

A. H. MERSHON.
Gas-Heaters.

No. 126,473.

Patented May 7, 1872.

Fig. 1.

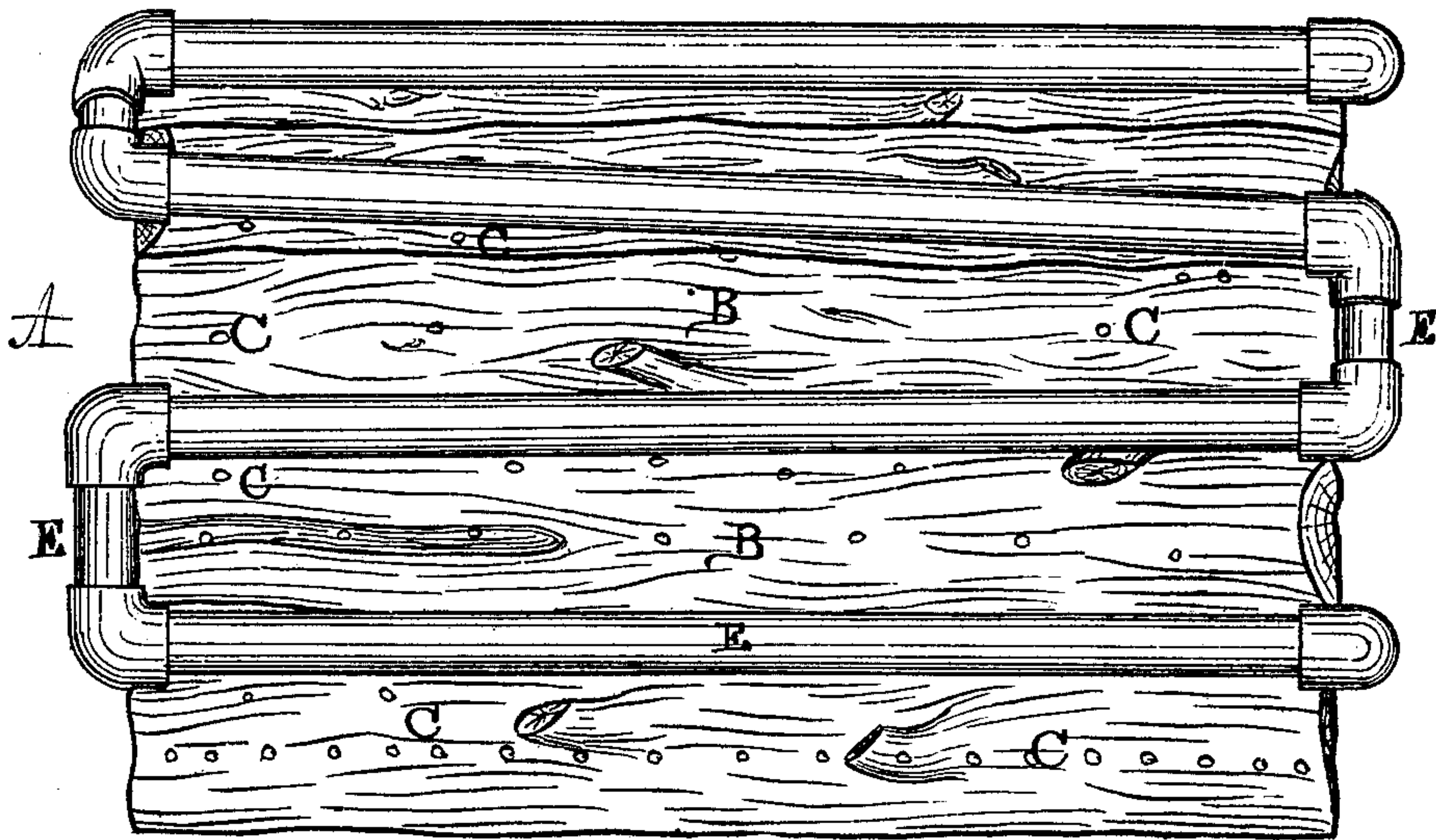


Fig. 2.

