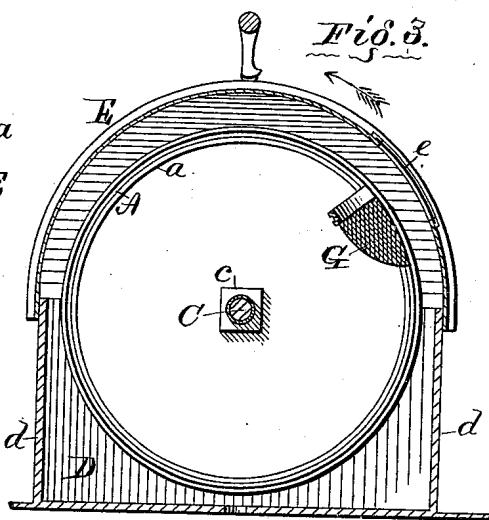
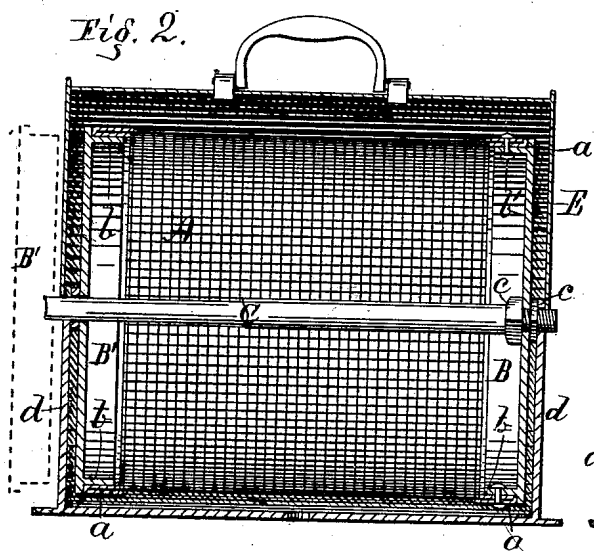
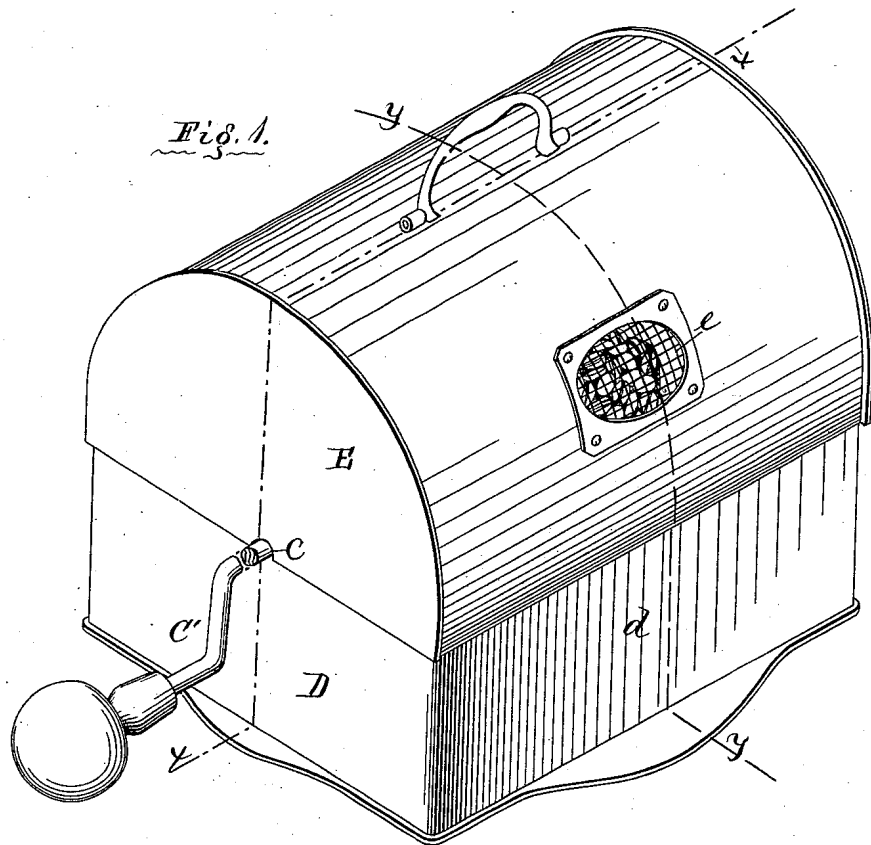


W. T. GILLILAND.
Coffee Roaster.

No. 201,920.

