

S. E. HEWES.  
Heating Stove.

No. 24,738.

Patented July 12, 1859.

Fig. 1

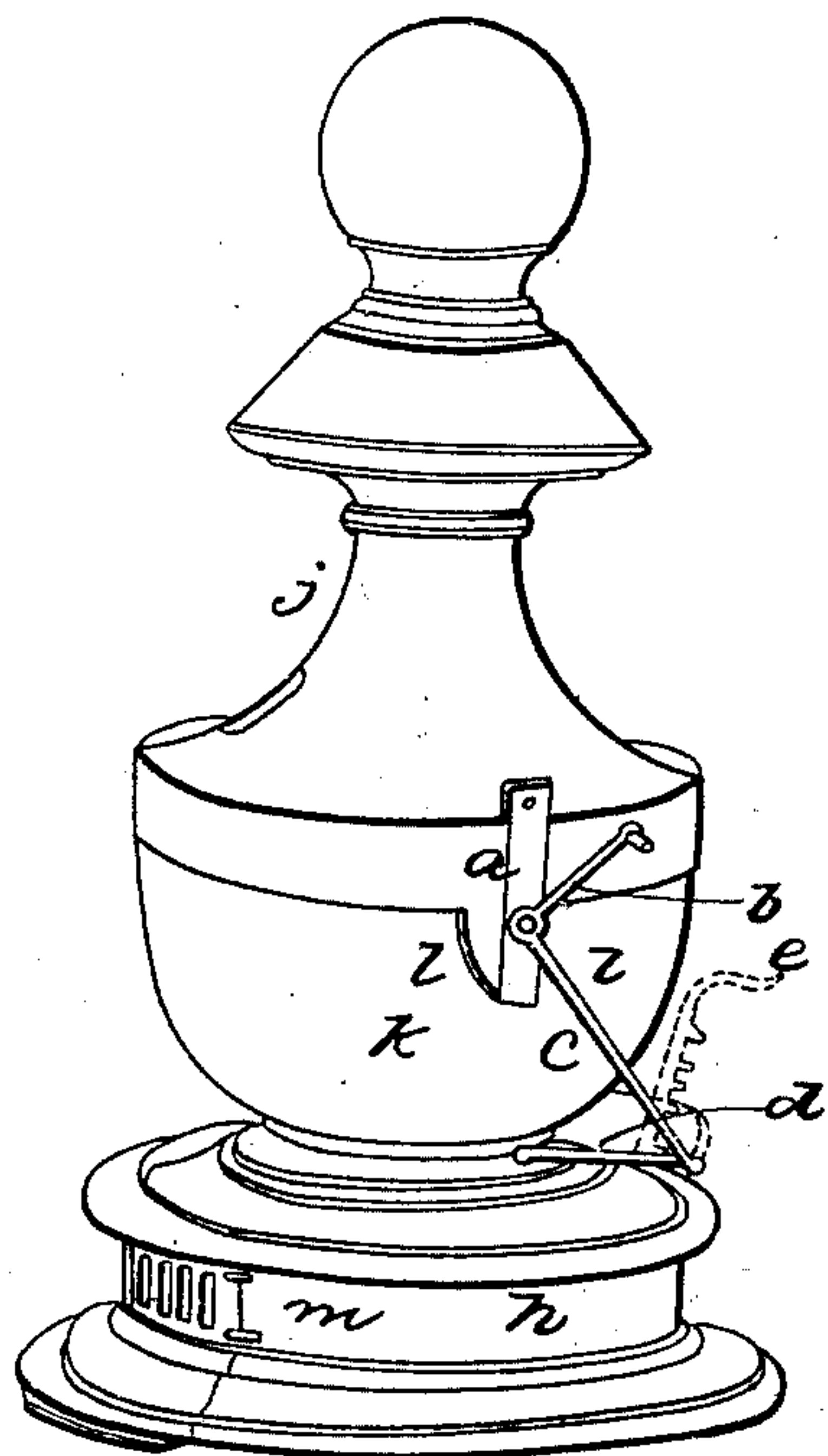


Fig. 2

