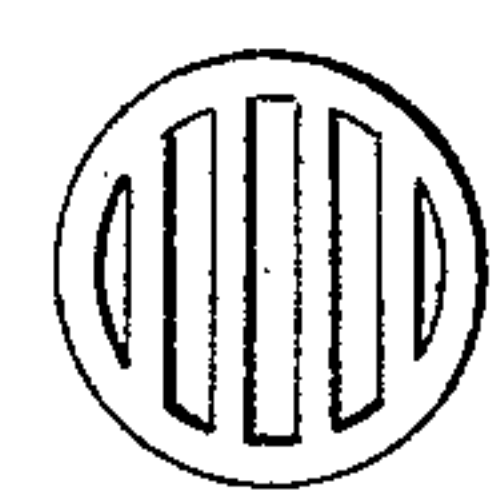
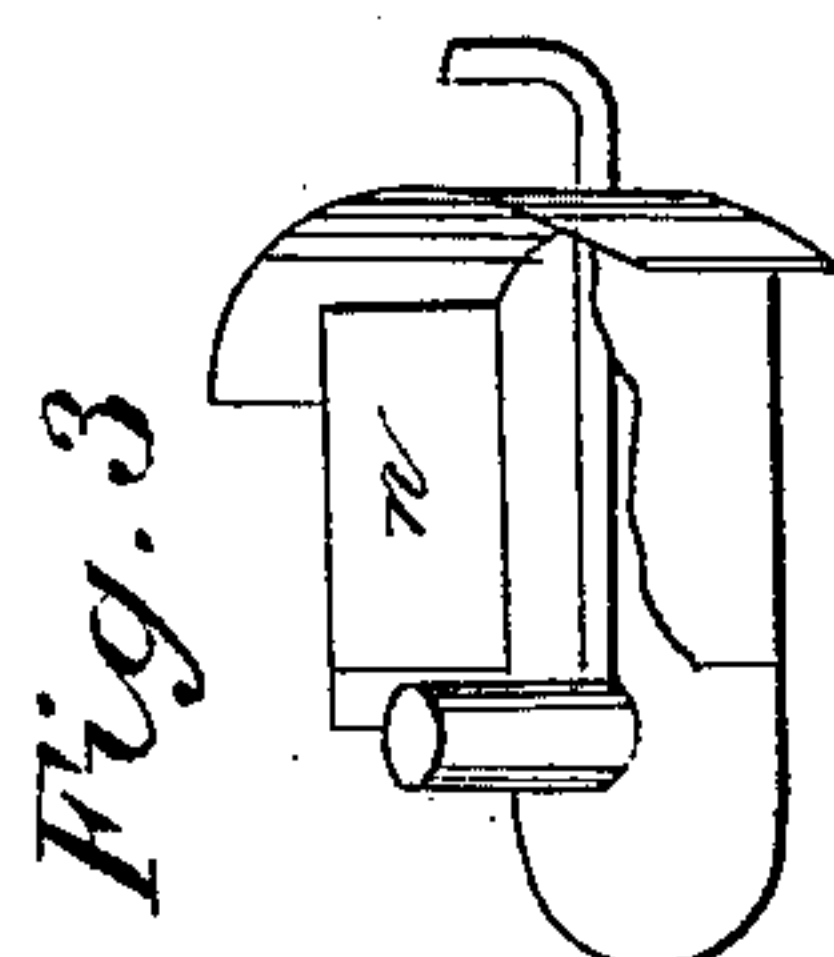
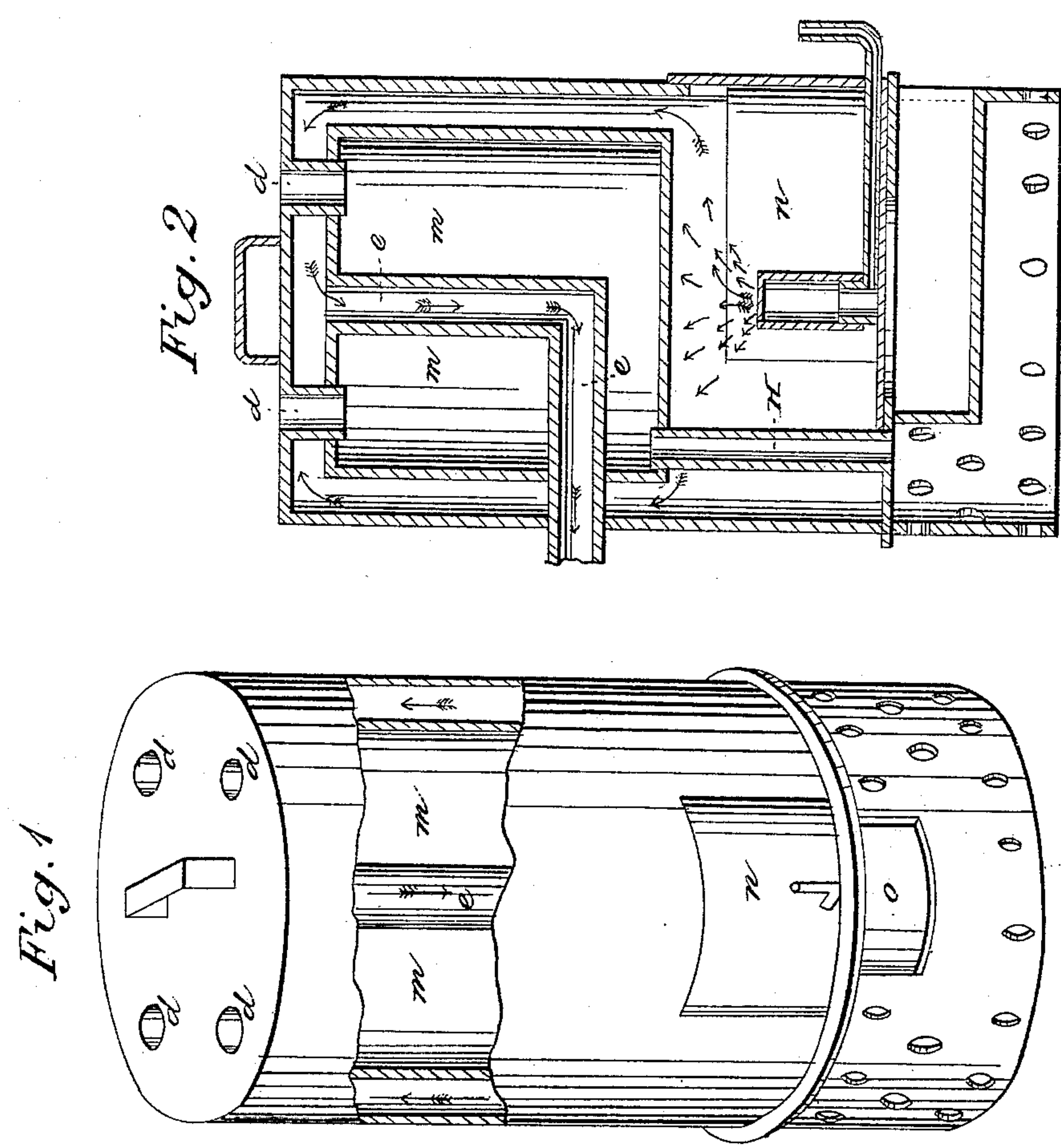