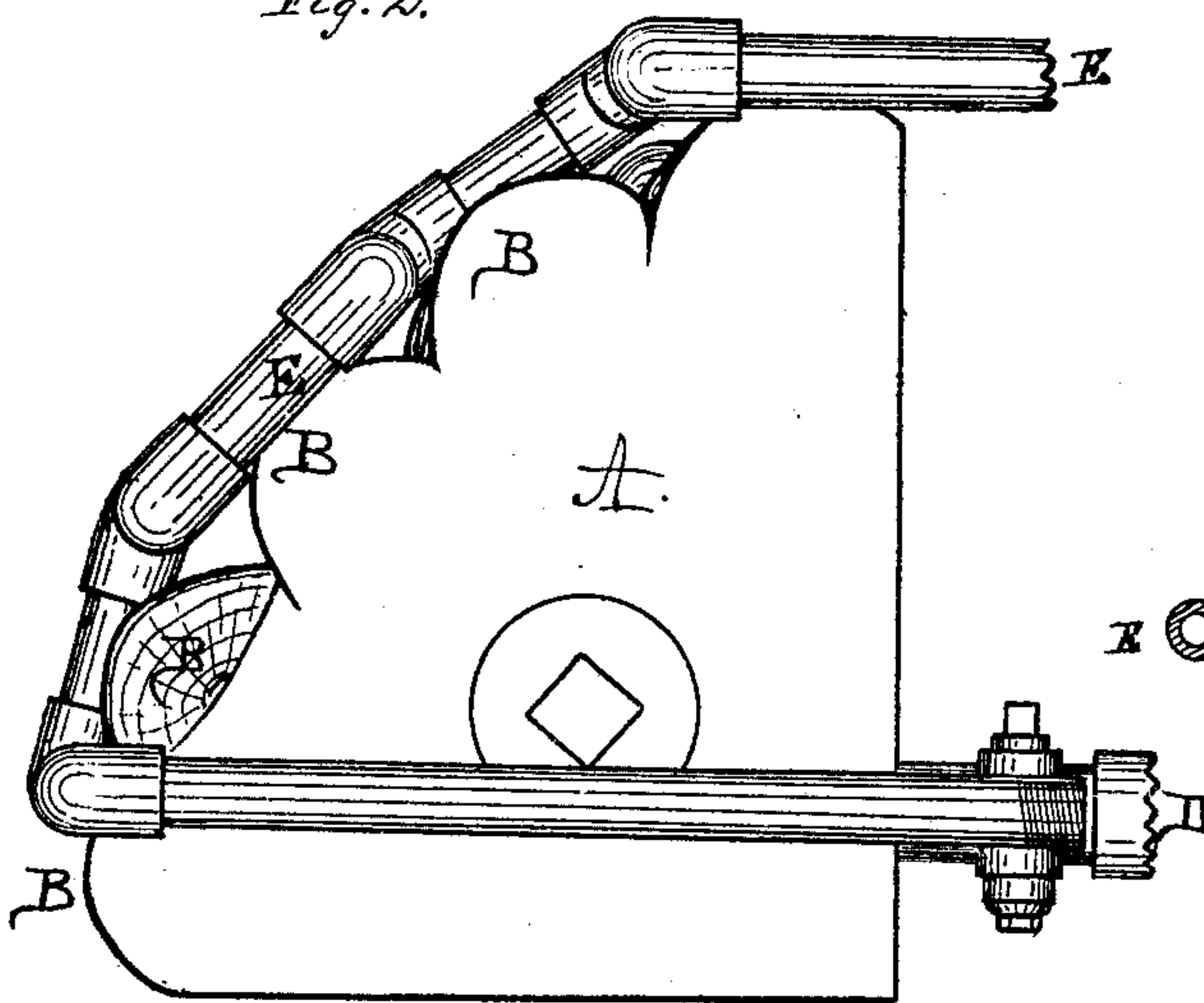
