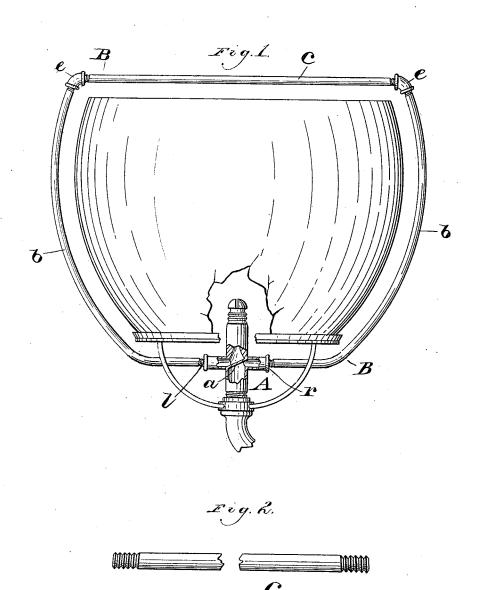
## J. G. MILLER.

GAS BURNER.

 ${\tt No.\,266,634}.$ 

Patented Oct. 31, 1882.



Witnesses. Henry Frankfuler, Attaly

Inventor. James & Miller Attorney.

## United States Patent Office.

JAMES G. MILLER, OF GREEN BAY, WISCONSIN.

## GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 266,634, dated October 31, 1882.

Application filed March 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. MILLER, a citizen of the United States of America, residing at Green Bay, in the county of Brown 5 and State of Wisconsin, have invented certain new and useful Improvements in Gas-Burners, of which the following is a specification.

My invention relates to that class of gasburners in which the gas, before escaping at 10 the burner-orifice, is made to pass through a small tube above the flame for the purpose of expanding and thus improving the combustion of the same.

Heretofore the small tube in this class of 15 gas-burners has been made in a continuous piece, with the ends secured rigidly in the burner by soldering or similar means, rendering it very difficult to remove the same for cleaning, which frequently becomes necessary from the clogging of said tube by particles of carbon or other particles contained in the gas. The object of my invention is to overcome this difficulty by making the pipe in parts, screwed together by means of "right" and "left" 25 threads, in the manner hereinafter fully described.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of a gasburner of this class embodying my invention; 30 Fig. 2, a detailed view, referred to hereinafter.

Similar letters refer to similar parts through-

out the several views.

A represents the burner, divided in the cus-

tomary manner by a web, a.

B B is the small tube, composed of side pieces, b b, and top piece, c, connected by elbows e e. The lower ends of the side pieces, bb, are screwed into the burner at r and l, connecting respectively with the different com-40 partments of the burner. The upper ends are provided with elbows ee, into which are screwed the ends of the top piece, c, one end of which

is provided with a right and the other with a left hand thread, as shown in Fig. 2, the respective elbows being "tapped out" to suit. 55 By this arrangement the parts may be readily attached or be removed for cleaning, which may be done by passing a piece of wire or similar article through the various parts.

If desired, the several parts of the tube may 60 be connected in the ordinary manner and the ends at r and l be provided respectively with right and left hand threads. By this arrangement the tube could be easily removed from the burner, said burner being detached, with- 65 out the use of a wrench or tongs, by holding the tube at the top part, c, and turning it upon an axis passing through r and l.

The advantages of this construction will be evident from the above description with ref- 70

erence to the drawings.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is-

1. A gas-burner, A, having partition a, in 75 combination with a tube, BB, connected thereto by means of right and left threads in such a manner that it may be readily removed, substantially as shown and described.

2. In a gas-burner, a tube, B B, composed 80 of pieces b b, connected together by piece c, provided with right and left threads, substantially as described and shown, and for the pur-

pose set forth.

3. In a gas-burner, the combination of the 85 side pieces, b b, top piece, c, and elbows e e, with the gas burner A, having partition a, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES GEDNEY MILLER.

Witnesses:

SAML. D. HASTINGS, Jr., W. P. GREENE.