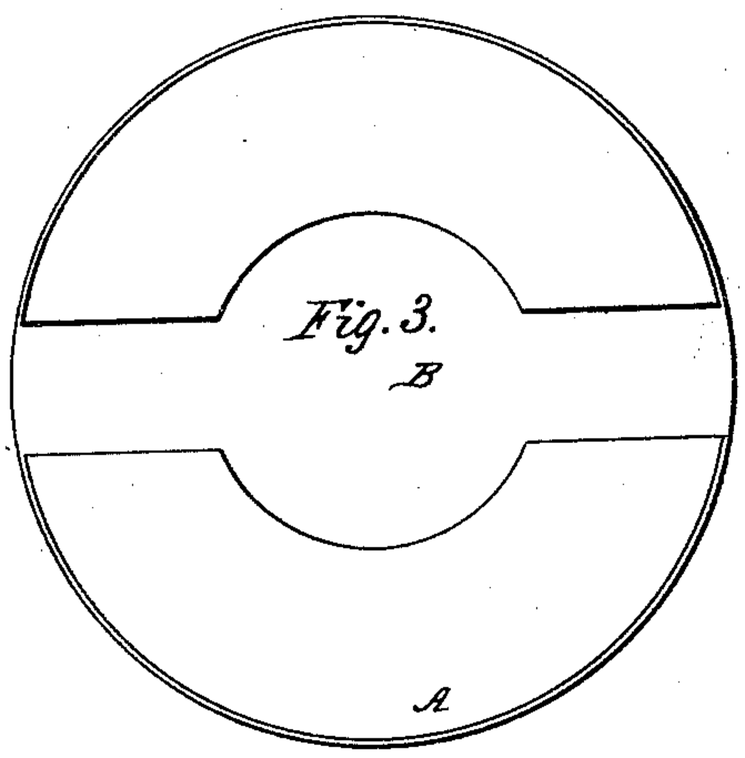
H. S. SARONI.

Vapor Burner.

No. 57,578. Patented Aug. 28, 1866.



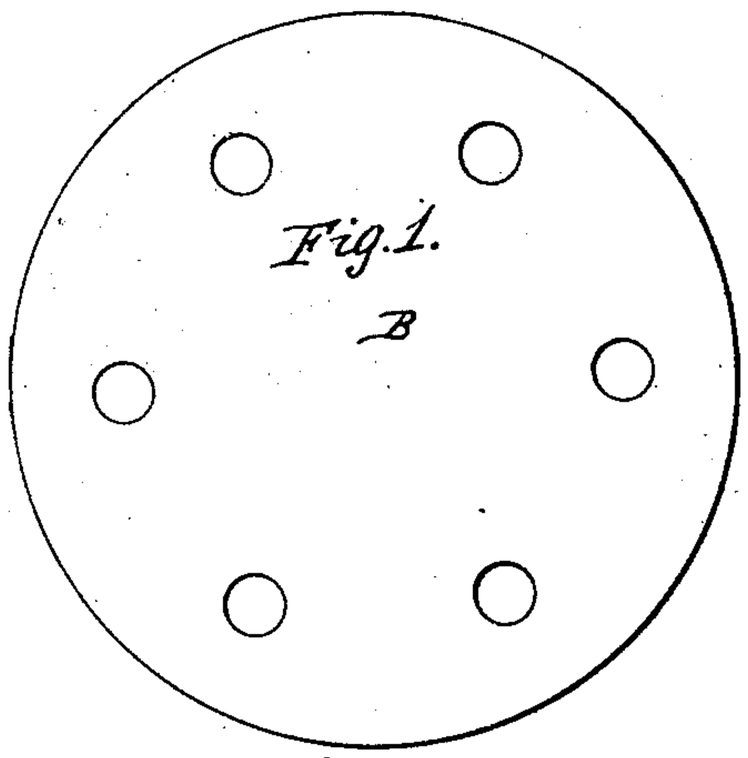
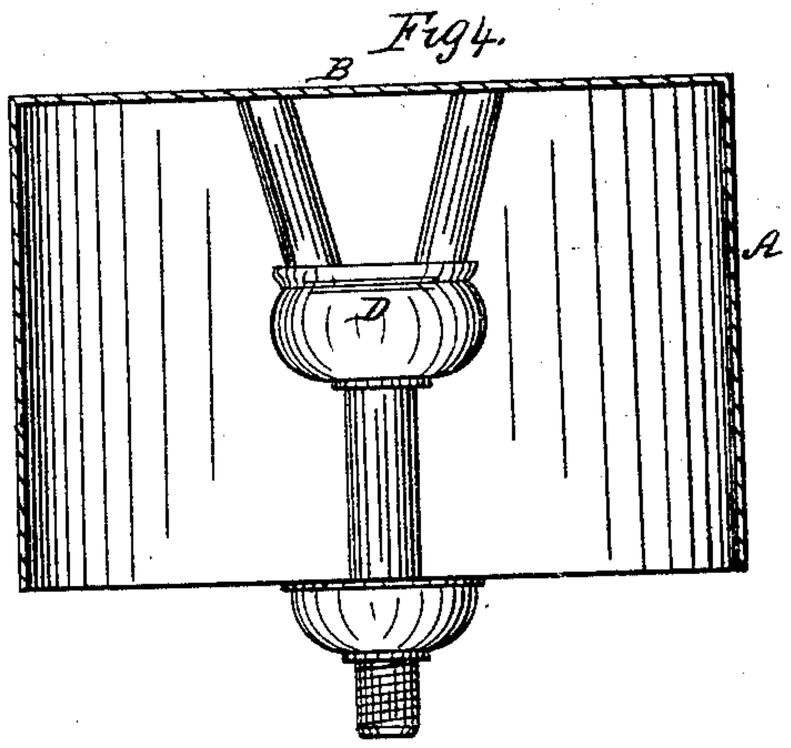
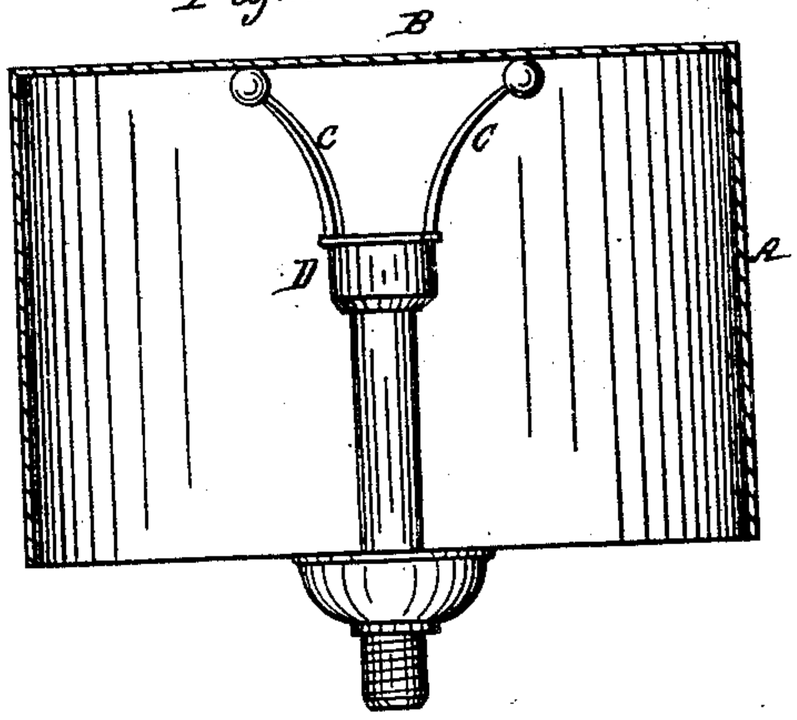


