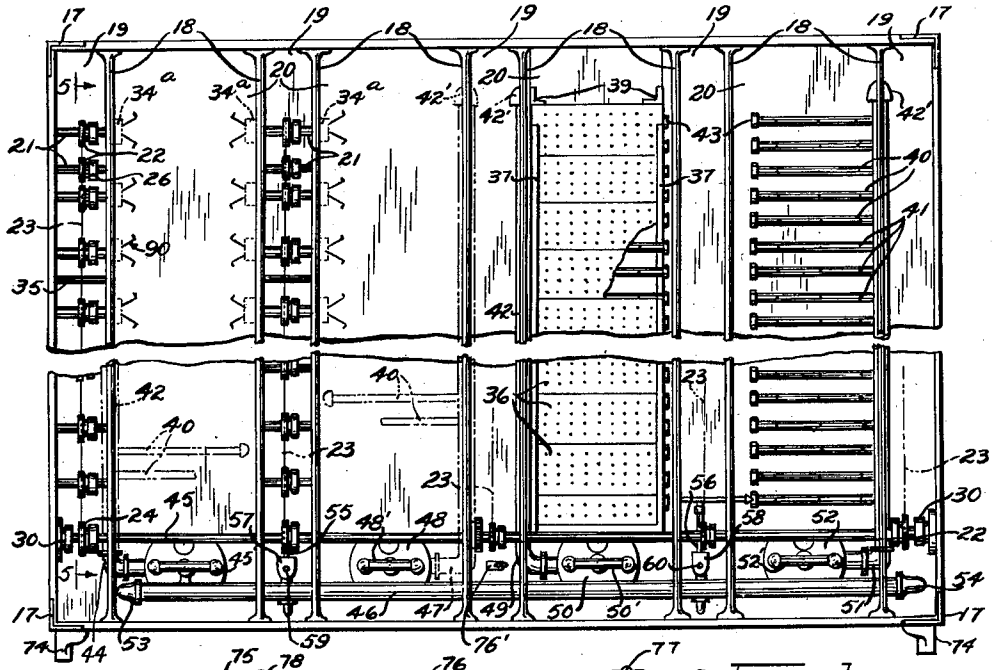


Fig. 1

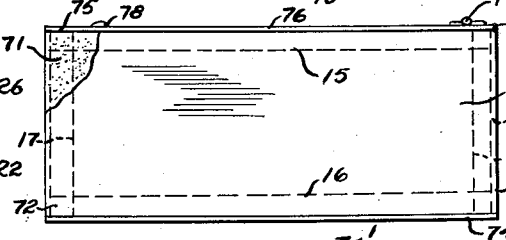


Fig. 6

Fig. 5

Fig. 7

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FRANKFURTER GRILLING DEVICE

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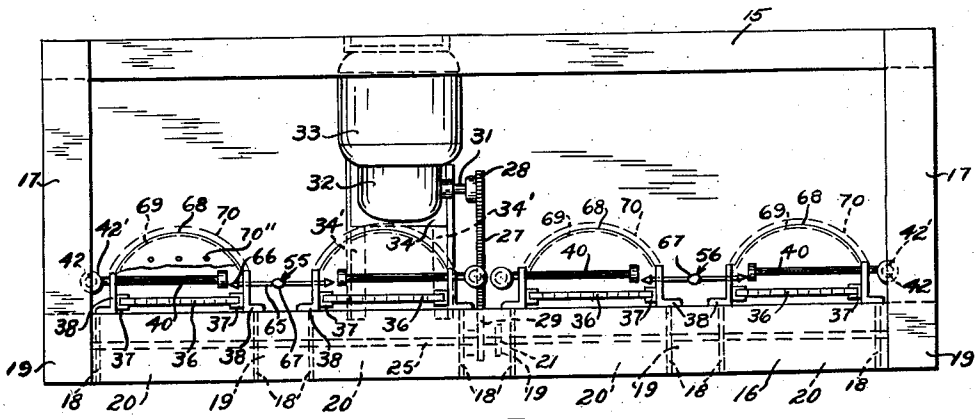


Fig. 2.

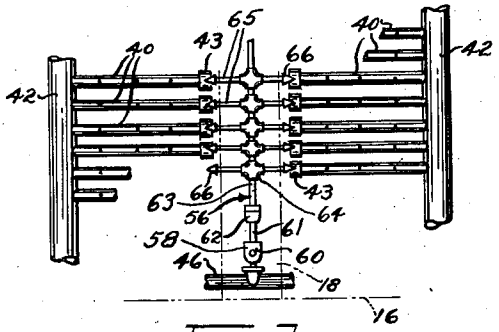


Fig. 3.

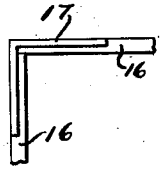


Fig. 4.