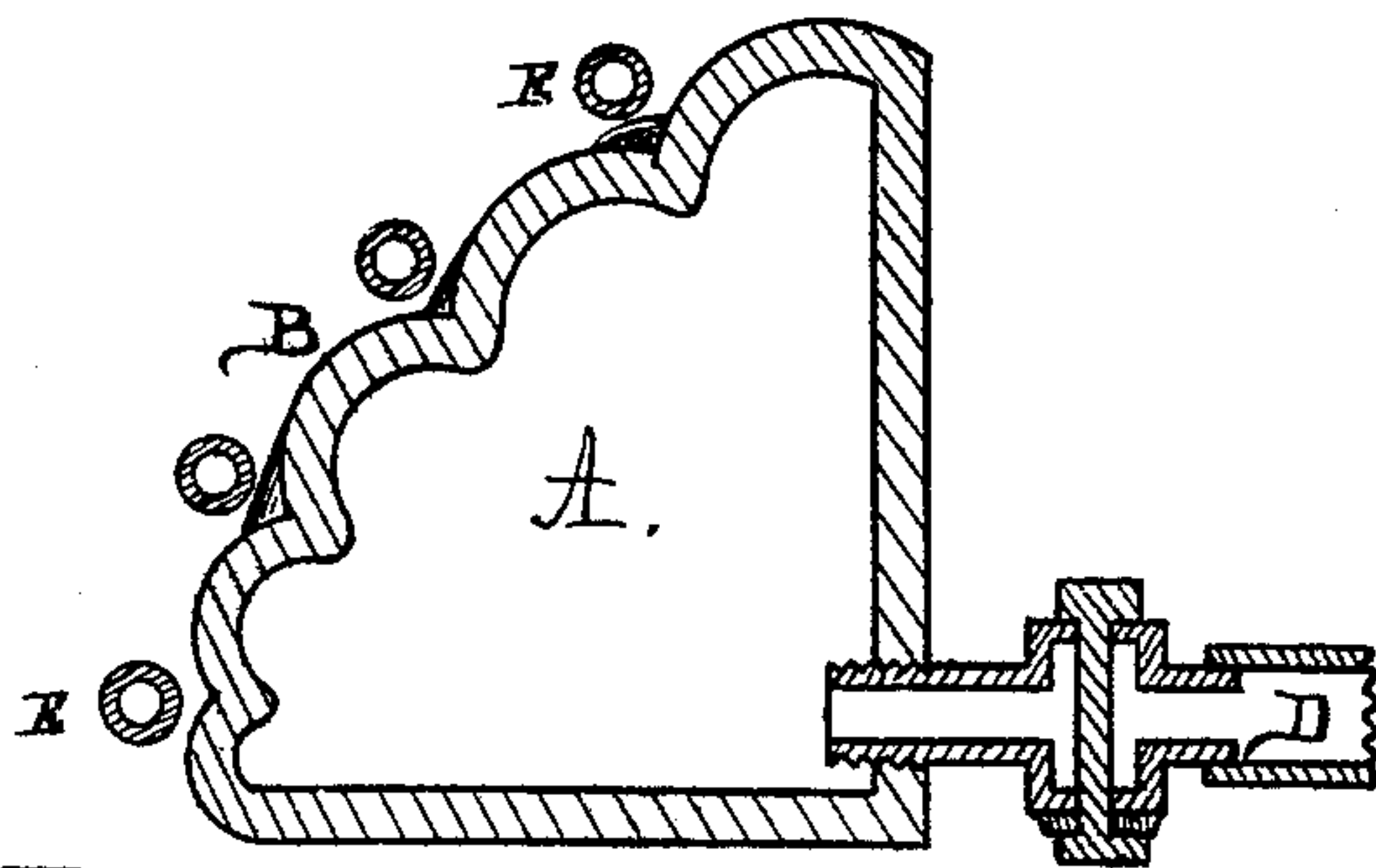