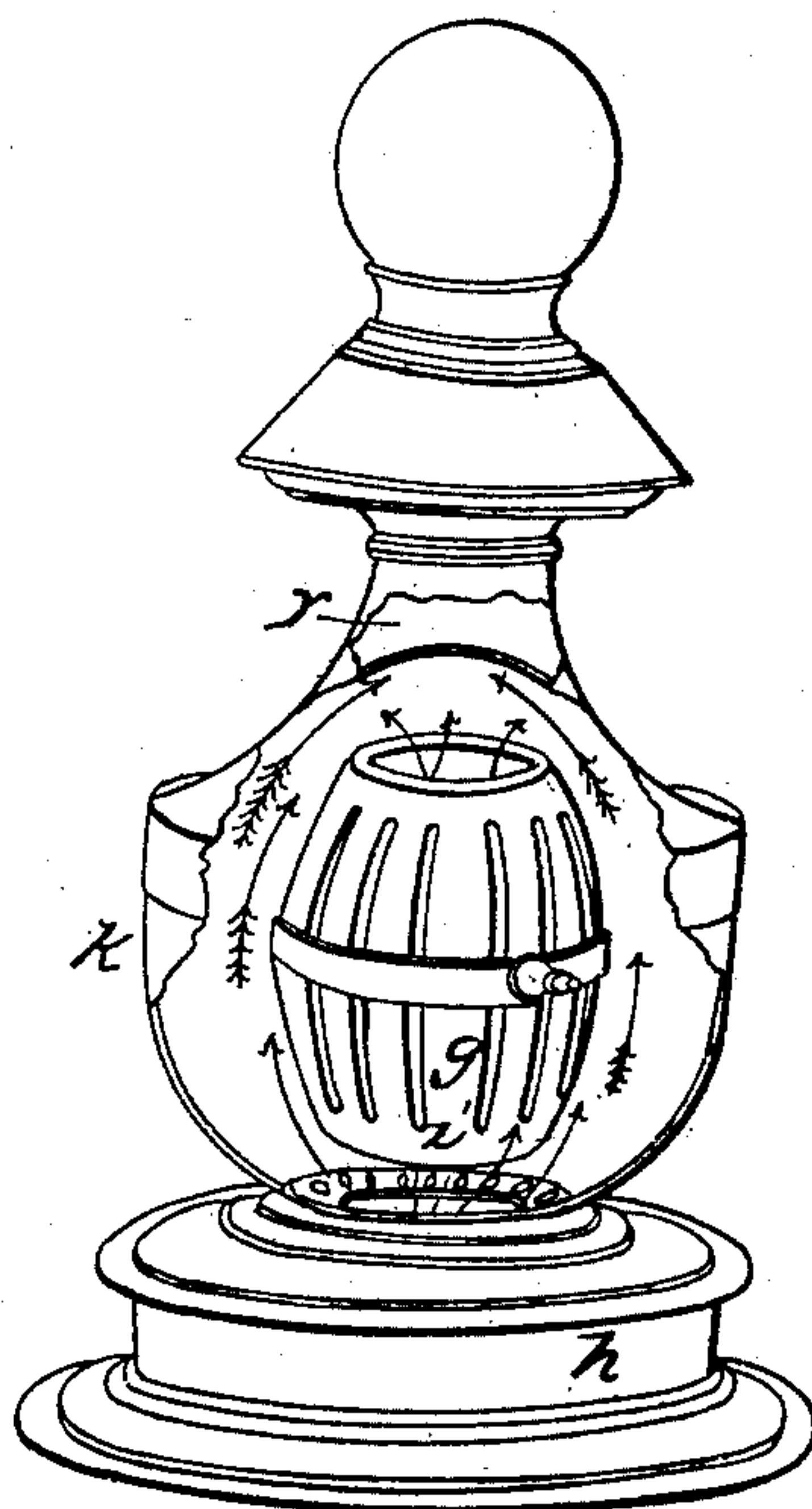


Fig. 3

