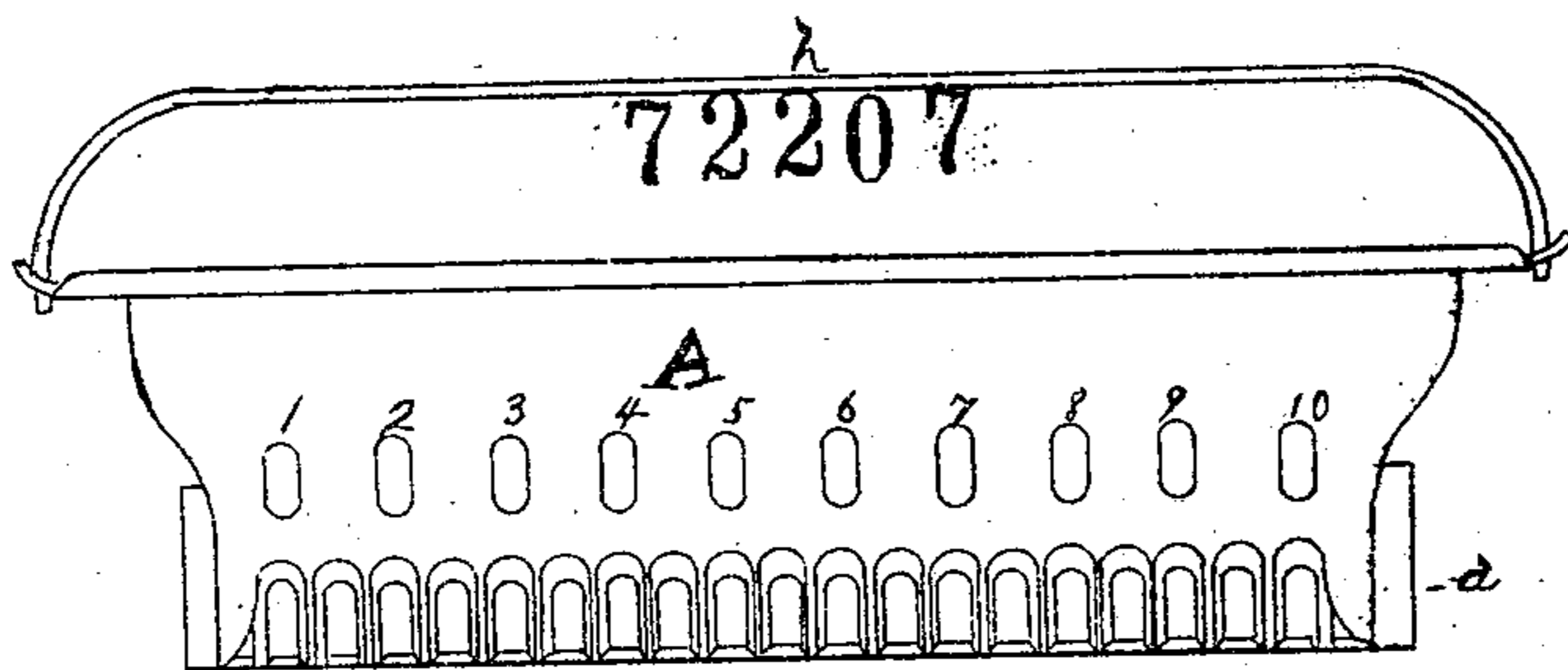
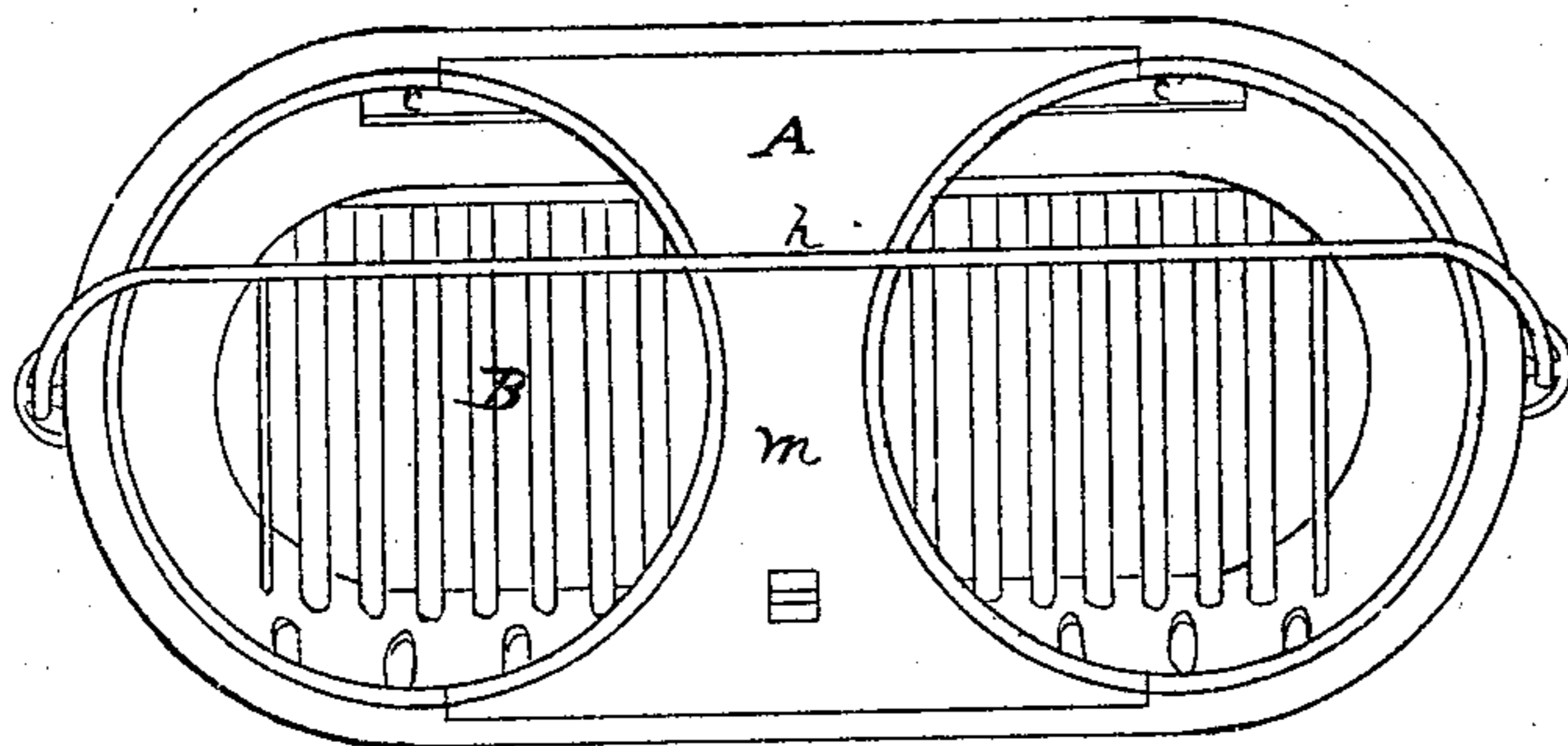


