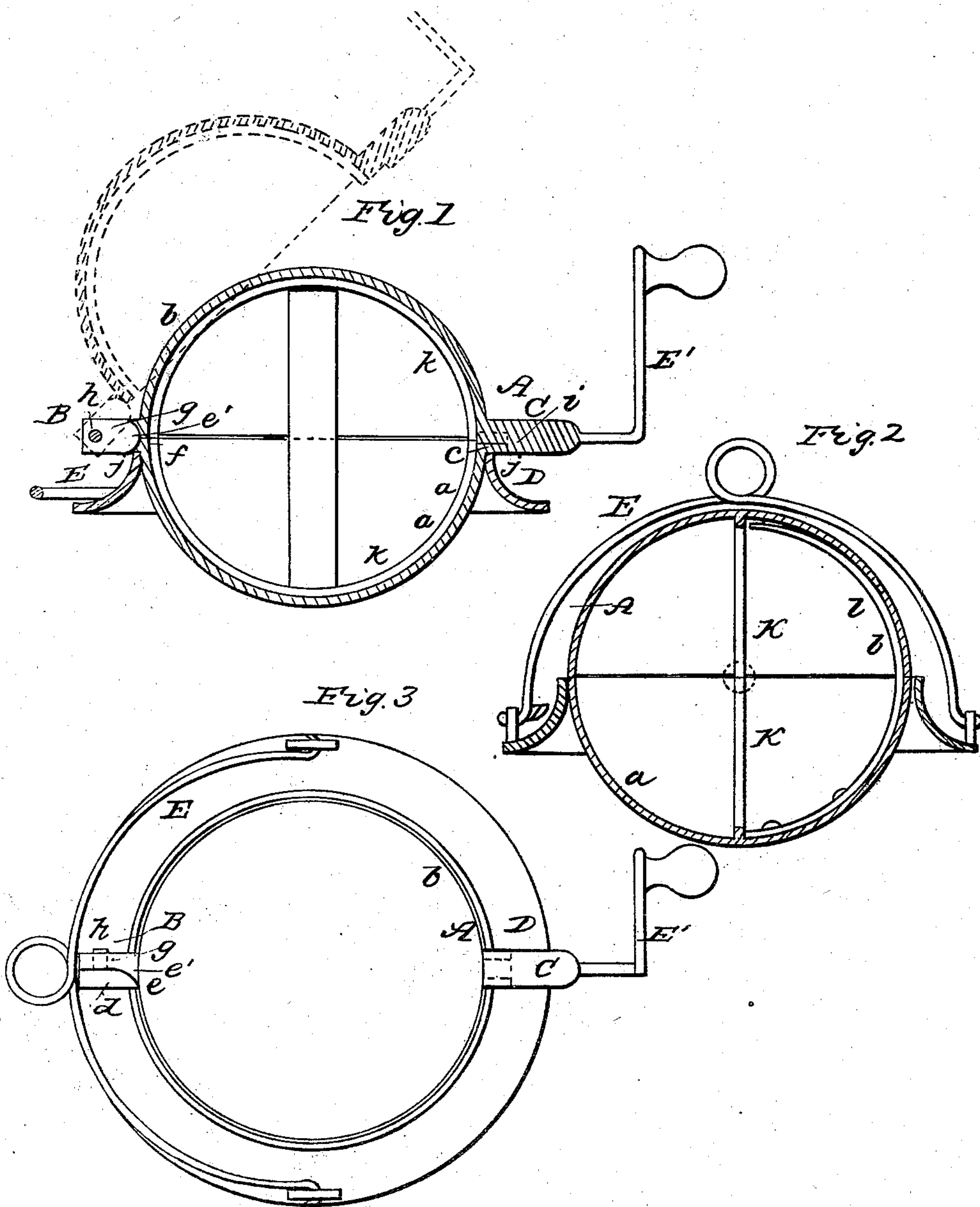


S. TOWER.  
Coffee Roaster.

No. 21,387.

Patented Aug. 31, 1858.





# UNITED STATES PATENT OFFICE.

SAML. TOWER, OF GRAND RAPIDS, MICHIGAN.

## APPARATUS FOR ROASTING COFFEE.

Specification of Letters Patent No. 21,387, dated August 31, 1858.

*To all whom it may concern:*

Be it known that I, SAMUEL TOWER, of Grand Rapids, in the county of Kent and State of Michigan, have invented a new and Improved Device for Roasting Coffee; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figures 1 and 2, are vertical central sections of my improvement, the two planes of section crossing each other at right angles. Fig. 3, is a plan or top view of ditto.

Similar letters of reference indicate corresponding parts in the several figures.

This invention is an improvement on the patent granted to J. R. Wood, in 1849.

The improvement consists in having a portion of each of the journals or axis of the contrivance attached to each sphere; so that when the spheres are closed, the axis will be completed and the parts will be locked together as hereinafter set forth.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents the chamber in which the coffee to be roasted is placed. This chamber is constructed of cast iron or a frame covered with wire gauze, and may be of any suitable size, and either a sphere or a spheroid. The chamber is constructed of two equal parts *a*, *b*, and is suspended by journals B, C, within a cast metal rim D, which, when the device is in use, is placed over the hole in the top plate of the stove or range. This rim is provided with a bail or handle E.

The two journals B, C, are at the junction of the two parts *a*, *b*, of the chamber, and are formed as follows: The part *a*, of the chamber has its portion of the journal C, formed of a semi-cylindrical shell *c*, and its portion of the journal B, is formed of a semi-cylindrical projection *d*, the inner part of which has a spiral terminus *e*, and a semi-cylindrical portion *f*, at right angles to the portion *d*. The other part *b*, of the chamber A, has its portion *g*, of the journal B, constructed precisely similar to the portion *d*, of the part *a*, with the exception that the inner spiral part of the portion *d*, is formed in a reverse position to that of the portion

*d*, so that the spiral parts *e*, *e'*, will fit together and form a lock joint, one that will not have a tendency to separate by the rotation of the chamber. The two portions *d*, *g*, are connected by a pivot *h*, said pivot being attached to the portion *d*, and passing loosely into the portion *g*. The part *b*'s portion of the journal C, is a cylindrical projection having a recess *i*, made in it to receive the shell *c*.

The journals B, C, are fitted in suitable bearings *j*, made in the rim D. The interior of each part *a*, *b*, of the chamber A, has a flanch *k*, formed on it, said flanch when the two parts are together extending entirely around the sphere and serving as an agitator. To the interior of the part *a*, a curved handle *l*, is attached. To the end of the journal C, a crank E', is attached.

The operation will be readily understood. The coffee to be roasted is placed in the chamber A, the rim D, being fitted over the hole in the top plate of a stove or range, and owing to the peculiar arrangement of the journals B, C, as shown and described the part *a*, may be elevated like a cover or lid, the journal B, forming a hinge. It will be seen therefore that the chamber A, may be readily opened and closed, and at the same time the journals will not have a tendency to open while the chamber is being rotated. The flanch *k*, agitates the coffee while being roasted so as to insure the perfection of the work the grains being evenly roasted thereby, the chamber being rotated by turning crank E'. The handle *l*, is grasped to tilt the part *a*, of the sphere for the purpose of discharging the roasted coffee.

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

Having a portion of each of the journals or axis B, C, attached to each sphere or shell (*a*, *b*) and otherwise arranged and combined as set forth, so that when the spheres or shells are closed, the axis or journals will be completed, and the shells will be locked, all as and for the purposes described.

SAMUEL TOWER.

Witnesses:

WM. ASHLEY, Jr.,  
SARAH WILLIAMS.