

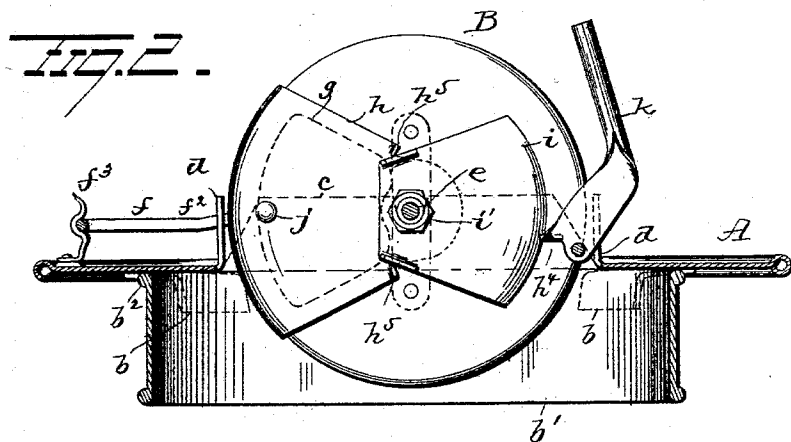
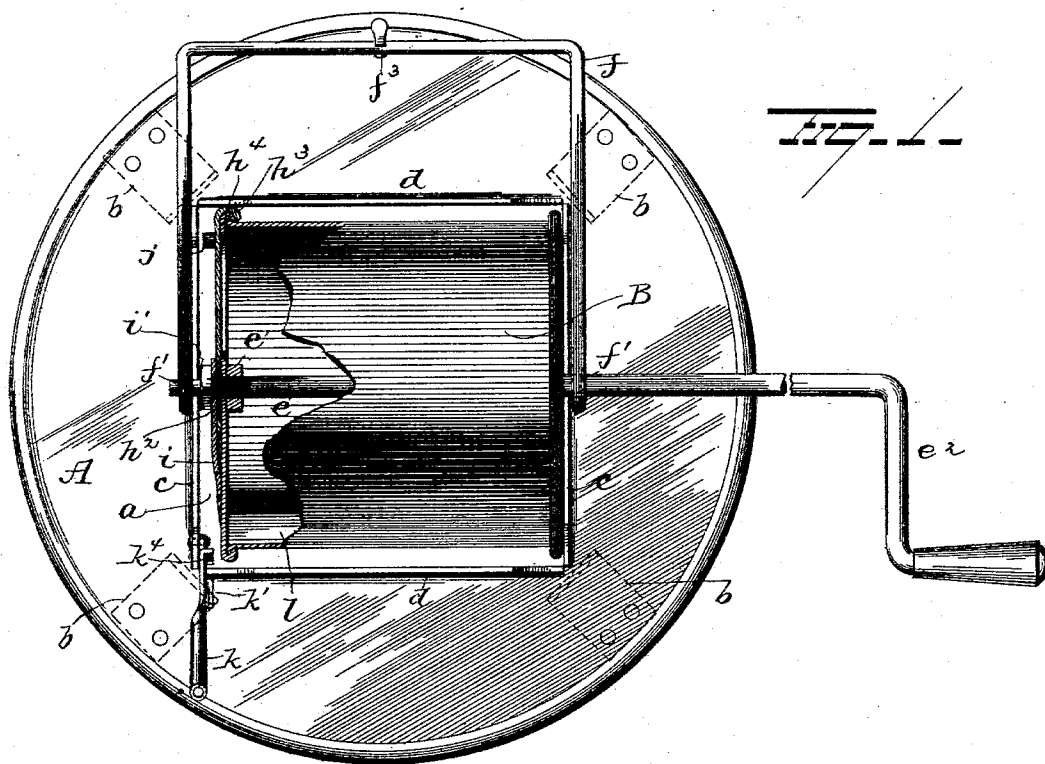
(No Model.)

2 Sheets—Sheet 1.

A. F. TEIGEN.
COFFEE ROASTER.

No. 548,405.

Patented Oct. 22, 1895.



Witnesses
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Inventor
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(No Model.)

