(No Model.)

E. DETWILER.

COFFEE ROASTER.

No. 597,397. Patented Jan. 18, 1898.

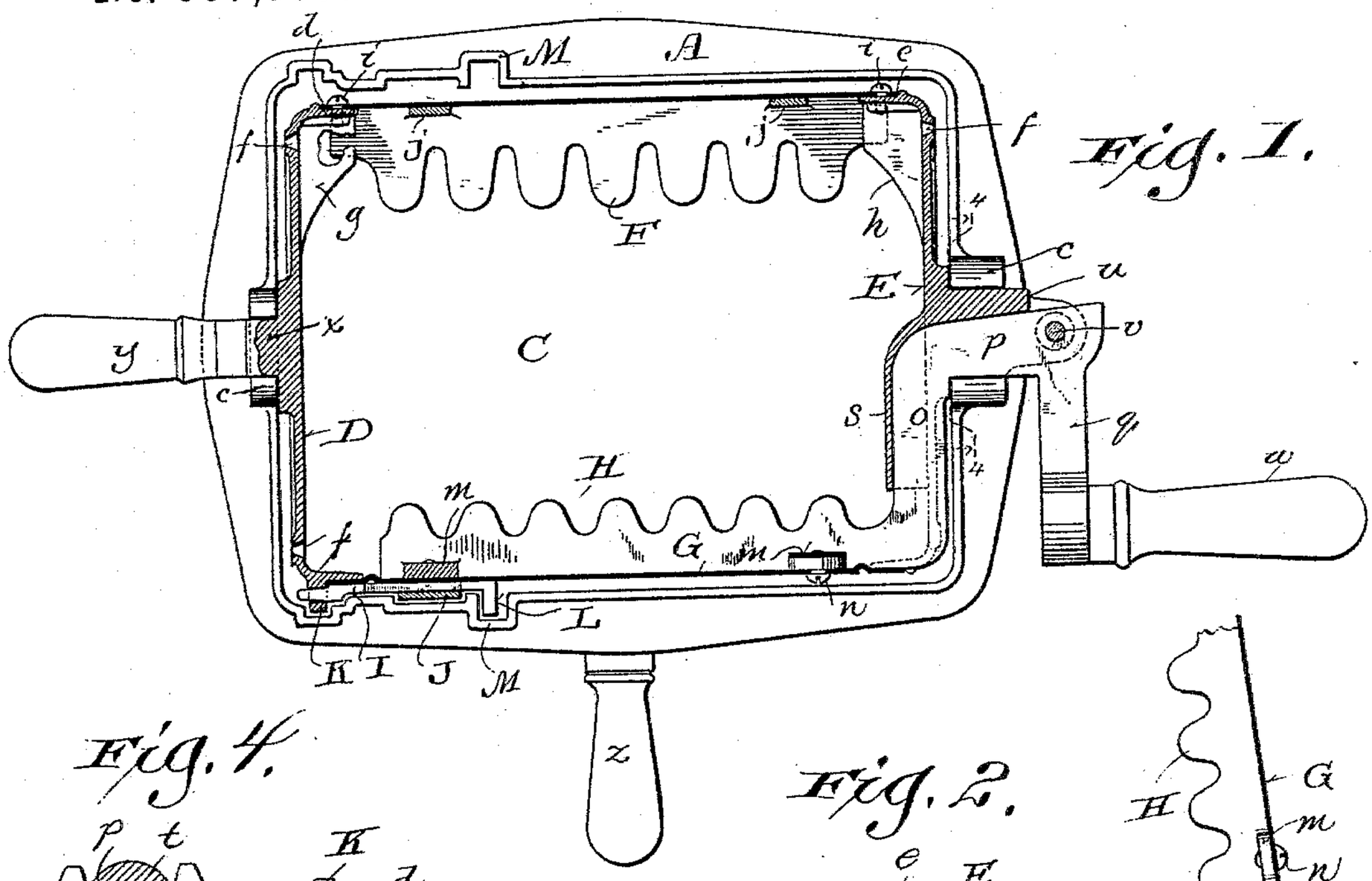

Fig. 1.

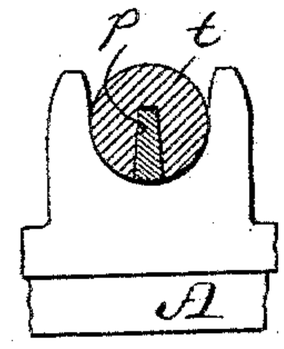

Fig. 4.

Fig. 2.

