

No. 627,787.

Patented June 27, 1899.

J. A. & J. T. WESSALOSKY.  
FUEL GAS BURNER.

(Application filed Nov. 16, 1898.)

(No Model.)

Fig. 1.

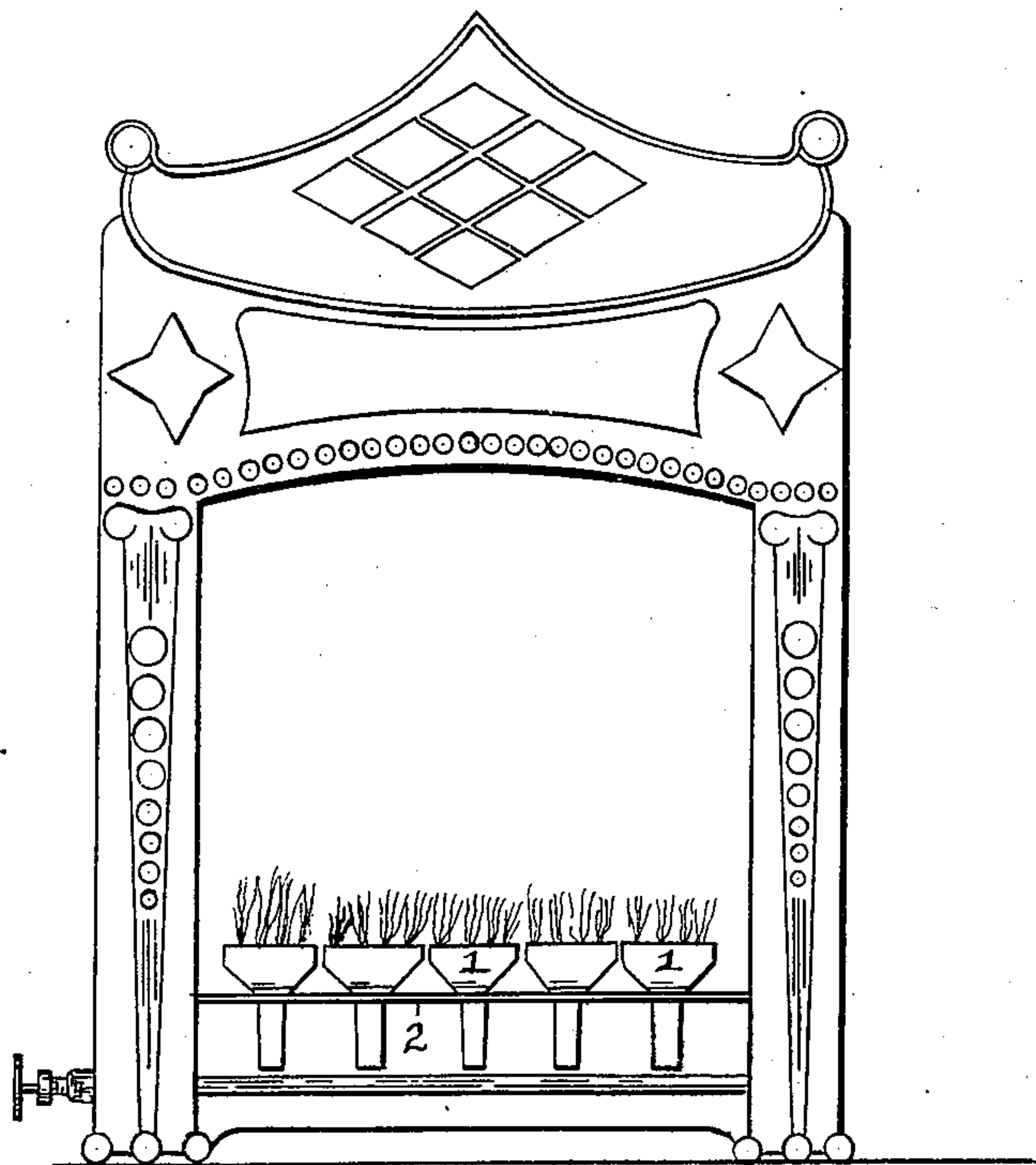


Fig. 2.

