

(No Model.)

G. E. GARY.
ROASTER.

No. 434,440.

Patented Aug. 19, 1890.

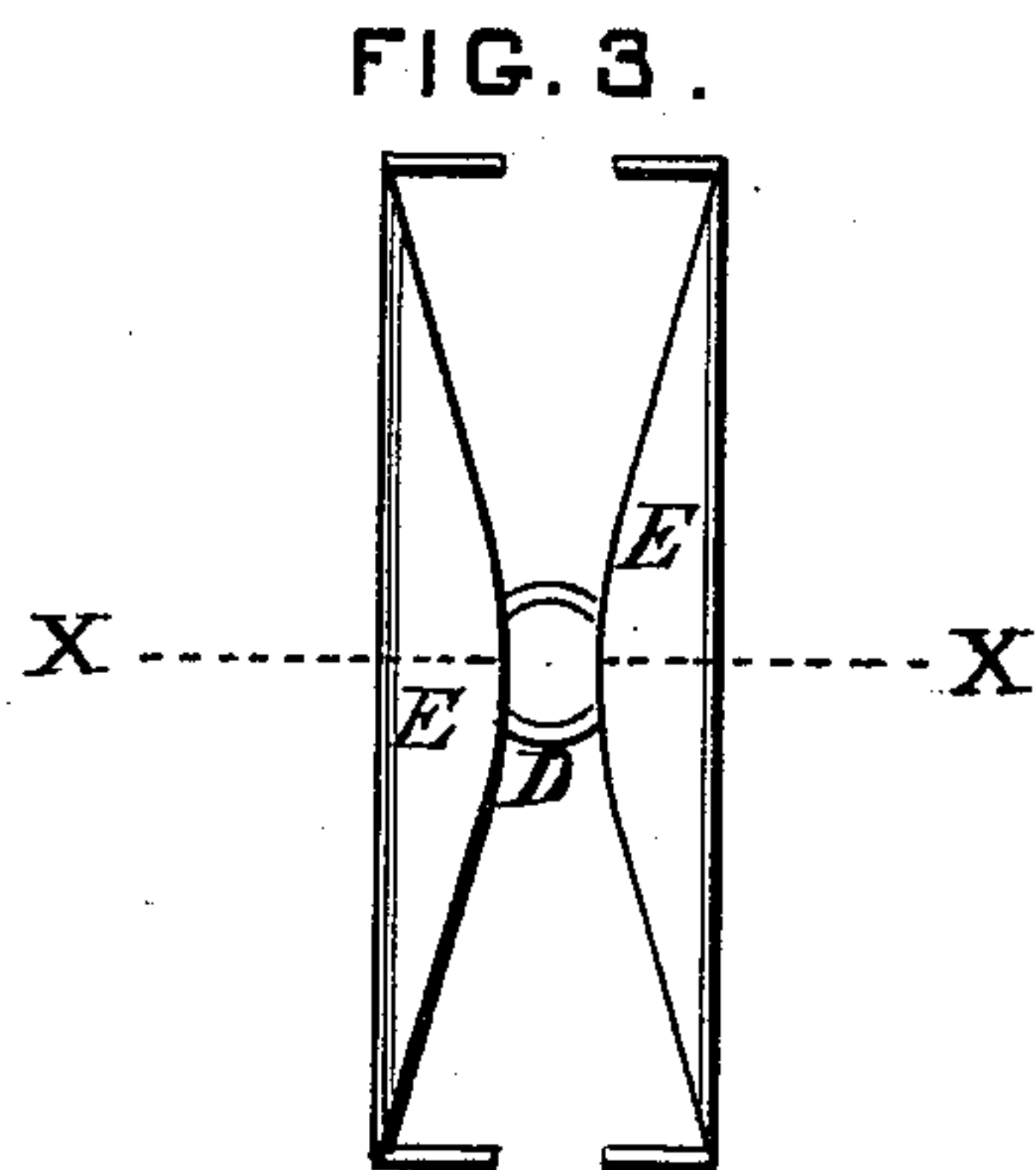
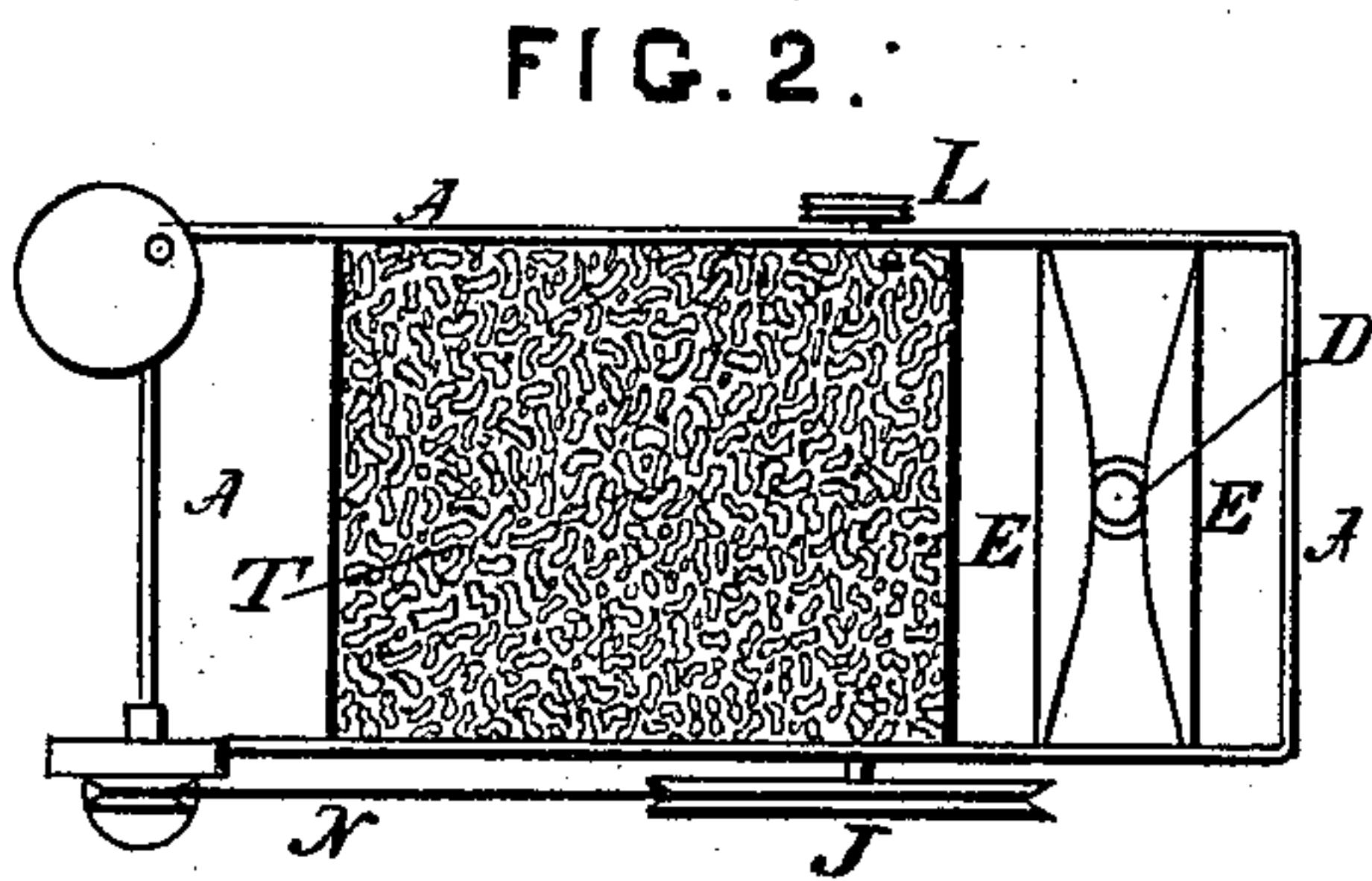
