

Specification of John Browne : preventing the escape of smoke from chimneys, and consuming or otherwise disposing thereof.

Contributors

Browne, John.

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A.D. 1852 N° 992.

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

OF

JOHN BROWNE.

PREVENTING THE ESCAPE OF SMOKE
FROM CHIMNEYS, AND CONSUMING OR
OTHERWISE DISPOSING THEREOF.

L O N D O N :

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.





A.D. 1852 N° 992.

**Preventing the Escape of Smoke from Chimneys,
and Consuming or otherwise Disposing thereof.**

(This Invention did not proceed to the Great Seal.)

PROVISIONAL SPECIFICATION left by John Browne at the Office of the Commissioners of Patents, with his Petition, on the 8th December 1852.

I, JOHN BROWNE, of Charles Street, Regent Street, in the County
5 of Middlesex, Gentleman, do hereby declare the nature of the said
Invention for "**IMPROVEMENTS IN MACHINERY OR APPARATUS FOR PRE-
VENTING THE ESCAPE OF SMOKE FROM CHIMNEYS, AND CONSUMING OR
OTHERWISE DISPOSING THEREOF,**" to be as follows:—

I propose to take, as an instance of the improvements above
10 mentioned, the chimney or stalk of a factory, which is usually of
considerable height. In building this chimney or stalk, I propose
to leave an opening of as large diameter as is consistent with the
safety of the brickwork, and about half way up its entire height
(this opening may be made in chimneys that are in present use),
15 behind this opening, and so covered in, to insure the non-escape of
the smoke, except where such means of escape is by me provided,
I place a cylinder, having at one end a handle (or the end may be
formed grooved, as in the case of a common window blind, where

Browne's Improvements in Machinery for Consuming Smoke.

the end is grooved to receive and retain the cord); this cylinder is provided with leaves of sheet iron, bent in any form which is most likely to operate upon or catch up the smoke. Under this cylinder is placed a tank, such tank to be filled, or nearly so, with water, having two well secured openings or doors at one end, or one at 5 each end. The door, which is placed near the bottom of the tank, is to facilitate the removal of solid matter, and the other, placed nearly at the top of the tank, to allow the lighter substances to flow out, when required. The course of the operation will be as follows :— 10

The smoke arising from the furnaces will ascend the chimney or stalk more rapidly than *now usual* in a chimney of the same capacity, because there will be a double draft; but, on its arrival at the opening aforesaid, it will come under the in-draught influence of the foliated cylinder, which, by any usual gearing from the steam 15 engine, will be made to rotate with great rapidity. On the smoke being in-draughted by the cylinder, it will be dashed down on to the surface of the water in the tank, and the heavier particles will be absorbed, and sink to the bottom thereof, while the lighter, or sooty-portion, will be carried off, as required, by the upper opening 20 or door, before mentioned. As the products of the smoke will be of value, the one being capable of recombustion, and the other usable for various useful purposes, it is supposed the expence of fitting the apparatus will be amply repaid, & a continued profit secured. The whole apparatus is to be built up and enclosed, so 25 that no smoke or noxious effluvia will escape.

It is presumed the above outline may be considered sufficient for a Provisional Specification, as it developes all I intend to do, while the sizes or proportions, and minute particulars of parts only are retained, and these will of course vary according to circumstances.

LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1854.