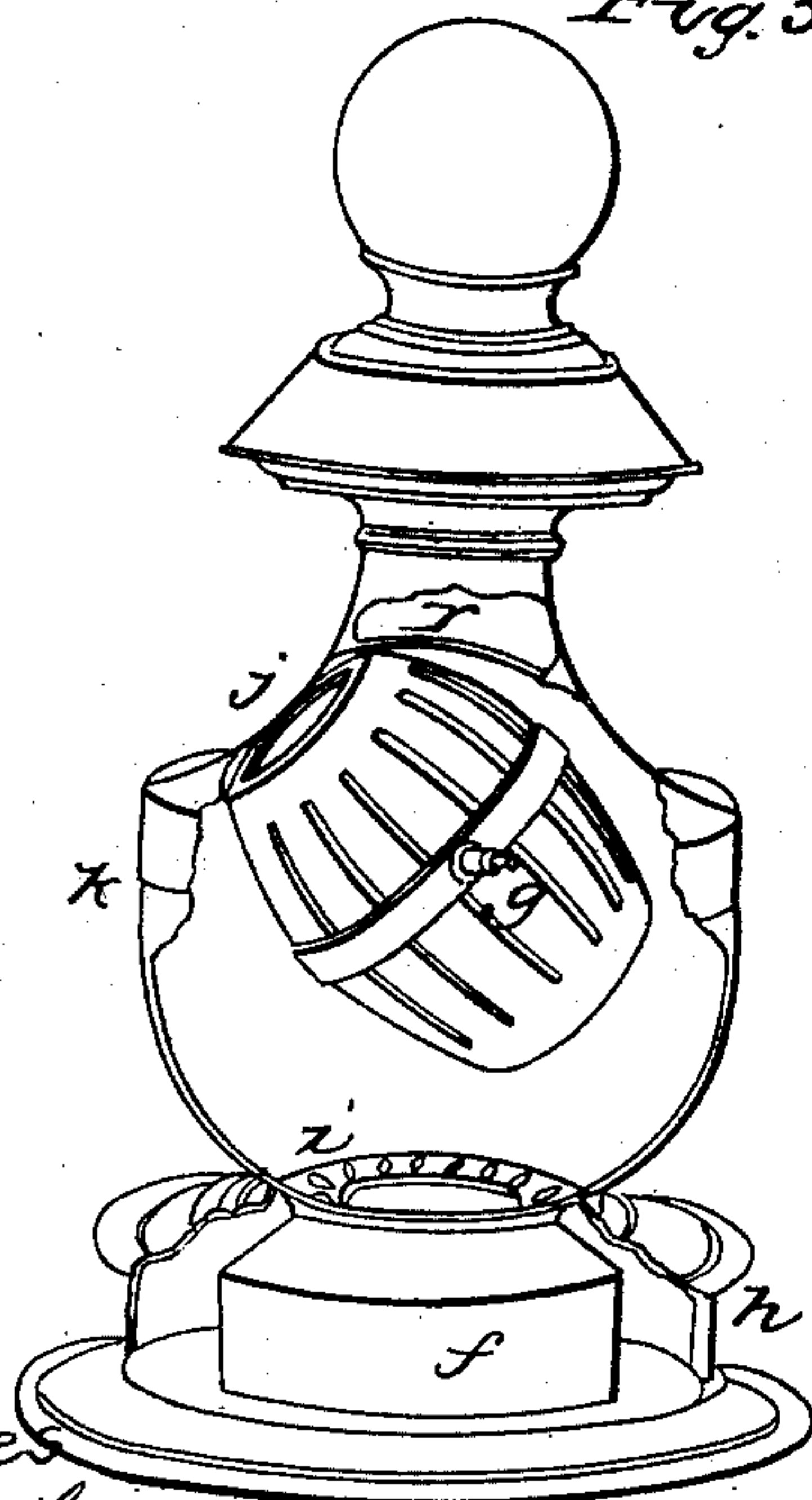
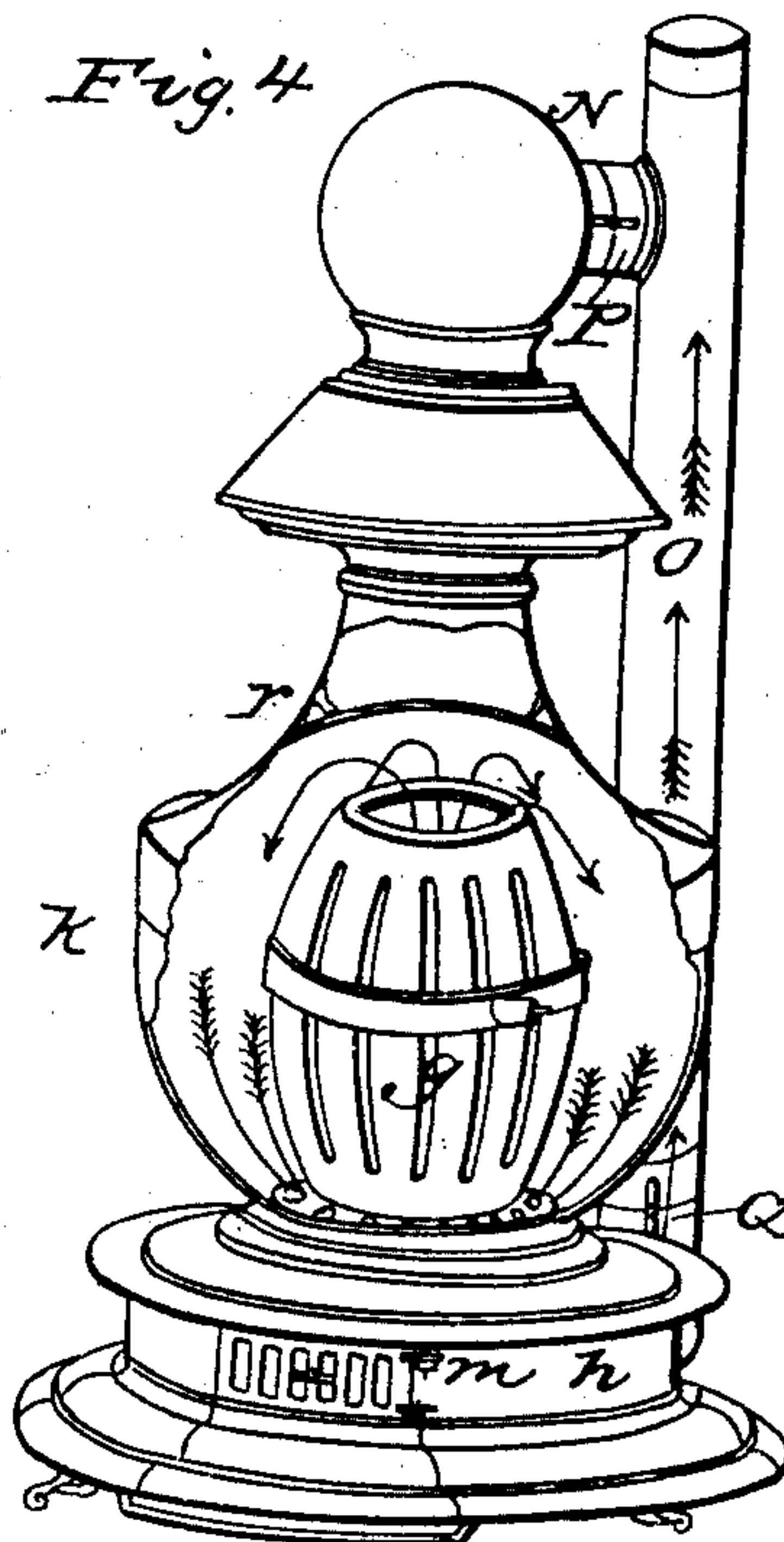


