

Specification of Benjamin Tweedy : apparatus for consuming smoke in furnaces.

Contributors

Tweedy, Benjamin.

Publication/Creation

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A.D. 1859, *5th August.* N° 1802.

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

OF

BENJAMIN TWEEDY.

APPARATUS FOR CONSUMING SMOKE IN
FURNACES.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

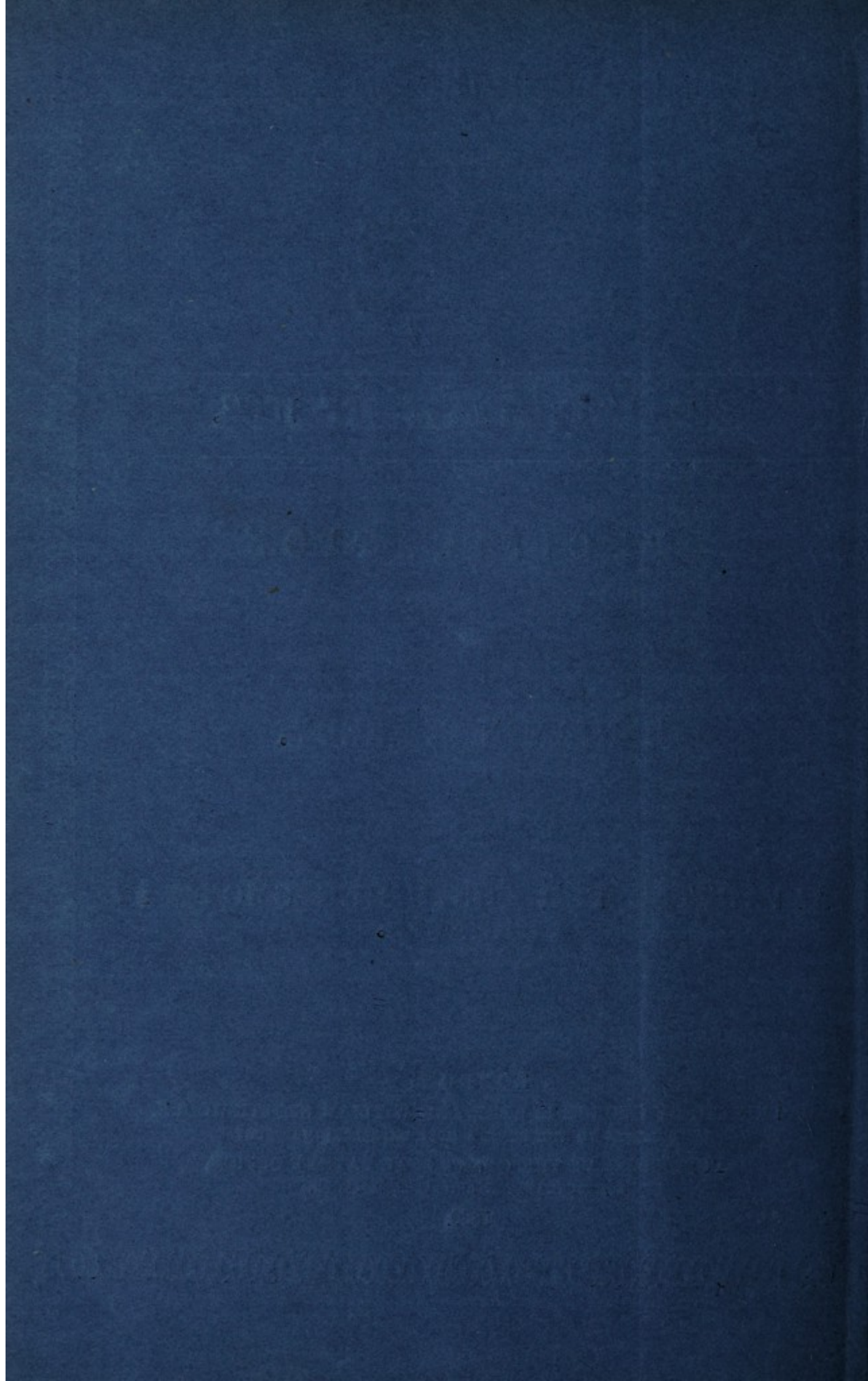
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

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Price 6d.

1860.





A.D. 1859, 5th AUGUST. N° 1802.

Apparatus for Consuming Smoke in Furnaces.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by Benjamin Tweedy at the Office of the Commissioners of Patents, with his Petition, on the 5th August 1859.