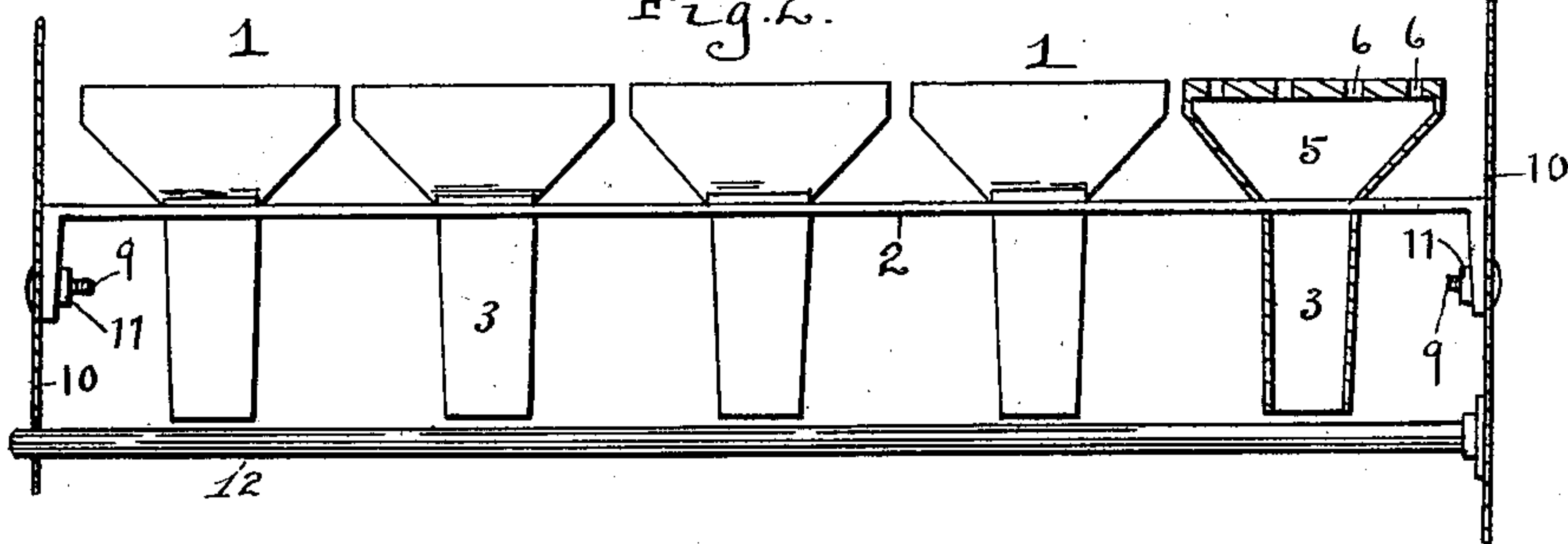


Fig. 3.

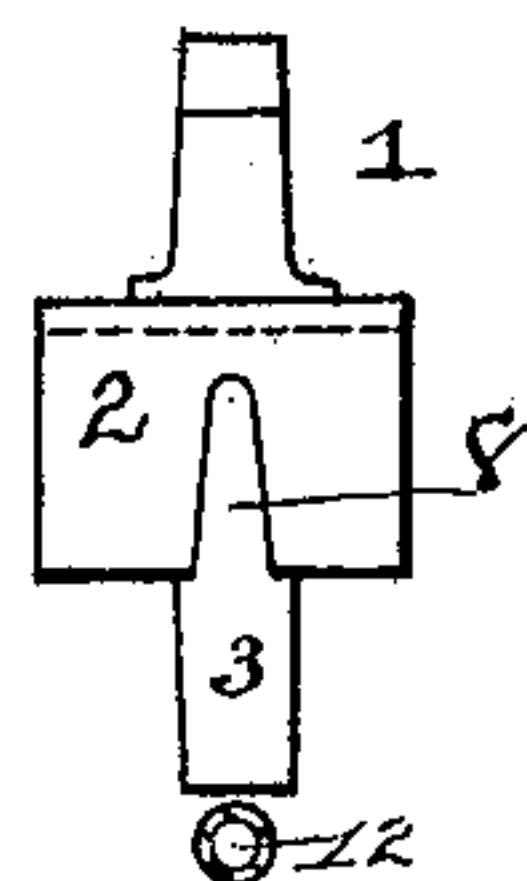


Fig. 4.

