

## **Specification of Daniel Foxwell : furnaces or fire-places.**

### **Contributors**

Foxwell, Daniel.

### **Publication/Creation**

London : Great Seal Patent Office, 1857 (London : George E. Eyre and William Spottiswoode)

### **Persistent URL**

<https://wellcomecollection.org/works/r9au2xdj>

### **License and attribution**

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>



---

A.D. 1856 . . . . . N° 2356.

---

S P E C I F I C A T I O N

OF

DANIEL FOXWELL.

---

FURNACES OR FIRE-PLACES.

---

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,  
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,  
25, SOUTHAMPTON BUILDINGS, HOLBORN.

*Price 3d.*

1857.









---

A.D. 1856 . . . . . N° 2356.

---

**Furnaces or Fire-places.**

---

**LETTERS PATENT** to Daniel Foxwell, of the City of Manchester, in the County of Lancaster, Card Manufacturer, for the Invention of "**AN IMPROVED MODE OR METHOD OF CONSUMING SMOKE AND ECONOMIZING FUEL THEREBY.**"

Sealed the 7th April 1857, and dated the 8th October 1856.

---

**PROVISIONAL SPECIFICATION** left by the said Daniel Foxwell at the Office of the Commissioners of Patents, with his Petition, on the 8th October 1856.

I, DANIEL FOXWELL, of the City of Manchester, in the County of Lancaster, Card Manufacturer, do hereby declare the nature of the said Invention for "**AN IMPROVED MODE OR METHOD OF CONSUMING SMOKE AND ECONOMIZING FUEL THEREBY,**" to be as follows:—

I propose to pass or force a continuous blast or blasts of cold air through the fire or furnace, which will have the effect of keeping up a constant mixture of the oxygen, carbon, and hydrogen sufficient to consume the smoke, and thereby cause an economization of fuel.



*Foxwell's Improved Mode of Consuming Smoke and Economizing Fuel thereby.*

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Daniel Foxwell in the Great Seal Patent Office on the 8th April 1857.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, DANIEL FOXWELL, of the City of Manchester, in the County of Lancaster, Card 5  
Manufacturer, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Royal Letters Patent, bearing date the Eighth day of October, in the year of our Lord One thousand eight hundred and fifty-six, in the twentieth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the 10  
said Daniel Foxwell, Her special licence that I, the said Daniel Foxwell, my executors, administrators, and assigns, or such others as I, the said Daniel Foxwell, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter, during the term therein expressed, should and lawfully might make, use, 15  
exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "AN IMPROVED MODE OR METHOD OF CONSUMING SMOKE AND ECONOMIZING FUEL THEREBY," upon the condition (amongst others) that I, the said Daniel Foxwell, by an instrument in writing under my hand and seal, should particularly describe and ascertain 20  
the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Daniel Foxwell, do hereby declare 25  
the nature of the said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement (that is to say):—

My Invention consists in supplying the furnace with forced or compressed air, either continuously or at intervals, as may be required, instead of the 30  
present mode of allowing the air to pass through the furnace at atmospheric pressure alone. I am thereby enabled to obtain a constant commixture of the oxygen, carbon, and hydrogen, and promote their combustion, the increased supply of oxygen consuming the gaseous products, preventing smoke, and economizing fuel. 35

Having thus described the nature of my said Invention, and the manner in which the same is to be performed, I desire it to be distinctly understood that I do not confine myself to any particular degree of pressure of the forced air,



---

*Foxwell's Improved Mode of Consuming Smoke and Economizing Fuel thereby.*

---

nor to the duration of its employment, as these details must depend upon the circumstances and conditions of the furnace or furnaces to which the forced air is applied; but I claim as my Invention, and which, to the best of my knowledge and belief, has not been hitherto used within the realm, the supply of  
5 forced or compressed air to a furnace or furnaces, either alone or in connection with or in addition to the atmospheric pressure, in contradistinction to the present plan of allowing it to pass through at atmospheric pressure alone.

In witness whereof, I, the said Daniel Foxwell, have hereunto set my  
hand and seal, this Seventh day of April, in the year of our Lord  
10 One thousand eight hundred and fifty-seven.

DANIEL FOXWELL. (L.S.)

Signed, sealed, and delivered by the within-  
named Daniel Foxwell, in the pre-  
sence of

15 E. J. HUGHES, Patent Agent,  
Manchester.

---

LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
Printers to the Queen's most Excellent Majesty. 1857.

Myself and my assigns, and my assigns, have invented the following

improvement in the construction of the furnace or furnace, and the mode of forcing air into the furnace, and which, to the best of my knowledge and belief, has not been hitherto used within the realm, the supply of forced or compressed air to a furnace or furnace, or in connection with or in addition to the atmospheric pressure, in a construction to the present plan of allowing it to pass through an atmospheric pressure valve.

In witness whereof, I, the said Daniel Foxwell, have hereunto set my hand and seal, this seventh day of April, in the year of our Lord One thousand eight hundred and fifty-seven.

DANIEL FOXWELL. (S)

Signed, sealed, and delivered by the within-named Daniel Foxwell, in the presence of

H. J. Houghton, Patent Agent, Manchester.

LONDON: Printed by George Rowland Hare and William Proctor, Stationers to the Queen's most Excellent Majesty, 1857.