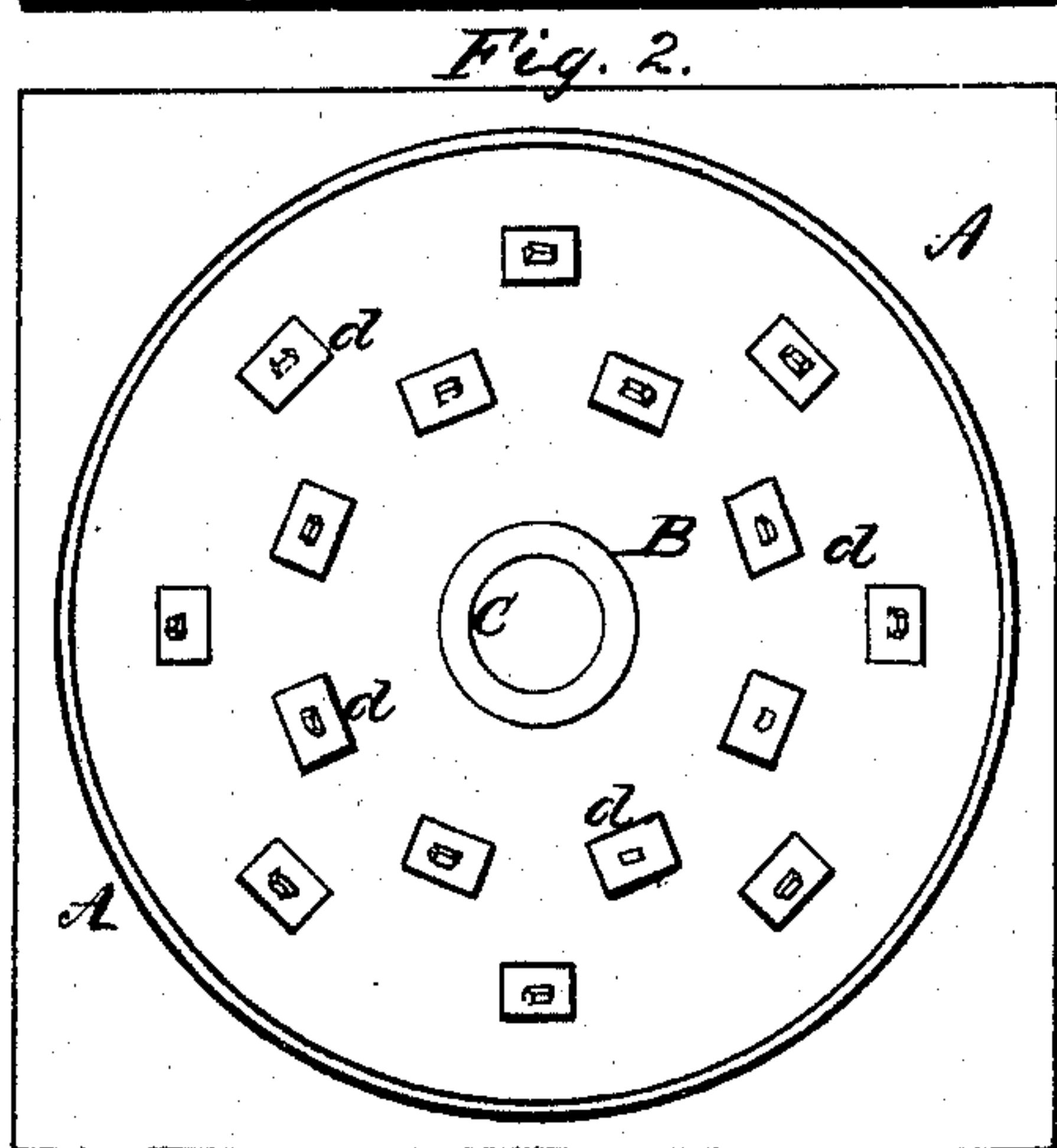
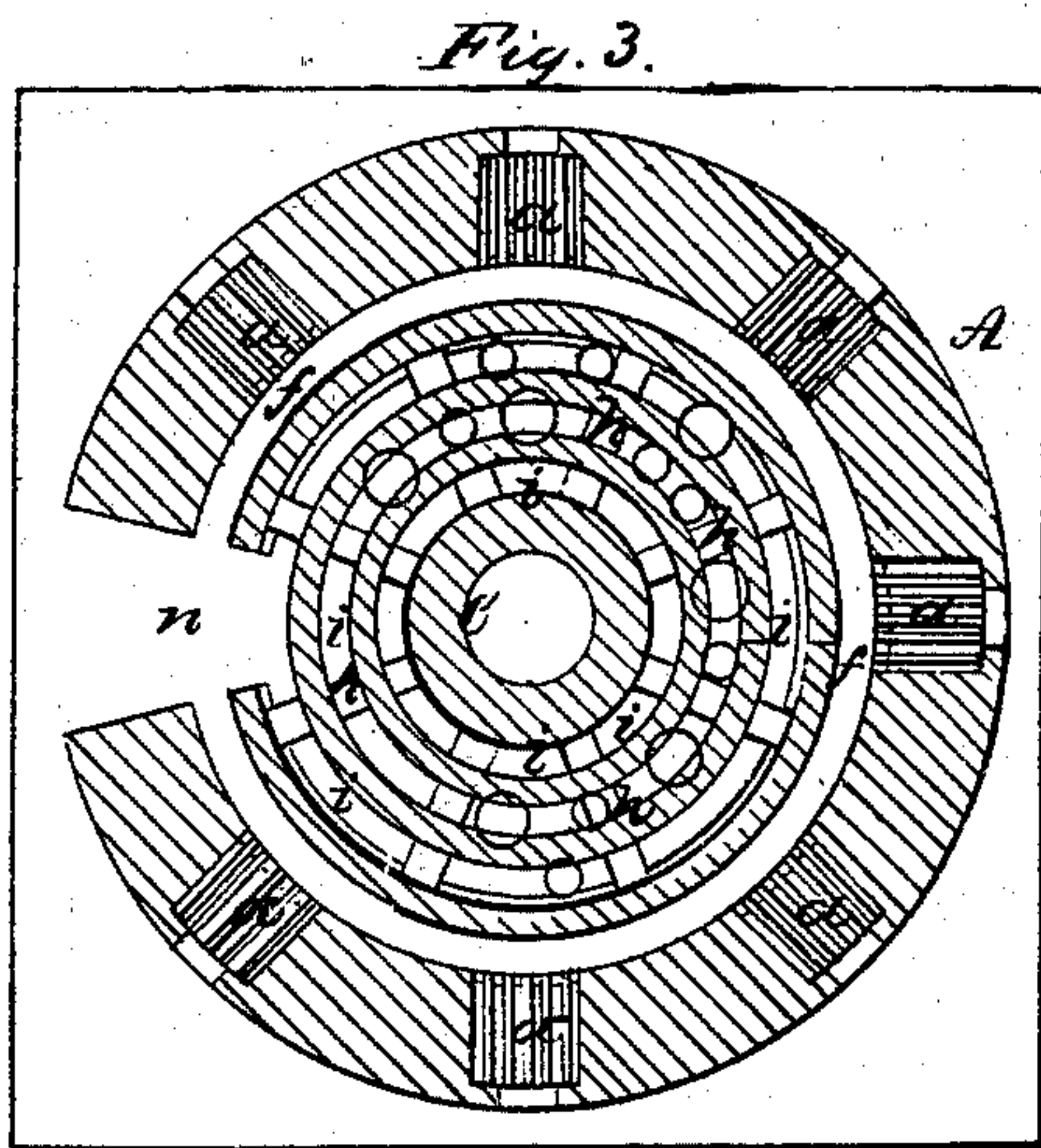
