

(No Model.)

N. HARRIS.  
COFFEE ROASTER.

No. 256,139.

Patented Apr. 11, 1882.

Fig. 1.

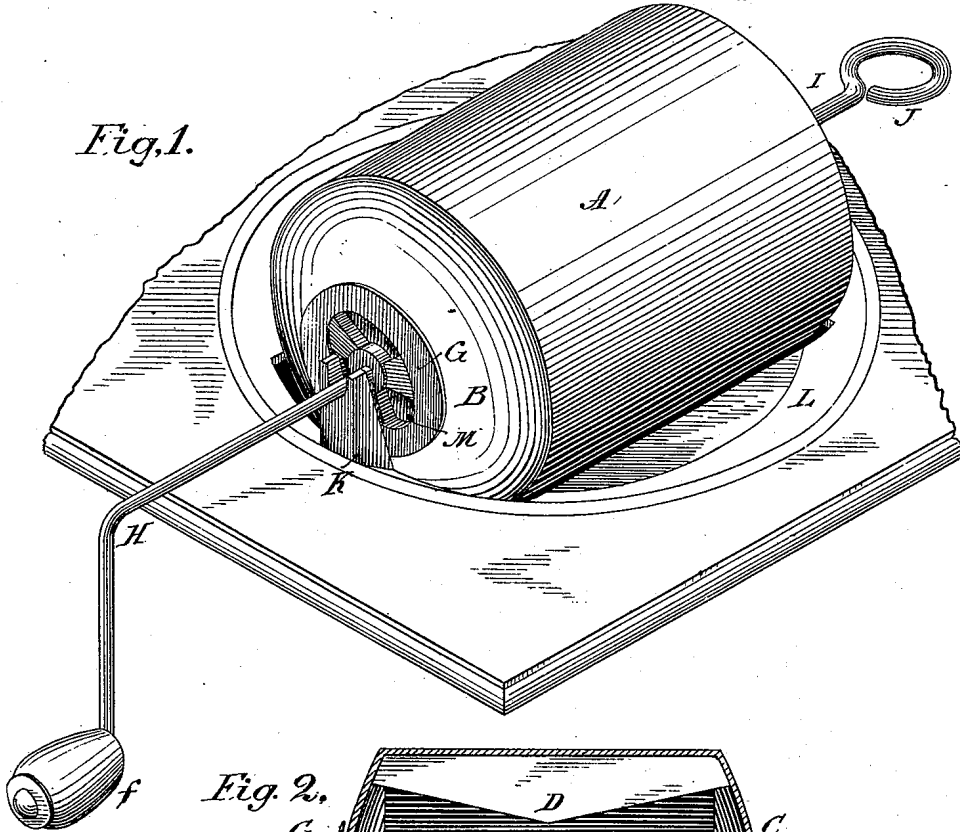


Fig. 2.

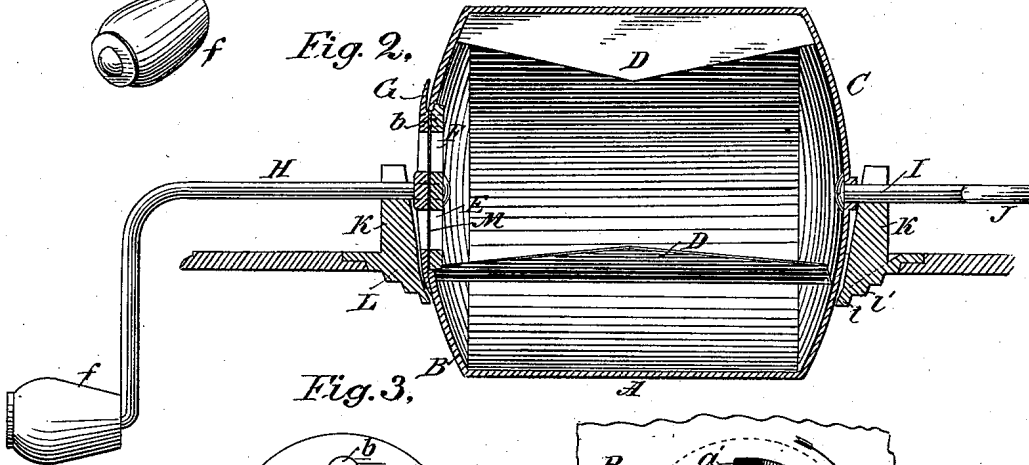


Fig. 3.

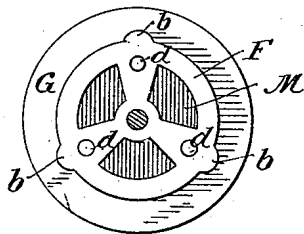
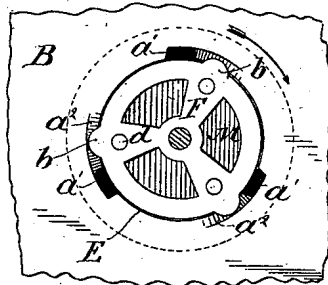


Fig. 4.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

NOAH HARRIS, OF VINCENNES, INDIANA.

