

**Specification of George Willett, Robert James Harris, and James Lund :
filtering sewage.**

Contributors

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A.D. 1874, 22nd JULY. N° 2557.

SPECIFICATION

OF

GEORGE WILLETT,
ROBERT JAMES HARRIS,
AND JAMES LUND.

FILTERING SEWAGE.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

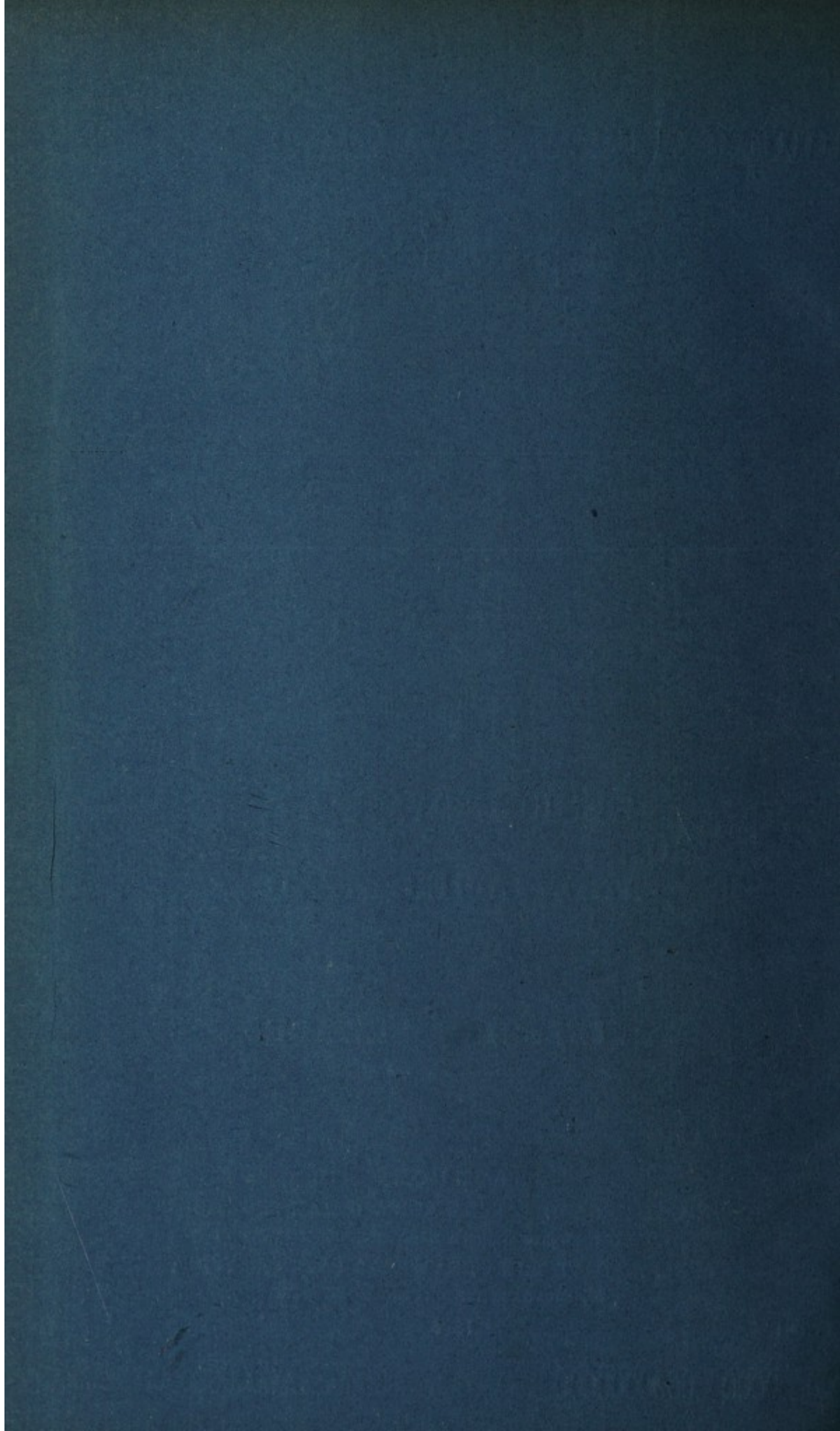
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.

Price 10d.

1875.





A.D. 1874, 22nd JULY. N° 2567.

Filtering Sewage.