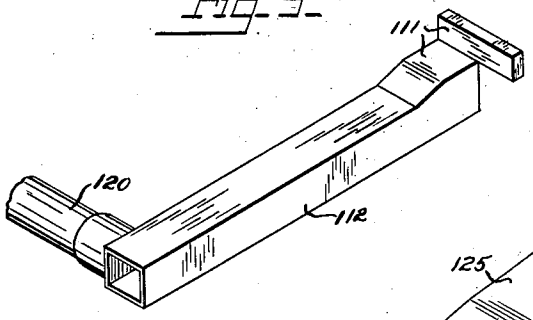


Fig. 13.

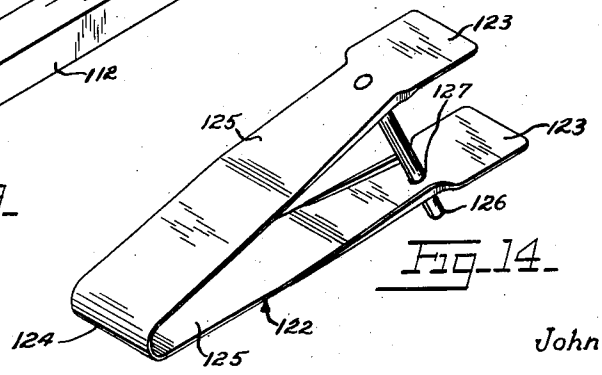


Fig. 14.

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FRANKFURTER GRILLING DEVICE

Filed Oct. 9, 1947 3 Sheets-Sheet 3

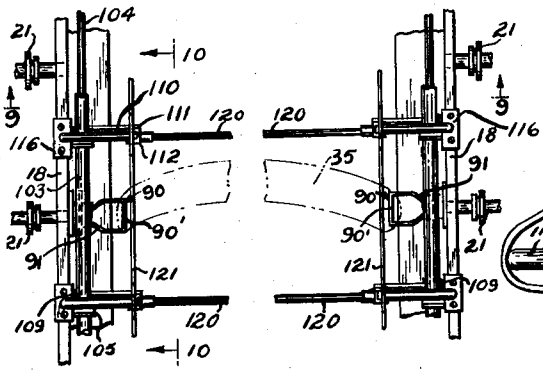


Fig. 8.

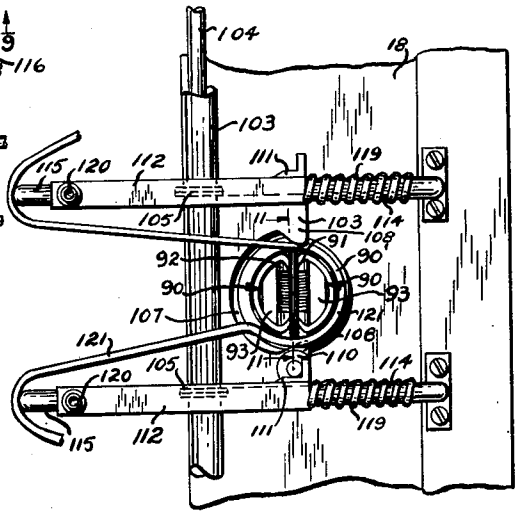


Fig. 10.

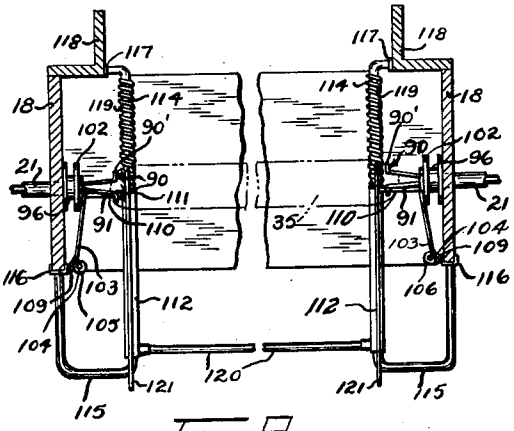


Fig. 9.

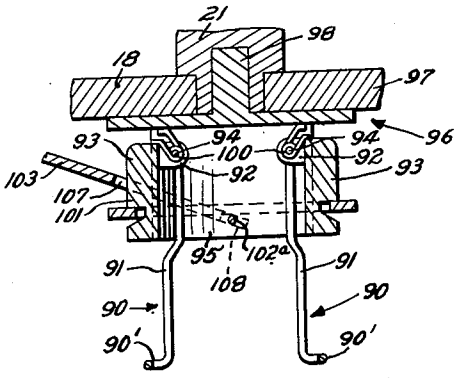


Fig. 12A.

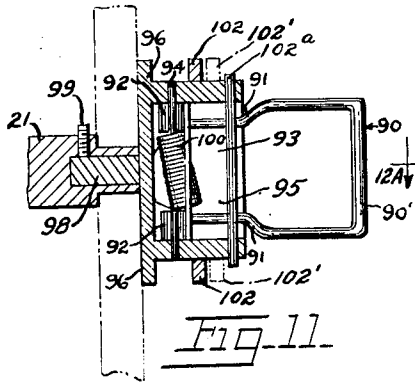


Fig. 11.

