

## **Specification of John Dean and Thomas Turton : consuming smoke in steam boilers.**

### **Contributors**

Dean, John.  
Turton, Thomas.

### **Publication/Creation**

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A.D. 1867, 8th OCTOBER. N<sup>o</sup> 2825.

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SPECIFICATION

OF

JOHN DEAN AND THOMAS TURTON.

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CONSUMING SMOKE IN STEAM BOILERS.

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LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

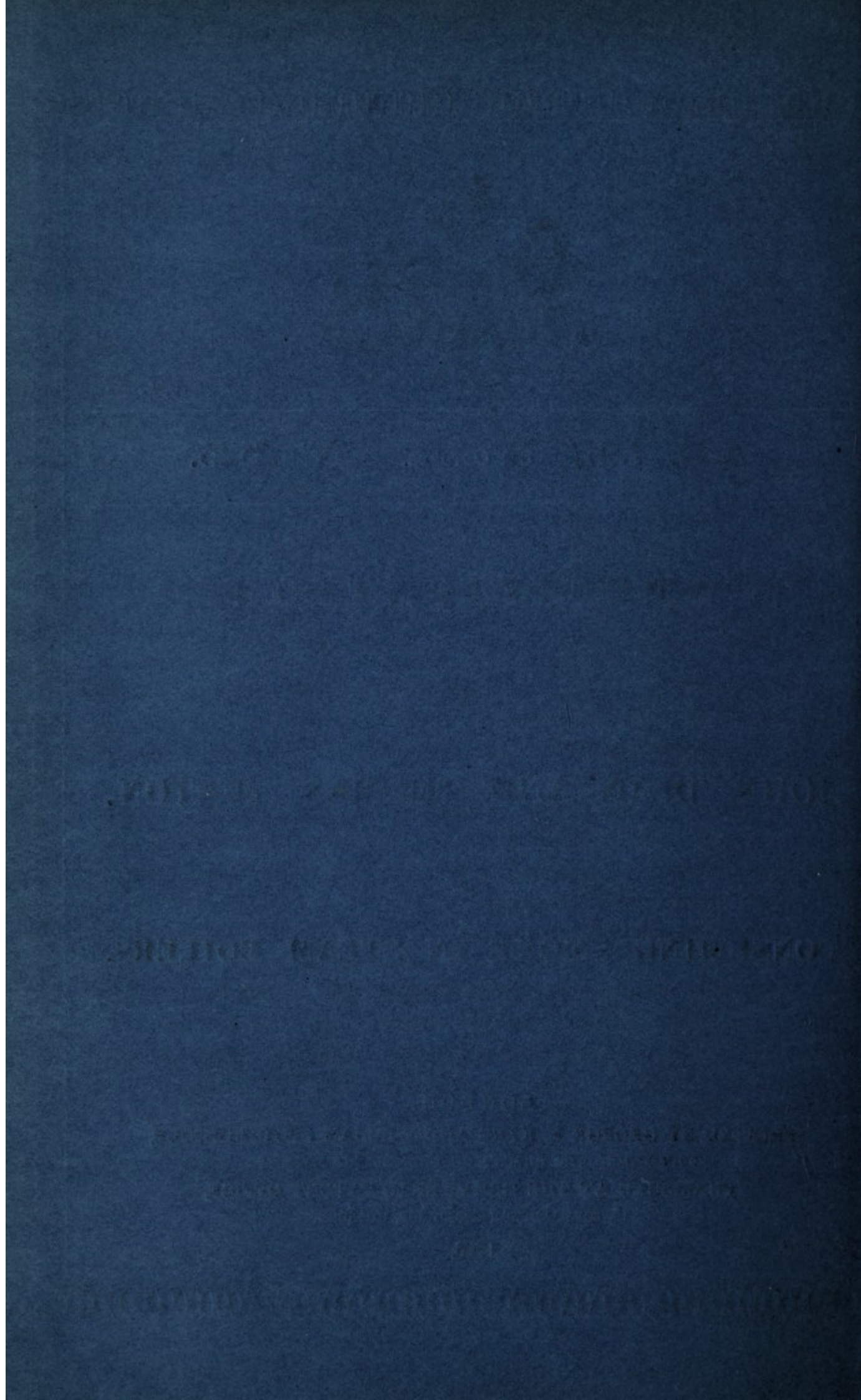
PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.

Price 4d.

1868.









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A.D. 1867, 8th OCTOBER. N° 2825.

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## Consuming Smoke in Steam Boilers.

*(This Invention received Provisional Protection only.)*

**PROVISIONAL SPECIFICATION** left by John Dean and Thomas Turton at the Office of the Commissioners of Patents, with their Petition, on the 8th October 1867.

We, JOHN DEAN, Engineer, and THOMAS TURTON, Grinder, both of Sheffield,  
5 in the County of York, do hereby declare the nature of the said Invention for  
“AN IMPROVED APPARATUS FOR THE PREVENTION OR CONSUMPTION OF SMOKE IN THE  
FURNACES AND FLUES OF STEAM BOILERS,” to be as follows :—

Our Invention relates to the prevention or consumption of smoke in the  
furnaces and flues of steam boilers, and consists in an arrangement of  
10 serpentine flues, whereby the smoke and other unconsumed products of com-  
bustion are prevented from passing away directly to the chimney until the  
whole has been consumed, and not only is smoke thus prevented but a great  
economy in fuel is also effected, as little or no waste heat from the fuel passes  
away uselessly up the chimney. The flues from the furnace first pass out-  
15 wards and then longitudinally beneath the boiler to the back, where they turn  
inwards, and then pass backwards and forwards in a serpentine direction till  
they meet in the centre; they are then brought forwards to the front, where  
they again separate and pass under the front end of the boiler to the  
outside flues; these latter extend to the back of the boiler, where they  
20 again pass in a serpentine or in a direct manner to the outlet leading to the  
chimney.

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LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
Printers to the Queen's most Excellent Majesty. 1868.