Fig. 2.





Witnesses:
G. G Peyton
Theodore Lang,

Inventor:
H. S Saroni
By Baldwin & Son

UNITED STATES PATENT OFFICE.

HERRMAN S. SARONI, OF MARIETTA, OHIO.

IMPROVEMENT IN VAPOR-BURNERS.

Specification forming part of Letters Patent No. **57,578**, dated August 28, 1866.

To all whom it may concern:

Be it known that I, HERRMAN S. SARONI, of Marietta, in the county of Washington and State of Ohio, have invented a new and useful Improvement in Vapor Burners and Heaters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which make a part of this specification, and in which—

Figure 1 is a plan view of my improved heater. Fig. 2 is a vertical section of the same, showing a side elevation of the burner. Figs. 3 and 4 are similar views of another form of heater.

It is the object of my invention to produce a simple and efficient lighting or heating apparatus adapted to the use of mineral oils or other hydrocarbons as a fuel; and to this end the improvement herein claimed consists, first, in a vapor-burner having a series of conductors surrounding the jet, but having no heater-cap; second, in combining with a vapor-burner a removable ring or cylinder having a heater-cap permanently attached thereto for the purpose of securing an efficient heating apparatus when the heat has to be generated or the vapor burned at a distance from the article to be heated; third, in a burner or heater, the upper or conducting part of which is formed of brass or other metal of high conducting power, while the lower portion is made of iron or other metal of less conducting power, whereby I concentrate the heat at the point of vaporization.

In Figs. 1 and 2 of the accompanying drawings a ring, A, is shown, having a bar or heater-cap, B, across its top, and resting upon the prongs or conductors C of the burner D. The vapor burns on the under side of the cross-bar, which becomes highly heated and imparts its heat to the burner through the conductors.

In Fig. 2 it will be seen that the conductors and burners are made heavy, in order to increase their conducting power.

I prefer to make the parts D C of the burner of brass or other metal of high conducting power, and the lower part of iron or other metal of low conducting power, so as to concentrate the heat at the jet or point of vaporization.

Figs. 3 and 4 represent a ring with a perforated diaphragm or heater-cap across one end, and which rests on the burner, which, in this instance, is composed of three or more prongs or conductors having balls on their ends.

When used simply for lighting purposes the ring is removed and the flame is not dimmed by the shadow of a heater-cap, while the conductors convey sufficient heat to the burner to vaporize the fluid. When used for heating the ring is placed on the conductors, when it becomes the heater-cap, and adds materially to the intensity of the heat.

From the foregoing description it will be seen that my invention is well adapted for supplying heat to points distant from the burner, as in ovens, warming buildings, &c.

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

1. A vapor-burner having a series of conductors surrounding the jet, but without a heater-cap, substantially as and for the purpose described.

2. The combination of the burner and conductors with the removable ring and heater-cap, substantially as and for the purpose described.

3. As a new article of manufacture, a vapor burner or heater having the upper or heat-generating portion made of metal of high conducting power, while the lower or fluid-conveying portion is made of metal of lower conducting power, as described, for the purpose of concentrating the heat at the generating or vaporizing point.

In testimony whereof I have hereunto subscribed my name.

HERRMAN S. SARONI.

Witnesses:

J. I. PEYTON,

EDM. F. BROWN.