Fig. 4



Witnesses  
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# UNITED STATES PATENT OFFICE.

S. E. HEWES, OF ALBANY, NEW YORK.

## STOVE.

Specification of Letters Patent No. 24,738, dated July 12, 1859.

*To all whom it may concern:*

Be it known that I, S. EMILIUS HEWES, of the city and county of Albany and State of New York, have invented a new, useful, and  
5 Improved Coal-Stove; and I do hereby declare that the same is described and represented in the following specifications and drawings.

To enable others skilled in the art to make  
10 and use my invention I will proceed to describe its construction and operation referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1 is an elevation of my improved  
15 stove showing the devices for raising and lowering the fire pot. Fig. 2, is an elevation with a part of the case broken away to show the fire pot in proper position. Fig. 3, shows the firepot in a position to receive a charge  
20 of coal, and also the construction of the air chamber below the fire pot. Fig. 4, shows the firepot in the position it should occupy, after the coal ceases to supply any flame.

The nature of my invention and improve-  
25 ment consist in a revolving firepot arranged to traverse perpendicularly, or to be raised and lowered, for the purpose of supplying air to, and shutting it from the openings in the sides of the firepot, so as to effect a more  
30 ready and perfect combustion of the fuel.

In the accompanying drawings *h*, is the base of the stove forming an air chamber around the ashpit *f*, with openings *i*, from said air chamber into the chamber above,  
35 around the fire pot *g*. The outside case *k*, of the stove may be made in the form shown in the drawings or in such other form as will answer the purpose, and provided with an opening *j*, to supply coal to the fire pot *g*,  
40 which opening may be closed by a proper door. This case *k*, has slots in the sides for the pivots of the fire pot, to traverse in when it is raised and lowered.

*l, l*, are ribs on each side of the above men-  
45 tioned slots forming a dovetailed groove around said slot for the slide *a*, to traverse in, which covers the slot, and is provided with a hole for the pivot of the fire pot, which pivot extends through it and through  
50 the end of the link *c*, and has the crank *b*,

fastened to it by which the fire pot may rotate when desired.

The links *c*, connect the pivots of the firepot to the semicircular lever or bail *d*, which vibrates on pins fastened in the base *h*, to  
55 traverse or raise and lower the firepot when necessary, and it may be held in the position required by letting the bail *d*, catch into one of the notches in the rack *e*, Fig. 1.

The door *m*, in the base *h*, may be pro-  
60 vided with a register to regulate the supply of air which passes in through the ash draw tube into the ash pit *f*, and ascends up through the firepot and top of the case, into the pipe *N*, leading to the perpendicular pipe  
65 *O*, to kindle the fuel and get it to burning, when the damper *P*, in the pipe *N*, may be closed and the damper *Q*, in the pipe *O*, opened so that the gaseous products of combustion may pass out of the top of the fire-  
70 pot down through the openings *i* into the air chamber in the base *h*, as shown by the arrows in Fig. 4, and from thence into the pipe *o*, and pass to the chimney.

The fire pot *g*, is made in the form shown  
75 in the drawing, that is larger in the middle than at the ends, and one end about three fourths the size of the other, and I fit a coarse grate to the large end, to burn bituminous coal; and a finer grate to the small  
80 end for anthracite coal, either of which grates may be removed when the other is used. There are also openings in the sides of the firepot, so that when it is raised from the base, after the fire is kindled, the air  
85 may enter at the sides as well as at the bottom of the firepot.

By raising the firepot, so as to supply air containing oxygen entirely around it, as shown in Fig. 2, and the top of the firepot  
90 may be brought so near to the rim *r*, above it, that the rim will deflect the air containing oxygen in over the firepot, so as to unite with the hydrogen rising from the coal and burn it, and thereby effect a more perfect  
95 consumption of all the products of coal that are combustible than has been heretofore attained by any apparatus within my knowledge.

I believe I have described my improved 1

stove, so as to enable any person skilled in the art to make and use it.

I will now state what I desire to secure by Letters Patent to wit:

5 I claim—

A revolving firepot arranged to traverse perpendicularly, or to be raised and lowered substantially as described, for the purpose

of supplying air to, and shutting it from the openings in the sides of the firepot, so as to 10 effect a more ready and perfect combustion and consumption of the fuel.

S. EMILIUS HEWES.

Witnesses:

B. F. SMITH,

WM. J. HOFFMANN.