June 14, 1960 R. BARTELS ET AL 2,940,439

PORTABLE GRILL

Filed Sept. 27, 1957

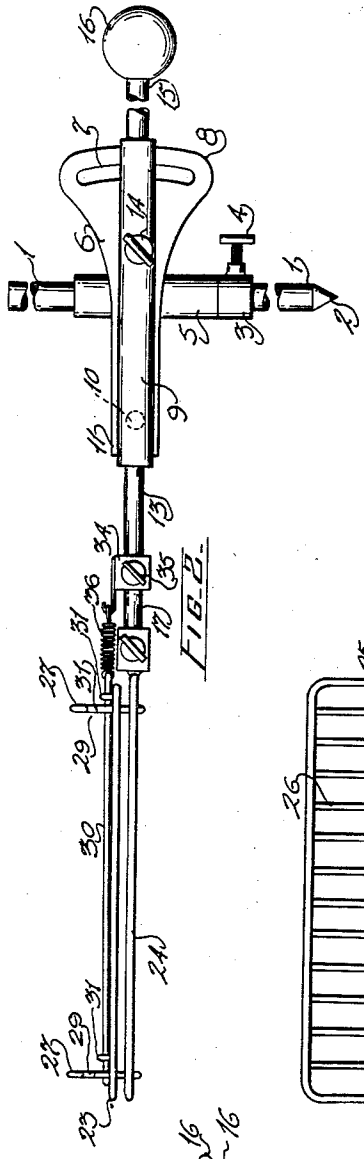


FIG. 2.

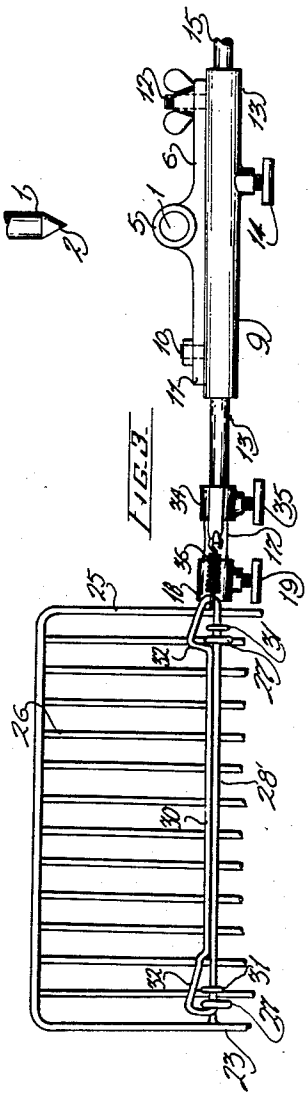


FIG. 3.

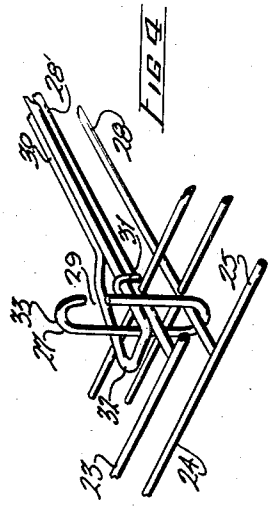


FIG. 4.

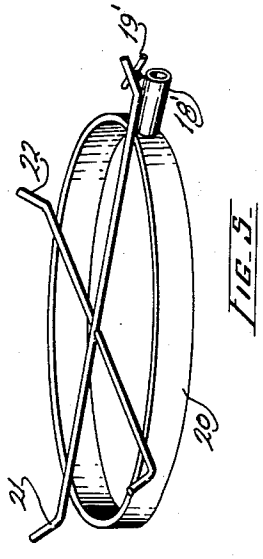


FIG. 5.

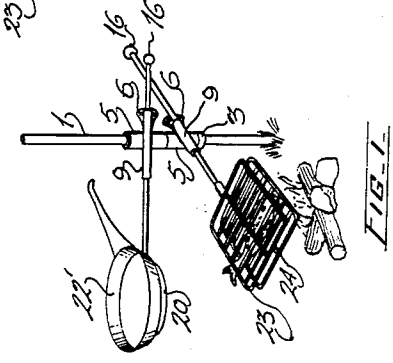


FIG. 1.

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PORTABLE GRILL

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2 Claims. (Cl. 126—30)

Our invention relates to new and useful improvements in portable grills, the principal object and essence of our invention being to provide a device of the character herewithin described which is easily set up upon any terrain and which is completely universal in its operation inasmuch as the grill can be positioned exactly as desired over the source of heat or can be swung out of the way readily and easily.

A further object of our invention is to provide a device of the character herewithin described whereby more than one rack carrying unit can be mounted upon the vertical rod and in which either of the units can be brought over the source of heat as desired.

A still further object of our invention is to provide a device of the character herewithin described which includes a novel rack assembly for use with our grill.

A yet further object of our invention is to provide a device of the character herewithin described which is usually erected and dismantled without the use of tools.

With the foregoing objects in view, and such other objects and advantages as will become apparent to those skilled in the art to which this invention relates as this specification proceeds, our invention consists essentially in the arrangement and construction of parts all as hereinafter more particularly described, reference being had to the accompanying drawings in which:

Figure 1 is a perspective view reduced in size from the other views, of our device in the operating position.

Figure 2 is a fragmentary side elevation of our device.

Figure 3 is a top plan view of Figure 2.

Figure 4 is an enlarged perspective fragmentary view of one end of the rack assembly.

Figure 5 is a fragmentary perspective view of the pan or pot holding element.

In the drawings like characters of reference indicate corresponding parts in the different figures.