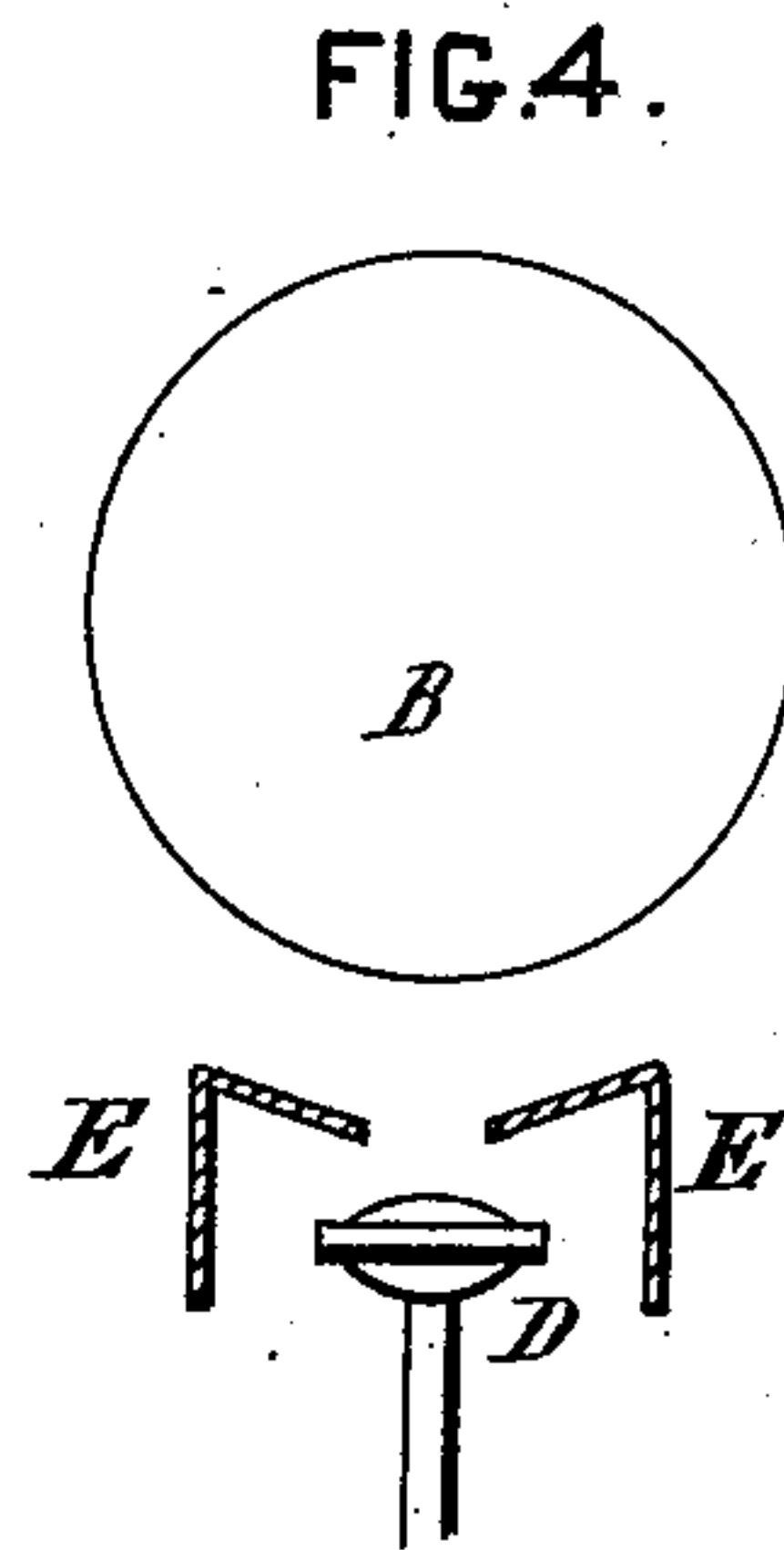
