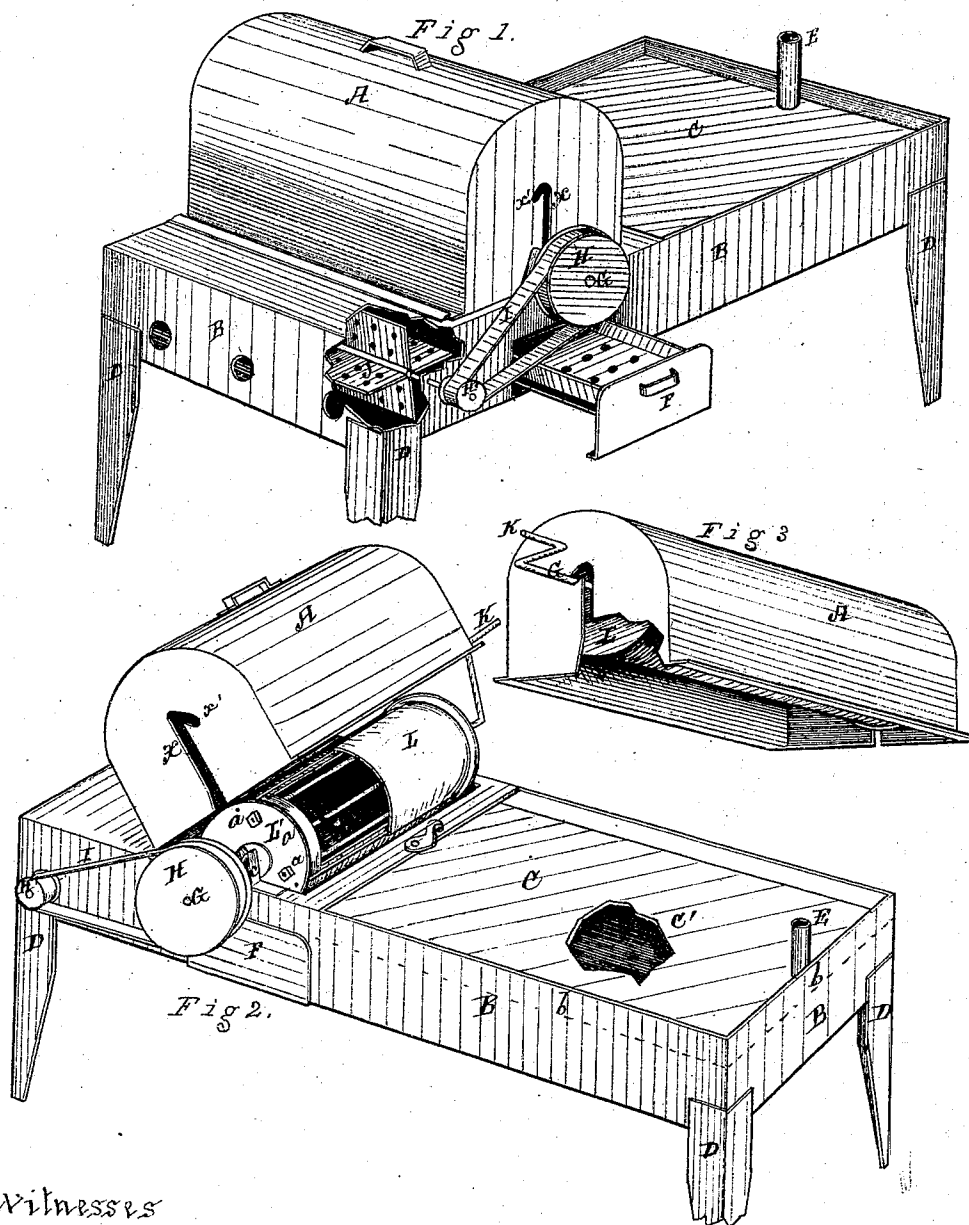


Nelson S Thompson's Imp^d Roaster & Heater

No. 118,497.

Patented Aug. 29, 1871.