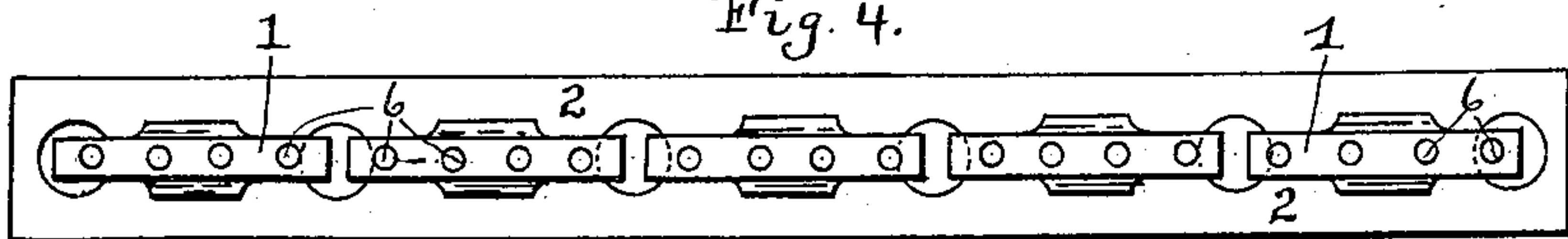


Fig. 6.

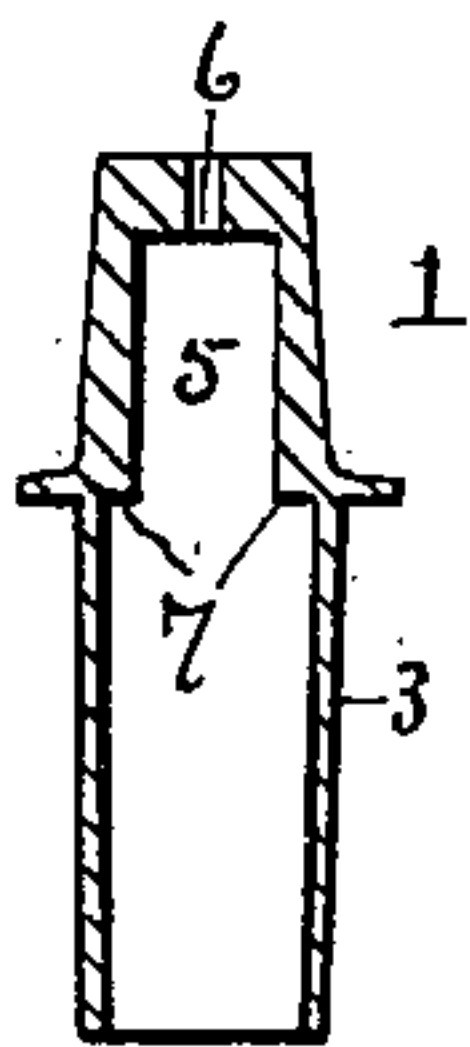
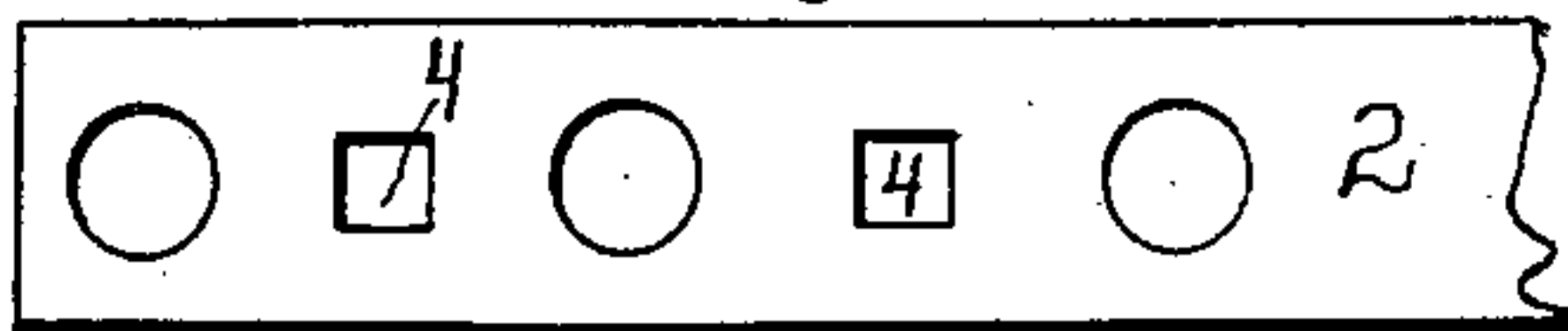


Fig. 5.

