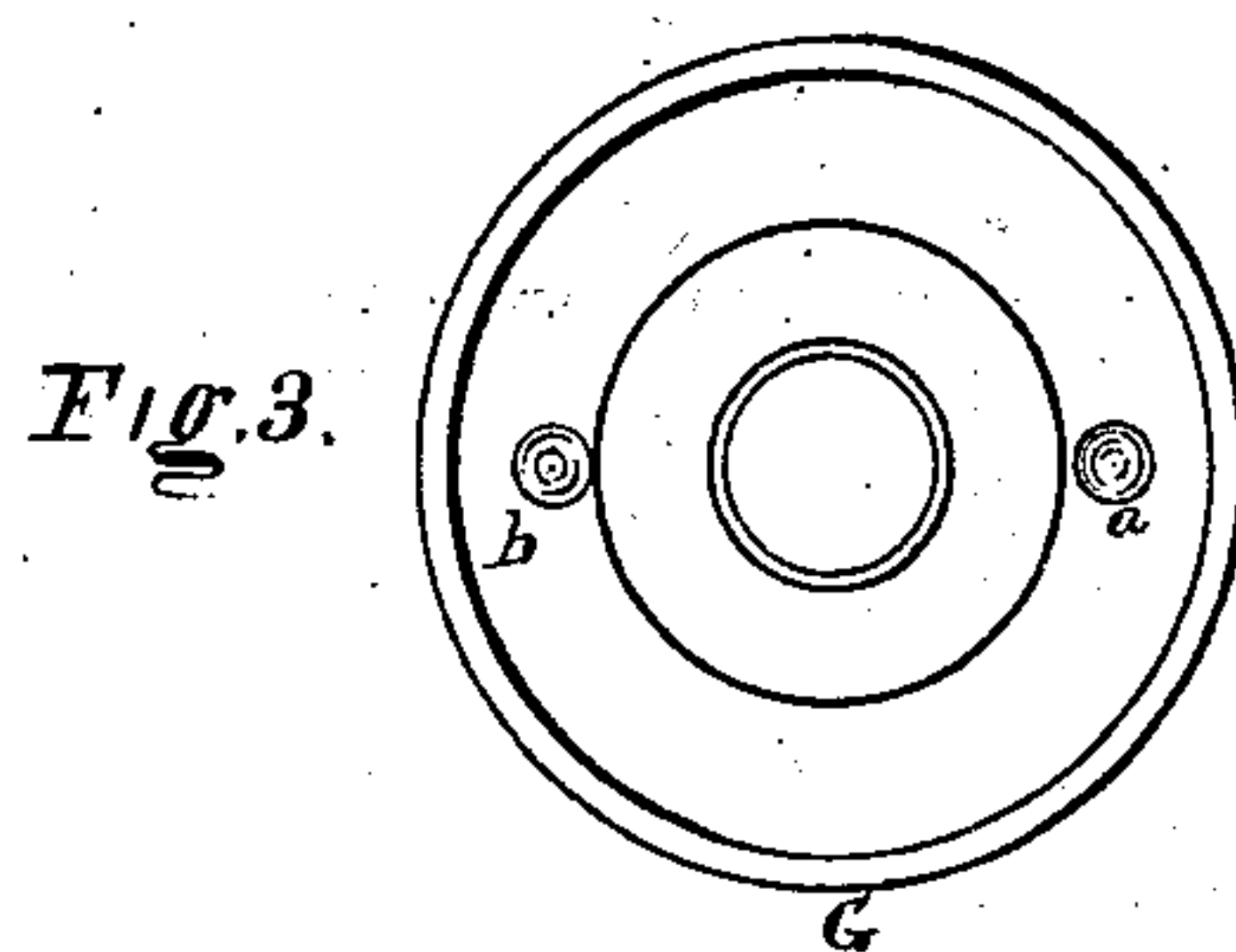
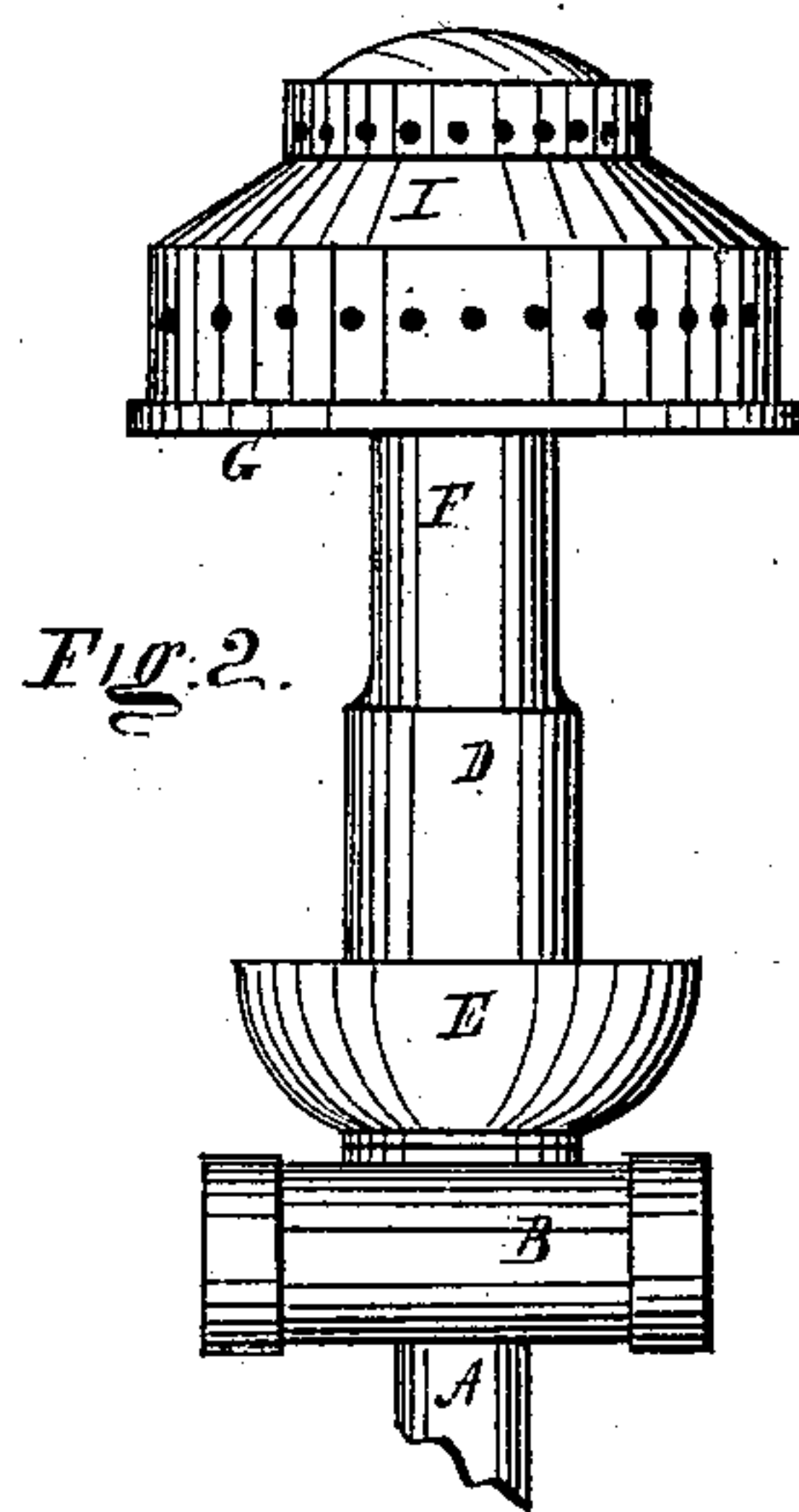
