

D. S. QUIMBY.
Fire Place Heater.

No. 49,153.

Patented Aug. 1, 1865.

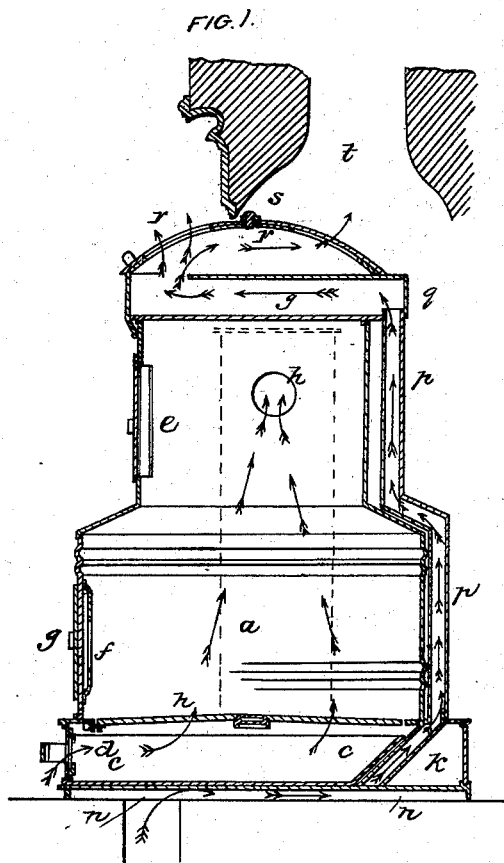
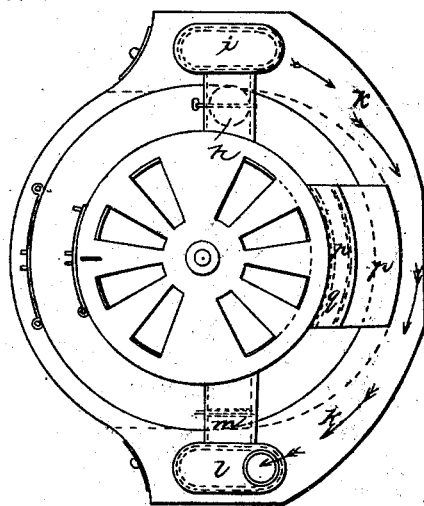


FIG. 2.



WITNESSES

Chas. Geo. Harold.

Jas. C. Sennell Jmy.

INVENTOR

David S. Quimby

UNITED STATES PATENT OFFICE.

DAVID S. QUIMBY, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN COAL-STOVES.

Specification forming part of Letters Patent No. **49,153**, dated August 1, 1865.

To all whom it may concern:

Be it known that I, DAVID S. QUIMBY, of Brooklyn, in the county of Kings and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Fire-Place Heaters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a vertical section of my said heater; and Fig. 2 is a plan of the same.

Similar letters denote the same parts.

Heaters have been made for fire-places with flues for heated air leading up into a room above, and in some instances dampers have been provided for directing the heated air into such flue or for causing it to come out into the room where the stove or heater is located.

The nature of my said invention consists in a peculiar arrangement of air-flue and register whereby the fresh air is taken up through the hearth into an air-space below the heater, thence by a vertical flue to a double air-box above the fire, over which is a turning register so formed that when in one position the heated air is thrown into the room and prevented from going into the ascending air-flue, and the reverse.

In the drawings, *a* is the furnace with any usual grate, *b*, ash-pan *c*, draft-regulator *d*.

e is the supply-door for fuel, and *f* are grate-bars in the front of the furnace, and *g* is a door that may be open or closed in front of these grate bars.

h is a pipe passing to the descending flue *i*, which in the hollow base *k* connects with the flue that crosses the heater at the back, and connects with the ascending flue *l* to the chimney.

m is a pipe and damper from the furnace *a* to the flue *l* to be used in kindling the fire, as heretofore employed.

The red arrows indicate the direction of the

draft and products of combustion, and the intensity of the fire is to be regulated by the dampers, as usual.

The heater rests on a rim or flange, so that there is an air-space below the heater, to which cold air is supplied through the opening *n*, and *o* is an air-flue between the flue *k* and ash-pit, which flue *o* opens to the air-pipe *p* at the back of the heater, communicating with the hot-air box *q* forming the top of the heater.

Over the box *q* is a register, *r*, fitted to turn on the center rivet, *s*, and the cover of the box *q* forms one-half of the register-plates, and is perforated with two sets of openings, one at the front, the other at the back, portion of said top of the box *q*. The movable register-plate *r* is also perforated or formed with openings in such a position that when turned in one direction the openings coincide with those in the front portion of the top of *q*, while the back ones are closed, and when *r* is turned in the other direction the openings in the front are closed and those at the back opened. By this arrangement of parts the heat can be thrown out into the room containing the heater, or directed up the hot-air flue *t* in the chimney to one or more rooms above.

The black arrows denote the direction of the currents of heated air.

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

1. The arrangement of the hot-air flue *o* *p* and box *q* in combination with the heater *a* and flues *i* *k* *l*, as specified.

2. The register *r*, fitted as specified, in combination with the hot-air box *q* and pipe *p*, for the purposes specified.

In witness whereof I have hereunto set my signature this 14th day of June, A. D. 1865.

DAVID S. QUIMBY.

Witnesses:

THOS. GEO. HAROLD,
JAMES E. SERRELL, Jr.