

No. 626,387.

Patented June 6, 1899.

L. S. LAWSON.  
GAS BURNER.

(Application filed Oct. 5, 1897.)

(No Model.)

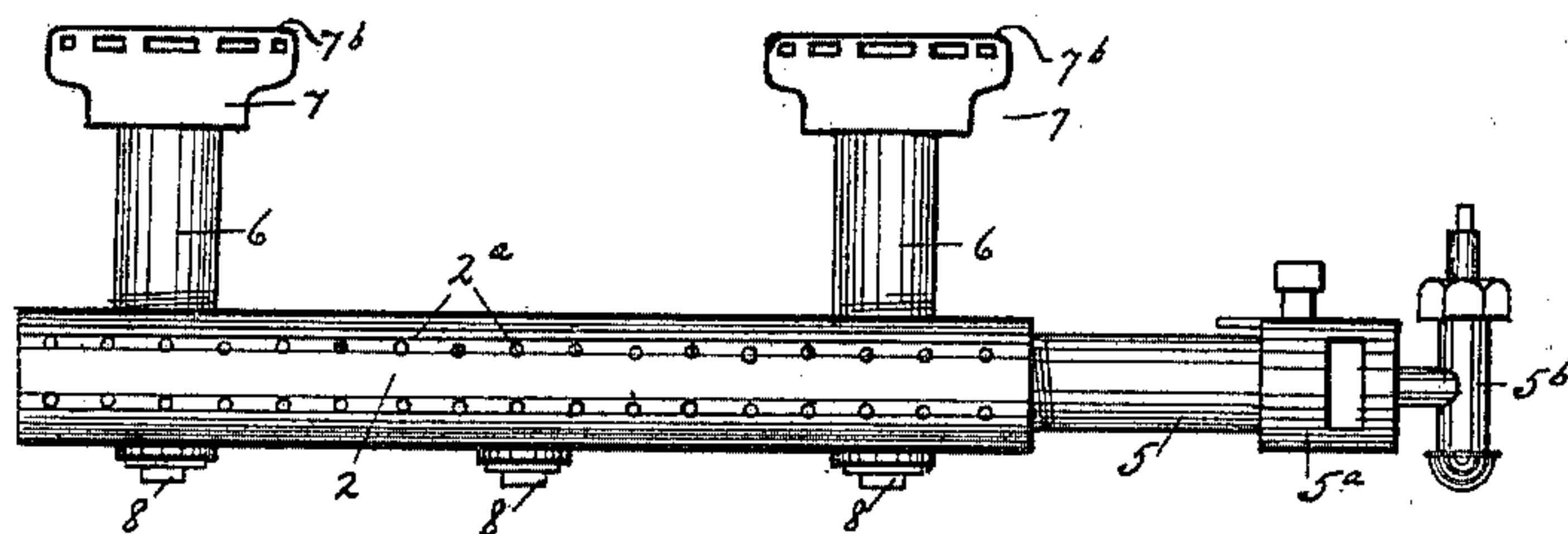


Fig. 1.