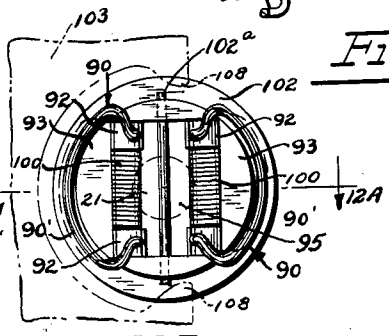


Fig. 12.

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UNITED STATES PATENT OFFICE

2,506,318

FRANKFURTER GRILLING DEVICE

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Application October 9, 1947, Serial No. 778,823

5 Claims. (Cl. 99—391)

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This invention relates to new and useful improvements in apparatus for grilling frankfurters or the like and dispensing the same in public places.

An object is to provide such an apparatus, and one having a large capacity insofar as the number of frankfurters capable of being grilled at one time is concerned. As the invention is preferably carried out in this regard, a number of grilling stations are arranged one above another to provide a column thereof, and a plurality of such columns are present in side by side relation.

Radiant heat is also preferably employed for the grilling, and also preferably such a heating means is provided that one of said means common to all the stations of a column serves that column; each of said heating means being desirably a suitably heated indirect ceramic radiant. To thoroughly grill a frankfurter in a literal sense, the same, while subjected to radiant heat, should be suspended and partake of a circulatory motion about its own axis parallel to the heating means.

Such a suspension and rotation of a frankfurter is made possible by the invention. At each of two points spaced across any grilling station, are shafts or the like each carrying near an end thereof a plurality of fingers for grasping the opposite end portions of a frankfurter. These shafts are continuously rotated in the same direction and at the same velocity. Each plurality of fingers need merely be two thereof, with at least one finger of each plurality rockably mounted on its shaft.

Manually operable means are provided at each station whereby the fingers of each pair may be relatively moved, during continuous rotation of said shafts, as by rocking both fingers, either to spread them to allow insertion of the opposite ends of a frankfurter between the pairs of fingers and to allow removal from said fingers of a grilled frankfurter, or to permit the fingers of both pairs to move toward each other to seize the opposite ends of a frankfurter and so cause the same to commence rotation with said shafts. Preferably the fingers of each pair are normally yieldingly urged to frankfurter grasping relation.

Also provided by the invention is a cradling means at each station for receiving a frankfurter to be grilled and for holding the latter in position until it is seized by said fingers and displaced from contact with the cradling means for unimpeded rotation with said shafts; said cradling means also for receiving a grilled frankfurter

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when released from said fingers and holding the latter until it is removed from the apparatus.

The cradling means is employed for thus holding and receiving a frankfurter only in timed coaction with the use of said manually operable means; that is, to maintain said fingers spread while an ungrilled frankfurter is inserted from the exterior of the apparatus into the cradling means, and while a grilled frankfurter is removed to the exterior of the apparatus from the cradling means.

Other features of the invention, having to do with sanitary excellencies, economy of operation, flexibility in regard to the total number of stations to be in service at any time, speed of grilling, attractively visible grilling, duplicate constructions for grilling compartments or cabinets and like constructions for auxiliary compartments or cabinets whereby these may be used in various combinations to comprise machines of different maximum possible capacities, universal accessibility for servicing any component of the apparatus, and general structural simplicity and operating efficiency, will become clear hereinafter.

For further comprehension of the invention, and of the objects thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is an elevational view showing, partly structurally and partly schematically, various elements of a large-capacity apparatus according to the invention; looking toward the front of the apparatus, and with the front of the casing removed, and with certain duplicated parts also omitted to avoid obscuring the drawing.

Fig. 2 is a top plan view, with the top covering structure omitted, to show the main framing as well as other elements which here would be best illustrated.

Fig. 3 is a fragmentary front elevational view, showing parts of the gas-burner means.

Fig. 4 is an enlarged detail view, showing a corner construction of the main frame.

Fig. 5 is a vertical section, taken on the line 5—5 of Fig. 1, for illustrating a sprocket chain drive.

Fig. 6, drawn on a scale reduced over that of Fig. 2, is a top plan view of the apparatus, partially broken away.

Fig. 7, drawn to the same reduced scale just

mentioned, is an elevational view looking toward the front of the apparatus, for showing certain sheet members employed for partially covering such front.

Fig. 8, on a scale enlarged over that of Fig. 1, is a fragmentary front elevation of a portion of the apparatus at a frankfurter handling and grilling location.

Fig. 9 is a horizontal section, taken substantially on the line 9—9 of Fig. 8.

Fig. 10 is a vertical section, taken substantially on the line 10—10 of Fig. 8.

Fig. 11 is also a vertical section, but one taken on the line 11—11 of Fig. 10.

