

(No Model.)

L. F. BETTS.
GAS BURNER FOR STOVES.

No. 266,418.

Patented Oct. 24, 1882.

Fig. 1

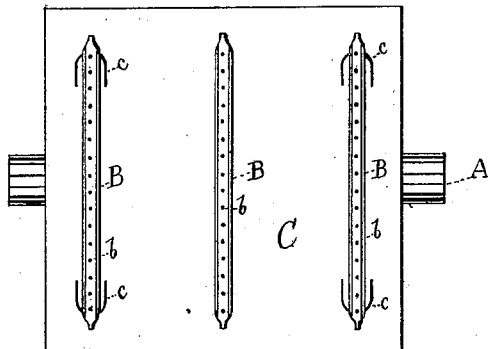


Fig. 2

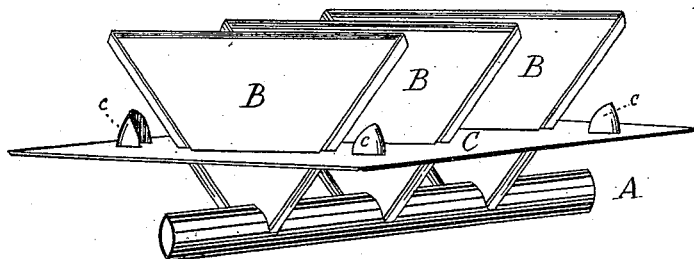
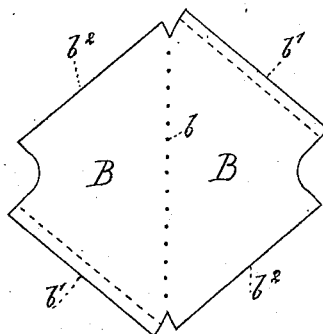


Fig. 3



Witnesses—
J. A. Lane
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UNITED STATES PATENT OFFICE.

LEWIS F. BETTS, OF MORTON, PENNSYLVANIA, ASSIGNOR TO JOHN H. IRWIN,
OF SAME PLACE, AND ROBERT E. DIETZ, OF NEW YORK, N. Y.

GAS-BURNER FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 266,418, dated October 24, 1882.

Application filed March 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, LEWIS F. BETTS, of Morton, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Gas-Burners for Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates especially to the construction of removable gas-burners for use in stoves, and has for its object the production of a burner which shall be cheap and simple to construct, effective in operation, and which may be used in stoves originally constructed for consuming hydrocarbon oils.

It consists essentially in constructing the burner of sheet metal and uniting the parts without the aid of brazing; and my invention involves certain novel and useful combinations or arrangements of parts and peculiarities of construction and operation, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is a plan view of my improved burner. Fig. 2 is a perspective view of the burner, and Fig. 3 is a plan view of a blank out of which the burner-tips are formed.

Like letters of reference wherever they occur indicate corresponding parts in all the figures.

A is a tube, formed of sheet metal, one end thereof being closed up and the other arranged for connecting with the gas-supply by any suitable means.

B are the burner-tips, the blank therefor being shaped as shown in Fig. 3. *b* are small perforations extending across the center of the burner, forming the gas-jet orifices. After the blank is formed it is bent downward upon each side of the gas-jet orifices, and the lips *b'* *b'* are bent over the edges of *b*² *b*² and swaged down tightly thereon. Solder may be applied to the seam for additional security, but it is not necessary. The burner-tips are so shaped that the side walls are sufficiently far apart to leave ample space for the passage of gas from the supply-tube to the jet-orifices. Burner-tips B are united to tube A at their lower extremities by means of solder, a perforation in said tube

being previously prepared for the passage of the gas.

C is a plate of metal, through which the burners pass, said plate being affixed thereto a short distance above tube A. This plate fits into a seat prepared in the base or oil-pot of a stove.

c are lugs attached to plate C, fitting into the burner-cones and forming a guide, whereby the burners are located in proper position with respect to the slots in the cones.

By the peculiar shape of the burners the transmission of heat to the supporting parts is in a great measure prevented, for while the upper edge corresponds in width to the slots in the burner cones the burner-tip gradually contracts nearly to a point before reaching pipe A, leaving a free open space for the air to circulate upon all sides of each burner-tip, and by constructing plate C of bright material the heat is also reflected upward. It will thus be seen that my improved gas burner for stoves is simple in construction, and as the entire device is made of sheet metal it costs but little, while admirably answering the uses and purposes for which it is intended.

Having now fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. In a gas-burner for stoves, the combination, with tube A, of triangular burner-tips united thereto by means of solder, substantially as shown and described.

2. The burner-tips B, formed of sheet metal, shaped substantially as specified, the edges thereof being bent over each other or swaged and united, substantially as shown and described.

3. In a gas-burner of the character herein specified, the combination, with pipe A and burner-tips B, constructed of sheet metal, as set forth, of plate C, having guiding-lugs *c*, thereon, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

LEWIS F. BETTS.

Witnesses:

F. W. HANAFORD,
A. M. PIERCE.