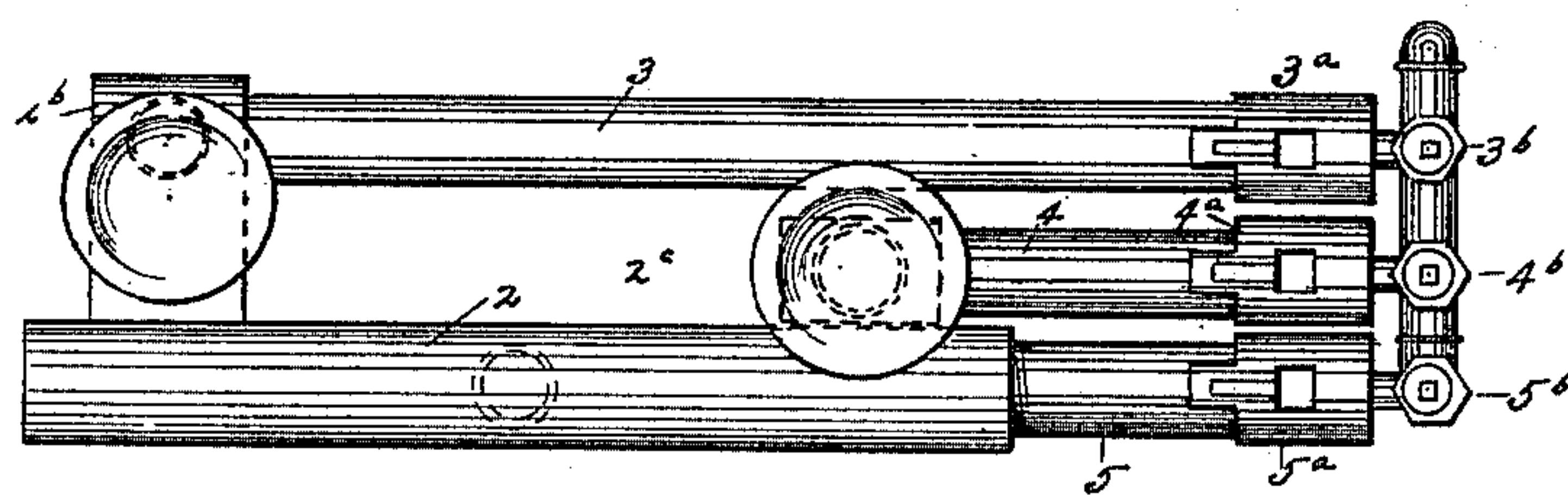


Fig. 2.

