

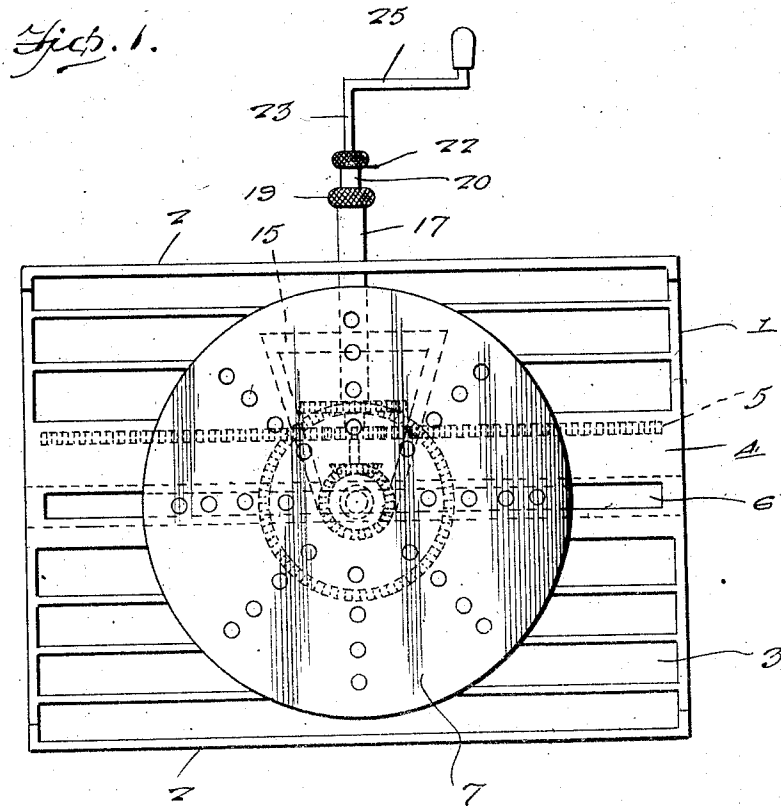
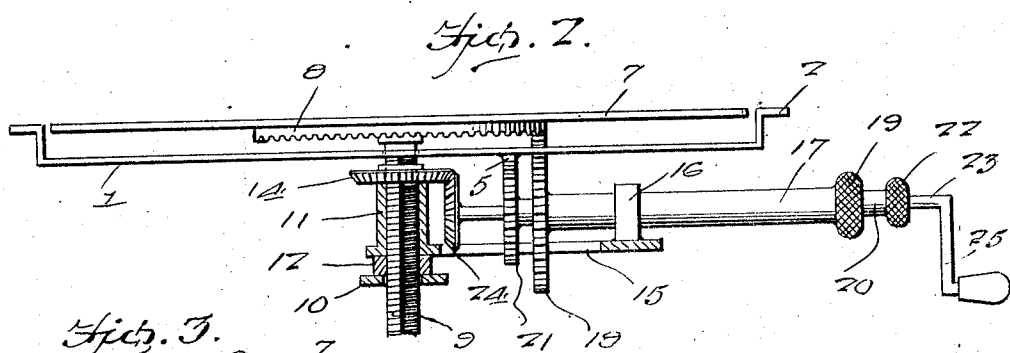
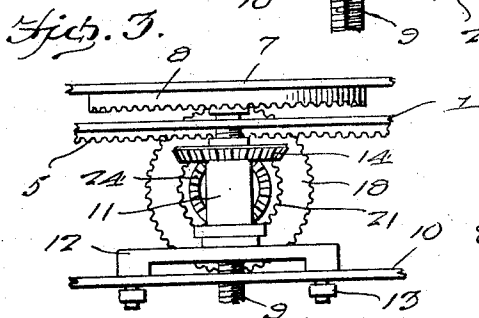
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BAKE PAN SUPPORTING DEVICE

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FREDRICK JAMES, OF PASADENA, CALIFORNIA.

BAKE-PAN-SUPPORTING DEVICE.

Application filed December 26, 1924. Serial No. 758,222.

To all whom it may concern:

Be it known that I, FREDRICK JAMES, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Bake-Pan-Supporting Devices, of which the following is a specification.