Fig. 12 is a view showing in full lines the parts seen in Fig. 11, looking toward the right in Fig. 11.

Fig. 12A is a horizontal sectional view taken on the line 12A—12A of Fig. 12.

Fig. 13 is a fragmentary perspective view showing on a somewhat enlarged scale relative to that of Fig. 9, a portion of a square tube forming part of the means shown in Figs. 8–10.

Fig. 14 shows, almost to full size, a hand tool specially devised to facilitate handling a frankfurter for placing the same in and removing it from the grilling apparatus.

Referring to the drawing in detail, the casing for the apparatus as best shown in Fig. 2 includes a rear rectangular frame 15 and a similar front rectangular frame 16. Depthwisely of the casing, at opposite ends of the top and bottom thereof, the two frames are joined by four angle irons 17, all alike, as shown at the top of the casing in Figs. 2 and 4, and as indicated at both the top and bottom of the casing in Fig. 1. These pieces 17 are inset in the horizontal and vertical members of the frames as shown in Fig. 4, the illustration here being in connection with the frame 16 at the upper left corner thereof as said frame is seen from the front of the apparatus.

The front frame 16 has suitably fixed therein (Figs. 1 and 2) eight vertical partitions 18, dividing the interior of the frame into five smaller compartments 19 and four larger compartments 20; these compartments 19 and 20 alternating across the width of the apparatus, so that each larger compartment 20, these for grilling frankfurters and below called the working cabinets, is between two smaller compartments 19, these for containing driving mechanisms for rotating the frankfurter seizing fingers and below called the drive cabinets.

Within each of the drive cabinets 19 are suitably journalled twelve short horizontal shafts 21, one vertically above another, each equally vertically spaced from an adjoining one, and each of said shafts having fixed thereon a sprocket 22; all as shown in the case of the two of said cabinets 19 at the left in Fig. 1. A sprocket chain 23 engages all these sprockets, preferably in the way shown in Fig. 5, and such chain also engages a driving sprocket 24 fixed on a main shaft 25 and further engages two idler sprockets 26. The chain 23 is indicated in Figs. 1 and 3 merely by a single broken line, but said chain is preferably a ladder-type chain as shown in Fig. 2 in connection with a chain 27 coupling a sprocket 26 with a sprocket 29 on the main shaft 25.

The shaft 25 extends the entire width of the apparatus, passing through suitable apertures in the partitions 18, and is journalled at opposite ends in ball-bearings 30 (Fig. 1). The sprocket 28 is on the output shaft 31 of a speed-reduction unit 32 of an electric motor 33 secured to a supporting plate 34 attached to a pair of angle irons 34' also joining the two frames 15 and 16 at their bottoms as shown in Fig. 2.

In each of the four drive cabinets 19 to the right of the left-hand one in Fig. 1, exactly the same parts as just described in connection with Fig. 5 are present, so that on rotation of the main shaft 25, all the twelve shafts in each of all the five driving cabinets 20, and which shafts correspond to the shafts 21 of Fig. 5, rotate in unison and in the same direction.

Each of said shafts at a particular height in one such cabinet 19 is horizontally axially aligned with a particular one of said shafts in each of all the other cabinets 19.

Each of the shafts 21 in the drive cabinet 19 to the left in Fig. 1 at its right hand end carries a frankfurter-end engaging special structure (some of these being merely schematically indicated at 34a in Fig. 1, but being fully shown in Figs. 8–13 later to be described) projected into the adjoining working cabinet 20; while each of the shafts 21, in the next drive cabinet 19 to the right in Fig. 1, at its left hand end carries one of said special structures projected in the last-mentioned cabinet 20 and at its right hand end carries also one of said special structures projected into the next cabinet 20 to the right.

The same arrangement is true across the width of the apparatus, although not shown; in which connection it may be pointed out, as of course will now be understood, that the shafts which correspond to the shafts 21 and which are in the drive cabinet 19 at the extreme right in Fig. 1 carry said special structures only at their left hand ends, so that the working cabinet 20 at the extreme right, like that at the extreme left, in Fig. 1, will have two such horizontally oppositely special structures at each of the twelve vertically spaced grilling locations to be provided in each cabinet 20.

In regard to said special structures, although the delineations 34a thereof in Fig. 1 are applied only to some of the two columns of shafts 21 in the two drive cabinets at the left in that view, said special structures are on all these shafts as well as on the corresponding shafts mentioned in the last paragraph preceding; since each pair of said special structures at the opposite sides of each of the working cabinets 20 is employed in connection with the two opposite ends of a frankfurter 35 (Fig. 8) for gripping of the latter at its opposite ends during rotation thereof for grilling. Twelve frankfurters, therefore, may be grilled simultaneously in each working cabinet 20; or, in other words, with four such working cabinets, as here shown by way of example, forty-eight frankfurters may be simultaneously grilled in the apparatus.