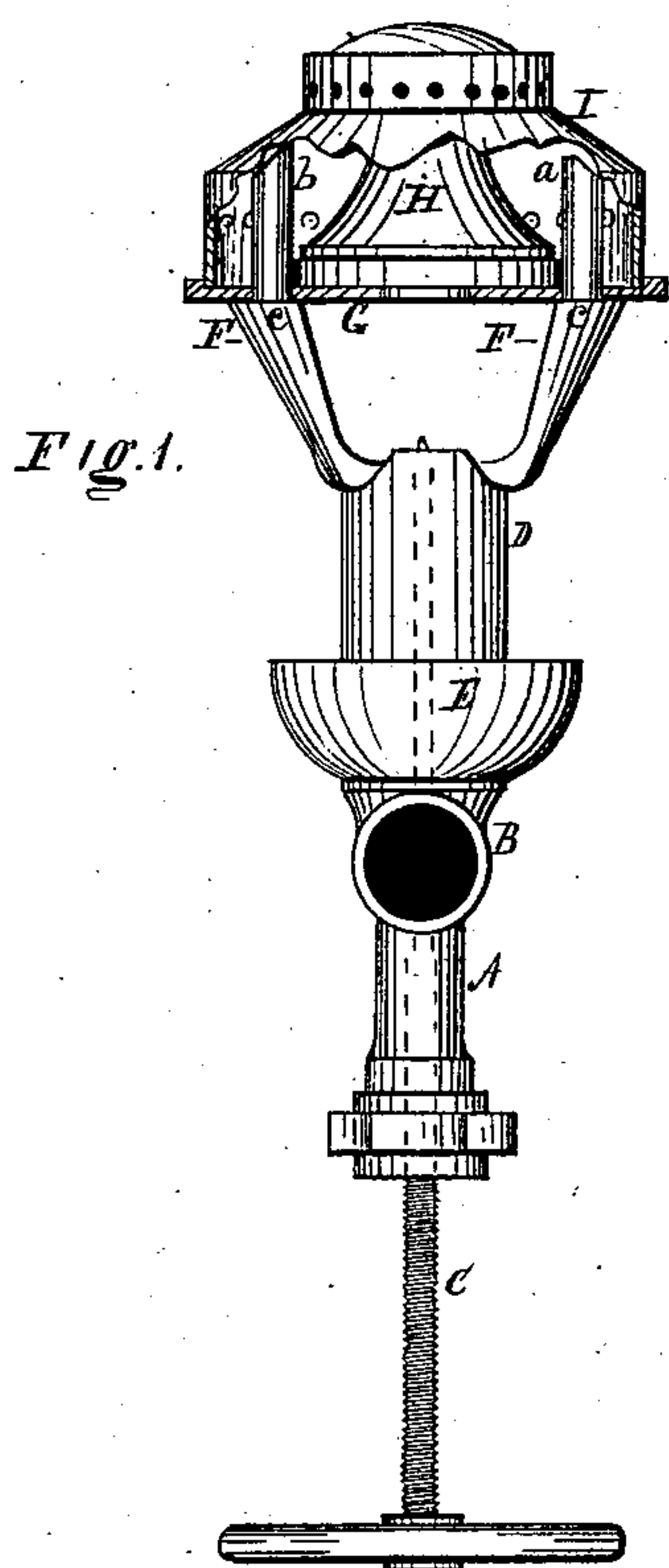


