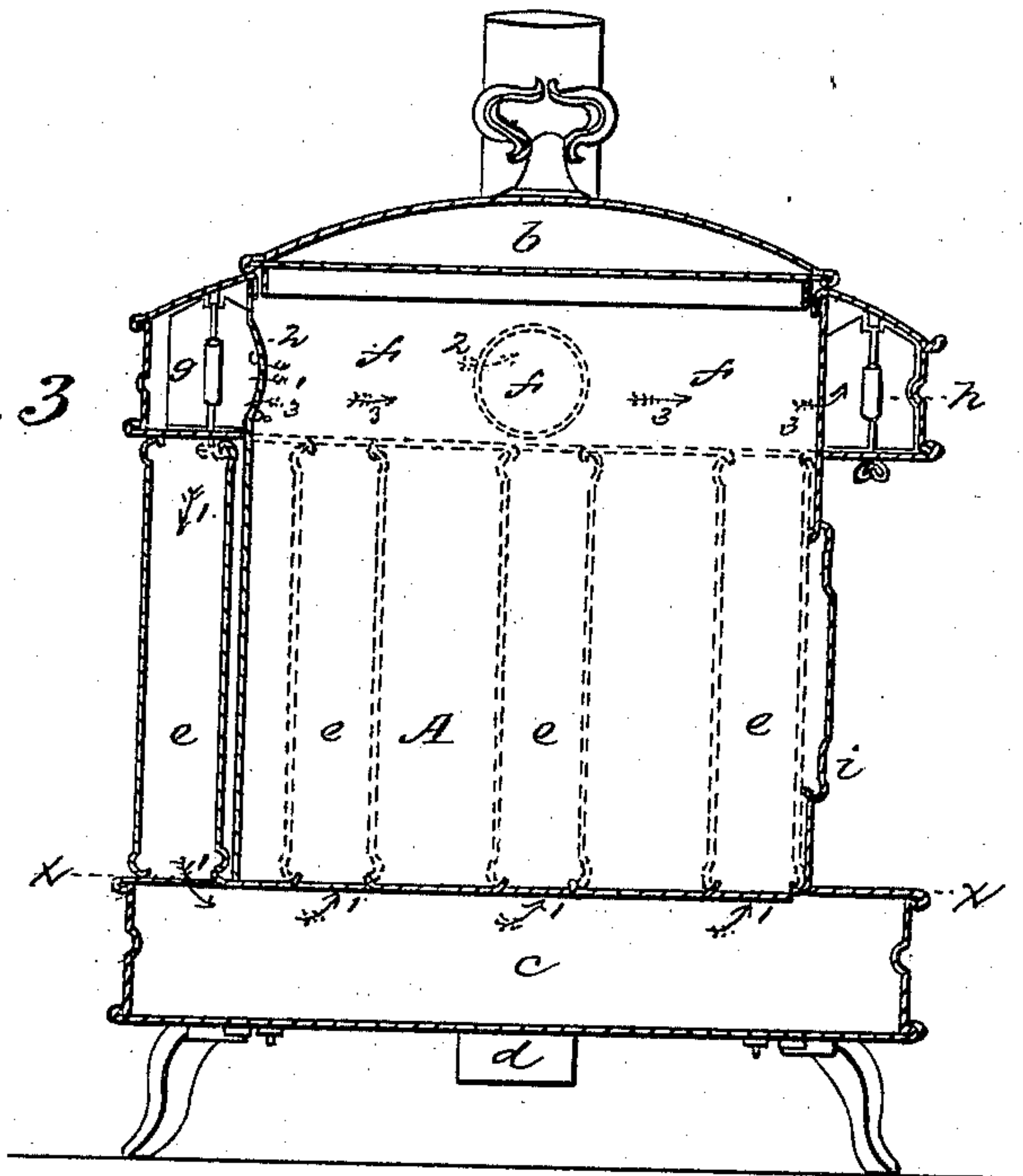


T. YATES.  
Heating Stove.