2 Sheets—Sheet 2.

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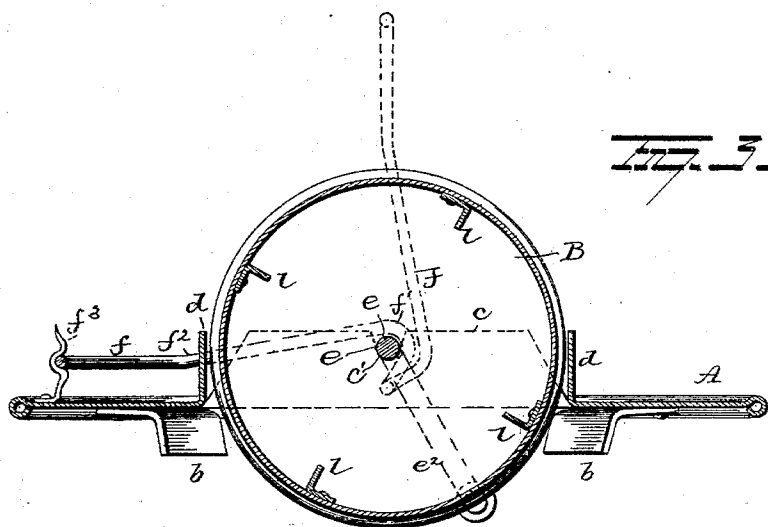
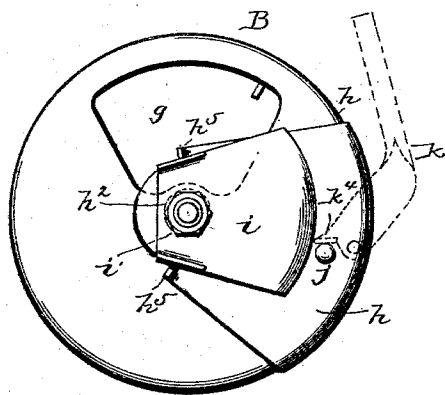


Fig. 4



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UNITED STATES PATENT OFFICE.

AUSTIN F. TEIGEN, OF HAGAN, MINNESOTA.

COFFEE-ROASTER.

SPECIFICATION forming part of Letters Patent No. 548,405, dated October 22, 1895.

Application filed April 1, 1895. Serial No. 544,075. (No model.)

To all whom it may concern:

Be it known that I, AUSTIN F. TEIGEN, a resident of Hagan, in the county of Chippewa and State of Minnesota, have invented certain new and useful Improvements in Roasters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in roasters, and more particularly to such as are adapted for domestic use in roasting coffee or peanuts, popping corn, or drying malt, the object of the invention being to produce a roaster which shall be simple in construction, durable, easy, and cheap to manufacture, adaptable to any stove by the use of which the material being treated will be prevented from becoming overheated and burned, which can be operated by unskilled persons, and which shall be effectual in every respect in the performance of its functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of my improved roaster. Fig. 2 is an end view partly in section. Fig. 3 is a sectional view. Fig. 4 is a detail view.

A represents a plate or frame having an angular opening *a* for the accommodation of a drum or cylinder B, said plate or frame being intended to rest on the top of a stove over the opening therein and to prevent its displacement. It is provided on its under side with a series of legs *b*, adapted to project into the opening in the stove and bear against the wall thereof.

When the device is to be used on a gasoline-stove, a detachable ring *b'* will be attached to the under side of the plate or frame and held in place by the engagement of a flange *b²* thereon with the legs *b*. When the ring *b'* is to be removed, it will be slightly bent to disengage it from the legs *b*. In the drawings I have shown the device as adapted for use over a round hole in the stove; but it is evident that the device may be made larger and

elongated in form to fit an elongated opening in the stove-top.

A series of flanges *c c d d* are bent up from the plate or frame A (or these flanges may be riveted to the plate or frame, if desired) and serve to brace said plate or frame. The diametrically-opposite flanges *c c* are made with notches *c'*, which form bearings for a shaft *e*, passing through the cylinder or drum B. One end of the shaft *e* is screw-threaded and passes through a similarly-threaded perforation in a plate or block *e'*, secured to the inner face of one end of the drum, and the other end of the shaft extends a distance from the drum sufficient to clear the edge of the stove and is made with a crank arm *e²*, by which to rotate the drum or cylinder. The ends of a yoke *f* are bent hook-shaped, and the free extremities of the arms of said yoke are pivotally connected with the flanges *c c* immediately under and in line with the bearings of the shaft *e* on said flanges. In the normal position of the yoke its arms rest at *f'* on the shaft and the yoke is disposed in practically a horizontal position, so as to retain the shaft and cylinder in place while the device is being operated. The arms of the yoke are bent slightly upward at *f²*, so as to prevent the cross-bar of the yoke from resting on the plate or frame A, but permitting it to rest on a knob or catch *f³* on said plate or frame. The yoke *f* may also be used as a handle when it is desired to move the device to and from the stove.

One end of the drum or cylinder is made with an opening *g*, through which the material to be treated can be inserted or discharged. This opening will be normally closed by means of a gate or cover *h*, having an opening near its inner end for the reception of a washer *h²*, on which it can turn, said washer being located on the shaft *e*, and the outer edge of said gate or cover is made with a lip *h³*, adapted to overlap a flange *h⁴* on the end of the drum or cylinder.

A spring locking-plate *i* is placed on the shaft *e* and retained in place by means of a nut *i'*, one end of said plate resting on the gate or cover *h* and washer *h²* and the other end or edge resting on the end of the drum or cylinder, so as to be normally in line with

lugs or stops h^5 , projecting from the gate, and thus retain the latter in its normal position. Where the stops h^5 engage the edge of the lock-plate i , the latter is bent outwardly slightly, so that when lateral pressure is applied to the gate the stops will be permitted to pass under said plate against the resilience offered by the latter. The gate or cover h is also provided with a knob or button j .