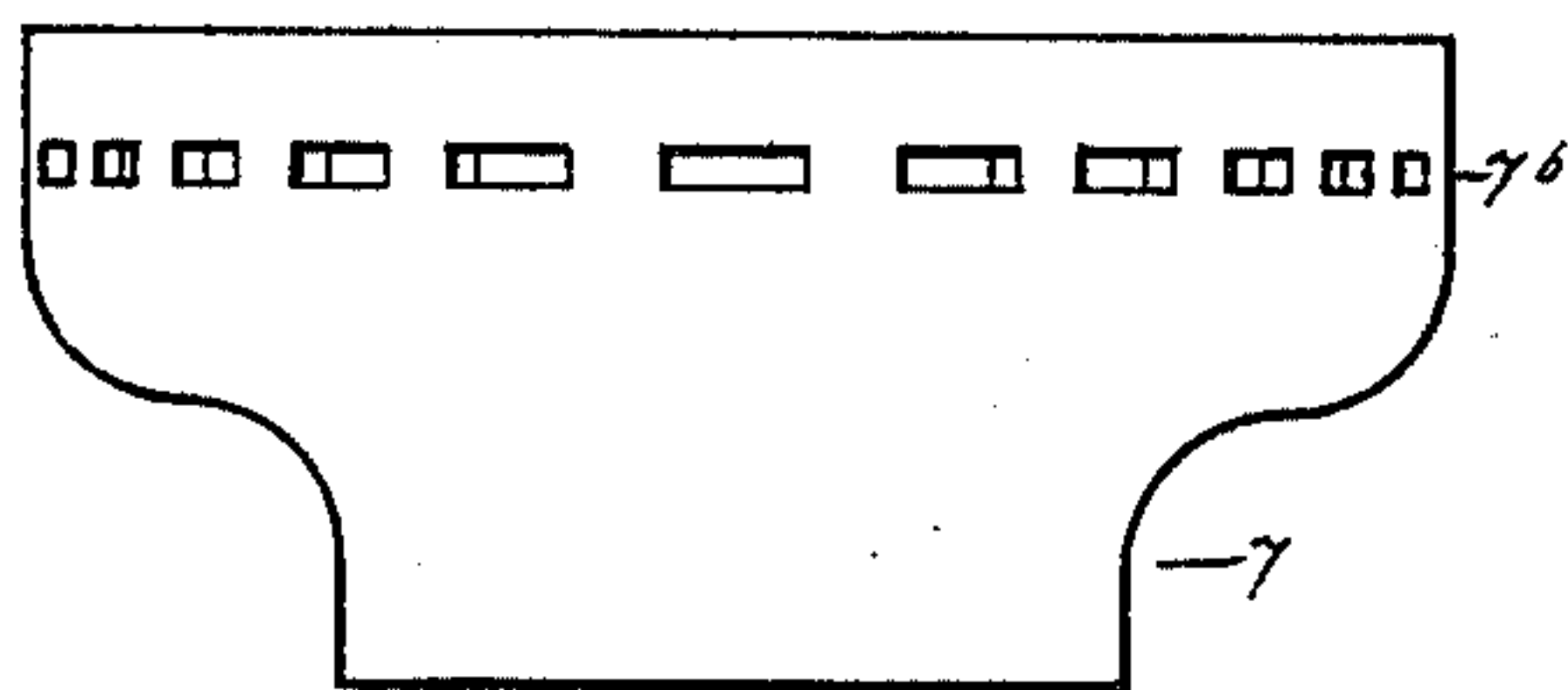


Fig. 3.

