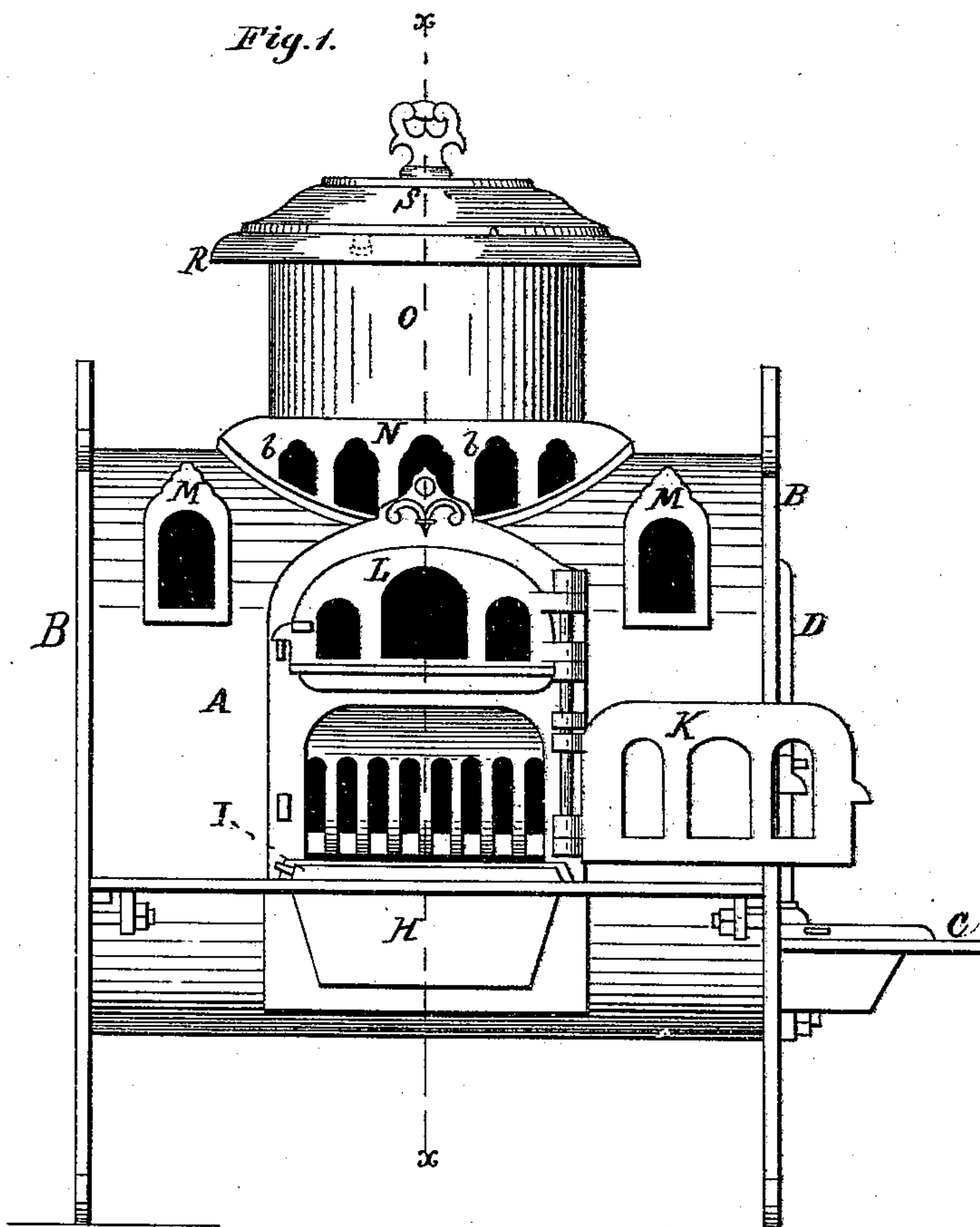


E. C. LITTLE & D. H. NATION.
HEATING-STOVE.

No. 180,355.

