

C. A. READ.

Sad Iron.

No. 10,907.

Patented May 16, 1854.

Fig. 1.

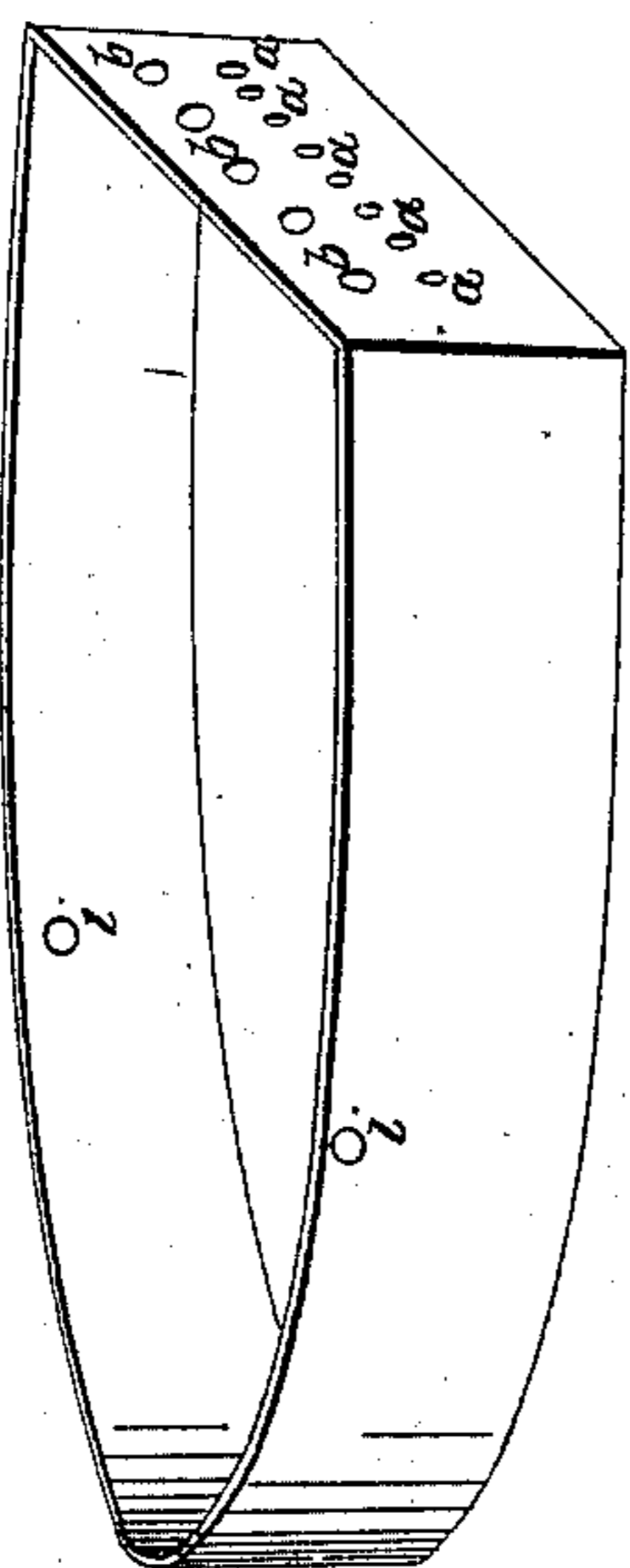


Fig. 3.