Witnesses
 W. J. Deunay
 P. M. Theiber

Inventor
 Nelson S. Thompson

UNITED STATES PATENT OFFICE.

NELSON S. THOMPSON, OF RICHMOND, INDIANA.

IMPROVEMENT IN COFFEE-ROASTERS.

Specification forming part of Letters Patent No. 118,497, dated August 29, 1871.

To all whom it may concern:

Be it known that I, NELSON S. THOMPSON, of Richmond, Indiana, have invented certain new and useful Improvements in Roasters and Heaters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the drawing which accompanies this specification and forms a part of the same and to the letters of reference thereon, in which—

Figure 1 is a perspective view of my improved apparatus. Fig. 2 is a view of the same with the casing removed, showing the cylinder and its internal construction. Fig. 3 is a view of the cylinder and casing detached from the superstructure.

My invention consists in the arrangement of a fan or blower which is driven by a belt from a pulley on the cylinder-shaft for the purpose of precipitating a blast upon any fuel in a fire-box, immediately in front of the same and underneath the cylinder, for the purpose of generating heat necessary for the roasting process, and in providing the end of the superstructure opposite to that where said blower is located with a hot-air chamber, the top of which acts as a heating-floor for any desired purpose. It further consists in providing each end of the casing with a vertical slot of sufficient dimensions to allow the shaft of the cylinder to traverse the same, which slots terminate at the top in acute angles, allowing the cylinder to be raised when the belt is disengaged far enough above its original position to allow the contents to cool gradually, and be retained there at pleasure. It further consists in constructing the cylinder and casing in such manner as that they can be readily removed jointly and placed over a stove or other heating device and operated.

To enable those skilled in the art to make and use my said improvement, I will proceed to describe the same.

In Fig. 1, A represents the casing, which incloses the heating-cylinder; B B, the sides of a rectilinear box; C, the floor of the upper portion of the box; D D D, the legs of the box; E, the flue leading from the hot-air chamber; F, the fire-box and ash-pan; J, the fan or blower; H', the pulley upon the shaft of the same; I, the belt by which the shaft is revolved; H, the driving-pulley upon the cylinder-shaft G, the operations of which will more fully hereinafter appear.

In Fig. 2 like letters represent like parts, while L represents the roasting-cylinder; L', the heads of the same; and *a a a* are the brake-rods which traverse the inner portion of the cylinder longitudinally, serving the double purpose of separating and dividing the substance being roasted, and rigidly securing the heads of the cylinder in position. The shaft G of the cylinder L, when in its position for use, rests in boxes *c*, open at the top, allowing the shaft to be raised in the slot *x* of the casing A, and to rest in the acute angle *x'* of said slot, allowing the contents of the cylinder to cool. The rods *a a a* are placed at such distances from the inner surface of the cylinder as may be found desirable to secure the most perfect performance of their functions.

When charcoal or other fuel is ignited in the fire-box F and the cylinder L filled with the substance to be roasted, power is applied to the crank K, and the cylinder L and the blower J are set in motion, the blast from the blower accelerating the combustion of the fuel and forcing, at the same time, hot air into the air-chamber C', which escapes through the flue E. The hot air thus directed serves to keep the floor C at a sufficiently high temperature to answer any culinary purpose.

The dimensions of the air-chamber are shown by the dotted lines *b b* and the sides B B, the bottom of the same being a plate corresponding with the floor C, attached to the lower edges of the sides B B. An opening into the interior of the hot-air chamber is shown at C', Fig. 2.

In Fig. 3 are shown the cylinder and casing detached, which may be used on the top of a stove or other heating device separately from the balance of the apparatus.

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

1. The combination of the cylinder L, the break-rods *a a a*, the blower J, and the casing A, provided with slots *x* and *x'*, substantially as set forth.

2. The arrangement and combination of the blower J, cylinder L, and hot-air chamber C', in the manner and for the purpose substantially as herein described.

NELSON S. THOMPSON.

Witnesses:

W. T. DENNIS,
T. M. TREIBER.