I, BENJAMIN TWEEDY, at present residing at Utrecht, in the Kingdom of the Netherlands, Engineer, do hereby declare the nature of the said Invention for "**AN IMPROVED MODE OF AND APPARATUS FOR CONSUMING SMOKE IN LOCOMOTIVE AND OTHER ENGINE FURNACES, WHEREBY COAL CAN BE USED INSTEAD OF COKE,**" to be as follows :—

An iron plate, of a half round or flat shape, of the length of twenty inches, or any other length to suit different furnaces the Invention may be applied to, to be fixed at the top part of the engine fire-door leading into the fire-box at an angle of 45, or any other angle to suit the different sized fire boxes or furnaces to which the Invention may be applied, by means of which a current of down cast air will be produced, and with the aid of a ventilated or trellaced fire-door the same may be regulated and increased, and this on coming in contact with the smoke will cause the same to descend on the fire, and there be consumed.

The following is a description of the Drawing thereof hereto annexed :—

No. 1 plan shows a longitudinal section of the fire-box and tubes, together with the apparatus of a locomotive engine ; this Invention or improvement is that coal can be used instead of coke, whereby there will be a saving of capital of at least 60 per cent. in fuel, and the smoke be entirely burnt. When the engine is standing the Inventor proposes a blow-off pipe or lock to fit in the chimney, which will consume any smoke that may arise from the

Tweedy's Improved Mode of and Apparatus for Consuming Smoke in Furnaces.

coal. The Inventor likewise calculates by this adoption of the coal in locomotives it will be a saving to the copper tubes of at least 20 per cent. The cost of this apparatus to each locomotive engine will not be more than five shillings, which will have to be renewed every three months.

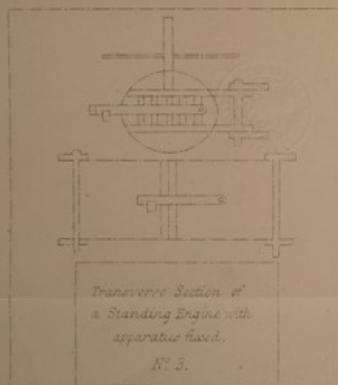
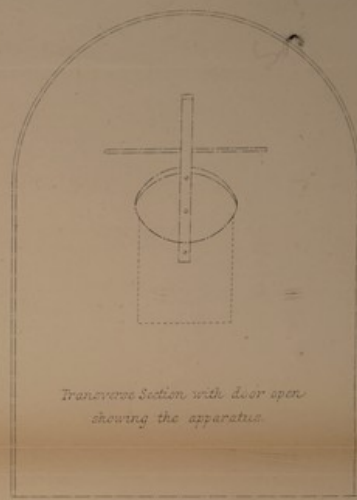
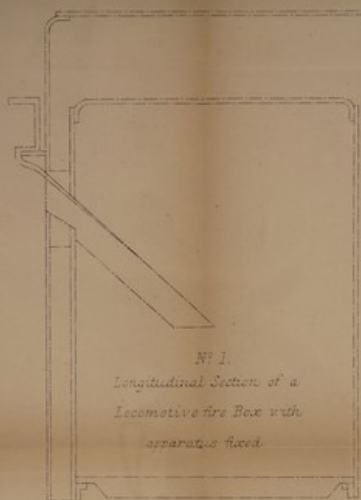
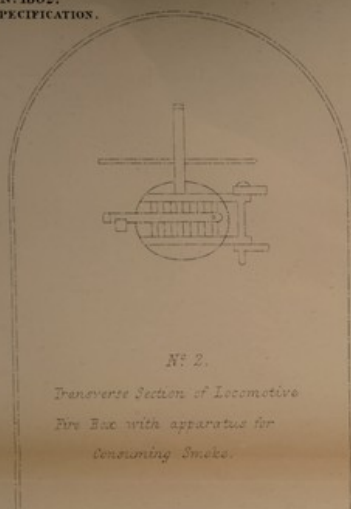
No. 2 plan shows a transverse section of a locomotive engine, of the apparatus and fire-door.

No. 3 plan shows a transverse section of a standing or steamboat engine, of the apparatus and fire-door.

No. 4 plan shows a longitudinal section of a standing or steamboat engine to which this apparatus can be fixed. The Inventor calculates that this 10 Invention can be applied to a standing engine or steamboat engine with the above saving as to locomotive engine.

LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1860.



The drawing left with Provisional Specification is altered.

Drawn in Stone by Mally & Son.

