

J. R. De MAHY.
Vapor Burner.

No. 94,722.

Patented Sept. 14, 1869.

Fig. 1

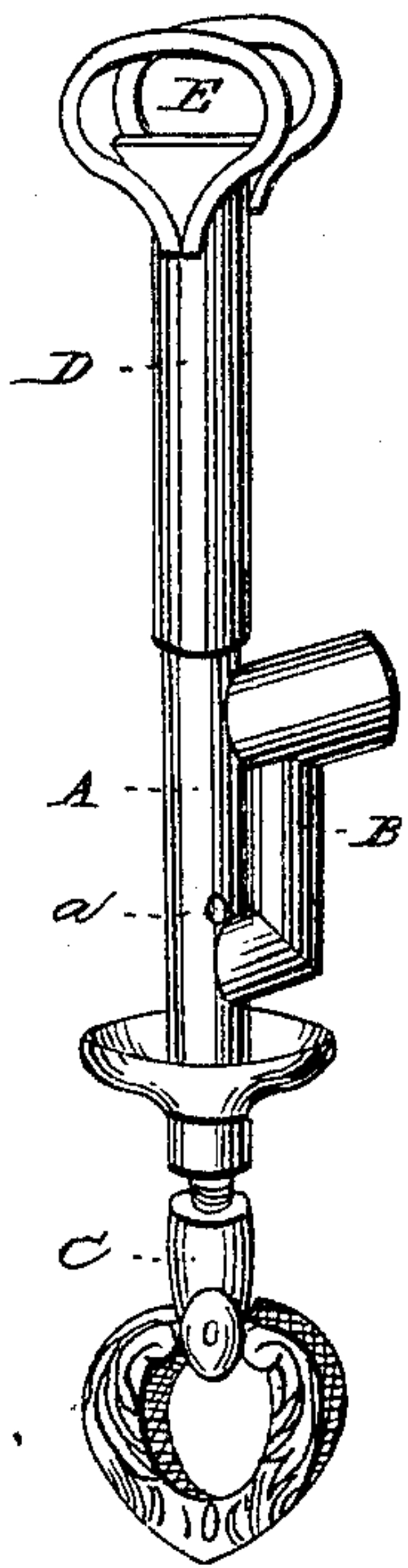


Fig. 2

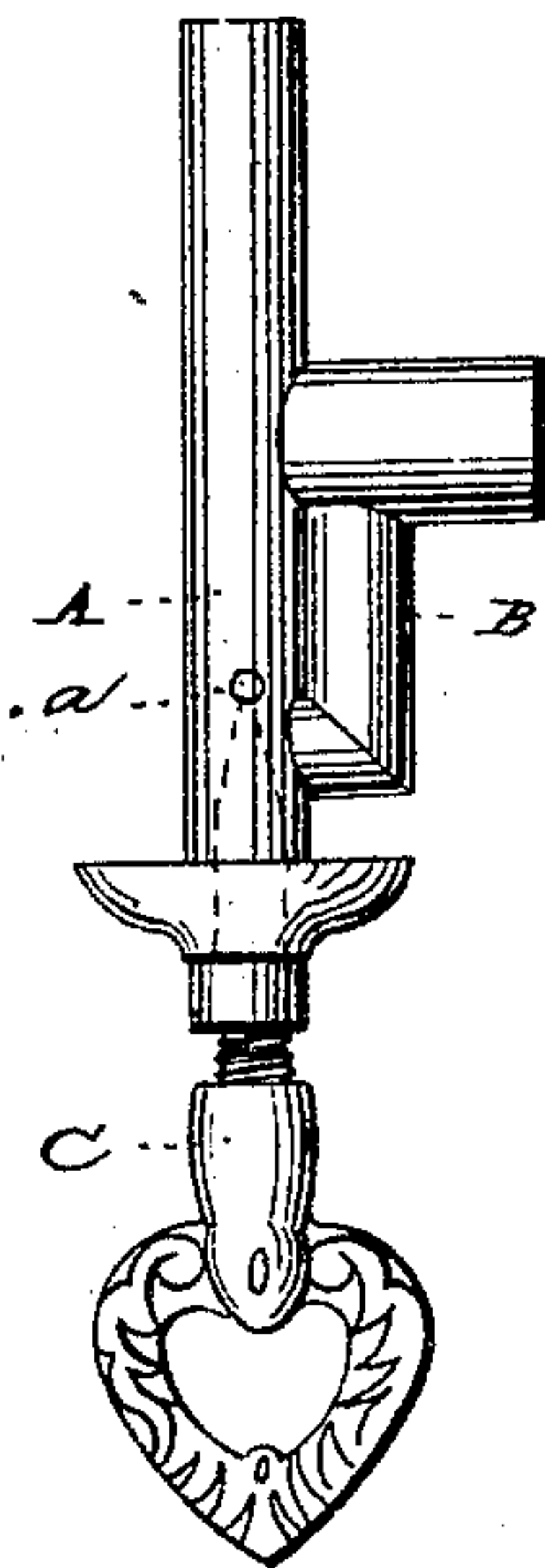
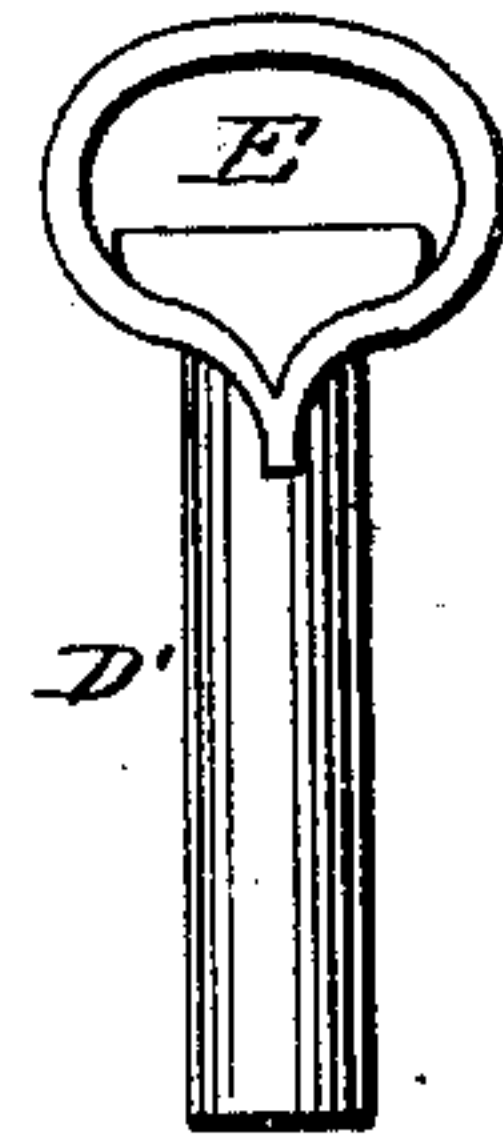