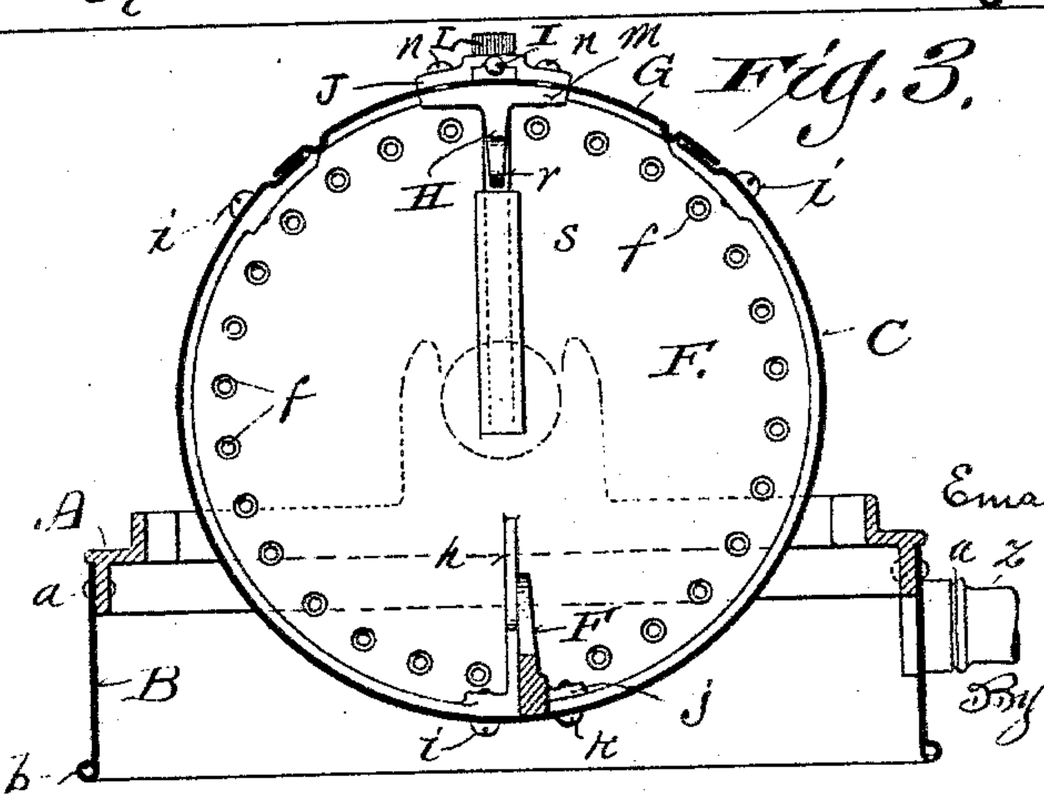

Fig. 3.

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UNITED STATES PATENT OFFICE.

EMANUEL DETWILER, OF MILWAUKEE, WISCONSIN.

COFFEE-ROASTER.

SPECIFICATION forming part of Letters Patent No. 597,397, dated January 18, 1898.

Application filed April 28, 1897. Serial No. 634,185. (No model.)

To all whom it may concern:

Be it known that I, EMANUEL DETWILER, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, 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.

My invention relates especially to that class of domestic roasters which are designed to prepare coffee in small quantities for immediate or early use in contradistinction to the devices employed by those who roast coffee in large quantities for the trade; and to that end it consists in certain peculiarities of construction and combination of parts, as will be fully set forth hereinafter and subsequently claimed.

In the drawings, Figure 1 is a plan view of my device with the revolving cylinder closed and partly in horizontal longitudinal section. Fig. 2 is a side elevation with the revolving cylinder open and with parts broken away or in section to better illustrate certain details of construction. Fig. 3 is a transverse vertical sectional view of my device with the revolving cylinder closed. Fig. 4 is a detail sectional view taken on the line 4 4 of Fig. 1, but with the movable parts in a different position from that shown in said first figure.

Referring to the drawings, A represents the base-frame of the roaster, made, preferably, of cast metal, to which is secured, as by rivets *a a*, a depending band B, which latter in the preferred form of my device herein illustrated is made of sheet metal beaded on its lower edge, as shown at *b*. This frame and band (which, if desired, could be cast in one piece) form a shell or hood adapted to be set over the burner of a gas, oil, or vapor stove or over the open stove-hole of a coal stove or range, the frame A having open bearings *c c* rising therefrom to receive the trunnions of the horizontal revolving cylinder C, which latter is of the proper size and shape to fit and turn within said frame A. This cylinder C is formed, preferably, of sheet-steel secured by screws *i i* to the horizontal annular flanges *d e* of the heads D E, which latter are of cast metal. Each of the heads is formed with an annular series of holes *f f* therethrough adjacent to the periphery, and each has a wing or plate *g h* on the inner side extending from the inner edge of the flange *d* or *e* back to the head D or E, said wings being cast solidly with the said heads.

F is a mixer consisting of a strip or plate of metal extending longitudinally inside of the cylinder C between and past the wings *g h* and having lugs *j* extending at intervals from opposite sides of its base, whereby it is riveted to the inner surface of the sheet-metal wall of the cylinder C, as shown at *k*, the inner projecting edge of the strip or plate being formed into a series of teeth, as shown. The sheet-metal wall of the cylinder extends only partially around the flanges of the heads D E, leaving an opening the entire length of said cylinder and in width about one-quarter of the circumference of said cylinder. G is the cover of this opening, the same being of sheet metal, like that of the cylinder, and of a width sufficient to overlap the edges of the cylinder-wall at said opening, which edges are preferably shouldered or inwardly offset, as shown best in Fig. 3.