Fig. 3.



Witnesses:
Jacob E. Schiedt,
Alfred C. Savage.

Inventor:
Albert H. Mershon,
by John A. Riedersheim
Atty.

UNITED STATES PATENT OFFICE.

ALBERT H. MERSHON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND GEORGE B. MERSHON, OF SAME PLACE.

IMPROVEMENT IN GAS-HEATERS.

Specification forming part of Letters Patent No. 126,473, dated May 7, 1872.

To all whom it may concern:

Be it known that I, ALBERT H. MERSHON, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Gas-Heaters; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a front view of the device illustrating my invention. Fig. 2 is a side view thereof. Fig. 3 is a transverse vertical section thereof.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement in the class of gas-heaters which are denominated "French gas-logs." These heaters have been constructed of terra-cotta or clay ware, and have their faces or front sides perforated and formed to resemble logs of wood with applied splints of asbestos, which become incandescent when in use, so that when gas is turned into the heaters and fire applied to the perforations numerous gas-jets are produced, which combine in such a manner as to present the appearance of wood-fire, and the result is a serviceable, cheerful, and ventilating fire.

Now, while this idea is extremely practical and useful, the material of which the logs are constructed is such that the logs are exceedingly fragile, consume much material in manufacture, and are thus expensive, require careful handling, crack with the heat, and do not retain the heat—all of which are serious objections, which my invention is designed to overcome; and it consists in forming the heater of a cast metallic body, constructed with a face extending from the highest point, which is at the back, in a sloping or curved form, so as to present a heating-surface on the front or on the sloping part facing the apartment, said face or heating-surface being increased by curved or angular corrugations, or both, and having numerous perforations, through which the gas escapes, which, when ignited, unites or combines and produces a

powerful and cheerful fire. The invention further consists in combining, with the heater, means for producing hot water or steam.

Referring to the drawing, A represents the heater, into which gas is passed from the ordinary gas-fixture or other place of supply. This heater is constructed of a body somewhat in the form of a cube, divided diagonally by a curved line, so that the front of the heater has a rounded face, B, and the widest part of the heater is at the bottom. This rounded face may be corrugated, or made in imitation of logs of wood, coals, or other fuel, so as to gain surface and present an ornamental and attractive appearance. The body is hollow, and constructed of cast metal, and all sides, top, and bottom may be made in one piece, or, in other words, cast together at one and the same operation, so that there will be no joints for the escape of gas, and no liability of the parts to dissever or break, as is the case with terra-cotta or clay ware. The face B will be perforated with numerous openings, C, so as to produce means of escape of gas on said face where the gas is to be consumed. The gas may be introduced through a pipe, D, by means of a flexible tube, or otherwise attached to the gas-fixture or apparatus. The openings or gas-jets C will be made in various parts of the face B, so that when the gas is ignited the jets, in burning, will be combined and form a broad flame, producing a powerful heat, which will be retained in the body, owing to the nature of the material of which it is composed. Since every part of the body becomes heated, this feature will assist the combustion of the gas, inasmuch as the gas is warmed before it escapes at the jets. The body may be cast of light weight, and is thus easily and conveniently handled, especially in transportation, and otherwise overcomes the necessity of great carefulness in laying or setting down. Again, heat cracks the terra-cotta and clay heaters and renders them unfit for use. This is a serious objection, and renders such heaters expensive—defects which are remedied by the metallic body. To the heater I apply a coil or length of pipe, E, through which water is to be passed, and, by means of the burning jets of the heater, the water will be heated and furnish means for obtaining hot water, for

use as hot-water, heating purposes, or steam. The pipe or pipes E may be arranged on the outside of the front face, as shown, "let in" flush therewith, or formed with the face B in the process of casting.

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

1. The gas-heater, constructed of a body having a face sloping or curved, as described, so as to form a heating surface on the front or toward the apartment, in connection with cor-

rugations and perforations, the whole constructed of cast metal, as set forth, for the purpose specified.

2. The water-pipe, in combination with the gas-heater, substantially as and for the purpose described.

The above signed by me this 2d day of March, 1872.

A. H. MERSHON.

Witnesses:

M. V. MERSHON,
JOHN A. WIEDERSHEIM.