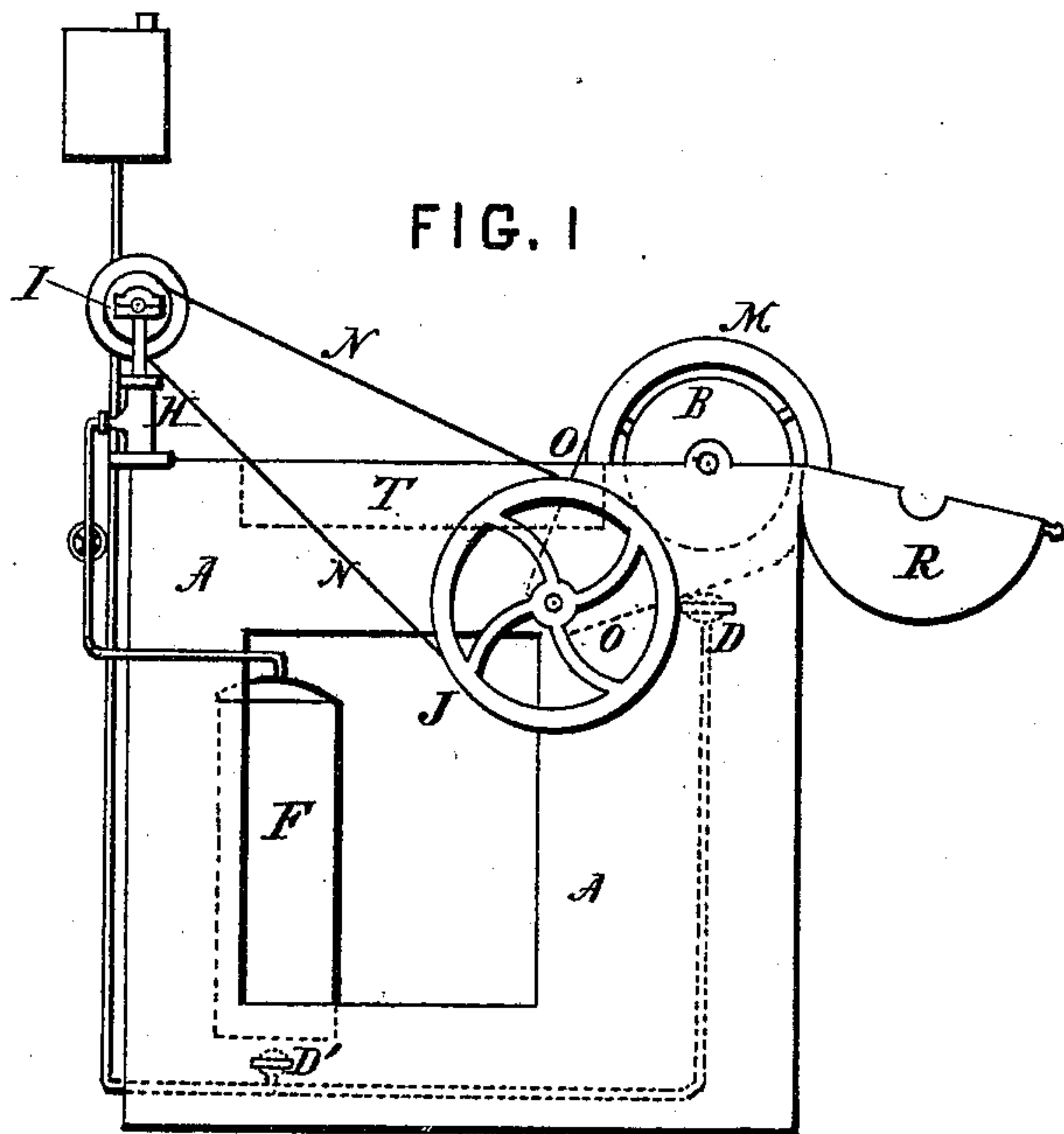
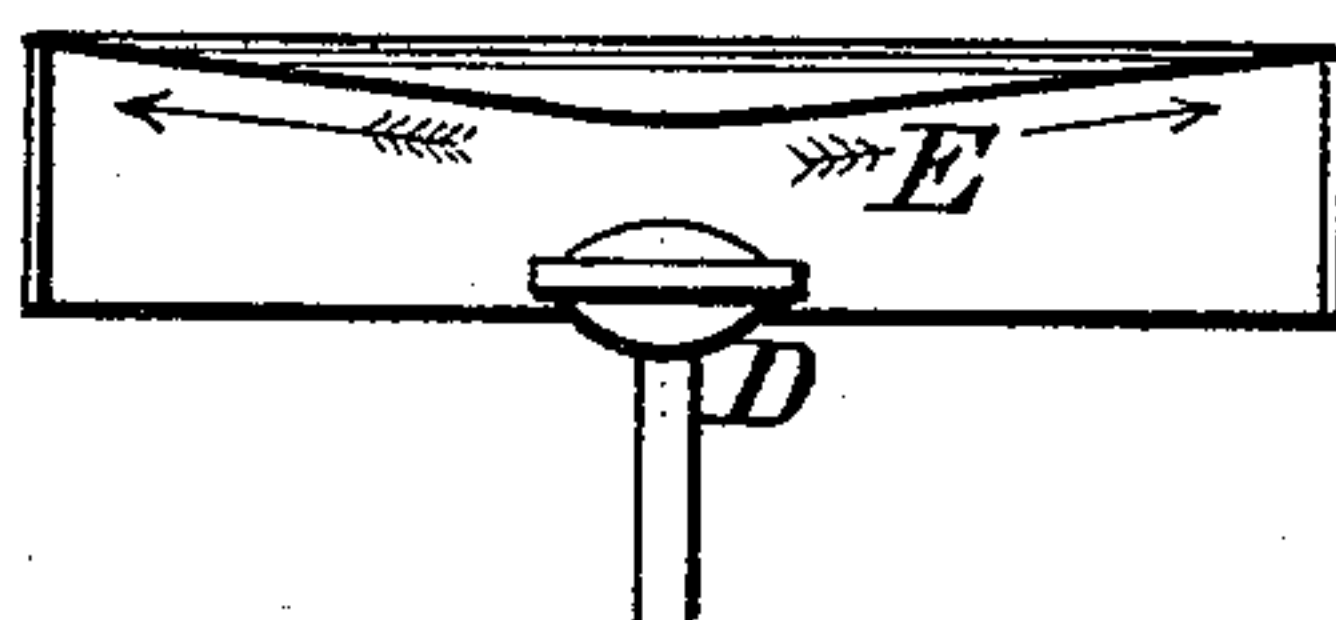


