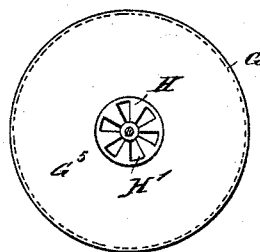
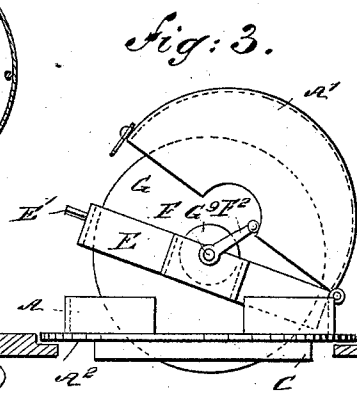
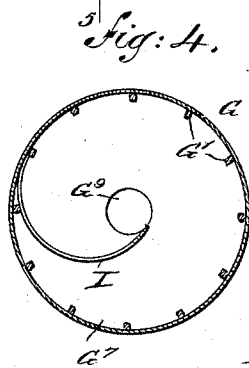
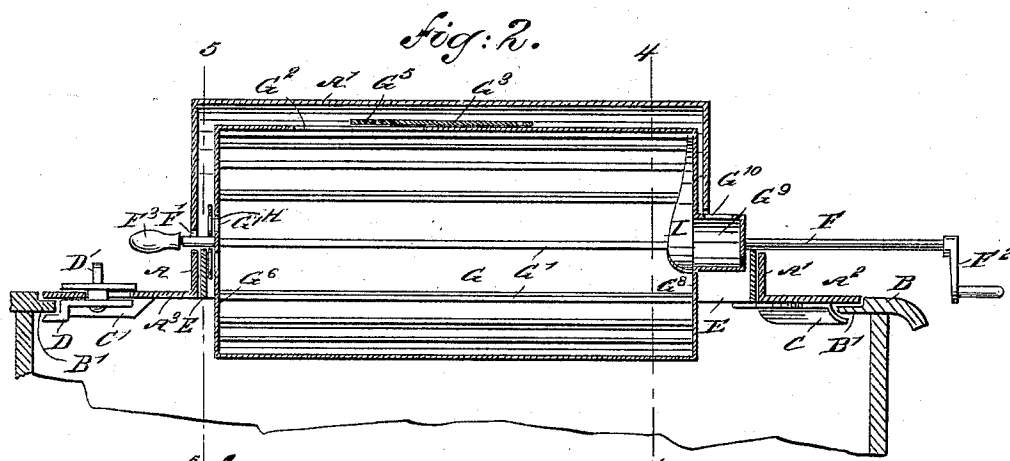
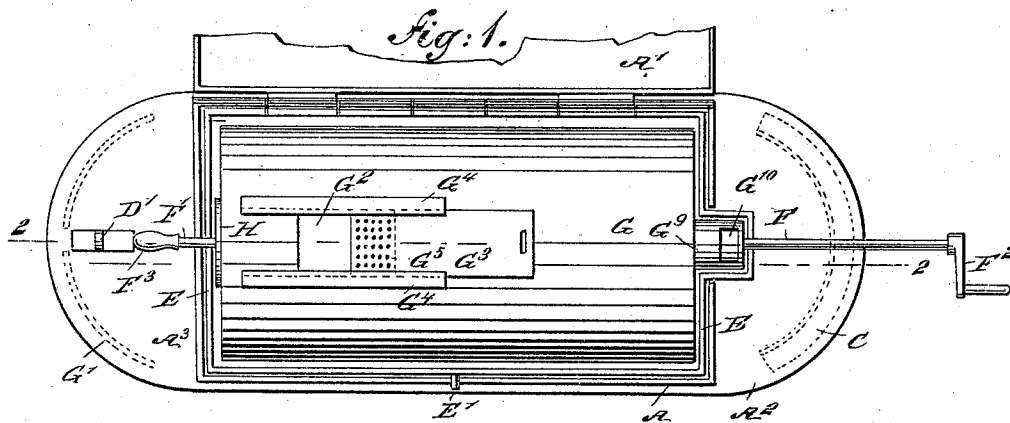


(No Model.)

N. H. McAUSLAN.
ROASTER.

No. 537,704.

Patented Apr. 16, 1895.



WITNESSES:

Chas. Kida
Geo. J. Foster

INVENTOR

N. H. McAuslan

BY

Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

NORVAL H. MCAUSLAN, OF SUTTER CITY, CALIFORNIA.

ROASTER.

SPECIFICATION forming part of Letters Patent No. 537,704, dated April 16, 1895.

Application filed November 15, 1894. Serial No. 528,938. (No model.)

To all whom it may concern:

Be it known that I, NORVAL H. MCAUSLAN, of Sutter City, in the county of Sutter and State of California, have invented a new and Improved Roaster, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved roaster, which is simple and durable in construction and more especially designed for use on ordinary stoves and ranges, for roasting coffee and other articles, and arranged in such a manner that the coffee or other article can be readily sampled during the process of roasting, without stopping the machine; and is also arranged to carry the fumes arising from the roaster, into the stove or range, instead of permitting the fumes to escape into the room.

The invention consists principally of an exterior casing adapted to be placed on the stove and opening into the same at its bottom, and a drum provided with a damper adapted to open into the said exterior casing to cause the fumes to pass through the casing into the stove.

The invention further consists of an automatic sampling device arranged on the roaster.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the improvement, with the cover in an open position. Fig. 2 is a longitudinal section of the improvement, on the line 2—2 of Fig. 1. Fig. 3 is an end view of the improvement. Fig. 4 is a cross section of the drum, on the line 4—4 of Fig. 2; and Fig. 5 is a similar view of the same, on the line 5—5 of Fig. 2.