Like the drive cabinet 19 shown in Figs. 1 and 5, the other drive cabinets are braced by three horizontal rods similar to the rods 35 shown in Figs. 1 and 5.

The grilling heat is radiant heat emitted from heat conducting ceramic blocks with cast-in holes, stacks of such blocks being arranged in vertical columns, one column for each cabinet 20, to provide an indirect radiant heat panel at the rear of each of said cabinets. This arrangement is shown in Fig. 1, in the case of the second from the right cabinet 20, and, as to all the four cabinets 20, in Fig. 2.

Said blocks are marked 36, the same being stacked in vertical channel-shaped metallic side frame members 37 carried by angle irons 38 secured at their tops and bottoms to the top and

bottom of the front frame 16 at the rear side thereof. At the top of a panel stack are angled clamps 39, held in place, as by screws or the like, for ready removal, for adjustment for size, and to permit replacement of damaged blocks 36.

A suitable heating means is in the rear of each of the ceramic block panels. Such means may be of the electrical resistance type, or otherwise; but as said means is shown it is of the gas burner type. Then the heating arrangement for each working cabinet 20 is as shown best in connection with the two such cabinets at the right in Fig. 1; and as shown there, when taken in connection with Fig. 3, each such arrangement includes a pilot-light means as best shown in the latter view.

The heating means for each cabinet 20 has gas burners, each of which is a straight horizontal tube 40 having burner holes 41, and all of which are offset from a vertical gas supply pipe 42. These burners, all capped as at 43 at their ends remote from said pipe, are vertically aligned in parallellism with the back of a radiant panel and are uniformly spaced one above another.

As indicated in Fig. 1, the pipe 42 for the first working cabinet to the left is toward the left side of that cabinet, and is connected at its bottom to an elbow 44 from a gas mixing chamber 45 supplied with gas from a main supply pipe 46; the pipe 42 for the next cabinet 20 to the right is toward the right side of that cabinet, and is connected at its bottom to an elbow 47 from a mixing chamber 48 also supplied with gas from the pipe 46; the pipe 42 for the next cabinet 20 to the right is toward the left side of that cabinet, and is connected at its bottom to an elbow 49 from a mixing chamber 50 also supplied with gas from the pipe 46; and the pipe 42 for the last cabinet 20 to the right is toward the right side of that cabinet, and is connected at its bottom to an elbow 51 from a mixing chamber 52 also supplied with gas from the pipe 46. As shown in Fig. 2, and in the case of some of the pipes 42 in Fig. 1, each of the latter is capped at its top as at 42'. As shown in Fig. 1, one end of the main supply pipe 46 is capped as at 53; and its other end extends toward the rear of the apparatus as indicated at 54.

The supply of gas to the mixing chambers 45, 48, 50 and 52 is independently controlled as to each chamber, either for shut off or otherwise by valves particular to each chamber, the operating handles for which valves are marked 45', 48', 50' and 52'.

Connected to the main gas supply pipe or manifold 46 at two points along the same, each such point at the bottom of one of the two outer ones of the three central drive cabinets 19, are two vertical tubular structures 55 or 56, the bottom of each of which is comprised of a pilot-light valve 57 or 58 connected to the pipe 46 for gas feed to the valves. These two tubular structures are only fragmentarily shown in Fig. 1 and each of the valves 57 and 58 has a push-button valve-opening type of actuator 59 or 60.

Said structures 55 and 56 are exactly alike, as indicated in Fig. 2; one of them, the structure 56, being shown fragmentarily but in detail in Fig. 3. Above the valve 58 is a nipple 61, then a coupling 62 to facilitate a nice final connection, then another nipple 63, then a four-way fitting 64, and thereabove further nipples like the nipple 63 in alternation with further four-way fittings 64. Each fitting has offset from each of its two opposite sides, and extended toward the capped end of the burners 40 for the two adjoining working cabinets 20, a small tube 65 terminating in a pilot-light nozzle 66. At the top of the structure 56, at about the level of the uppermost burners 40 in said two cabinets 19, the same is topped by a closing cap as indicated at 67 in Fig. 2.

A sheet metal shield 68 is arranged in the rear of and from top to bottom of the column of burners 40 behind a ceramic panel at the back of each of the four working cabinets 20, as shown in Fig. 2. Each shield 68 is laterally arched as there shown, and is suitably secured along its forward vertical edges to the angle irons 38. The concave side of such shield is coated with a refractory cement, as indicated at 69, and the convex side thereof is asbestos covered as indicated at 70.

These shields are primarily used to contain the heat and should be properly sealed to prevent heat leakage. They should also be partitioned horizontally to compartmentalize them at each burner 40, and faced with asbestos to further pocket the heat and prevent wastage thereof. There should be three small holes 70'' in each partition, directly underneath the gas burner or bit, to permit ignition from a lower pocket to one thereabove.

