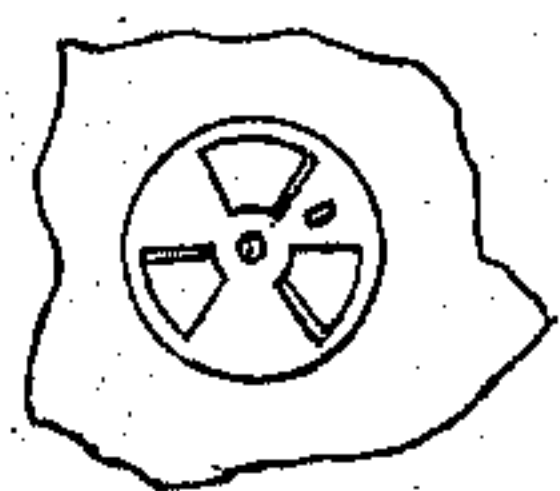
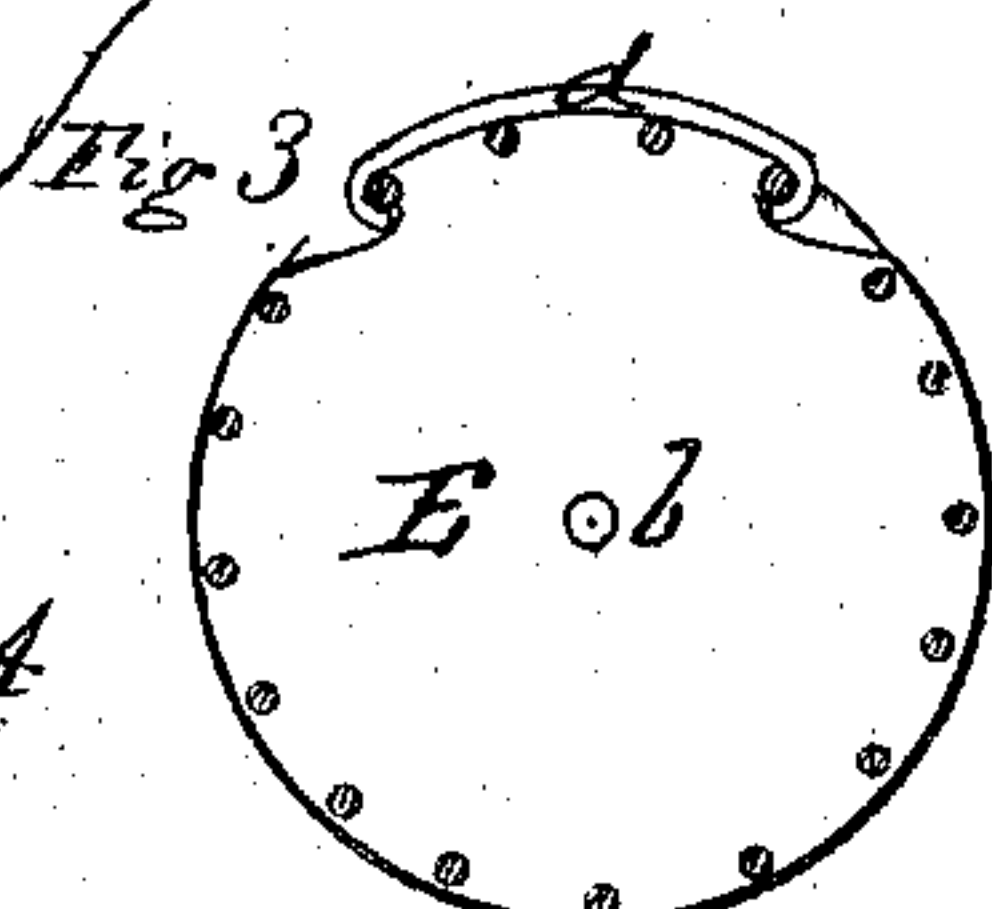