## COFFEE-ROASTER.

SPECIFICATION forming part of Letters Patent No. 256,139, dated April 11, 1882.

Application filed October 20, 1880. Renewed January 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, NOAH HARRIS, a citizen of the United States, residing at Vincennes, in the county of Knox and State of Indiana, have invented certain new and useful Improvements in Coffee-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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The present invention relates to improvements in cylinder coffee-roasters, and its object is to provide simple and effective means for closing and handling the cylinder and inspecting its contents.

The invention consists essentially in a combined door or cap plate and window, which is so constructed and arranged in respect to a central opening formed in the cylinder-head that the coffee can be roasted in an expeditious manner without incurring the liability of smoking the window.

The invention also consists in other details of construction and arrangement, which will be hereinafter more fully described, and then set forth in the claims.

Figure 1 is a perspective view of a coffee-roaster seated on a stove. Fig. 2 is a longitudinal section of the cylinder and supporting devices. Fig. 3 is an inner face view of the cap or cover; and Fig. 4 is a detailed view of the apertured cylinder-head having notches and interior inclined surfaces engaging with studs on the cover.

The cylinder coffee-receiver is generally constructed of a sheet-metal body or cylinder, A, and two solid cast-metal end heads, B C, and is provided with internal ribs or wings, D, for agitating the coffee as the cylinder is revolved. A circular opening, E, is formed in the central portion of the head B, the edge of said opening having notches  $a'$ , as is shown in Fig. 4. Into this opening there is fitted a door or cap consisting of two circular metallic plates, F and G, and a window or sheet of mica, M, interposed between said plates. The inner plate, F, which is made somewhat smaller than the outer plate, G, is provided with peripheral lugs or projec-

tions  $b$ , corresponding in number with the notches  $a$  in the head. Adjacent to the notches are formed inclined surfaces  $a^2$ , the object of which is to cause the lugs on the cover, as they glide over the same, to draw the cover into the opening in the end head and firmly secure it in position. This method of fastening is shown in my Patent No. 196,225, granted October 16, 1877. Both plates F and G are suitably apertured, the openings being generally of a segmental shape, so that by means of the afore-said sheet of mica interposed between the plates, a series of windows are formed in the door or cap. The parts comprising said door or cap are firmly secured together by means of a rod, H, which passes through a central opening made in said parts, and is riveted on the inside of the plate F. As an auxiliary fastening medium the plate G is provided with studs or pins  $d$ , which enter openings in the plate F. It is evident that by fitting the door or cap into the opening in the cylinder-head so that the lugs  $b$  and notches  $a'$  register with each other, and then partially rotating said door or cap, the same is retained in position without the aid of other fastening devices. The rod H is made quite long, and has its end formed into a hand-crank, which is provided with a non-conducting handle,  $f$ .

The head C of the cylinder is provided with an axis or spindle, I, formed of a short rod having an outer loop or ring, J, this rod being secured to the end head by riveting it on the inner side thereof.

The cylinder or drum, when in use for roasting coffee, is mounted or journaled in notched uprights K of a ring-shaped stove-plate, L. This plate fits into the stove-hole, and is suitably apertured to permit the roasting cylinder or drum to be passed sufficiently deep into the fire to quickly heat the drum. The plate L is provided with risers  $l$  and seats  $l'$ , of different sizes to fit the apertures of different-sized stoves.

The rods H and I form the axis of the drum and rest in the notched upper ends of the uprights K.

The operation is as follows, viz: The cap or door is removed and the cylinder filled with coffee. Then the door is replaced and the cylinder mounted in the stove-plate over a fire. By rotating the drum through the medium of rod

H the coffee is thoroughly agitated and roasted  
 in an expeditious manner, the window or win-  
 dows in the center of the end head providing  
 easy and never-failing means of inspecting the  
 5 contents of the cylinder or watching the pro-  
 gress of the roasting operation. The position  
 of the windows is very important, because if  
 they were arranged near the periphery of the  
 drum they would become smoked, thus destroy-  
 10 ing their transparency and rendering them use-  
 less for their intended purpose. After the cof-  
 fee has been sufficiently roasted a rod or stick  
 is passed through the loop J of the rod I for  
 lifting the drum off the fire. Then by removing  
 15 the door or cap by slightly turning the same  
 the contents of the drum can easily be dis-  
 charged.

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

1. The combination of the revolving roast-  
 ing-cylinder A, having a removable central in-  
 spection-window, with projecting journal in one  
 of its end heads and a fixed journal on its other  
 end head, with a stove-hole plate, L, having 25  
 supports or bearings K, for receiving the jour-  
 nals of the roasting-cylinder and raising the  
 inspection-window above the stove opening,  
 as and for the purpose set forth.

2. The combination of the apertured plates 30  
 F G, interposed sheet of mica M, and rod H  
 with the roasting cylinder or drum having an  
 opening in its end, substantially as and for the  
 purpose set forth.

In testimony whereof I affix my signature in 35  
 presence of two witnesses.

NOAH HARRIS.

Witnesses:

JOHN W. HARRIS,  
 ROBERT CAPSADELL.