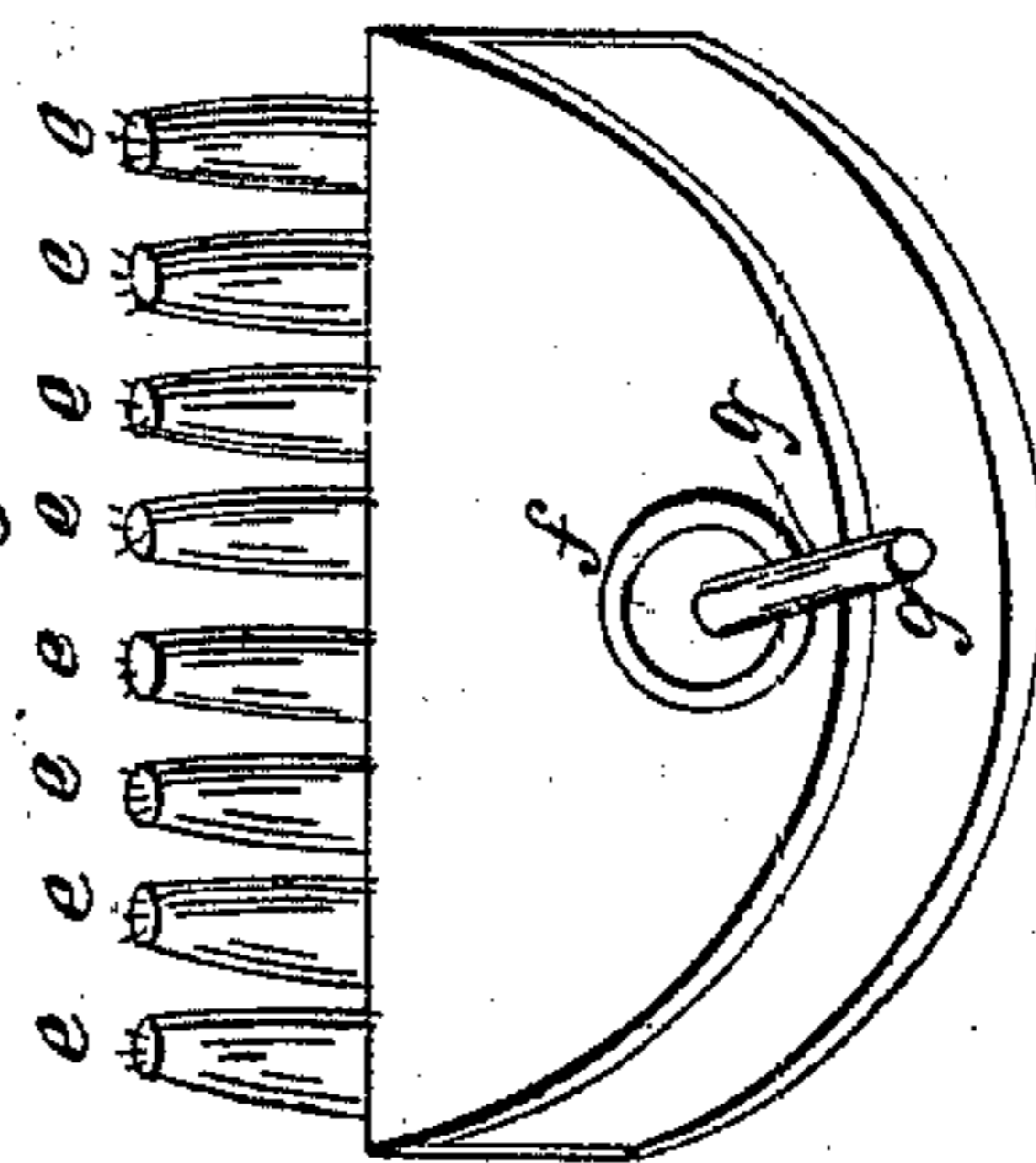


Fig. 4.