FIG. 5.



WITNESSES,

S. A. Hageman
J. Castigallader

INVENTOR,

George Edward Gary
By *Jeppha Garrard*
Atty

UNITED STATES PATENT OFFICE.

GEORGE EDWARD GARY, OF MACON, MISSOURI, ASSIGNOR TO SAMUEL S. KINGRY, OF CINCINNATI, OHIO.

ROASTER.

SPECIFICATION forming part of Letters Patent No. 434,440, dated August 19, 1890.

Application filed October 14, 1889. Serial No. 326,904. (No model.)

To all whom it may concern:

Be it known that I, GEORGE EDWARD GARY, a citizen of the United States, residing at Macon, in the county of Macon and State of Missouri, have invented a certain new and useful Improvement in Roasters, of which the following is a specification, reference being had to the accompanying drawings.

In the drawings, Figure 1 is a side elevation of the machine embodying my improvements. Fig. 2 is a plan of the same with cylinder B, pulley M, and cover R removed. Fig. 3 is an enlarged view of my heat-distributor, seen at the right-hand end of Fig. 2. Fig. 4 is a partial section through $x x$, Fig. 3, showing also the position of the roasting-cylinder by the circle above. Fig. 5 is a view of one half of the distributor, the other half being removed.

A is the sheet-metal body of the machine, of the usual rectangular or box form.

B is the usual sheet-metal roasting-cylinder.

D D' are gasoline-burners supplied by pipes leading from a reservoir in the usual manner.

E E are heat-deflectors of sheet metal, which together compose my flame-distributor, each made of one single piece cut and bent to the shape shown in the drawings.

The burner D is placed between the vertical sides of the sheet-metal deflectors E E. These deflectors are bent inward and downward toward the burner D, ending with a convex edge or outline and being lower just over the burner D than at the ends, and leaving a narrower opening at that point than at the ends. A portion of the blaze and heat is carried by these deflectors outward under the metal leaf, as shown by the arrows, Fig. 5, and equally distributed along the entire length of the cylinder B.

F is a small steam-boiler heated by the burner D' and furnishing steam to the engine. (Seen at H, Fig. 1.)

I is a pulley on the engine H, imparting motion by the belt or cord N to the pulley J. 45

L is a pulley of the opposite end of the same shaft that carries J and imparts motion through the cord O to the pulley M and to the cylinder B.

R is a semi-cylindrical cover hinged to the body of the roaster and designed to cover the cylinder B when in use. 50

T is a sheet-metal tray for holding the peanuts and keeping them warm.

Operation. In using the machine the peanuts to be roasted are introduced into the cylinder B. The burner D D' being lighted, steam is generated in the boiler F. The engine H, through the system of cords and pulleys above described, imparts a slow and steady motion to the cylinder B, by which its contents are kept constantly moving. The heat emanating from the burner D is so distributed by the deflectors E E that the cylinder B is uniformly heated throughout its entire length and its contents affected precisely as desired. When the roasting is complete, the contents are emptied into the tray T and kept warm by the waste heat from the burners D D'. 65 70

I claim as my invention—

The combination, with a single burner, of the pair of heat-deflectors, each deflector being formed with a vertical side and a top plate having a convex edge and bent downward toward the burner, the pair of heat-deflectors providing a narrow opening over the burner and wide openings at the ends, substantially as described and shown. 75

The foregoing specification of my invention signed by me this 24th day of September, A. D. 1889. 80

GEORGE EDWARD GARY.

Witnesses:

JEPHTHA GARRARD,
P. J. CADWALLADER.