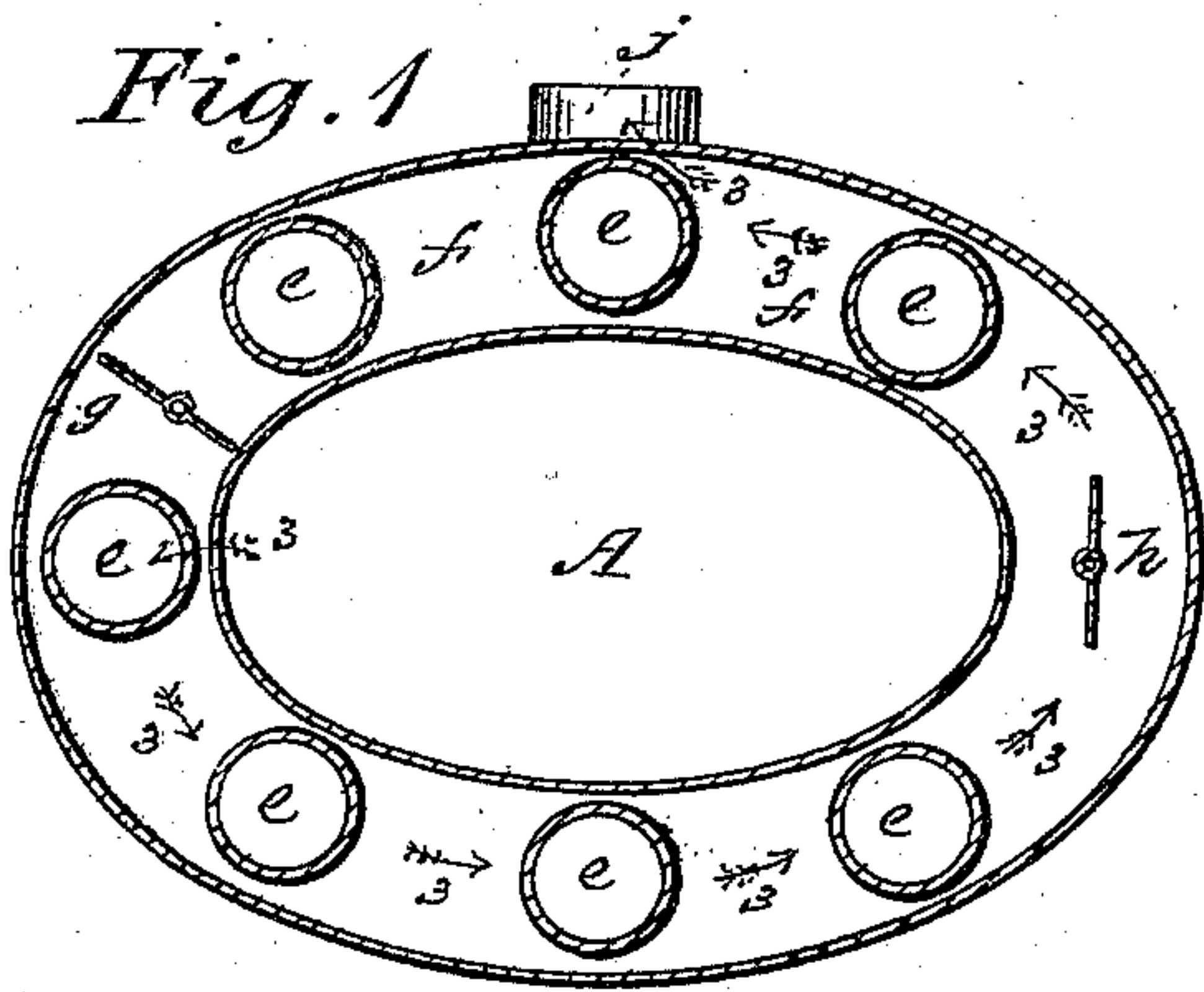
No. 65,524.

Patented June 4, 1867.