Referring to Figs. 6 and 7, the top of the apparatus is covered with a stiff asbestos sheet 71, as are the two sides thereof, and over these asbestos walls, sheet metal is secured as indicated at 72.

The entire bottom of the apparatus is covered with sheet metal 73, and at the four corners of such bottom are feet 74, the two front ones secured to the frame 16 and the two rear ones to the frame 15.

The rear of the apparatus is closed by two narrow end panels 75, and a swing door 76 hinged as at 77 and closable by a suitable latch 78; said door being a service door, particularly in regard to the motor 33.

The front of the apparatus is partially closed by metal sheet members or panels as shown in Fig. 7; one of such panels being a top horizontal one 74' extending down to about where the tops of the ceramic panels made up of the blocks 46 would lie were there shown installed in this view in each of the working cabinets 20 the parts shown in the second from the right such cabinet in Fig. 1.

Another of said sheet metal members or panels is a bottom horizontal one 75a, for covering the lower part of the front of the apparatus; the panel 75a having openings as indicated through which protrude the gas valve handles 45', 48', 50' and 52' and the pilot-light push-buttons 59 and 60 and also a toggle-type switch 76' whereby electric current may be supplied to or cut off from the motor 33.

Behind the panel 75a and resting on the bottom 73 are removable drip pans 80 below each of the working cabinets 20.

Between the top and bottom panels 74' and 75a are vertical sheet members or panels 78, one for closing in the front of each drive cabinet 19. Any one or several of the panels 74', 75a and 78 may be removed, to facilitate servicing at a particular point.

As above noted, electrical heating means may be used, as in connection with the ceramic panels including the blocks 36, or otherwise. In that case, all gas lines and parts associated with or served thereby could be eliminated, by substituting the well-known Cutler-Hammer Space Heaters Bulletin #15510, and this without mechanical change-over. With such heating, it would be advisable to mount two heaters behind each

ceramic panel, and by raising one above the other, complete ceramic panel coverage can be obtained. Any standard heat control unit could be used in connection with these heaters, either of the temperature or range type.

Referring now to Figs. 8–13, and to the special structures merely schematically indicated in Fig. 1, at 34a, each such delineation 34a in the full line portion thereof represents a pair of frankfurter-end gripping fingers marked 90 in Figs. 8–13, and each of said delineations in the dot and dash portion thereof is representative of all the parts shown in Fig. 11 as carried on an end of a shaft 21 for rotation therewith additional to said fingers. The fingers 90 are arranged in pivotally mounted pairs for movement toward and away from each other about axes which extend at right angles to the axis of the respective shaft 21.

Each finger is formed of a bent length of wire to provide a skeletal member as shown in Figs. 8, 9, 11 and 12.

Each finger 90 comprises a working end in the form of a lateral and curvilinearly extended stretch 90', for partially girthwisely clasping an end of a frankfurter when it and its companion finger are swung toward each other at their ends having said stretches 90', and a pair of legs 91 which converge away from such stretch.

To permit such rocking of a pair of the fingers 90, to spread them as indicated in Figs. 11 and 12 for receiving or releasing the ends of a frankfurter, or to close them in toward each other as shown in Figs. 8–10 to grasp the ends of a frankfurter, the converging ends of the legs 91 of each finger are secured to spaced bosses 92 formed on rockers 93. Pins 94 span a central lateral cut-out 95 formed across a cylindrical member 96 having a base-flange 97. The pins pass through the bosses 92 and pivotally support the bosses and the related rockers 93. In the rear of the flange 97 of the cylindrical member 96 there is a reduced stem 98 suitably fixed to the associated shaft 21 as by a set-screw 99, as indicated in Fig. 11.

As shown best in Figs. 12 and 12A, the bosses 92 of one rocker 93 face the bosses of the other rocker; and between the two bosses of each rocker is a spring 100 having a coiled portion sleeving the associated pin 94 and having end extensions, see Fig. 12A, one engaging the respective rocker 93 and the other bearing against the adjacent face of the flange 97. The springs 100 are so arranged and are under enough tension to act on the rockers 93 and urge the fingers toward each other to grasp the end of an inserted frankfurter.

Also as best shown in Fig. 12A, the rockers 93 project at their sides remote from their bosses 92 beyond the sides of the cylindrical member 96. Slidable axially of the cylindrical member 96 is a ring 102, normally forced to the dot and dash position shown at 102' in Fig. 11 by the projections 101 of the rockers in response to the springs 100, and there stopped by a cross-rod 102a mounted across the front end of the cylindrical member 96.

In order to move the ring 102 from its dot and dash position 102' in Fig. 11, to spread the adjacent pair of fingers 90, an associated plate 103 is provided, pivoted on a fixed vertical rod 104. In each working cabinet 20, at opposite sides thereof, there is a stack of such plates on such a rod, the various plates alternating with spacing collars 105.