A lever k is pivotally connected to one of the flanges c and lies normally parallel with the gate or cover h . The lever k is made wide and flat at its pivoted end and is provided with a flange k' , which normally rests on the plate or frame A and sustains said lever normally in the position shown in Fig. 1. The lever k is also provided with a projection k^4 , which when the lever is turned to a horizontal position, as indicated by dotted lines in Fig. 4, will be disposed in the path of the knob or button j on the gate or cover h . When the lever k shall have been turned to the position just described and the drum rotated forwardly, the knob or button j will engage the projection k^4 on said lever and prevent the further rotation of said gate or cover with the drum or cylinder, and thus the gate will be opened automatically without the necessity of removing the drum or cylinder from the frame and without removing the frame from the stove. While the lever k is in the horizontal position above described a backward rotation of the drum or cylinder will cause the button j to engage the other side of the projection k^4 (said button having previously been permitted to pass said projection) and cause the gate or cover to be closed. The lever k will then be moved to its normal position, as shown in Fig. 1, and the rotation of the drum or cylinder will be continued until the roasting of its contents shall have been completed.

On the interior of the cylinder or drum B a series of longitudinal ribs l are secured. During the rotation of the drum or cylinder the contents thereof will be lifted and then dropped, thus keeping the material under treatment properly agitated and prevented from burning, the ribs preventing any of the material from remaining at the hottest part of the drum a sufficient length of time to become injured by an excess of heat.

My improvements are very simple in construction, cheap to manufacture, and are effectual in all respects in the performance of their functions.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a roaster, the combination with a frame and a revoluble cylinder or drum mounted therein and adapted to contain material to be roasted, of a ring removably attached to said frame, whereby to adapt the latter to a gasoline stove, substantially as set forth.

2. In a roaster, the combination with a

frame, of a drum revolubly mounted in said frame and having an opening in one end, a gate normally closing said opening, and means adapted to be set for opening and closing said gate without removing the drum from the frame, substantially as set forth.

3. In a roaster, the combination with a revoluble drum having a gate or cover, of means adapted to be set for opening and closing said gate or cover, substantially as set forth.

4. In a roaster, the combination with a frame and a revoluble drum having an opening in one end, of a gate or cover adapted to normally close said opening, a lock plate to retain the gate or cover normally closed and means for opening and closing said gate or cover against the resistance of the lock plate, substantially as set forth.

5. In a roaster, the combination with a frame and a revoluble cylinder having an opening in one end, of a pivoted gate adapted to normally close said opening, a lip on said gate to receive a flange on the drum, a lock plate to retain the gate normally closed and means for moving said gate, substantially as set forth.

6. In a roaster, the combination with a frame and a revoluble drum, having an opening in one end, of a pivoted gate adapted to normally close said opening, stops projecting from said gate, a spring locking plate adapted to be engaged by said stops, and means for moving the gate against the resilience offered by the locking plate and the engagement of the stops therewith, substantially as set forth.

7. In a roaster, the combination with a frame, a shaft mounted therein, and a drum having an opening, secured to said shaft and adapted to rotate therewith, of a washer on said shaft adjacent to one end of the drum, a gate mounted on said washer and adapted to normally close the opening in the drum, stops projecting from said gate, a locking plate mounted on said shaft, said locking plate bearing at one edge on the gate and washer and at the other edge on the drum, and means for turning said gate on its fulcrum, substantially as set forth.

8. In a roaster, the combination with a frame and a revoluble drum mounted therein and having an opening in one end, of a gate adapted to normally close said opening, means for retaining the gate normally closed, a button on the gate, a pivoted arm or lever and a projection on the arm or lever adapted to be disposed in the path of said button, substantially as and for the purpose set forth.

9. In a roaster, the combination with a frame, and a revoluble drum mounted therein, of a yoke pivotally connected to the frame below and in line with the bearings on the drum, the arms of said yoke normally extending over the journals of said drum, substantially as set forth.

10. In a roaster, the combination with a frame and a revoluble drum mounted therein, of a yoke bent hook-shaped at its ends and piv-

otally connected to the frame below the bear-
ings of the journals of the drum and means
for preventing the free end of the yoke from
resting on the frame, the arms of said yoke
5 being adapted to extend over the journals of
the drum and prevent the displacement of the
latter, substantially as set forth.

11. In a roaster, the combination with a
plate or frame, flanges thereon, a drum and a
10 shaft secured to the drum and mounted in said
flanges, of a shaft mounted in said flanges, a
drum secured to said shaft, a yoke bent hook-
shaped at its free ends and pivotally con-

nected to said flanges under the bearings of
the shaft therein, the arms of said yoke ex- 15
tending over the shaft and bent upwardly be-
tween its ends, and a device on the plate or
frame to receive the cross bar of said yoke,
substantially as set forth.

In testimony whereof I have signed this 20
specification in the presence of two subscrib-
ing witnesses.

AUSTIN F. TEIGEN.

Witnesses:

ELIAS JACOBSAN,
OLE WIFSUNNOR.