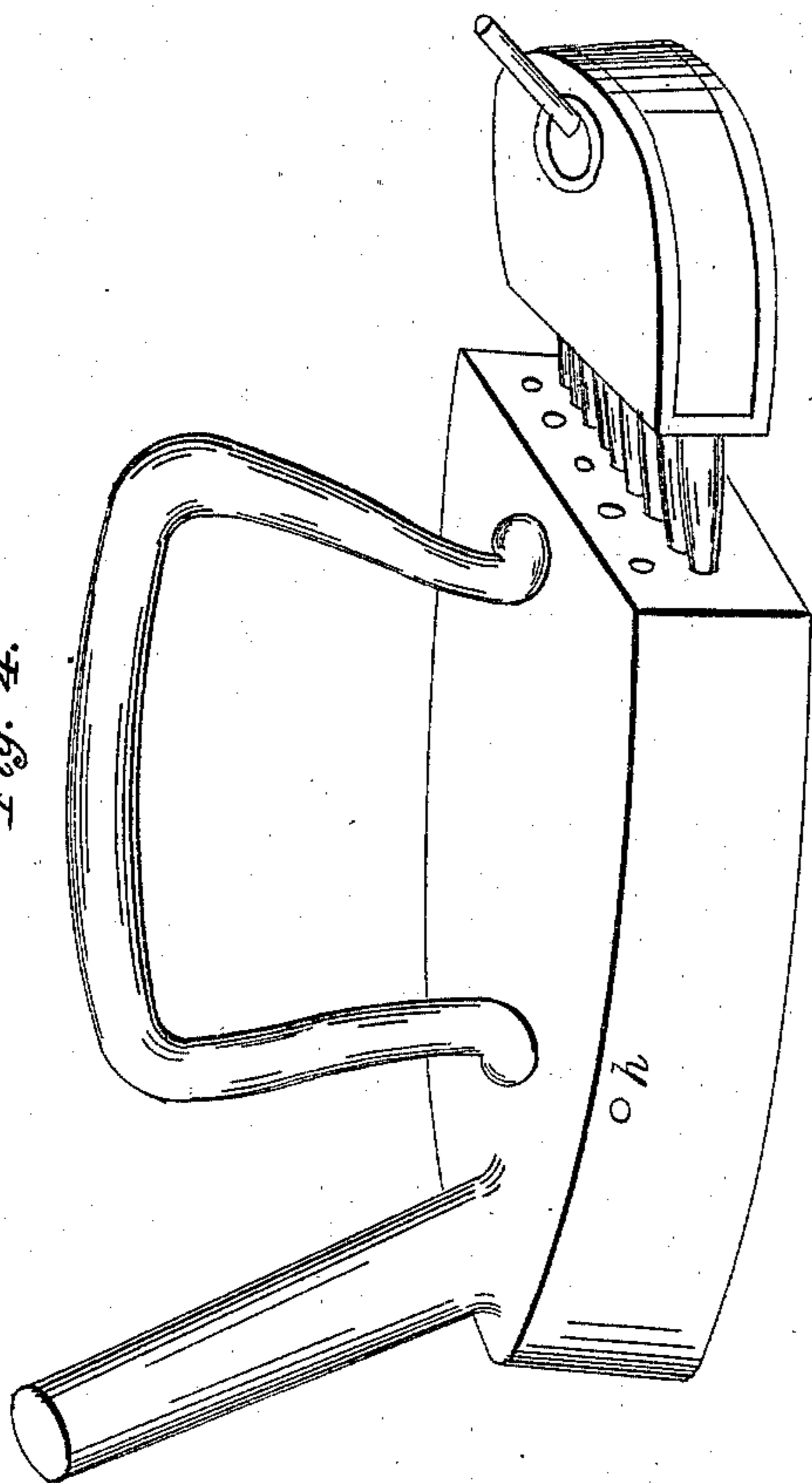
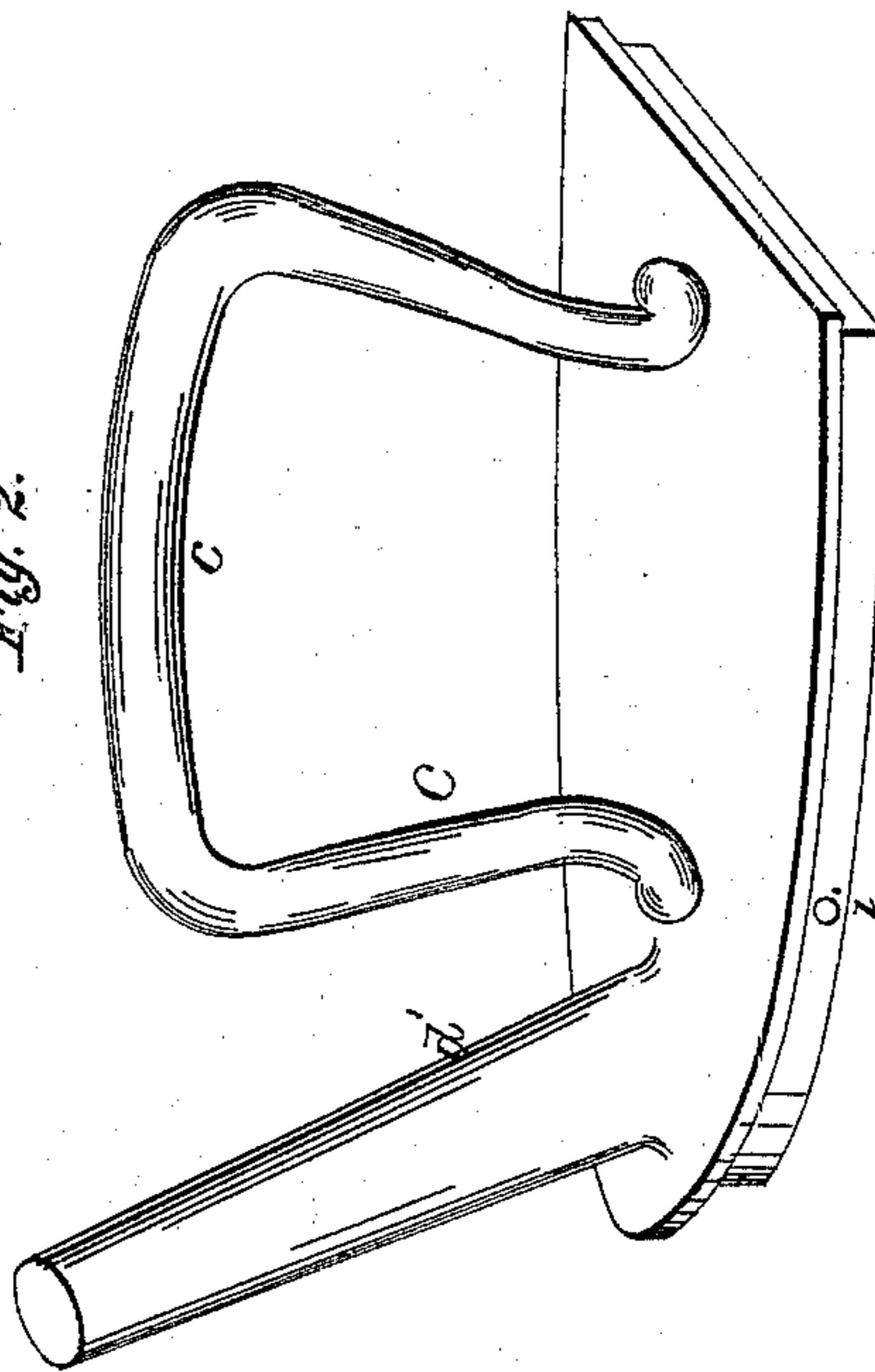