This invention relates to a highly novel means for supporting a bake pan on the shelf of a baking oven, in such a manner as to permit the bake pan to be moved in various positions on the shelf, while in the oven, so that the fingers or hands of a person will not come in contact with the bake pan, in order to move the same.

Another important object of the invention is to provide a device of the above mentioned character, wherein means is provided for raising and lowering the bake pan, so that the same may be moved toward or away from the fire, as may be desired.

A further object of the invention is to provide a device of the above mentioned character, wherein means is provided for moving the bake pan forwardly or rearwardly on the shelf in the bake oven, so that access to the pan may be had, in order to facilitate the removal of the same, from the oven, whenever desired.

A further object is to provide a device of the above mentioned character, which is simple in construction, inexpensive, strong and durable, and further well adapted for the purposes for which it is designated.

Other objects and advantages of this invention will become apparent during the course of the following description.

In the accompanying drawing, forming a part of this specification, and in which like numerals designate like parts throughout the same:

Figure 1 is a top plan view of a device embodying my invention, showing the same associated with a bake oven shelf.

Figure 2 is an end elevation, and

Figure 3 is a fragmentary side elevation.

In the drawing, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates a shelf, which is provided at its

opposite side with the flanges 2, whereby the shelf is adapted to be slidably supported in a bake oven, in a manner well known in the art. The shelf 1 is provided with the usual longitudinally extending slots or cut out portions 3, and the intermediate portion 4 of the shelf is provided on its bottom face with the rack teeth 5. The purpose of the rack teeth will hereinafter be more fully described. A longitudinally extending slot 6 is also formed in the intermediate portion 4 of the shelf 1, as is clearly illustrated in Figure 1.

Cooperating with the shelf 1 is a bake pan supporting plate 7. The plate 7 is substantially circular in design, and is formed of any suitable material, preferably of cast iron, and is provided with a series of spaced openings. A ring gear 8 is carried by the bottom face of the plate 7. An elongated screw threaded shaft 9 is swivelled at its upper end to the bottom of the plate 7 at the center thereof, and the same extends downwardly through the slot 6, formed in the intermediate portion 4 of the shelf 1. The screw threaded shaft 9 is further adapted to extend through the strip 10, which extends longitudinally of the shelf, and has its ends extending upwardly and secured to the respective ends of the shelf. The strip 10 is provided with a longitudinal slot, which is adapted to register with the slot 6, provided in the intermediate portion 4 of the shelf 1, so that the shaft 9 may move freely in either direction in the slot. A bearing 11 is provided for the threaded shaft 9, and is supported in position, by means of the bracket 12, which, in turn, is secured to the strip 10, as at 13.

A bevelled gear 14 is threaded on the threaded shaft 9, and is supported on the upper end of the bearing 11, as clearly illustrated in Figures 2 and 3. Associated with the bearing 11 is the bracket 15, the same comprising a substantially triangular shaped frame, such as is shown in the dotted lines, with reference more particularly to Figure 1. A bearing 16 is provided on the outer end of the bracket and journaled in the bearing is the tubular outer shaft 17. A gear 18 is formed on the inner end of the tubular

outer shaft 17, and is adapted to extend through one of the cut out portions 3 of the shelf 1 adjacent the intermediate portion 14, whereby the gear 18 will be in engagement
5 with the ring gear 8, carried by the bottom face of the plate 7. The outer end of the tubular outer shaft 17 is provided with a knurled knob 19, which forms a handle whereby the shaft 17 may be rotated.

10 A tubular inner shaft 20 is disposed within the tubular outer shaft 17, and is of greater length than the outer shaft 17, as clearly illustrated in Figure 2. A gear 21 is formed on the inner end of the tubular
15 inner shaft 20, for engagement with the rack teeth 5, and the outer end of the shaft 20 has formed thereon the knurled handle 22, for facilitating the rotation of the tubular inner shaft.

20 Extending through the tubular inner shaft 20 is the smaller shaft 23. The inner end of the shaft 23 is disposed beyond the inner end of the tubular inner shaft 20, and carries thereon the bevelled gear 24, which
25 meshes with the bevelled gear 14. A crank handle 25 is formed on the outer end of the shaft 23, for rotating the same. The outer ends of the shafts are adapted to extend through the outer sides of the bake oven, so
30 that access to the same may be easily had.