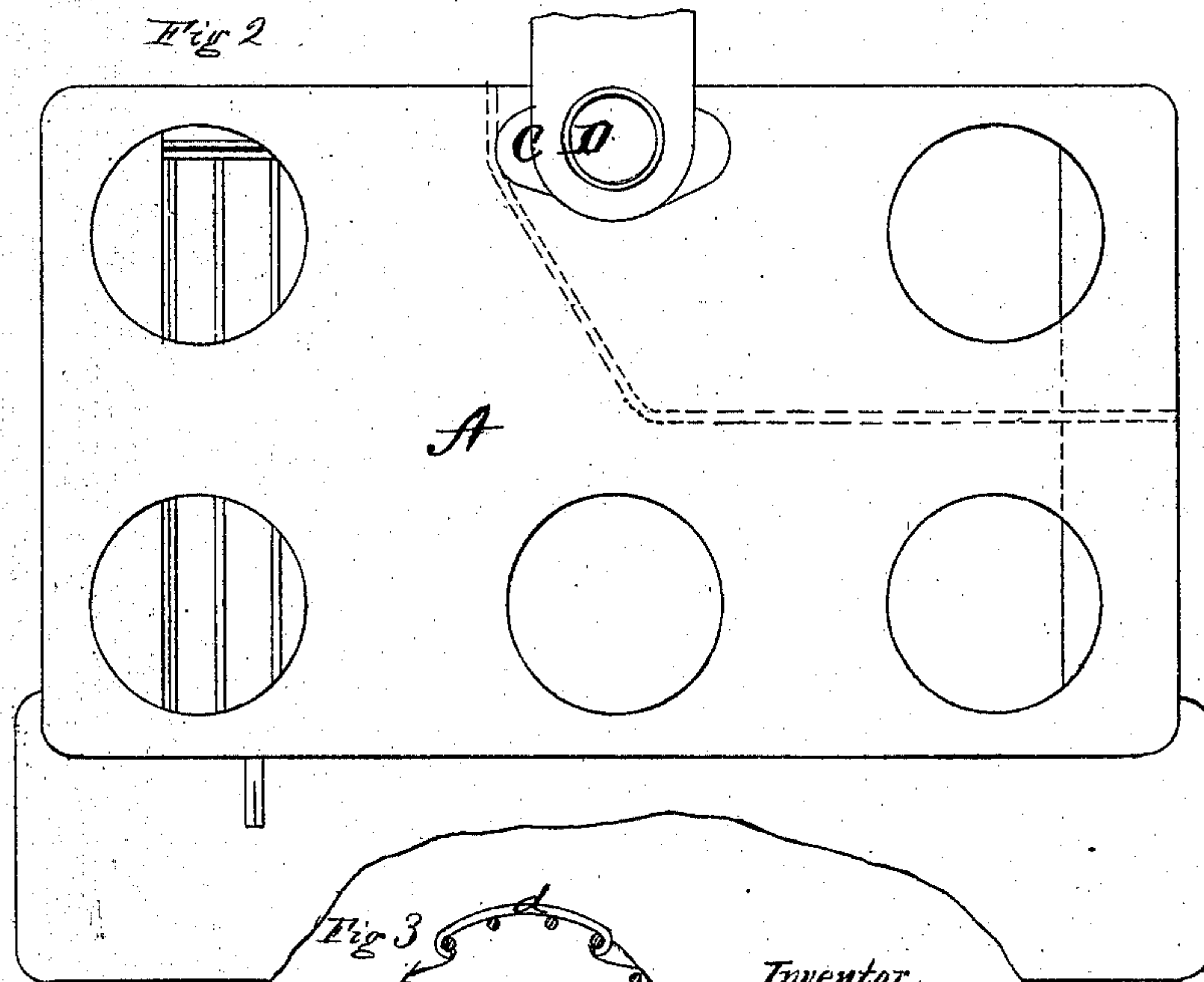
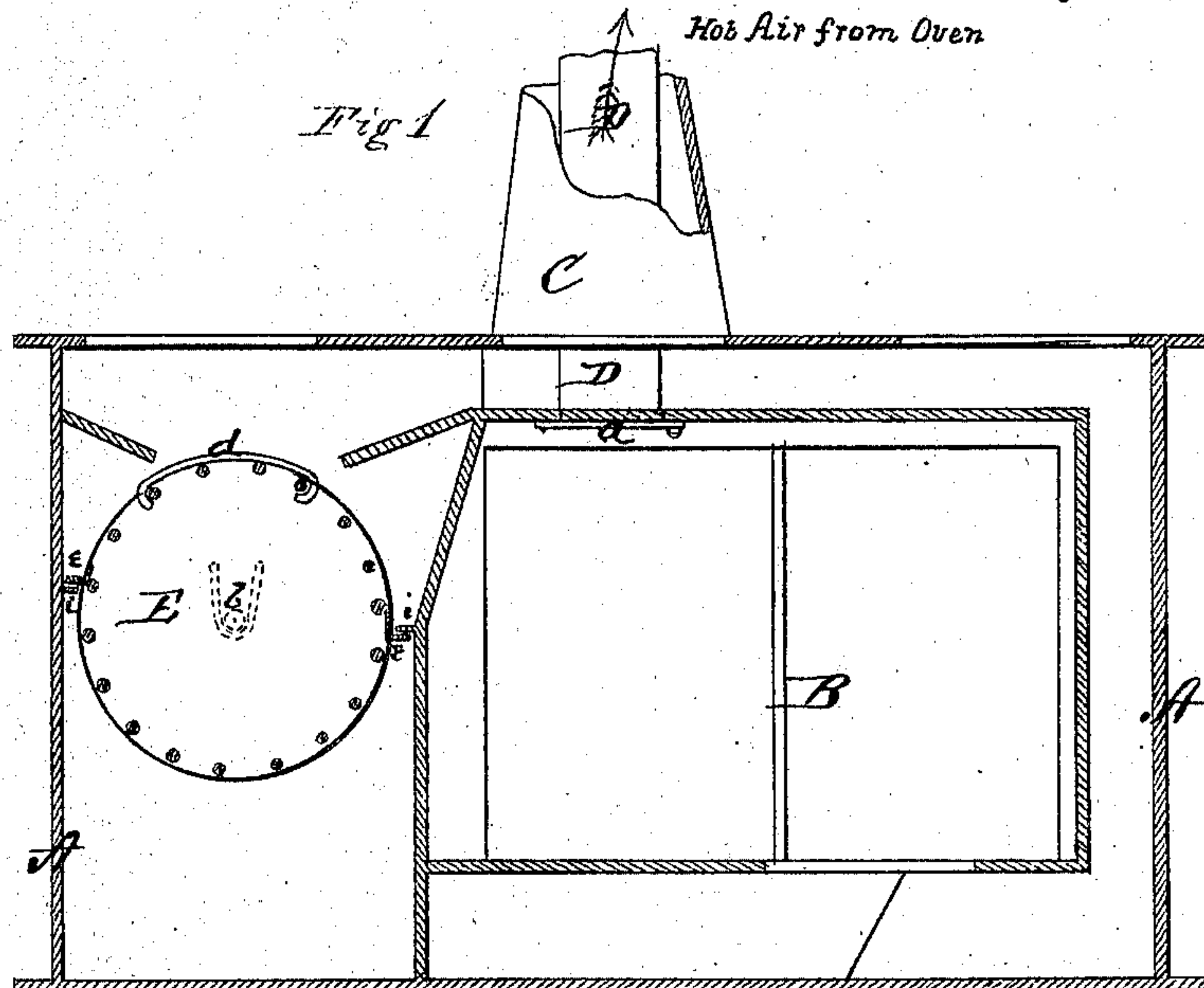