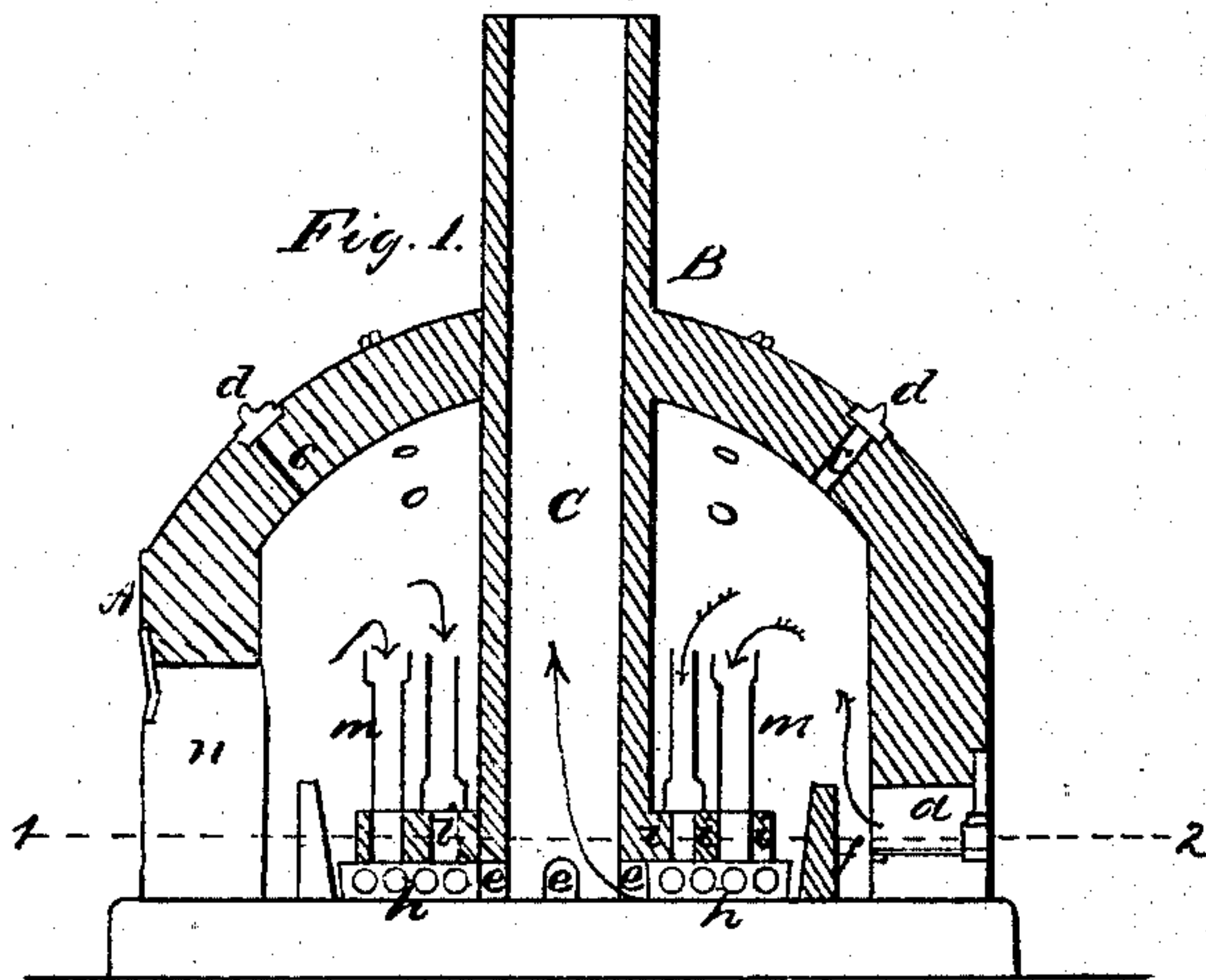