Patented July 25, 1876.



WITNESSES

Henry N. Miller
Frank L. Curand

INVENTOR

E. C. Little
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Fig. 2.

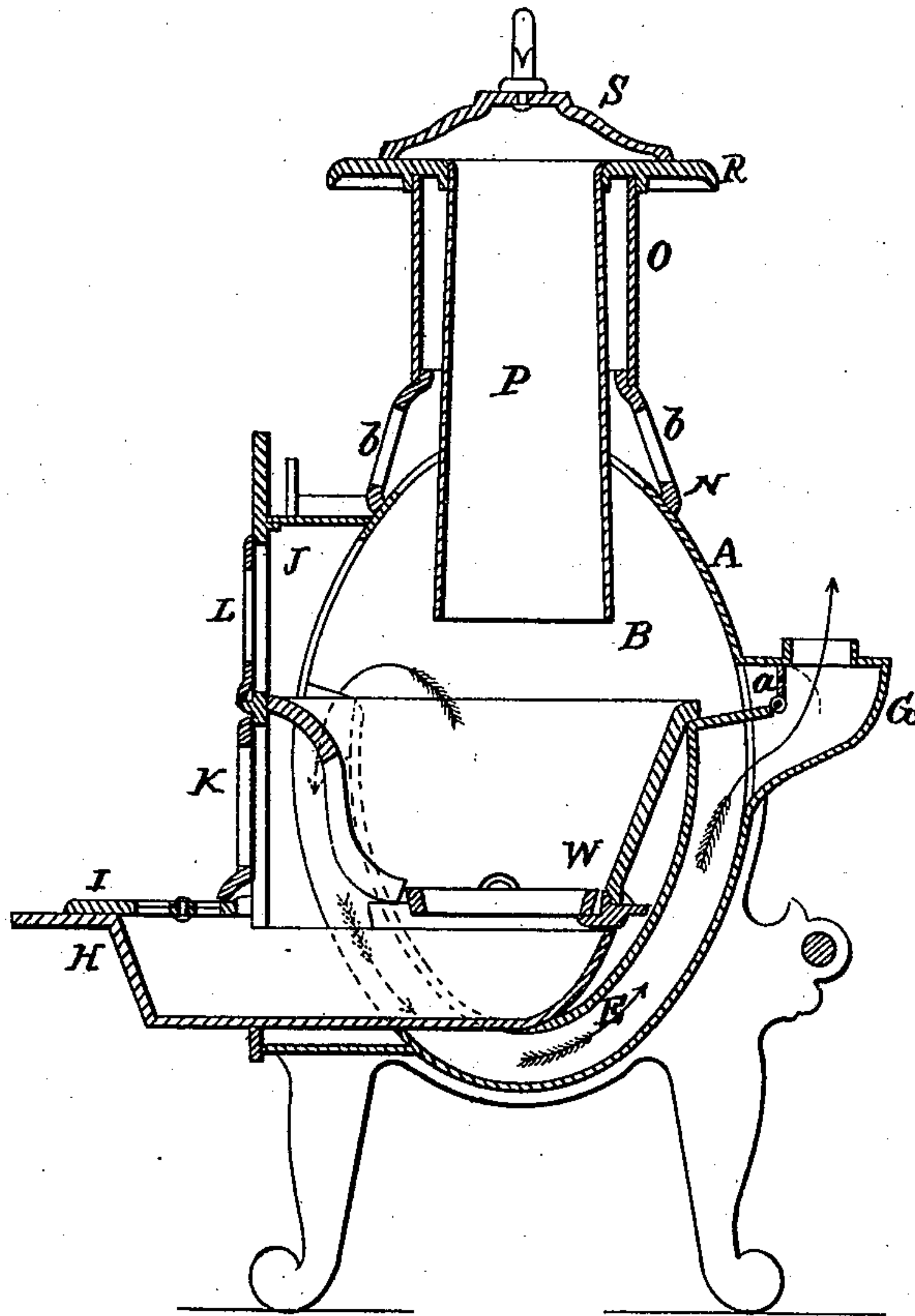
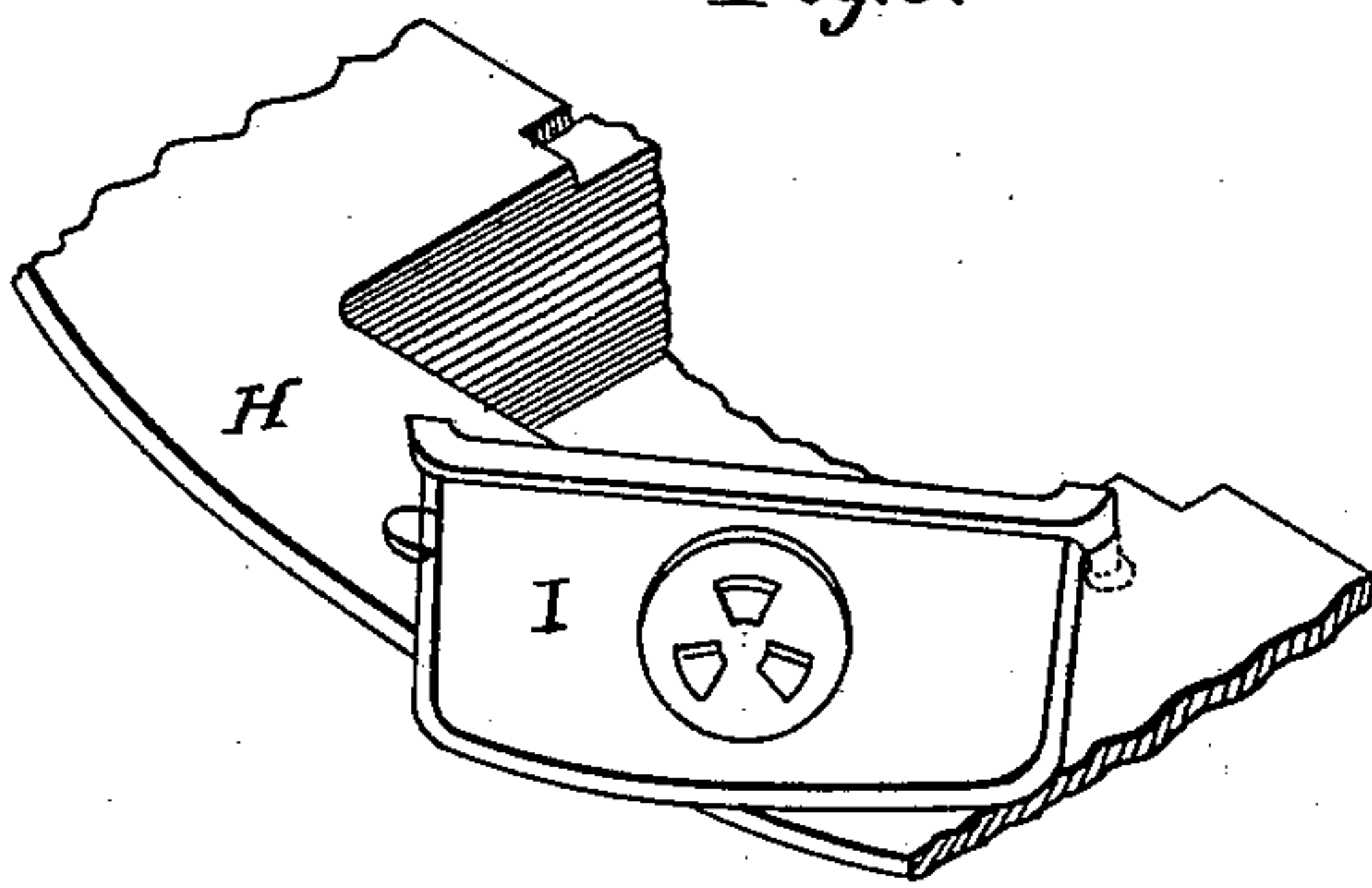


Fig. 3.