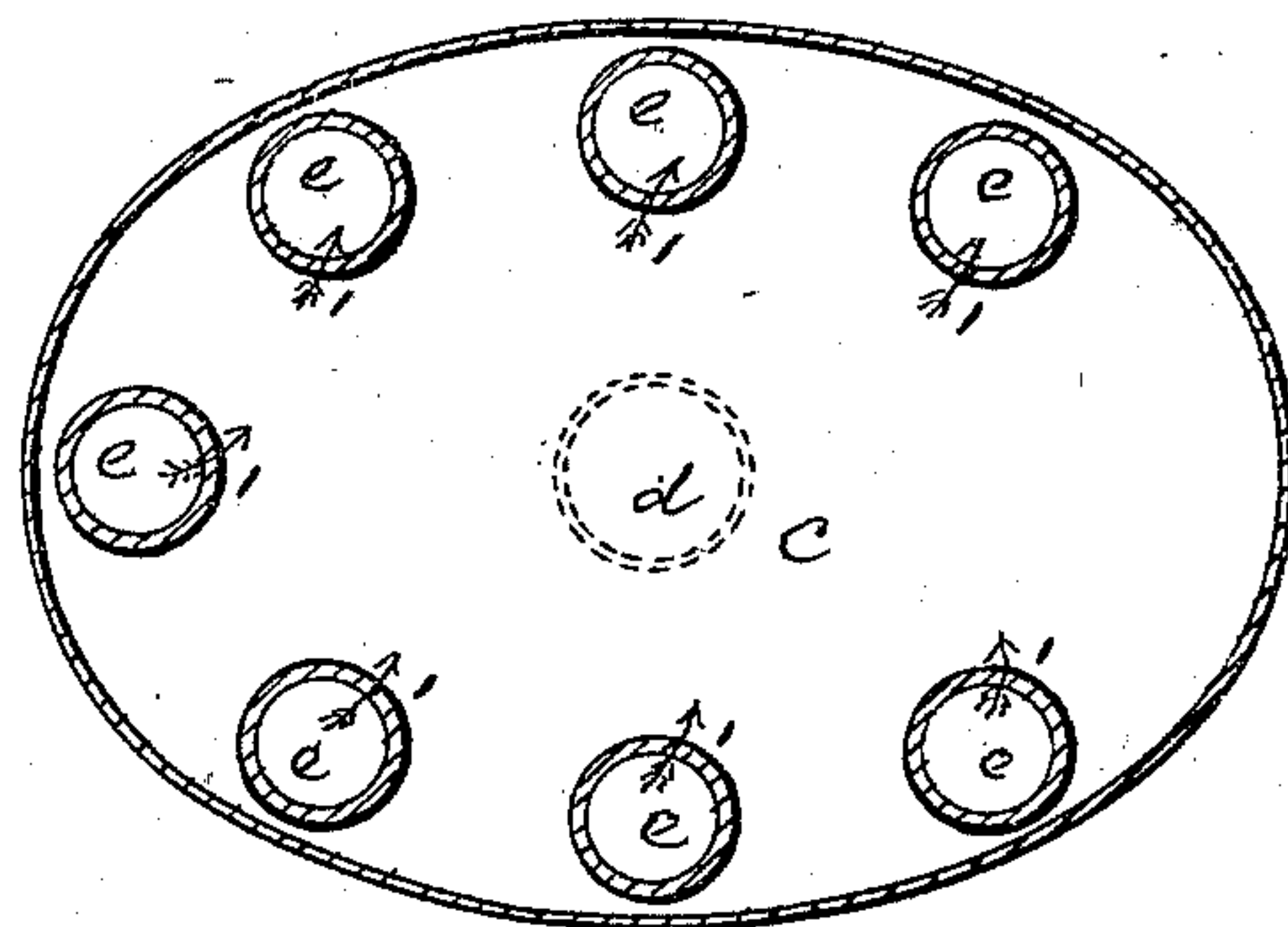
*Fig. 3*



*Fig. 1*



*Fig. 2*



*Witnesses:*

*Henry B. Foulke*  
*Alonso Craig*

*Inventor:*

*Thomas Yates*

# United States Patent Office.

THOMAS YATES, OF DUBUQUE, IOWA.

Letters Patent No. 65,524, dated June 4, 1867.

## HEATING-STOVE.

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, THOMAS YATES, of Dubuque, in the county of Dubuque, State of Iowa, have made and invented a new and useful improvement on a Stove; and I do hereby 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, in which—

Figure 1 is a plan or top view, with the top plate and cover removed.

Figure 2 is a plan view of the lower drum-chamber *c*, taken through the line *x x* in fig. 3.

Figure 3 represents a vertical central section of my invention, which consists of the usual oval form given to heating-stoves, with four legs, door, and smoke pipe, also an open top fire-chamber, surrounded by a draught-chamber, connected by seven side pipes to a drum-chamber, so arranged that it can be used as a heating-stove and drum at one and the same time, or separately, if desired.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

It is composed of two top plates and two bottoms, of cast iron. The sides and the pipes are composed of sheet iron. Between the two top plates, and surrounding the open-top fire-chamber *A*, represented by figs. 1 and 3, is formed the draught-chamber *ff*, in which are arranged the two dampers *g* and *h*, by which the draught can be changed in different directions. The side pipes *eeee* are arranged and connected, by orifices made for their reception, to draught-chamber *ff* and drum-chamber *c*, which is formed by the two bottom plates in such a manner that the draught can be directed from the draught-chamber *ff* down the four pipes on this the left side, then across the bottom in the drum-chamber to the other or right side, then up the three pipes to the pipe hole *j*. The pipe *d*, at the bottom of the drum-chamber, is for the purpose of attachment to any other stove.

The operation is as follows: When desired to be used as a heating-stove and drum, it is placed upon the second floor of any building through which there is a hole for the passage of a pipe from below, which is attached to the drum by the pipe *d*, and, when used for a heating-stove alone, the pipe *d* is removed and the orifice closed by a damper or cover. The two dampers *g* and *h*, fig. 3, are represented as being closed, by which means the draught is directed in the direction of arrows marked 1, which is down the four pipes *eeee* on this the left side, then across the drum-chamber *c*, fig. 2, to the other or right side; then up the three pipes *eee* to the pipe hole *j*, thus radiating the heat through the whole entire stove. If the front damper *h* is opened as represented in fig. 1, the draught will be directed in the direction of arrows marked 3 in figs. 1 and 3, through the draught-chamber *ff*, which surround the open-top fire-chamber *A* to the pipe hole *j*. If the rear damper *g* is opened, the draught will be in the direction of arrows marked 2, which is represented by fig. 3, which is the usual direction when starting the fire. The open-top fire-chamber has a cover, *b*, which can be removed for the admission of fuel. There is also a door, with a draught-hole at *i* for the admission of fuel.

Having thus described my invention, I do not claim the drum arrangement without my improvement, as that has been used before; but what I claim, and wish to secure by Letters Patent, is—

1. The arrangement of the open-top fire-chamber *A*, in combination with the upper draught-chamber *ff*, so that the draught can be directed around the open-top fire-chamber *A*, as specified.

2. The arrangement of the two dampers *g* and *h*, in the upper draught-chamber *ff*, so that the draught can be changed in the different directions as specified.

THOMAS YATES.

Witnesses:

HENRY B. FOUKE,  
ALONZO CRAGIN.