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# UNITED STATES PATENT OFFICE.

JOHN A. WESSALOSKY AND JULIUS T. WESSALOSKY, OF DAYTON, OHIO.

## FUEL-GAS BURNER.

SPECIFICATION forming part of Letters Patent No. 627,787, dated June 27, 1899.

Application filed November 16, 1898. Serial No. 696,586. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN A. WESSALOSKY and JULIUS T. WESSALOSKY, citizens of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Fuel-Gas Burners; and we do hereby declare that the following is a full, clear, and exact description of the invention, which 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 the figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in fuel-gas burners for open grates and heating-stoves.

The object of the said invention is to provide a burner consisting of a plurality of individual burners which may be held and supported in an assembled position without screws or other means of attachment, so that the said individual burners may be easily removed for cleaning or for rearranging them by increasing or decreasing the number of individual burners that may be used. This removal of the individual burners may be done without disturbing the support for said burners. Each of the said individual burners is further provided with interior deflecting shoulders or flanges at the upper terminal of the mixing-tube, which arrest the force of the incoming gas and cause it to enter the orifice-chamber with less force. There are also means provided for adjusting the positions of the support for the individual burners, all of which are within the purview of our invention and will be hereinafter described.

In the accompanying drawings, Figure 1 is an elevation of an open grate with our improved multiplex burner therein. Fig. 2 is an enlarged elevation of the burner, one of the individual burners appearing in section. Fig. 3 is an end elevation of the burners, showing an end of the supporting-bar and the supply-pipe. Fig. 4 is a top plan view of the burners and supporting-bar. Fig. 5 is a section of one of the individual burners. Fig. 6 is a top plan view of the supporting-frame.

As hereinbefore stated, the burner com-

prises a series of individual burners 1. These are assembled in a row of any desirable length or number and are supported in a horizontal frame or bar 2 free from any attachment therewith, so that the said burners may be easily removed by the hand and cleaned and as quickly replaced. Each burner consists of an upright mixing-tube 3, which is square or rectangular in cross-section and tapers to its lower end in order that said burners may be easily inserted in the rectangular openings 4 in the bar 2 and lowered therein to the positions shown, which causes the said tubular parts 3 to fill the openings, and thereby the burners are prevented from shifting or moving when placed in position. The portion of each burner above the mixing-tube spreads outwardly and provides an enlarged chamber 5, from which the gas is emitted through orifices 6. These chambers 5 are narrower one way by the formation of interior lateral shoulders 7, which tend to retard the upward flow of the gas entering the mixing-tubes, and thereby cause said gas to enter the chambers 5 mixed with a greater percentage of air. The ends of the supporting-bar 2 terminate laterally and have a tapering slot 8. Bolts 9, penetrating the side walls 10 of the grate or stove, pass through these slots 8 and receive nuts 11, by means of which the said frame is rigidly held in position, as shown. The position of the said frame 2 may be changed by raising or lowering it to the extent of the slots 8, and thereby the lower ends of the burners may be brought in a proper relative position to the supply-pipe 12, which has discharge-openings below said burners.

Having described our invention, we claim—

1. In a fuel-gas burner, the combination with a transverse supporting-bar having a series of rectangular openings therein and adapted to be supported in the side walls of a grate or stove, of a plurality of individual burners each having an upper chamber, and a lower tubular extension rectangular in cross-section and tapering to its lower end whereby said burners are adapted to pass through the openings in the bar and to be supported on said bar free from any attachment therewith.

2. In a fuel-gas burner, the combination with a supporting-bar having a series of rec-

tangular openings, and its ends terminated laterally and provided with adjusting-slots, of a series of individual burners having tubular extensions fitting in said openings, the  
5 said tubular extensions being rectangular in cross-section and tapering to their ends whereby they may be easily inserted in said openings and lowered to positions to engage with the sides of said openings, and means engag-  
10 ing with the slotted ends of the supporting-

bar for holding said bar in position, substantially as described.

In testimony that we claim the foregoing as our own we hereunto affix our signatures in presence of two witnesses.

JOHN A. WESSALOSKY.

JULIUS T. WESSALOSKY.

Witnesses:

R. J. McCARTY,

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