C. A. HARPER.  
Gas Stove.

No. 59,766.

Patented Nov. 20, 1866.



Witnesses:  
J. B. Clausen  
Lawrence Murphy

Inventor:  
C. A. Harper  
by  
D. D. Holloway & Co.  
his attys

# United States Patent Office.

## COAL-OIL STOVE, OR GAS HEATER.

C. A. HARPER, OF RAHWAY, NEW JERSEY.

*Letters Patent No. 59,766, dated November 20, 1866.*

### SPECIFICATION.

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, C. A. HARPER, of the city of Rahway, and State of New Jersey, have invented a new and improved Stove or Heater adapted to any kind of fuel, gas or other burner, greatly reducing the expense of heating rooms; and I do hereby declare that the following is a full and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon:

Fig. 1 is a perspective view.

Fig. 2 is a vertical section.

Fig. 3 is a detached view of the drawer containing the grate or other heater.

Fig. 4 a plan of the grate in the heater.

The nature of my invention consists in a combination of drums and air pipes, so constructed that cold air passes in freely at the bottom and (after being heated) out at the top through the outer from the inner drum into the room; the heat from the grate or gas burner striking on the bottom of the inner drum and passing up and around the same, downwards in the escape funnel through the centre of the same to a point just below the middle thereof, thence out through both drums into the chimney; also of a drawer grate constructed for coal, peat, or wood, and shiftable so as to be used for gas or other burners.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation. I first construct of sheet iron, or other suitable material, two drums, the outer one about three feet high and fifteen inches in diameter; the inner one, *m*, about three inches less in diameter, so as to leave a space of about one and a half inch all round between it and the outer drum, and about ten and a half inches shorter than the outside one, so as to leave a space of about one and-a-half inch between it and the outer drum on the top and about nine inches on the bottom for drawer grate and air pipes. Three or more hollow pipes, *k*, of about two inches calibre, are so placed around the recess left in the outer drum for the grate drawer, &c., as to admit of the free passage of cold air from the bottom into the inner drum, and four (more or less) similar pipes, *d*, so placed in the top of the inner drum passing up through the outer, as to admit of the heated air passing freely into the room; the fire, smoke, gas, &c., passing from the grate or other burner entirely around the inner drum from its bottom to its top and thence down through an escape-pipe, *c*, or funnel, passing from the top of the inner drum to a point something below its centre, and thence out through both drums into the chimney. The grate is shiftable so as to be used for coal, gas burner, or lamp, and slides in and out in grooves as a drawer, *n*, so as to be movable from one stove to another.

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

First. The combination of an exterior and interior drum with draught pipes and air flues when arranged substantially in the manner and for the purpose set forth.

Second. A shifting heater movable upon slides when used in combination with an exterior and interior drum, substantially as set forth.

C. A. HARPER.

Witnesses:

HELLEN HARPER,

EMILY M. HARPER.