The improved roaster is provided with an exterior casing A having a hinged hood A', and provided at its ends with longitudinally extending flanges A² and A³ adapted to rest on the stove lid resting flanges B' in the top plate B of the stove or range, as is plainly shown in Fig. 2. The casing A is open at the bottom, so as to lead into the interior of

the stove, and in order to securely hold the casing in position, I provide the end flange A², at its under side, with an outwardly curved holding flange C adapted to engage the under side of the flange B', as is plainly shown at the right in Fig. 2. The other flange A³ is provided with a downwardly extending rib C', fitting against the inner edge of the flange B' to prevent sidewise movement of the casing on the top B of the stove. A lug bolt D is held slidably on the flange A³, so as to engage the under side of the resting flange B', as illustrated at the left in Fig. 2, to securely hold the casing in position.

A button D' extends from the bolt D, through the top of the flange A³, so as to be under the control of the operator, to hold the bolt open or closed when removing the casing, or refastening the same in place.

On the pintle of the hinge for the casing A and on its hood A' is hung a frame E extending within the casing A, and provided at its front with a handle E' adapted to be taken hold of by the operator, to swing the said frame E into an uppermost position, as shown in Fig. 3, or to rest the said handle on the front of the casing A, to support the said frame in a horizontal position.

In the ends of the frame E are mounted to turn the shafts F and F', secured in the heads of a drum G, mounted to turn within the frame E, as is plainly shown in the drawings. On the outer end of the shaft F is arranged a crank arm F² adapted to be taken hold of by the operator, to turn the said shaft and the drum G to rotate the latter within the frame E of the casing A. The shaft F' is in alignment with the shaft F, and is provided at its outer end with a handle F³ adapted to be taken hold of by the operator, together with the shaft F, so as to remove the drum from the frame E or place it in position therein, as the case may be.

The drum G is provided on its inner peripheral surface with longitudinally extending ribs or small projections G' adapted to agitate the coffee or other article to be roasted, at the time the drum is turned. The drum G is also provided in its rim with an opening G² for placing the coffee or other article to be roasted into the drum, or removing the roasted article from the drum. The opening G² is

adapted to be closed by a slide G³, mounted to slide in guideways G⁴ held exteriorly on the rim of the drum G.

The slide G³ is formed at one end with perforations G⁵ adapted to be moved over the opening G² while roasting the article, so that the fumes produced by the roasting process, can pass through the perforations into the hood A' of the casing, to then pass through the opening in the bottom of the casing into the stove, and pass with the smoke and gases to the chimney. The slide G³ is, however, of such a length, that the perforated part G⁵ of the slide can be moved beyond the opening G², so that the latter is fully closed.

A second escape for the fumes arising by the roasting of the coffee or other article is formed in the head G⁶ of the drum G, the said head being provided, for this purpose, with damper openings G⁷ adapted to register with openings H' in the damper H, mounted to turn on the shaft F', outside of the head G⁶ by shifting the damper H. The openings G⁷ can be closed, but usually the said openings G⁷ and H' are in register to permit the fumes in the drum to escape into the casing A, to pass into the stove, and from the latter to the chimney. In the other head G⁸ of the drum G is arranged an automatic sampling device provided with the curved plate I, secured to the head and extending from the opening in the center of the head to the periphery thereof, as is plainly shown in Fig. 4. The central opening in the head G⁸ leads to a chamber G⁹ provided with a cover G¹⁰, made of glass or other translucent or transparent material, the said chamber extending to the outside of the hood A', to permit the operator to view the contents of the chamber G⁹ through the said cover G¹⁰. A small opening in the end of the chamber G⁹ permits of removing a few grains of coffee for minute inspection.

Now, it will be seen that when the drum is revolved by the operator turning the crank arm F², part of the coffee or other article to be roasted is taken up by the curved plate I and delivered into the chamber G⁹, so that the operator can view the sample to see whether the article is sufficiently roasted or not. As the plate I scoops up a new sample on each revolution of the drum, it is evident that the

operator is enabled to continuously follow the roasting process and to be in position to know at all times the condition of the article to be roasted.

It will be seen that by the construction described, the obnoxious fumes, arising during the roasting process from the coffee or other article to be roasted, do not escape into the kitchen or other room in which the roasting is done, but the said fumes are drawn into the stove or range to finally pass into the chimney.

It will further be seen that by the special sampling device described, the operator is enabled to at all times examine the coffee or other article without stopping the machinery, until the roasting process is completed.

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

1. A roaster, comprising a casing adapted to be set on a stove and provided with a hinged hood, a frame hung on the pintle connecting the hood with the casing, a drum journaled in the said frame, substantially as shown and described.

2. In a roaster, a revoluble drum having a roasting chamber and a sampling chamber having a sight aperture and a plate extending from the periphery of the drum to the mouth of the sampling chamber automatically causing a portion of the material to pass from the roasting chamber to the sampling chamber while said drum is in movement, substantially as set forth.

3. In a roaster, in combination, a casing, a revoluble drum to contain material to be roasted mounted in the drum and having a hollow trunnion extending through the casing and forming a sampling chamber the wall of which is provided with a sight aperture, and a plate located in said drum and extending from the periphery thereof to said hollow trunnion, and adapted to convey the material from the interior of the drum to said sampling chamber, substantially as set forth.

NORVAL H. MCAUSLAN.

Witnesses:

G. E. MERRILL,
JNO. Q. LISLE.