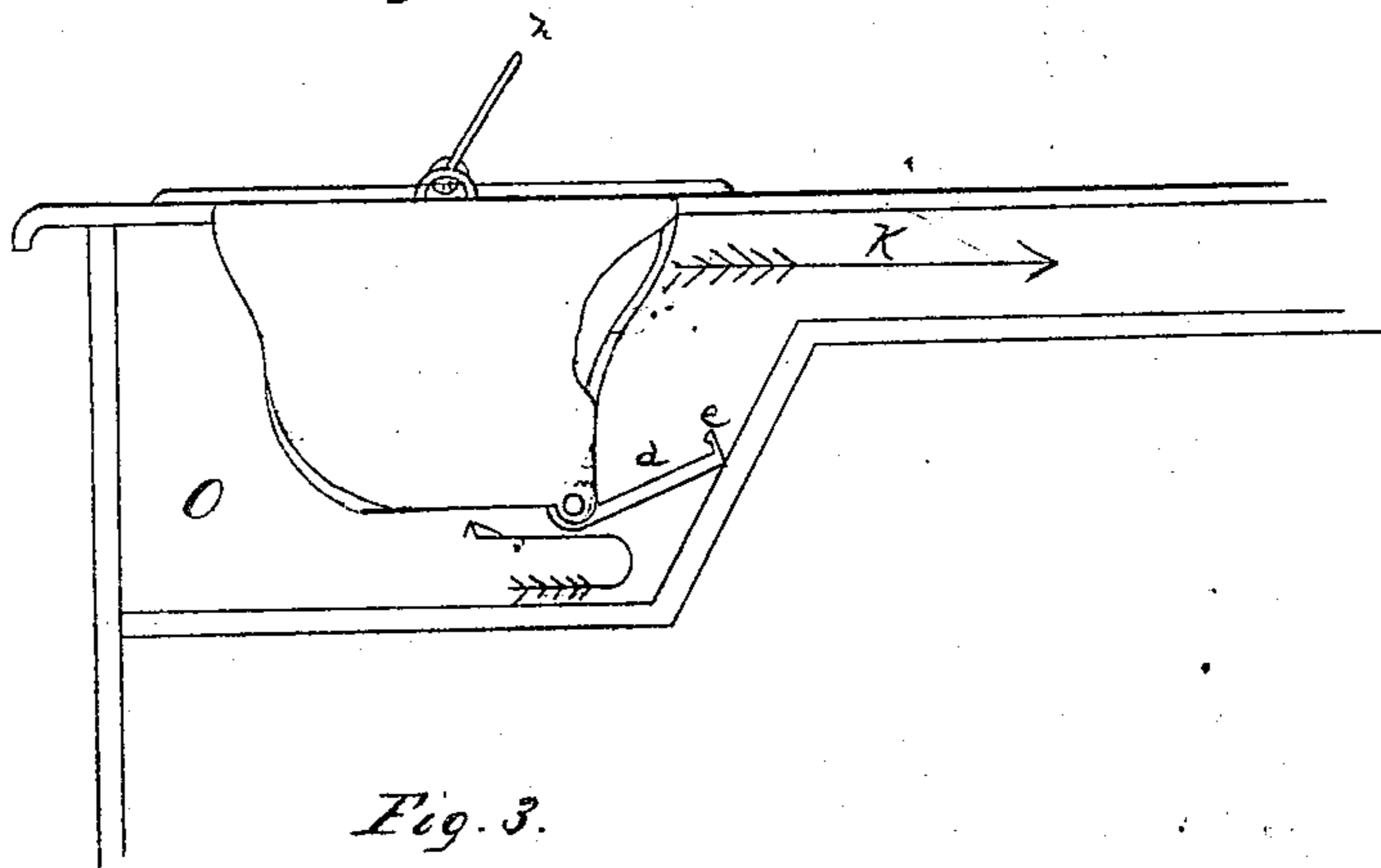
*F. C. Little & J. W. Bell, Imp'd. Charcoal Furnace.*