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UNITED STATES PATENT OFFICE.

EZEKIEL C. LITTLE AND DAVID H. NATION, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. **180,355**, dated July 25, 1876; application filed June 27, 1876.

To all whom it may concern:

Be it known that we, EZEKIEL C. LITTLE and DAVID H. NATION, of St. Louis, in the county of St. Louis, and in the State of Missouri, have invented certain new and useful Improvements in Heating-Stoves; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Our invention relates to that class of heating-stoves known to the stove trade as the "Todd Stove," wherein the oval is made transverse, and the flue is made to encircle the bottom part of the oval from side to side; and the nature of our invention consists in certain improvements upon the Letters Patent, No. 142,707, granted to us the 9th of September, 1873, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a front elevation of our improved heating-stove. Fig. 2 is a transverse vertical section of the same through the line *x x*, Fig. 1. Fig. 3 is a view of the swinging hearth.

A represents the body of the stove, with end pieces B B, one of which is provided with an ash-hearth, C, and door D. E is the flue under the bottom of the stove, with flue-chamber G and valve *a* at the rear. H is the ash-hearth on the front of the stove, extending the entire length thereof from end to end. Over the opening in the hearth H is a plate, I, provided with a damper in the center. This hearth-plate I swings on a lug, *a*, at the inner corner of one end. J is the frame in the center of the front of the body A, having lower door K and upper door L. On each side of the frame J is a mica window, M. On top of the body A is a saddle, N, with mica windows *b b* in the front and rear, and on this saddle is a casing, O, within which is the magazine P, attached to the top

rim R, having a swinging cover, S. Within the stove is a sectional basket-grate, W, which can be easily removed when desired.

The particular improvements on this class of stoves are as follows: The magazine or self-feeding pipe P and its surrounding casings are made portable, and setting through the saddle N.

The stove can be used with or without this magazine or feed-pipe, as it is intended for either wood or coal.

The grate and linings W can readily be removed when the stove is to be used for wood.

The upper feed-door L is intended to start the fire through, or, if used as an ordinary direct-draft coal-stove, for soft or bituminous coal, so that it is adapted to the use of all grades of coal or wood.

The casing O will be made of sheet-iron or perforated cast-iron, in ornamental form, and the body A may be made either of cast or sheet iron.

The illuminated saddle N presents a handsome appearance.

The magazine or feed-pipe P occupies a small portion only of the body of the stove. In the ordinary base-heaters the magazine occupies the whole upper section or two-thirds of its entire height, more or less, which is lost radiating-surface; but by the application of a feed-pipe to our peculiar form of stove we obtain considerably more heating-surface than is possible in any other form of stove. The magazine is also reduced in height in this form of stove, which renders it more convenient in feeding than in the ordinary base-burner.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a Todd stove, a magazine or feed-pipe, P, in combination with the casing O, swing-top S, saddle N, and coal-fixtures W, substantially as and for the purposes herein set forth.

2. The illuminated saddle N, in combination with the body A, casing O, and top R S, substantially as herein set forth.

3. The hearth H, extending the entire

length of the stove from end to end, and provided with the swinging hearth-plate I, in combination with the doors K L and frame J, substantially as herein set forth.

4. In a Todd stove, the frame J, with top and bottom doors L K, in combination with the body A, hearth H, magazine P, and coal-fixtures W, substantially as herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands.

EZEKIEL C. LITTLE.
DAVID H. NATION.

Witnesses:

BENJAMIN SMITH BUCK,
IRWIN EZEKIEL LITTLE.