Each such plate 103 is curled along its outer vertical edge at 106 where it takes around its rod 104. Each plate 103, as best shown in Fig. 10, is cut away at 107 opposite its associated cylindrical member 96, but so as to present upper and lower horns 108 for engaging diametrically opposite points on the outer face of the ring 102 therebehind. On each plate 103 is fixed one end of a leaf-spring 109 the other end of which bears against the adjacent partition 18, for normally urging the plate away from the associated ring 102, thereby normally to allow the associated pair of fingers 90 to remain in their closed position.

Offset from each plate 103 is a stud 110, which normally abuts an L-shaped stop 111 secured atop and at an end of a square tube 112 slidable horizontally back and forth between its forward position shown in Figs. 9 and 10 and a rearward position. Each tube 112 sleeves loosely the main length 114 of a bracket 115. Such bracket, shaped as shown best in Fig. 9, is formed by bending a piece of round rod stock; and to the opposite ends of the piece are secured an L-shaped foot-plate 116 attached as by screws to the front edge of the adjacent partition 18, and a flat foot-plate 117 also attached suitably to a vertical angle iron 118 at the rear edge of said partition. Each angle iron 118 is anchored at its upper and lower ends to the rear sides of the upper and lower members of the front main frame 16.

Said tube 112 is normally urged into its forward position, shown in Figs. 9 and 10, by an expansible coil spring 119 on the main length 114 of the bracket 115; and then, as has been pointed out, the fingers 90 are in their closed position.

When, however, the tube 112 is moved inward, the stop 111 on the tube engages the stud 110 on the plate 103 and swings the latter to cause its horns 108 to move the ring 102, against the action of the springs, and open the fingers 90.

In order that one manual operation may open the aligned pairs of fingers 90 at each of the opposite ends of a frankfurter grilling location, the two aligned tubes 112 are rigidly connected at their front ends by a cross rod or bar 120.

Thus, when such a bar 120 opposite any frankfurter grilling location is pushed inward the two tubes 112 are pushed in against their springs 119, thus swinging the two associated plates 103 toward the adjacent rings 102, and so forcing the two pairs of fingers 90 at the opposite ends of said location to open up.

At each end of a frankfurter grilling location, also, a bent wire member 121 is provided. This member is shaped as best shown in Fig. 10, and placed in adjacency to the pair of fingers 90 at its end of said location as best shown in Fig. 8. Each such member 121 at its median portion is formed to incorporate a C-shaped cradle for the end of a frankfurter, this cradle having a mouth facing the front of the apparatus; and from the upper and lower limits of said mouth the member 121 has diverging upper and lower leg portions, said upper leg portion being secured to a forward part of the adjacent bracket 115 for the frankfurter grilling location now being considered, and said lower leg portion being secured to a forward part of the corresponding bracket for the frankfurter grilling location therebelow, as best shown in Figs. 8 and 10.

Operation.—Assume, for example, that in all the forty-eight frankfurter grilling locations in the four working cabinets frankfurters 35 are be-

ing rotated for grilling because they are engaged at their opposite ends by the fingers 90 which are being rotated by the shafts 21.

To remove a grilled frankfurter at any location without stopping the rotation of the fingers 90 it is merely necessary to push in the cross bar 120 at that location. Then that frankfurter will be released by the spreading of its seizing fingers, and will drop into the wire members 121 at that location to rest in the cradles of said members; and, while holding the bar 120 thrust in, the released frankfurter may be removed from said cradles.

To replace said frankfurter with a new one to be grilled at said location, it is merely necessary, while holding the bar 120 pushed in, to insert the new frankfurter into the cradles of the wire members 121 at said location; and thereupon, on releasing said bar 120, the springs 119 will return the same to its normal advanced position, thus freeing the now rotating fingers 90 to close about the ends of the new frankfurter for rotation therewith.

In Fig. 14 is shown a tool, marked as a whole 122, for a dual purpose at any frankfurter grilling location; that is, for removing a grilled frankfurter from the cradles 121 or for replacing an ungrilled frankfurter in said cradles.

The tool 122, a simple and inexpensive one, includes a pair of flat jaws 123 for gripping a frankfurter intermediate its ends. Such jaws are the end portions of a strip of spring steel given a U-bend at 124 to provide a handle portion 125, the upper and lower members of which are resiliently biased to spread the jaws 123 to a normal separation slightly greater than the diameter of the central part of the length of a frankfurter.

The tool 122 also incorporates a short rod 126 anchored at one end to one of the members of the handle portion 125 and extended toward the other of said members and passing therethrough by way of an aperture 127 therein.

In using said tool for removing a grilled frankfurter from any grilling location of the apparatus, the projecting bottom end of the rod 126 is effective to push in the bar 120 at that location, thereby causing the grilled frankfurter to fall into its cradles of the wire members 121, and to hold said bar pushed in, until the jaws 123 have grasped the frankfurter and moved it out of the fingers 90.

