Specification of Thomas Potts : air stove and reverberator.

Contributors

Potts, Thomas.

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A.D. 1815 . . . . . N° 3898.

SPECIFICATION

OF

THOMAS POTTS.

AIR STOVE AND REVERBERATOR.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:
PUBLISHED AT THE QUEEN'S PRINTING OFFICE, EAST HARDING STREET,
NEAR FLEET STREET.
Price 6d. 1854.

A.D. 1815 . . . . . N° 3898.

Air Stove and Reverberator.

POTTS' SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, THOMAS POTTS, of Batchworth Mills, Rickmersworth, Herts, Half Stuff Manufacturer, send greeting.

WHEREAS His most Excellent Majesty King George the Third, by His Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the Fourteenth day of March, in the fifty-third year of His reign, give and grant unto me, the said Thomas Potts, my exors, admors, and assigns, His especial licence, full power, sole privilege and authority, that I, the said Thomas Potts, my exors, admors, and assigns, should and lawfully might, during the term therein mentioned, make, use, exercise, and vend, within England, Wales, and the Town of Berwick upon Tweed, my Invention of "A NEW MODE OR MEANS OF COMBINING AND APPLYING PRINCIPLES ALREADY KNOWN TO THE PURPOSE OF PRODUCING PURE AND FRESH WARM AIR, OF SUCH MODE OR MEANS OF COMBINATION AND APPLICATION OF PRINCIPLES ALREADY KNOWN TO SUCH PURPOSES AFORESAID;" in which said Letters Patent there is contained a proviso that if I, the said Thomas Potts, shall not particularly describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, by an instrument in writing under my hand and seal, and cause the same to be inrolled in His Majesty's High Court of Chancery within six calendar months next and immediately after the date of the said Letters Patent, that then the said Letters Patent, and all liberties and advantages whatsoever thereby granted, shall utterly cease, determine, and become void, as in and by the same, relation being thereunto had, may more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said Thomas Potts, do hereby declare that the nature of my said Invention, and the manner in which the same is to be performed, are particularly described and ascertained as follows, that is to say:—

I make use of a stove and reverberator, which are both inclosed in brickwork, and which are described in the following Drawing:—

Description of the Stove and Brickwork, and the Mode in which they are Used to Produce Fresh Warm Air and to Save Fuel.

The Drawing is made upon a scale of an inch to a foot.

A, a part of the stove, in which the coals or other fuel are burned. This part of the stove is larger at bottom than at the top, and is made with its four sides of equal sizes; the dotted lines shew a door *a*, and 2, 2, 2, 2, 2, 2, shew the ends of bars lying parellel with the door *a*; when it is shut, the dotted lines 3 shew the direction of the bars forming the bottom of the stove; the number of these bars may be increased or diminished at option. The front bars 2, 2, 2, 2, 2, 2, give an opportunity of clearing out any clinker or slate.

B, the top of the stove ending at E, and having a door shewn by the dotted lines 6; through this door A is filled with fuel; the top part of the stove is open at E, shewn by the dotted lines.

C, the bottom of the stove, having in it a damper or valve moving similar to a throttle valve in a steam engine, shewn at *c*, *c*, and a drawer to catch the ashes D; by the damper or valve *c* the draught of the stove is increased or decreased at option, there not being any other aperture through which the air can reach the fuel, as the other three sides are cast or made without any opening.

D, the drawer in the bottom C, to catch the ashes; this drawer fits quite air-tight, and by removing the plug 4 is easily taken out, together with any cinder or ashes that may fall out by stirring the fire or taking out clinkers at the door *a*.

E, the upper part of the top of the stove, the end 5 being closed, as well as every other part, except at E, as expressed by the dotted lines.

F, the reverberator, being almost a cylinder, five feet diameter and three feet wide; this reverberator and stove may be made either of cast iron, rought iron, or copper.