J. Dimelow,
Kiln for Burning Pipes,
No. 68,716, Patented Sept. 10, 1867.



Witnesses:

Howbotham
John Parker

Inventor

J. Dimelow
By his Atty
H. Howson

United States Patent Office.

JOHN DIMELOW, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF, T. P. STUARD, AND J. STUARD, OF THE SAME PLACE.

Letters Patent No. 68,716, dated September 10, 1867.

IMPROVED KILN FOR BURNING CLAY PIPES.

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, JOHN DIMELOW, of Philadelphia, Pennsylvania, have invented an Improved Kiln for Burning Clay Pipes; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a kiln constructed substantially as described hereafter, so that the products of combustion may pass both through and around the clay pipes placed in the kiln, the said pipes being thereby slaked or burned more speedily and thoroughly than in ordinary kilns.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a sectional elevation of my improved kiln for burning clay pipes.

Figure 2 is a plan view, and

Figure 3 is a sectional plan on the line 1-2, fig. 1.

A is the vertical wall of the kiln, which is circular in shape, and in which, at equal distances from each other, are arranged the radial fire-places *a a a*, communicating with the interior of the kiln. In the dome-shaped top B of the kiln are openings *c*, to which are fitted covers *d*; and through the centre of the kiln, and through the top of the same, extends a chimney, C, at the lower end of which are openings *e*. The base of the chimney is surrounded by an annular bridge, *f*, the outer side of which is but a short distance from the inside of the vertical wall A; and between the chimney and the bridge extends a series of radial perforated ribs, *h*, on which rest concentric rings *i i i*, arranged at about equal distances apart between the bridge *f* and the chimney.

The pipes *m* to be burned are introduced through an opening, *n*, into the kiln, and there placed upon the rings *i i*, as shown in fig. 1, each pipe resting upon two adjacent rings, and all the pipes being placed near but not in absolute contact with each other. After this the opening *n* is closed, and the fuel on the grates of the fire-places ignited. The heated gases and products of combustion pass from the fire-places into the kiln, and are directed upwards by the bridge *f*, and then pass downwards through and round the pipes to the openings *e*, and through the latter to the chimney, the heated gases being thus brought into intimate contact with the entire inner and outer surfaces of the pipes, which are rapidly and thoroughly baked.

When it is desired to glaze the pipes, common salt is thrown into the fire-places, whence it is carried, in a volatilized state, by the currents, to the pipes, the surfaces of which are thereby vitrified.

When the fires are first kindled the caps are removed from the openings *c*, in order that the gases may pass freely upwards, and carry the smoke with them.

If desired, the rings *i i* may be dispensed with, and the number of radial ribs *h* may be increased, so as to afford rests for the pipes; or other suitable supports for the latter may be used.

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

1. A kiln having fire-places *a*, a chimney, C, and rings *i*, or their equivalents, the whole being so arranged that the products of combustion, in their passage from the fire-places to the chimney, must pass both through and around the pipes *m*, resting on the said rings, for the purpose specified.

2. The ribs *h h*, rings *i i*, and bridge *f*, arranged within a kiln in respect to the fire-places and chimney, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN DIMELOW.

Witnesses:

JOHN WHITE,
W. J. R. DELANY.