S. H. La RUE.
Cooking Stove.

No. 103,204.

Patented May 17, 1870.



Witnesses

Harry King
C. L. Green

Inventor

S. H. La Rue
per
Alexander Mason
Atty.

United States Patent Office.

SILAS HOFFMAN LA RUE, OF ALLENTOWN, PENNSYLVANIA.

Letters Patent No. 103,204, dated May 17, 1870.

IMPROVEMENT IN COOKING-STOVES.

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, SILAS HOFFMAN LA RUE, of Allentown, in the county of Lehigh and in the State of Pennsylvania, have invented certain new and useful Improvements in Stoves; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists—

First, in conducting heat from the oven of a baking-stove when not in use, to an upper room; and

Second, in the construction and arrangement of a revolving grate for the purpose of consuming the gas.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a longitudinal vertical section, and

Figure 2 is a plan-view of my stove.

Figure 3 is an end view of the revolving-grate.

Figure 4 is a section of the oven-door showing a damper therein.

A represents a cooking-stove of any suitable construction, and provided with a baking-oven, B.

C is the pipe through which the products of combustion are carried off to the chimney-flue.

In the top of the oven B, directly under the smoke-pipe, is an aperture provided with a slide or damper, *a*, which may be operated either from the outside of the stove, or from the inside of the oven, whichever may be desired. A pipe D leads from this aperture upward through the smoke-pipe C, into the same or another room, so that the heat of the oven may in this manner be utilized.

When the oven is in use, the damper *a* will be closed so as to confine the heat in the same, but, when not in use, it is to be opened to convey the heated air upward, and heat the room.

For the purpose of supplying air to the oven, to

take the place of the heated air that has passed away, the door of the oven is provided with a damper to be regulated at will.

In the fire-box of the stove is placed a fire-grate, E, of cylindrical shape, the heads or ends being solid, and connected by means of grate-bars. The heads or ends of the grate are, on their outside, provided with pivots or journals *b b*, and suspended in any suitable manner, so as to revolve freely. The sides of the grate are provided with longitudinal flanges *e e*, which strike and bear against flanges or edges *i i* in the sides of the fire-box, so as to hold the grate in position, with either side up.

A slide *d* is also formed in the top of the grate through which fuel is introduced, and I intend to place a similar slide in the bottom of the grate, so that the fire can be replenished, whether the top or bottom is up.

The object of my revolving grate is to consume the gas by turning the grate upside down, when the fire has been well started. The fire will gradually burn down through the coal beneath it, and consume the gas passing up through it. Every time fresh coal is put on the fire, the grate is to be turned over again.

This grate also dispenses with the use of fire-brick.

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

The combination and arrangement, in a cooking-stove, of the revolving-grate E, pipes C D, and oven B, with an aperture in it communicating with a hot-air pipe, and a door provided with a damper, all substantially as and for the purposes set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 1st day of February, 1870.

S. H. LA RUE.

Witnesses:

A. F. WITTMAN,

ABRAHAM WORMAN.