Patented April 2, 1878.



Witnesses:
M. H. Barringer,
a. m. Gallum

Inventor:
William T. Gilliland
By W. B. Richards

UNITED STATES PATENT OFFICE.

WILLIAM T. GILLILAND, OF MONMOUTH, ILLINOIS.

IMPROVEMENT IN COFFEE-ROASTERS.

Specification forming part of Letters Patent No. 201,920, dated April 2, 1878; application filed October 12, 1877.

To all whom it may concern:

Be it known that I, WILLIAM T. GILLILAND, of Monmouth, in the county of Warren and State of Illinois, have invented certain new and useful Improvements in Coffee-Roasters; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to coffee-roasters; and consists in improvements in the construction and combination of parts, all as hereinafter fully described, and set forth in the claim hereto annexed.

In the accompanying drawing, Figure 1 is a perspective view of a machine embodying my invention, showing the cap removed. Fig. 2 is a vertical longitudinal sectional view in the line *xx* in Fig. 1. Fig. 3 is a transverse vertical sectional view in the line *yy* in Fig. 1.

Referring to the parts by letters, A represents a cylinder formed of wire-cloth, banded at each end by internal and external bands *a a*. B B' are heads or ends in the cylinder A, formed of cast metal, and each having an annular flange, *b*, which fits the interior of the cylinder A. One head, B, is secured in the end of the cylinder by rivets *b'*, and the other head, B', is removably seated. Each head B B' has a central hole, through which a shaft, C, passes, which is secured to the head B by nuts *cc*, and on which the head B' may be drawn back to withdraw it from the cylinder A. C' is a crank on one end of the shaft C. D is a rectangular case, with sides *d*, in the upper portions of which the shaft C is journaled, and is of such length between the journals that when the shaft and cylinder A are placed therein the sides *d* will retain the head B' in the cylinder. When it is desired to remove the head B' from the cylinder, it (the cylinder) may be lifted from the case D, and the head B' may then be withdrawn, as shown, by dotted lines at Fig. 2. E is a cap fitting the case D, and arched over the cylinder A, with its interior of polished metal, which

forms a reflecting-surface. The cap E has a mica or other transparent medium, *e*, in one or both of its sides. G is a pocket attached to the interior of the cylinder A, with one open side.

The case D may be seated on a stove or over an open stove-hole. The cap E being removed, the cylinder A may be raised from the case D, and the head B' removed, as hereinbefore described, for the purpose of charging the cylinder with coffee to be roasted. When charged, the cylinder may be reseated in the case D, and the cap E then replaced, to form a close case over the cylinder A, for retaining the aroma while the roasting process is proceeded with, and the cylinder A revolved in the direction shown by the arrow at Fig. 3, to agitate the coffee-grains and secure uniformity in the roasting. The interior surface of the cap E, being a reflecting-surface, to reflect the ascending heat back upon the cylinder A and concentrate it upon the coffee, will not only heat the coffee from above, but will enable the roasting to be effected with less heat below the case D than would be necessary without said reflector.

The process may be observed through the transparent medium *e*; and by rotating the cylinder A backward, the pocket G will be charged with coffee, and may be made to bring it near the transparency *e*, as shown at Fig. 3, where it may be seen, in order to observe the stage of the roasting process. The coffee may be removed in the evident manner.

What I claim as new, and desire to secure by Letters Patent, is—

In a coffee-roaster, the combination of an interior wire cylinder, provided with a wire pocket, with an exterior casing, having a concave reflector on the inside of its top, and a suitable opening, closed by some transparent medium, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM T. GILLILAND.

Witnesses:

L. O. TOURTELLOTT,
J. L. DRYDEN.