Many portable grills have been designed in the past, but they all suffer from various disadvantages. One of these disadvantages is the impossibility of utilizing more than one utensil at the same time whereby either of the utensils can readily and easily be brought into position over a source of heat or removed therefrom. A further disadvantage is the lack of universality insofar as movement is concerned. Another disadvantage is the difficulty in setting up the device without tools.

We have overcome all of these disadvantages by providing a cooker which is easily mounted irrespective of the terrain and which furthermore permits one or more utensils to be used at the same time.

Proceeding therefore to describe our invention in detail, reference should be made to the accompanying drawings in which we have shown a vertical ground engaging cylindrical post 1 sharpened at the lower end 2 thereof to assist in the penetration within the ground. A cylindrical collar 3 is slidable upon this post 1 and is clamped in the desired position by means of clamp bolt 4. A cylindrical bearing tube 5 is adapted to slide over the post 1 and to rest upon the collar 3 so that the bearing

tube 5 can be rotated through 360°. In this connection, a further bearing tube carrying another utensil can be placed above the first bearing tube, both bearing tubes being independently rotatable as illustrated in Figure 1.

A substantially triangular sector plate 6 is secured as by welding to the side of the bearing tube 5, said sector plate having an arcuate slot 7 formed therein adjacent the rear end 8 thereof. A rack carrying tube 9 is secured by means of a pivot 10 adjacent the front end 11 of the plate 6 and is supported for vertical pivotal motion by means of a clamp bolt assembly 12 extending from the rear end 13 of the tube and through the arcuate slot 7 so that the tube can be pivoted vertically within the bounds of the slot 7 and clamped in the desired position.

A rack carrying rod 13 is bearably supported by means of the tube 9 and is capable of rotational movement within the tube as well as endwise movement therethrough, clamp bolt 14 within the wall of tube 9 clamping the rod in the desired radial and endwise position. The rear end 15 of the rod extends rearwardly of the tube 9 and terminates in a cylindrical ball 16 for ease of manipulation.

Figure 5 shows a saucepan or other pan supporting component adapted to be detachably secured upon the front end 17 of the rod 13. This component comprises a short sleeve 18' adapted to engage the end 17 of the rod 13, clamp screw 19' securing same in position. A cylindrical ring 20 supports a cruci-form wire frame 21 which may be secured thereto by welding and the pan or other utensil 22' rests upon the frame 21, the upturned ends 22 thereof preventing same from inadvertent displacement.

Figures 2, 3 and 4 show our rack or grill component which consists of an upper rack 23 and a lower rack 24. Both racks are formed with a bounding frame 25 and a plurality of transverse frame members 26. A pair of links 27 are secured by soldering or welding to a central longitudinal wire 28 on the lower rack 24 and extend upwardly therefrom, said links being split as at 29 adjacent the upper end thereof. The upper rack includes an elongated sliding clip 30 adapted to slide within cleats 31 secured to a corresponding longitudinal wire 28', this clip being provided with closed wire loops 32 upon each end thereof. When in the position shown in Figures 2, 3 and 4, the upper and lower racks are linked together by means of this clip engaging the split links. However, when it is desired to separate the upper rack from the lower rack, the clip is rotated through 90° at the same time as the upper rack is raised so that the loops 32 clear the upper ends 33 of the links 27 thus enabling the longitudinal wire 28' to pass through the split 29 within the links thus freeing the upper rack from the lower.

In order to prevent inadvertent displacement of the upper rack, we have provided a further sleeve 34 upon rod 13 clamped in position by means of clamp screw 35. A tension spring 36 extends between this sleeve 34 and the loop 32 of the clip 30 thus maintaining the clip firmly against the links.

From the foregoing, it will be appreciated that we have provided a grill unit in which more than one utensil can be used at the same time and in which each utensil is freely swingable in a horizontal plane through 360°. Furthermore, each utensil mounting permits longitudinal adjustment thereof by the sliding of rod 13 within tube 9, rotation thereof by the same agency, and pivotal adjustment thereof to permit raising or lowering of utensils with relation to the source of heat all controlled by the operator grasping the ball 16 and manipulating the clamping screws as desired.

Furthermore, it will be appreciated that the entire device can readily be erected or dismantled without the use of tools, rapidly and easily.

Since various modifications can be made in our invention as hereinabove described, and many apparently widely different embodiments of same made within the spirit and scope of the claims without departing from such spirit and scope, it is intended that all matter contained in the accompanying specification shall be interpreted as illustrative only and not in a limiting sense.

What we claim as our invention is:

1. In a portable grill, the combination of a vertical post having a pointed lower end adapted for insertion in the ground, a collar slidable on said post, a clamping screw provided in said collar and engageable with the post for locking the collar in a selected position thereon, a bearing tube slidably and rotatably positioned on the post above and in abutment with said collar, a vertically disposed and horizontally elongated plate secured to said bearing tube, a horizontal pivot element provided on one end portion of said plate, the other end portion of the plate being provided with an arcuate slot concentric with said pivot element, a second bearing tube juxtaposed to said plate and having one end portion thereof connected to said pivot element whereby the second tube may be swung in a vertical plane, clamping means provided on the other end portion of said second tube, said clamping means extending through said arcuate slot and being engageable with said plate for locking the second tube in a selected position relative to the plate, a rod slidable

and rotatable in said second tube and projecting at both ends therefrom, a clamping screw provided in said second tube and engageable with said rod for locking the same in a selected position relative to the second tube, a handle provided at one end of said rod, and a grill member removably mounted on the other end of the rod.

2. The device as defined in claim 1 together with a tubular sleeve secured to said grill member and removably receiving said other end of said rod therein, and a clamping screw provided in said sleeve and engageable with said rod whereby to removably mount said grill member on the rod.

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