

# **Specification of Wilkinson Jackson, Joseph Jackson, & James Cowgill : preventing escape of smoke from furnaces.**

## **Contributors**

Jackson, Wilkinson.

Jackson, Joseph.

Cowgill, James.

## **Publication/Creation**

London : Great Seal Patent Office, 1870 (London : George E. Eyre and William Spottiswoode)

## **Persistent URL**

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A.D. 1869, *1st NOVEMBER.* N° 3170.

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

OF

WILKINSON JACKSON,  
JOSEPH JACKSON, & JAMES COWGILL.

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PREVENTING ESCAPE OF SMOKE FROM  
FURNACES.

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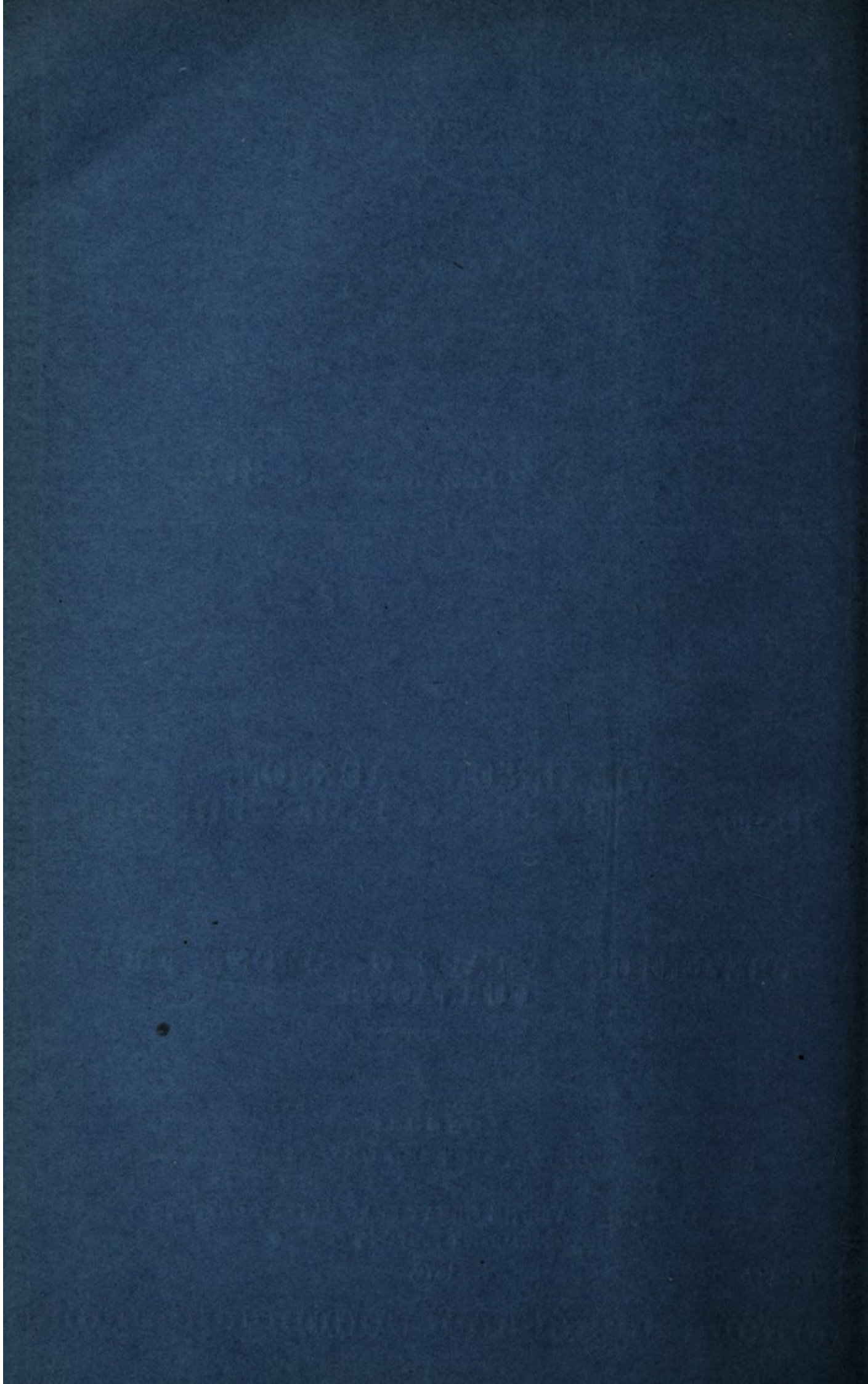
LONDON:

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.

1870.









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A.D. 1869, 1st NOVEMBER. N° 3170.

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**Preventing Escape of Smoke from Furnaces.**

*(This Invention received Provisional Protection only.)*

PROVISIONAL SPECIFICATION left by Wilkinson Jackson, Joseph Jackson, and James Cowgill at the Office of the Commissioners of Patents, with their Petition, on the 1st November 1869.

We, WILKINSON JACKSON and JOSEPH JACKSON, of Halifax, in the  
5 County of York, and JAMES COWGILL, of Bradford, in the same County,  
Engineers, do hereby declare the nature of the said Invention for "**IM-  
PROVED MEANS OF PREVENTING THE ESCAPE OF SMOKE FROM STEAM BOILER AND  
OTHER FURNACES,**" to be as follows:—

This Invention consists in forcing the smoke or products of com-  
10 bustion as they issue from the furnace through water, which condenses  
or refines them, the carbon or heavy bodies being precipitated into  
the water, whilst the gases escape and pass away by the chimney in  
the usual manner. We may effect this by providing a cistern to contain  
water in the flue leading from the furnace to the chimney, and forming  
15 a partition or damper above the water extending to the top of the flue,  
which is adjustable, and by applying a worm or screw working or  
capable of rotating upright in the water in front of the damper, rotary  
motion being given thereto by any suitable or convenient motive power,

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*W. & J. Jackson & Cowgill's Impts. in Preventing the Escape of Smoke.*

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so that the said worm or screw by its action will force the smoke into the water, from which the gases escape on the other side of the damper purified from the carbon, which is condensed and left in the water. Or instead of the screw a rotary fan may be used to force the smoke into and through the water.

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Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
Printers to the Queen's most Excellent Majesty. 1870.