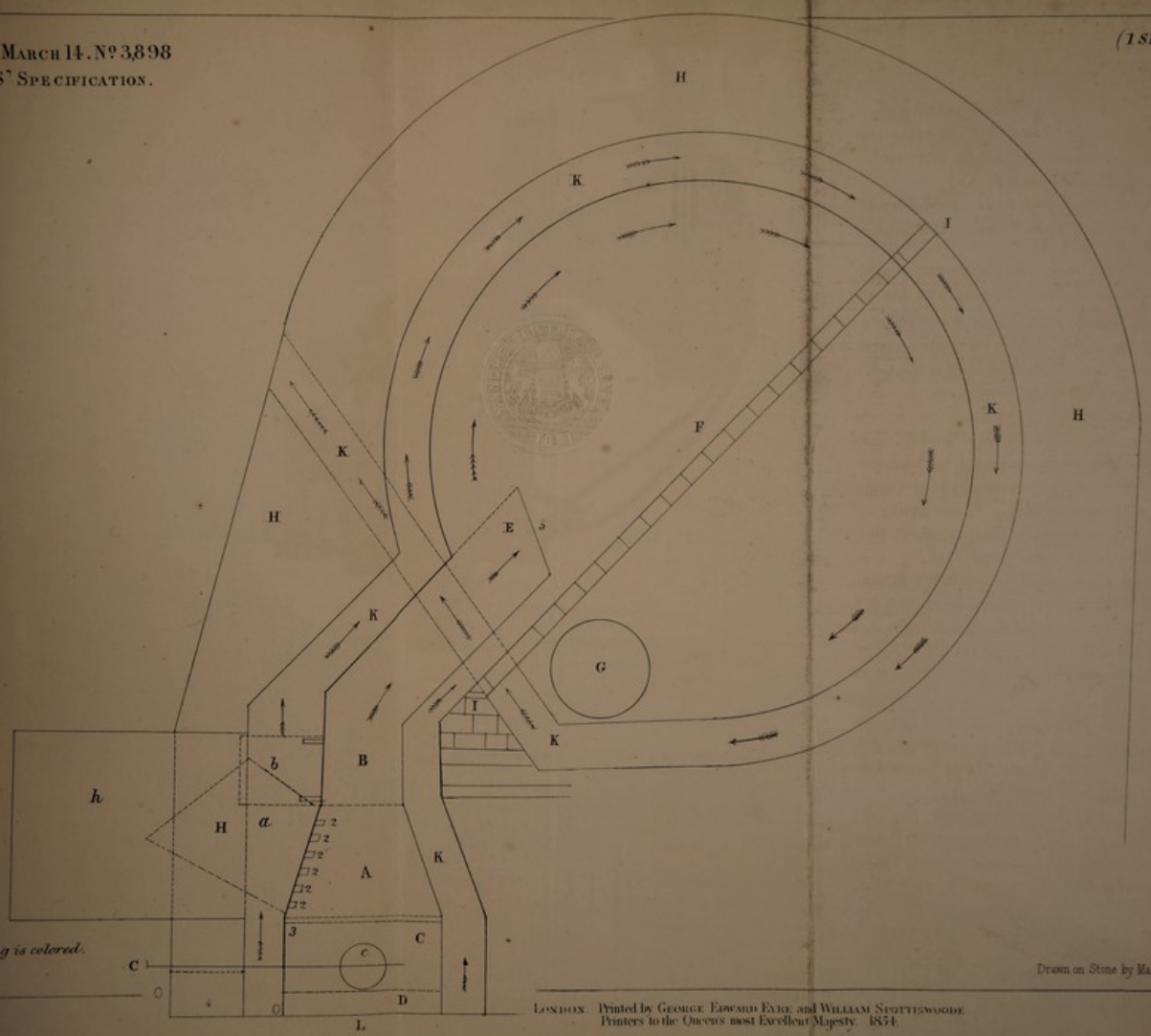
G, an aperture in the reverberator, through which the smoke passes into the chimney; to this aperture a pipe is fixed.

H, H, H, H, the brickwork surrounding the stove; *h* an iron door in the same, fronting the other doors.

A.D. 1815. March 14. No 3,898

POTTS' Specification.

(1 SHEET)



The enrolled drawing is colored.

Drawn on Stone by Malby & Sons.

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Printers to the Queens most Excellent Majesty. 1854.

I, I, a stop of brickwork running quite across and underneath the reverberator, but this stop does not go across the upper side of the reverberator.

K, K, K, K, K, K, K, the warm air flue, the external air being admitted quite at the bottom of the stove at L.

Mode of Using the Air Stove.

The damper or valve *c* is turned till it is horizontal; the door *h* is opened, the door *b* is opened, and the door *a* is shut; the fire is lighted at the door *b*, which is then shut, together with the door *h*; the reverberator becomes heated; the air rushes in at L, an ascends round the side of the stove, and being stopped from going to the right by the stop I, which runs quite across that part of the reverberator, it follows quite round the reverberator and flies off through the dotted flue. The ends of the reverberator being closed with brickwork all but the distance of the flue, it cannot get off by any other means; it is then conducted to any room or building where the warm air may be required. This mode of heating air I have found more economical than any other I have heard of or seen; the consumption of fuel in twenty-four hours, to thoroughly heat a building containing one hundred and three thousand six hundred cubical feet, has only cost at this place five shillings and sixpence. There is one thing particularly required, viz^{t}, a strong current of external air.

In witness whereof, I, the said Thomas Potts, have hereunto set my hand and seal, this Thirtieth day of August, in the year of our Lord One thousand eight hundred and fifteen.

THO^{S} POTTS. (L.S.)

AND BE IT REMEMBERED, that on the Thirtieth day of August, in the year of our Lord 1815, the aforesaid Thomas Potts came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and everything therein contained and specified, in form above written. And also the Specification aforesaid was stampt according to the tenor of the Statute made for that purpose.

Inrolled the Fifth day of September, in the year of our Lord One thousand eight hundred and fifteen.

PALMER, Extra.

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