(No Model.)

W. C. NORTH.
Gasoline Burner.

No. 227,701.

Patented May 18, 1880.



Witnesses.
A. L. Emerson
Clarence A. Smith.

Inventor:
W. C. North
per W. H. Burdick
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM C. NORTH, OF CLEVELAND, OHIO.

GASOLINE-BURNER.

SPECIFICATION forming part of Letters Patent No. 227,701, dated May 18, 1880.

Application filed March 11, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. NORTH, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Burner for Gasoline-Stoves; and I do hereby declare that the following is a full, clear, and complete description thereof.

This invention relates to the construction of the burner for gasoline-stoves, the same being an improvement on a burner for which a patent was granted to me on the 14th day of August, 1877.

The following is a full and complete description of the said improvement, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the burner, partially in section. Fig. 2 is an external view of the burner. Fig. 3 is a detached section.

Like letters of reference refer to like parts in the several views.

The improvement alluded to relates to the head or upper part of the burner. Hence a brief description only of the lower parts will be necessary in this place, as the said lower parts are fully shown and described in my patent above alluded to.

In the drawings, A represents a tube, and B a T-coupling joint for attaching the burner to a supply-pipe and for connecting it to other burners. In the said pipe A is a needle-valve, terminating the upper end of the screw-stem C, by which the valve is actuated for opening and closing the orifice in the end of the gas-generator D, for regulating the flow of gas therefrom. E is a cup surrounding the base of the generator, all of which are substantially the same as in my patent.

F F are a pair of arms attached to and projecting upward from the sides of the gas-generator. The upper ends of said arms terminate, respectively, in fingers *a* and *b*, projecting through the bottom plate, G, on either side of the tubular cone H, as shown in Fig. 1. Said figure represents a transverse section of the plate with the dome or cap I supported thereon, and represented as broken away that the cone H may be seen.

The above-said bottom plate, G, is support-

ed in place upon the shoulders *c* of the arms F. The plate, being a separate and not an integral part of the arms, can be taken off and put thereon for any needful purpose.

In this my present burner I dispense with the yoke-openings in the bottom of the burner patented to me, and also the openings in the yoke. Said openings in the bottom of the burner and in the yoke were for the purpose of letting down flames of gas onto the outside of the arms in order to heat them, and thereby convey heat to the generating-chamber. This was a waste of fuel, as the flames did not aid in heating the cooking-vessels.

The yoke and bottom plate in my former burner were in one piece, and were made of brass, and had to be cast with a core and then turned out to form a flange to hold the burner in its place, which made the burner expensive to make.

In this my present burner I cast the bottom plate separately and without a core, the flange being cast thereon for holding in place the perforated cap. The plate is also made of iron, which cheapens the burner.

The arms in this my new burner, having their fingers extending up through the plate into the combustion-chamber and surrounded therein with flame, become so heated as to convey sufficient heat to the generator to keep up a continuous vaporization of the gasoline without waste of fuel.

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

In combination with the detachable plate G of the burner, the heat-conducting arms F, supporting, penetrating, and extending above said plate into the flame within the heating-chamber, consisting of the foraminated dome or cap I, secured in place by the peripheral flange of the base-plate, with a central tube extending up from said plate in the dome of the burner, all constructed and arranged as described, and for the purpose specified.

WILLIAM C. NORTH.

Witnesses:

J. H. BURRIDGE,
A. L. CHAMPION.