*Fig. 1.* PATENTED  
DEC 17 1867



*Fig. 2.*



*Fig. 3.*

*Witnesses:*

*Sam'l. S. Boyd*

*Henry J. Carter*

*Inventors:*

*F. C. Little*

*J. W. Bell*

# United States Patent Office.

EZEKIEL C. LITTLE AND JAMES W. BELL, OF ST. LOUIS, MISSOURI.

*Letters Patent No. 72,207, dated December 17, 1867.*

## IMPROVEMENT IN SUMMER-FURNACES.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, EZEKIEL C. LITTLE and JAMES W. BELL, of the city and county of St. Louis, State of Missouri, have invented a new and useful Improved Charcoal-Furnace, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, constituting a part of this specification, in which—

Figure 1 represents a front elevation of our invention.

Figure 2 represents a top view of same, and

Figure 3 represents an end view of same when in position for use, and having a portion broken out to show the port for the back draught.

Similar letters indicate like parts.

Our invention contemplates a charcoal-furnace, to be used in connection with an ordinary cooking-stove, which shall economize fuel and throw out but little heat into the room.

It consists of a cast-iron basket, A, figs. 1, 2, and 3, with a grate-bottom, as shown at B, fig. 2, and having ports 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10, fig. 1, in the front, and two long ports *e e'*, fig. 2, and *e*, fig. 3, in the back. To the bottom of the basket is attached a hinged plate, *d*, figs. 1 and 2, which, by means of a catch *e*, fig. 3, falling into one of the back ports, is kept in the position, shown in fig. 1, close against the basket. The front top of the stove being taken off in the usual way, the basket, by means of the handle *h*, figs. 1, 2, and 3, may be placed in the fire-box *o* of the stove, and as it settles to position, the jar will cause the plate *d* to fall down, till, striking against the fire-back, it assumes the position shown in fig. 3, thereby preventing any draught passing in that direction. The dampers of the stove and also the front doors, if there be any, being opened, all the draught passes through the basket from side to side, or from the bottom up and through the back, in the direction indicated by the arrow *k*, fig. 3. The draught that would pass under the basket and up the chimney is turned back by the plate *d*, and forced to pass through the basket before escaping. A grate may be placed in the basket to rest irons upon, or the plate *m*, fig. 2, may be used, dividing it into two parts for kettles and other cooking-utensils.

The advantage of our invention consists in having an upward draught from beneath and the sides, instead of a downward draught, as is the case with other furnaces of this kind. The heat, instead of being carried away from the top of the grate, as it must necessarily be when the draught is downward, is, by our invention, brought to bear directly at the point where most needed, and all the heat is utilized, since none of it can pass away, save through the basket, on account of the plate *d*.

We do not claim to be the first inventors of a furnace to be used with a cooking-stove; but

What we do claim as our invention, and desire to secure by Letters Patent, is—

The construction of charcoal-furnace, having a hinged plate, *d*, at the back thereof, which, shutting off the draught from beneath, causes it to pass up through the basket.

E. C. LITTLE,  
JAS. W. BELL.

Witnesses:

SAM'L S. BOYD,  
HENRY T. CARTER.