Fig. 2.



# UNITED STATES PATENT OFFICE.

CHARLES A. READ, OF WATERLOO, NEW YORK.

## IMPROVEMENT IN SELF-HEATING SMOOTHING-IRONS.

Specification forming part of Letters Patent No. 10,907, dated May 16, 1854.

*To all whom it may concern:*

Be it known that I, CHARLES A. READ, of Waterloo, in the county of Seneca and State of New York, have invented a new and useful Machine for Ironing Clothes, called the "Self-Heating Flat-Iron;" and I declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

The self-heating flat-iron is composed of three principle parts, as represented by the annexed drawings Nos. 1, 2, and 3.

Drawing No. 1 represents the lower or bottom part of the flat-iron, which is in the shape and about the size of an ordinary flat-iron. It is made of iron, is hollow, and perforated with a row of round holes intended to receive the tubes of the lamp, hereinafter described. These holes are designated in the drawing No. 1 by the letter *a*. There is a row of holes *b b* above those for the lamp-tubes, through which the air enters and deflects the flame of the lamp down against the bottom to heat it most and the top least, and it is aided materially in doing so by the form of the under side of the top, No. 2, which descends from the rear to the front, so as to carry the flame down near or against the bottom before it escapes into the chimney *d d*.

Drawing No. 2 represents the top of the flat-iron provided with a rabbet around the edge to fit the bottom, No. 1, to which it is secured by two pins, one of which is represented at *h* in the holes *i i*, Nos. 1 and 2. This top is furnished with a handle *c*. It has also a draft pipe or chimney communicating with the interior and leaning forward from the handle, and is designated in drawing No. 2 by the letter *d*. This is made of tin or some light material, and may be movable.

Drawing No. 3 represents the lamp, it being a semicircular tin or copper vessel for holding alcohol or other burning material, and having a number of tubes projecting from the straight side of the lamp, corresponding in all respects to the round holes intended to receive them in the bottom of the flat-iron, as represented in drawing No. 1, and designated by the letter *a*. The tubes are made to fit the holes closely, and the lamp

is attached by inserting the tubes firmly into the holes. The tubes are designated by the letter *e*. Upon the upper surface of the lamp is an ordinary aperture for filling the same, which is covered by a small screw, designated in the drawing No. 3 by the letter *f*. In the top of the screw and communicating with the interior of the lamp is a small air-tube or ventilator, as designated by the letter *g* in said drawing.

Drawing No. 4 represents the several parts of the flat-iron fitted together ready for use.

This flat-iron is constructed so as to leave no projecting or rough edges or anything to impede the free use of the machine for effecting the purpose intended. The lamp is made of light material and so much thinner than the iron that it never comes in contact with the surface of the cloth, and does not interfere with the ordinary process of ironing. It is made tight, and the screw upon the top is fitted carefully, so that there is no waste of the burning-fluid in the motion of the iron and no injury to the fabrics being ironed.

Operation: The lamp is supplied with ordinary wicking, which passes through the tubes, and is then filled with alcohol or other burning-fluid, and the tubes then inserted firmly into the holes prepared for them. The iron soon becomes sufficiently heated and is ready for use, and so continues until the fluid is exhausted.

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

1. Making the holes which supply the air to the lamps above the holes through which the lamp-tubes are inserted, so that the air as it enters to supply the lamps will deflect the flame down toward or against the bottom to heat it more rapidly and effectually than it would otherwise do, and heat the top less, substantially as described.

2. Making the inside of the top descend gradually from rear to front to aid in deflecting the flame down toward or against the bottom, so as to heat it more effectually.

CHARLES A. READ.

Witnesses:

I. G. HADLEY,  
PETER RHODES.