A bake pan containing the food to be baked is placed on the supporting plate 7, and for the purpose of moving the plate 7 with the bake pan supported thereon, toward
35 or away from the fire in the oven, the handle 25 is rotated, causing the rotation of the shaft 23, and the bevel gears 24 and 14 respectively. The rotation of the bevel gear 14 will cause the vertical movement of the
40 shaft 9, it being understood of course, that the same is provided with a suitable longitudinal slot for receiving a key carried by the member 12, so that the shaft will not rotate, but will move vertically through
45 the strip 10 and the shelf 1. When it is desired to rotate the pan supporting plate 7, so that the pan is caused to be moved in different positions on the shelf, so that the food may be thoroughly baked, the knob 19 is
50 rotated, causing the rotation of the tubular outer shaft, and as a result, causing the rotation of the gear 18 and the ring gear 8, whereby the plate 7 will rotate, with respect to the shelf 1. For the purpose of sliding
55 the plate longitudinally on the shelf 1, the knob 22 is turned, whereupon the tubular inner shaft 20 will rotate, and the gear 21 carried by the inner end of the tubular inner shaft 20 will engage the rack teeth 5 and the
60 plate 7, together with the threaded shaft 9, and the other parts associated therewith will slide forwardly or rearwardly on the shelf 1, depending upon the direction in which the knob 22 is turned. This will facilitate the
65 moving of the plate 7, together with the bake

pan supported thereon, to the front of the bake oven whereby the bake pan may be readily removed from or permit a bake pan to be placed on the plate 7.

It will thus be seen from the foregoing
70 description, that my novel means has been provided for supporting a bake pan in a bake oven, in such a manner as to enable the bake pan to be rotated at various intervals,
75 whereby the food will not be burned and will furthermore be permitted to thoroughly bake through. Furthermore, the handling of the bake pan with the fingers as is now commonly practiced, when the bake pan is in the oven will be obviated, thus preventing any
80 danger of a person burning their fingers or hands.

While I have shown the preferred embodiment of my invention, it is to be understood that various changes in the size, shape, and
85 arrangement of parts, may be resorted to, without departing from the spirit of the invention and the scope of the appended claims.

Having thus described the invention, what
90 I claim is:

1. In combination with a shelf for a bake oven, of a bake pan supporting plate associated therewith, means for rotating the
95 plate, and additional means for sliding the plate on the shelf.

2. In combination with a shelf for a bake oven, of a bake pan supporting plate associated therewith, a shaft extending from the
100 bottom of the plate, through a slot provided in the shelf, rack teeth on the bottom of the shelf and disposed parallel to said slot, a shaft supported below said shelf, and a gear on the inner end of said shaft adapted for engagement with said rack teeth whereby
105 the plate is adapted for slidable movement on said shelf.

3. In combination with a shelf for a bake oven, of a bake pan supporting plate associated therewith, a shaft extending vertically
110 from the bottom of the plate, through a slot provided in the shelf, rack teeth on the bottom of the shelf and disposed parallel to said slot, a shaft supported horizontally below said shelf, a gear on the inner end of
115 said last mentioned shaft adapted for engagement with said rack teeth whereby the plate is adapted for slidable movement on said shelf, and additional means cooperating with said vertical shaft for vertically adjusting the plate with respect to the shelf.

4. In combination with a shelf for a bake oven, of a bake pan supporting plate associated therewith, a vertical shaft extending
120 from the bottom of the plate through a slot provided in the shelf, rack teeth on the bottom of the shelf and disposed parallel to said slot, a horizontal shaft supported below said shelf, a gear on the inner end of the
125 horizontal shaft adapted for engagement

with the rack teeth whereby the plate is adapted for slidable movement on said shelf, and additional means cooperating with said first mentioned shaft for vertically adjusting the plate with respect to the shelf, said
5 means including a bevel gear threaded on the vertical shaft, said vertical shaft being

threaded throughout its entire length, means for preventing the rotation of the shaft carried by the plate, and means for facilitating the rotation of said beveled gear. 10

In testimony whereof I affix my signature.

FREDRICK JAMES.