In using said tool for inserting a frankfurter to be grilled at any grilling location of the apparatus, the tool is used as just described, except that said frankfurter is in the grasp of the jaws 123 before the tool is used at said location to cause the rod 126 to push in the bar 120 at that location. After the frankfurter is dropped into its cradles in the wire members 121, the jaws 123 are permitted to release their grasp on the frankfurter; but until said jaws are removed from the field of rotation of the frankfurter, the fingers 90 are maintained spread apart and do not grip the ends of the frankfurter, this because the jaws 123 must be withdrawn before the rod 126 is sufficiently withdrawn to allow said fingers to close and grip the ends of the frankfurter.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. An apparatus for grilling frankfurters or the like, comprising a grilling cabinet having a frankfurter grilling station therein, a rotary means at each of two points spaced across said station, means for rotating both said rotary means about substantially aligned axes and in the same direction and at substantially the same velocity, a pair of pivotally mounted fingers mounted on each rotary means for movement between open and closed positions, one pair of fingers facing the other pair thereof, means operable during rotation of said rotary means for closing said fingers to grasp the opposite ends of a frankfurter, means manually operable during rotation of said rotary means for opening said fingers to free the frankfurter from said fingers for removal of the frankfurter from the apparatus during continued rotation of said rotary means, and a receptor means for holding a frankfurter with each of its opposite ends adjacent one of said pair of fingers, said receptor means including a frankfurter supporting means so shaped and arranged that a frankfurter may be rested thereon out of contact with said fingers when the latter are open but in position to be gripped by said fingers when moved to their closed position.

2. An apparatus for grilling frankfurters or the like, comprising a grilling cabinet having a frankfurter grilling station therein, a rotary means at each of two points spaced across said station, means for rotating both said rotary means about substantially aligned axes and in the same direction and at substantially the same velocity, a pair of pivotally mounted fingers mounted on each rotary means for movement between open and closed positions, one pair of fingers facing the other pair thereof, means operable during rotation of said rotary means for closing said fingers to grasp the opposite ends of a frankfurter, means manually operable during rotation of said rotary means for opening said fingers to free the frankfurter from said fingers for removal of the frankfurter from the apparatus during continued rotation of said rotary means, and a receptor means for holding a frankfurter with each of its opposite ends adjacent one of said pair of fingers, said receptor means including a frankfurter supporting means so shaped and arranged that a frankfurter may be rested thereon out of contact with said fingers when the latter are open but in position to be gripped by said fingers when moved to their closed position, said supporting means comprising a pair of spaced cradles located between said pairs of fingers.

3. An apparatus for grilling frankfurters or the like, comprising a grilling cabinet having a frankfurter grilling station therein, a rotary means at each of two points spaced across said station, means for rotating both said rotary means about substantially aligned axes and in the same direction and at substantially the same velocity, a pair of pivotally mounted fingers mounted on each rotary means for movement between open and closed positions, one pair of fingers facing the other pair thereof, means operable during rotation of said rotary means for closing said fingers to grasp the opposite ends of a frankfurter, means manually operable during rotation of said rotary means for opening said fingers to free the frankfurter from said fingers for removal of the frankfurter from the apparatus during continued rotation of said rotary means, a receptor means for

holding a frankfurter with each of its opposite ends adjacent one of said pair of fingers, said receptor means including a frankfurter supporting means so shaped and arranged that a frankfurter may be rested thereon out of contact with said fingers when the latter are open but in position to be gripped by said fingers when moved to closed position, said supporting means including a plurality of elongate members each bent to include a portion constituting a cradle for an end portion of a frankfurter.

4. An apparatus for grilling frankfurters or the like, comprising a cabinet having a frankfurter grilling station therein, a rotary means at each of two points spaced across said station, means for rotating both said rotary means about aligned axes in the same direction and at the same velocity, a pair of opposed fingers pivotally mounted on each of said rotary means for movement between open and closed positions relative to each other, said pairs of fingers being arranged facing each other to grip between them the ends of a frankfurter to be grilled, and means manually operable at will during rotation of said rotary means including a manually movable cross bar and pivotally mounted plates having portions engaged between the opposed fingers of each pair of fingers for moving said fingers to open positions to permit the insertion and removal of a frankfurter.

5. An apparatus for grilling frankfurters or the like, comprising a cabinet having a frankfurter grilling station therein, a rotary means at each of two points spaced across said station, means for rotating both said rotary means about aligned axes in the same direction and at the same velocity, a pair of opposed fingers pivotally mounted on each of said rotary means for movement between open and closed positions relative to each other, said pairs of fingers being arranged facing each other to grip between them the ends of a frankfurter to be grilled, means manually operable at will during rotation of said rotary means including a manually movable cross bar and pivotally mounted plates having portions engaged between the opposed fingers of each pair of fingers for moving said fingers to open positions to permit the insertion anl removal of a frankfurter, and means normally yieldably urging said fingers into a closed position to grip the ends of an inserted frankfurter.

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The following references are of record in the file of this patent:

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