Fig. 3



Witnesses

A. Parkman
Referee R. Rhoads

Inventor

Jos. De Mahy

United States Patent Office.

JOSEPH R. DE MAHY, OF NEW ORLEANS, LOUISIANA.

Letters Patent No. 94,722, dated September 14, 1869.

IMPROVEMENT IN VAPOR-BURNERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH R. DE MAHY, of the city of New Orleans, State of Louisiana, have invented a certain new and useful Improvement in Petroleum Gas-Burners; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, on which it is illustrated at—

Figure 1, by a view of it, as when ready for use, and at

Figures 2 and 3, by sectional views.

My invention consists of several distinct and important improvements on the burner recently patented by myself and James B. Croes, as joint inventors, by which the device is more easily manufactured and at less cost, and is made decidedly more effective and better in all respects than said burner.

Instead of making the parts A B, to wit, the sections of the pipe in which the gas is generated, and into which it flows, in separate pieces, and then joining them together, as in the case of the said patented burner, I connect them in casting, and hence avoid the trouble and difficulty of uniting them afterward, as well as all danger of leakage from imperfect joints. I moreover dispense with the movable regulating-sleeve of the "Croes and De Mahy" burner, and provide for a due supply of atmospheric air in the gas-section A, by making a small perforation, *a*, through the same, just above the point at which the gas enters therein from the generating-section B. I regulate the quantum of air admitted through this perforation by making the upper extremity of the key C of conical form, as shown by dotted lines at fig. 2, or by the size of said aperture. The flow of the gas is also regulated by key C, by means of its conical pointed extremity.

Finally, instead of extending the part A up to the

point at which the gas issues, I cut it off, as shown at fig. 2, and fit on it a removable burner or tip, D, so as to be able to use tips of different thicknesses and lengths, as shown at D', fig. 3. Moreover, instead of curving the tip of the burner, on the line of the fissure through which the gas escapes, I make it perfectly straight, as shown at E, figs. 1 and 3, and extend the fissure a little way below the top of the burner at both its extremities, and curve the metal on each side of the same, so as to produce a packing of the gas before it issues therefrom. I use the same kind of heat-conductors employed by De Mahy and Croes.

By actual experiment, I have demonstrated that my invention will give a better and steadier light, with the same amount of oil, for any given time, with any given size of burner, so that it possesses this advantage, as well as that of being cheaper, more easily made, and less liable to get out of order.

Again, I have demonstrated, by actual experiment, that whilst there is always sufficient heat to generate an abundant supply of gas in my burner, there is never enough to char the packing, and that, in this respect, also, my burner is the best that has been hitherto devised.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

A gas-burner, in which the sections A and B are made in a single piece, by one casting, and which is provided with an aperture *a*, for the admission of atmospheric air, and a regulating key, C, in combination with a removable tip D, when each part is constructed as herein described for the purpose set forth.

JOS. R. DE MAHY.

Witnesses:

A. BARBARIN,
RUFUS R. RHODES.