H is a toothed mixer similar to the one F already described, being made preferably of cast metal, with lugs *m m* extending from the opposite sides thereof, whereby it is secured to the cover G by screws *n n*, so as to be exactly opposite the mixer F. This mixer H is formed integrally with the handle-shank *o p q* of the cover. The part *o* of the shank when the cover is closed fits within a slot or groove *r* in the head E, which slot below the line of the mixer H is protected by an inwardly-projecting casing *s*, so that the contents of the roaster cannot escape out through or become wedged in said slot or groove when the cylinder is being revolved in use. The part *p* of the shank is received in a recess in the trunnion *t* of the head E of the cylinder, the base of said trunnion below this recess being cut off to form a stop *u* to limit the backward movement of the cover in opening the same, the part *p* of the shank being pivoted, as shown at *v*, between the divided portions of the trunnion *t* above the stop *u*, so that the lower end of the part *p* will abut against said stop when the cover is opened, as shown in Fig. 2. The part *q* of the shank extends parallel to the part *o*, and the handle *w* is

secured to the end of the said part *q*, a wooden handle being preferably employed. The head D of the cylinder is formed with a trunnion *x*, to which is fitted a handle *y*, preferably also a wooden handle, and a like handle *z* is preferably attached to the base-frame A or its band B for convenience in manipulating the device.

The cover G when closed is locked in place by means of a bolt I, sliding in a loop J, which latter is secured to the cover by the screws *n n*, which fasten the mixer H to that end of the cover, the end of this bolt slipping into a socket K, cast upon the periphery of the head D of the cylinder C. The bolt I is provided with a thumb-piece L, which, when the bolt is shot forward so as to lock the cover to the cylinder, will find free passage through the recesses M M in the opposite inner side edges of the frame A as the cylinder C is revolved, and the adjacent portions of said inner side edges of said frame are further recessed and shaped to admit the passage of the bolt I and adjacent parts when said bolt is locked as described; but if the bolt is withdrawn from the socket K then the projecting parts of said bolt will strike against the top edge of the said frame, and the cylinder C cannot be revolved on its trunnions, and hence there is no danger of the contents of the said cylinder being spilled therefrom by reason of failure to properly lock the said cover G to the cylinder-head.

The operation of my device will be readily understood from the foregoing description of its construction, taken in connection with the accompanying illustrations. The proper quantity of coffee for one roasting is put into the cylinder C and the cover G locked, and then the said cylinder is placed in position with its trunnions *t t* in the open bearings of the frame A, the latter being above the burner or stove-hole, as described, and the handle *w* is turned until the coffee is roasted. A ready inspection of the contents can be had at any time by pushing against the thumb-piece L and thus freeing the bolt I and then opening the cover G by bearing down on the handle *w*. When the coffee is sufficiently roasted, the cylinder can be quickly removed by the two handles *w y*, said cylinder opened as before, and the contents ejected by a turn of the wrists, and owing to the described construction it will be impossible for a coffee-berry to find lodgment within, which is very important, as a single overroasted berry would mar the flavor at the next roasting.

Though especially designed for roasting coffee, my device may be employed for roasting peanuts, popping corn, and like uses.

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

1. A coffee-roaster, comprising a combined burner-hood and supporting-frame, a revolving cylinder having trunnions projecting from the cylinder-heads and horizontally supported in open bearings on said frame, a handle rigidly secured to one of said trunnions, and a handle pivotally secured to the opposite trunnion, and a cover forming a section of the wall of the said cylinder and rigidly secured to the shank of the said pivoted handle, substantially as set forth.

2. A coffee-roaster, comprising a combined burner-hood and supporting-frame, the inner upper edges of said frame being recessed at the opposite sides near one end, a revolving cylinder trunnioned in bearings on said frame and fitting down below the top of the frame, a hinged cover forming a section of the wall of the cylinder, a movable bolt on said cover having a projecting thumb-piece, and a bolt-socket on the adjacent head of the cylinder, the thumb-piece of the bolt having free passage through the recesses in the inner upper edges of the frame when the bolt is locked in the socket, but incapable of passing the edges of said frame when the bolt is withdrawn from said socket, substantially as set forth.

3. A coffee-roaster, comprising a combined burner-hood and supporting-frame, a revolving cylinder having trunnions projecting from the cylinder-heads and horizontally supported in open bearings on said frame, one of said trunnions being solid, and having a handle directly attached thereto, and the other trunnion being recessed and with the base below the recess cut away to form a stop, a handle-shank having a central part fitting within said recess and pivoted to said trunnion and adapted to bear against said stop, and said shank having parallel branches extending at right angles from said central part, one of said branches having a handle fitted thereto, and the other branch adapted to fit within a groove or slot in the adjacent cylinder-head, a toothed mixer-strip extending from said last-named branch and rigid therewith, and a cover forming a section of the wall of the cylinder rigidly secured to said mixer-strip, and adapted to be locked to the opposite head of the cylinder when the device is closed ready for use, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

EMANUEL DETWILER.

Witnesses:
H. G. UNDERWOOD,
B. C. ROLOFF.