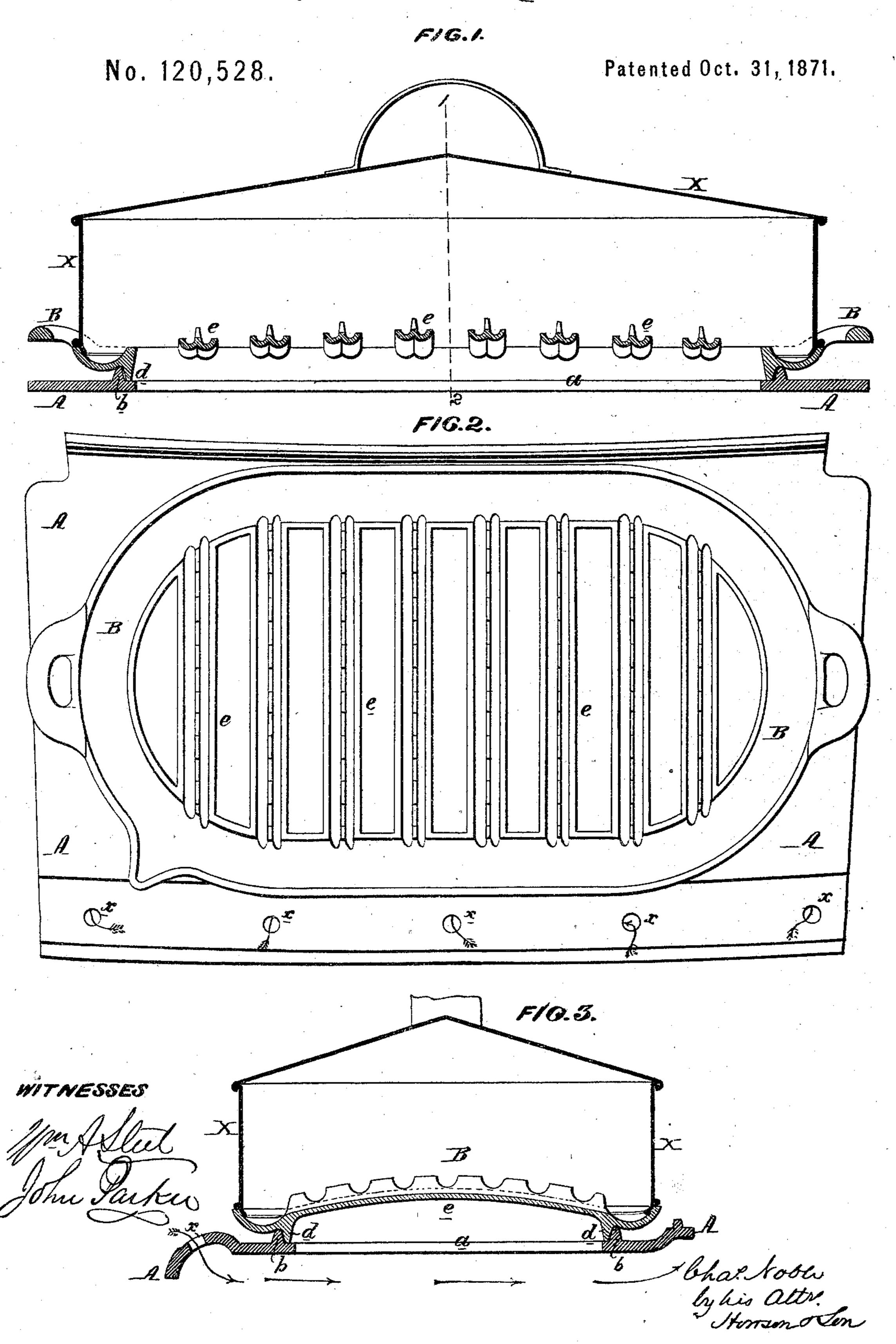
## Chas. Noble, assr. to Chas Noble & Co. Impot. in Cooking Stoves.



## UNITED STATES PATENT OFFICE.

CHARLES NOBLE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO CHARLES NOBLE & CO., OF SAME PLACE.

## IMPROVEMENT IN GRIDIRONS.

Specification forming part of Letters Patent No. 120,528, dated October 31, 1871.

To all whom it may concern:

Be it known that I, Charles Noble, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented certain Improvements in Cooking-Stoves, of which the following is a specification:

My invention consists in the combination of a covered gridiron with the upper hearth-plate of a cooking-stove, in which are formed openings for the passage of air into and through the hearth, all as fully described hereafter; the objects of my invention being to maintain the embers which are raked down into the hearth beneath the gridiron in a state of ignition during the operation of broiling, and also to prevent smoke and gases from the embers from rising upward between the bars of the gridiron and deteriorating the flavor of the meat.

Figure 1 is a vertical section illustrating my invention; Fig. 2, a plan view; and Fig. 3, a transverse vertical section on the line 12, Fig. 1.

A represents the top hearth-plate of a cooking-stove, and this plate has an elongated opening, a, near the edge of which is a rib, b, within which fits the rib d on the under side of the gridinon B; the latter consisting of a frame with transverse bars e, in which are formed channels communicating with that formed in the frame, as in other gridinons of this class.

It is a common practice in using cookingstoves, especially those in which wood is employed as a fuel, to rake ignited embers from the fire-place into the recess of the hearth-plate and place over the whole a gridiron for broiling meat, &c. I overcome these objections by adapting the ordinary gridiron, provided with its closelyfitting cover X, to an opening of corresponding shape in the hearth-plate and forming in the latter, near the front edge of the same, a number of openings, x. The fact of the gridiron being provided with a non-perforated cover and fitting closely to the hearth-plate prevents the smoke and gases from the embers from rising upward and deteriorating the flavor of the meat, and the embers are maintained in an ignited state, owing to the continuous draught produced by fine jets of air entering the opening x, as indicated by the arrows, and passing through the closed hearth beneath the gridiron to the fire-place of the stove and through the latter to the outlet-pipe.

It will be seen that by merely perforating the ordinary hearth-plate, or by substituting a perforated for the usual plate, the necessity of removing the entire base-plate of the stove is obviated. By using the perforated plate, also, the air is admitted in fine jets instead of in a wide stream, which consumes the cinders too rapidly, and impairs the efficiency of the utensil. Greater efficiency may be attained by providing the hearth-plate with a perforated slide for regulating the passage of air through the openings.

I claim—

The hearth-plate A, covering the opening in the base-plate of a stove, perforated near its edge, and having an opening, a, to which is fitted the covered gridiron B, as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHAS. NOBLE.

Witnesses:

SAMUEL SMITH, F. B. RICHARDS.

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