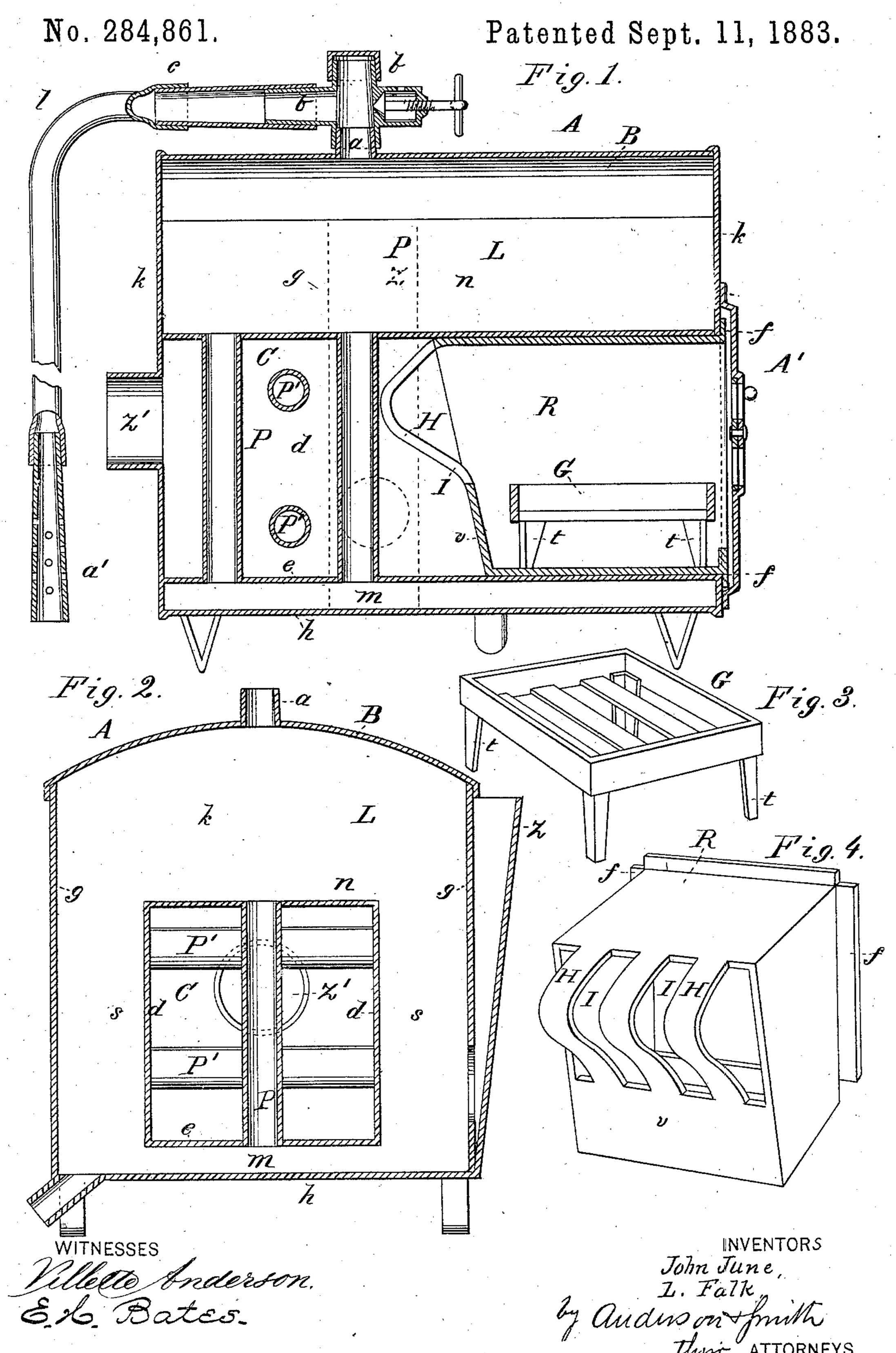
J. JUNE & L. FALK.

FEED COOKER.



United States Patent Office.

JOHN JUNE AND LEONARD FALK, OF MANSON, IOWA.

FEED-COOKER.

SPECIFICATION forming part of Letters Patent No. 284,861, dated September 11, 1883.

Application filed June 4, 1883. (No model.)

To all whom it may concern:

Be it known that we, John June and Leon-ARD Falk, citizens of the United States, residing at Manson, in the county of Calhoun and State of Iowa, have invented certain new and useful Improvements in Feed - Cookers; and we do 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.

Figure 1 of the drawings is a representation of this invention, and is a vertical section. Fig. 2 is a cross-section. Fig. 3 is a perspective detail of the movable grate. Fig. 4 is a perspective detail of the movable fire-place.

This invention has relation to agricultural boilers; and it consists in the construction and novel arrangement of devices, as hereinafter set forth, and particularly pointed out

in the appended claim. In the accompanying drawings, the letter A designates the main case or receiver of the boiler, which is of rectangular form, having an arched top, B. It is formed with an interior longitudinal cavity, C, whereof the side 30 walls, d, and bottom e are parallel to the outer side walls, g, and bottom h of the case. The interspace between the outer and inner walls of the case being closed at each end by the end walls K, forms a receiving chamber, L, 35 around the interior cavity, C, as indicated in the drawings. The chamber L is designed to receive the water to be heated. One or more vertical pipes, P, extend through the fire chamber or cavity C from the lower portion, 40 m, of the boiler to its upper portion, n, and transverse pipes P' connect the sides s of the boiler. These pipes are arranged in the back portion of the fire-place where the heated products of combustion will heat them and 45 the water thereon, setting up vertical and

transverse currents in the water, so that the

entire body thereof soon becomes heated to

the boiling-point. In the front part of the

fire-chamber C is placed a cast-iron movable

50 fire-place, R, of rectangular form, open in l

front to receive a movable cast-iron coal-grate, G, which is provided with legs or supports t. The position of the fire-place R in the chamber C is regulated by the outwardly-turned front flanges, f, which engage the wall of the 55 front opening of the case A. The back of the fire-place R is closed below to about the height of the grate by a wall, v. From the upper edge of the wall to the top of fire-place extend the rearwardly-bent plates H, which 60 are separated by the draft-intervals I, through which the heated products of combustion pass into and through the back portion of the fire-chambers.

From the top of the case A extends a short 65 pipe, a, to which is attached the head b of the tube c, whereby the steam is conveyed into the vessel containing the food to be cooked. The tube is provided with a perforated spout, a', at its end, which is designed to be introduced 70 into the feed and stirred about therein. The tube should have a flexible portion, l, so that its outer or discharging end can be readily moved about when needed.

A' indicates the door, and Z' the tubular 75 neck to which the smoke-pipe is attached.

Z indicates the lateral passage leading to the bottom of the receiver, and through which the water is passed in filling the same.

Having described the invention, what we 80 claim, and desire to secure by Letters Patent, is—

An agricultural boiler of rectangular form, having a rectangular longitudinal cavity or fire-chamber, C, extending from its front part 85 to its rear wall, vertical and transverse pipes arranged in rear to connect the upper and lower portions and sides of the boiler-chambers, the movable fire-place R, in the front of the chamber, having the bent rear plates, H, separated to form draft-interspaces I, and the movable grate G in said fire-place, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN JUNE. LEONARD FALK.

Witnesses:
J. T. Kelly,
M. W. Fitz.