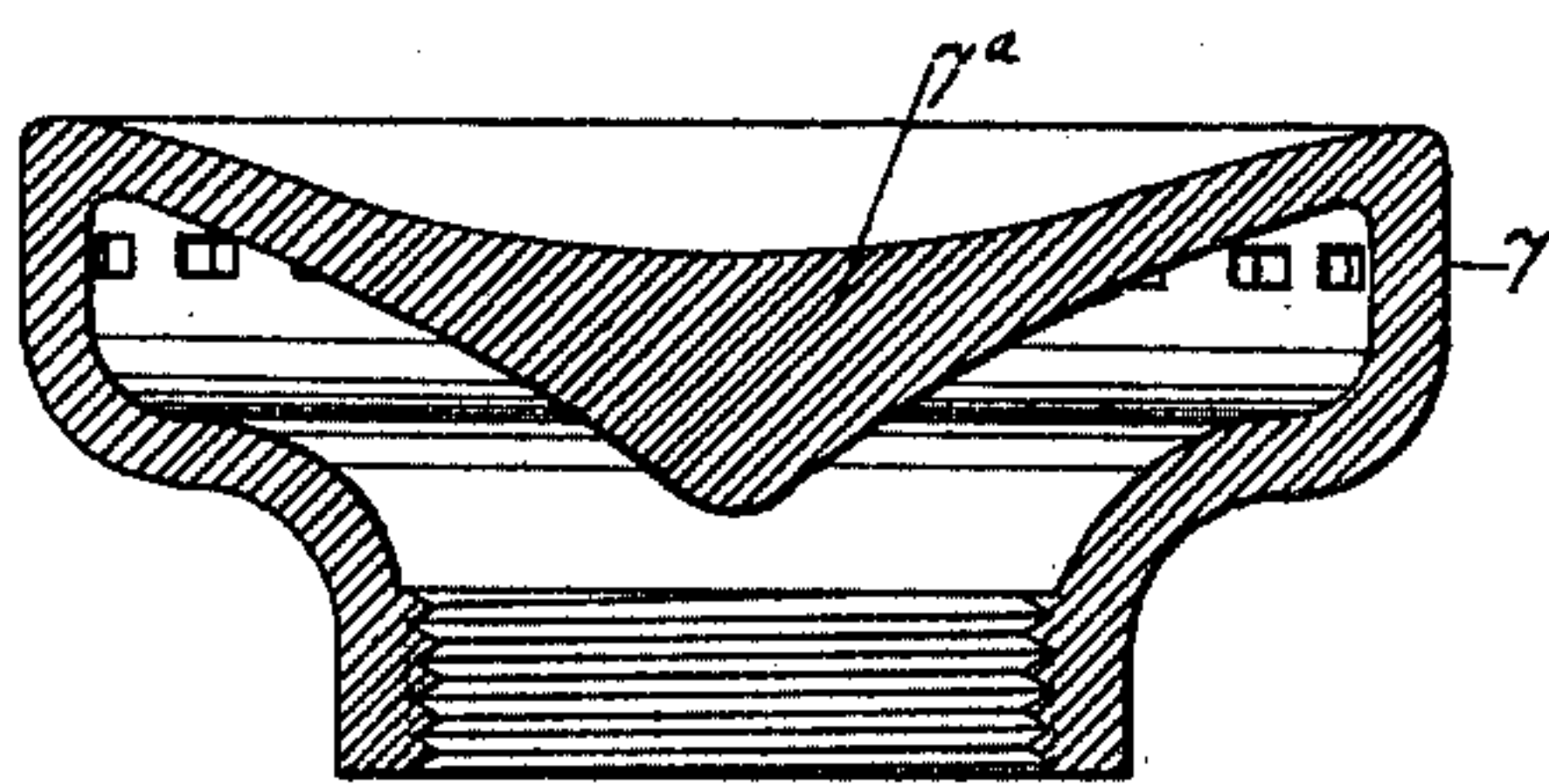


Fig. 4.

Witnesses  
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Inventor  
Lindley S. Lawson,  
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his attorney

# UNITED STATES PATENT OFFICE.

LINDLEY S. LAWSON, OF HOMESTEAD, PENNSYLVANIA.

## GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 626,387, dated June 6, 1899.

Application filed October 5, 1897. Serial No. 654,177. (No model.)

*To all whom it may concern:*

Be it known that I, LINDLEY S. LAWSON, a citizen of the United States, residing at Homestead, in the county of Allegheny and State of Pennsylvania, have invented or discovered new and useful Improvements in Gas-Burners, of which the following is a specification.

In the accompanying drawings, which make part of this specification, Figure 1 is a side elevation of my improved gas-burner; Fig. 2, a plan of same; Fig. 3, a side elevation, enlarged, of one of the lid-burners; and Fig. 4, a vertical section of Fig. 3.

The purpose of my invention is a compound range gas-burner of equal efficiency with those ordinarily used, but much cheaper in construction, as the main portions of the burner are inexpensive castings and the balance ordinary gas-pipe.

In the accompanying drawings, which make part of this specification, 2 is a casting which constitutes the main burner in the grate of the range. This casting is provided with suitable apertures 2<sup>a</sup> 2<sup>a</sup> to permit of the passage of the gas. Extending laterally from said casting and preferably formed integrally therewith are the hollow lugs 2<sup>b</sup> 2<sup>c</sup>, said lugs, however, not communicating with the hollow interior of the main part of the burner. 2<sup>b</sup> and 2<sup>c</sup> are tapped to receive, respectively, pipes 3 and 4, each of which is provided at its outer end with a suitable air-mixer 3<sup>a</sup> and 4<sup>a</sup> and independent gas-valve 3<sup>b</sup> and 4<sup>b</sup>.

The main burner 2 is tapped at one end to receive a short pipe 5, which likewise has a suitable air-mixer 5<sup>a</sup> and independent gas-valve 5<sup>b</sup>.

In the upper side of hollow lugs 2<sup>b</sup> and 2<sup>c</sup> are threaded one or more short pipe-sections 6 6, which are capped by a peculiar mushroom-shaped lid-burner 7, each mushroom burner communicating, respectively, with pipes 3 and 4. This lid-burner is cast so that its top forms an inverted cone 7<sup>a</sup>, projecting downward into the burner. The periphery of the burner immediately below its top is surmounted with slots or apertures 7<sup>b</sup> 7<sup>b</sup> for the passage of the gas.

8 8 8 are plugs secured in the openings used for cleaning the interior of burners of the by-products of combustion, &c.

My built-up burner can be constructed much more cheaply than it is possible to cast an entire burner embodying all its features, while it is easily assembled and taken apart.

The shape of the lid-burner secures a very uniform distribution of gas around the entire periphery of the burner.

Having described my invention, I claim—

A main burner cast with hollow projections integral therewith, said projections having no gas communication with the main burner; independent mushroom burners detachably mounted upon said projections; independent gas-pipe sections connected with each of said projections and with the main burner.

In testimony whereof I have hereunto set my hand this 30th day of September, A. D. 1897.

LINDLEY S. LAWSON.

Witnesses:

E. A. LAWRENCE,  
C. C. LEE.