LETTERS PATENT to George Willett, of South Street, Worthing, in the County of Sussex, Picture Dealer, Robert James Harris, of High Street, Worthing, aforesaid, Engineer, and James Lund, of Fife Villa, Hertford Road, Worthing, aforesaid, Surveyor, for the Invention of "**IMPROVEMENTS IN FILTERING SEWAGE AND IN THE MEANS FOR EFFECTING THE SAME.**"

Scaled the 25th September 1874, and dated the 22nd July 1874.

PROVISIONAL SPECIFICATION left by the said George Willett, Robert James Harris, and James Lund at the Office of the Commissioners of Patents, with their Petition, on the 22nd July 1874.

We, **GEORGE WILLETT**, of South Street, Worthing, in the County of
5 Sussex, Picture Dealer, **ROBERT JAMES HARRIS**, of High Street,
Worthing, aforesaid, Engineer, and **JAMES LUND**, of Fife Villa, Hertford
Road, Worthing, aforesaid, Surveyor, do hereby declare the nature of the
said Invention for "**IMPROVEMENTS IN FILTERING SEWAGE AND IN THE MEANS
FOR EFFECTING THE SAME,**" to be as follows:—

10 This Invention for filtering sewage, house slops, and such like,
consists of a series of tanks, made in brickwork or other material, filled

Willett, Harris, & Lund's Improvements in Filtering Sewage.

with coal ashes of various sizes. It is so constructed that the sewage will flow through the several compartments and pass off sufficiently pure and clear to allow of the ordinary street channels being used, and by filling the last compartment with charcoal it may be rendered fit for any ordinary purpose. It is proposed to deal with the sewage of towns where water-closets are in use, or in connection with ash closets, to purify the house slops. It is equally well adopted for a single house, farm yard, village, or town; and sewage or slops thus filtered may be used for watering gardens, streets, or roads. 5

SPECIFICATION in pursuance of the conditions of the Letters Patent, 10
filed by the said George Willett, Robert James Harris, and James
Lund in the Great Seal Patent Office on the 22nd January 1875.

TO ALL TO WHOM THESE PRESENTS SHALL COME, we, GEORGE
WILLETT, of South Street, Worthing, in the County of Sussex, Picture
Dealer, ROBERT JAMES HARRIS, of High Street, Worthing, aforesaid, 15
Engineer, and JAMES LUND, of Fife Villa, Hertford Row, Worthing,
aforesaid, Surveyor, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her
Letters Patent, bearing date the Twenty-second day of July, in the
year of our Lord One thousand eight hundred and seventy-four, in the 20
thirty-eighth year of Her reign, did, for Herself, Her heirs and suc-
cessors, give and grant unto us, the said George Willett, Robert James
Harris, and James Lund, Her special licence that we, the said George
Willett, Robert James Harris, and James Lund, our executors, admini-
strators, and assigns, or such others as we, the said George Willett, 25
Robert James Harris, and James Lund, our 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, exercise, and vend, within the
United Kingdom of Great Britain and Ireland, the Channel Islands, and 30
Isle of Man, an Invention for "IMPROVEMENTS IN FILTERING SEWAGE AND
IN THE MEANS FOR EFFECTING THE SAME," upon the condition (amongst
others) that we, the said George Willett, Robert James Harris, and
James Lund, our executors or administrators, by an instrument in
writing under our, or their, or one of their hands and seals, should par- 35

Willet, Harris, & Lund's Improvements in Filtering Sewage.

ticularly describe and ascertain 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.

- 5 NOW KNOW YE, that we, the said George Willett, Robert James Harris, and James Lund, do hereby declare the nature of our said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—
- 10 This Invention for filtering sewage, house slops, and such like, consists of a series of tanks, made in brickwork or other material, filled with coal ashes or coke of various sizes. It is so constructed that the sewage will flow through the several compartments and pass off sufficiently pure and clear to allow of the ordinary street channels
- 15 being used, and by filling the last compartment with charcoal it may be rendered fit for any ordinary purpose. It is proposed to deal with the sewage of towns where waterclosets are in use, or in connection with ash closets, to purify the house slops. It is equally well adapted for a single house, farm yard, village, or town; and sewage or slops thus
- 20 filtered may be used for watering gardens, streets, or roads, or it may be used by water companies for filtering river water.

These filtering tanks built of brickwork in cement and filled with cinders or coke, or part cinders and part coke, and a small quantity of old iron, finished on top with perforated bricks or gravel to prevent the

25 cinders floating, and provided with means to aerate the water as it flows over the division walls.

And in order that our said Invention may be more fully understood reference is made to the accompanying Drawings, wherein Fig. 1 shews a section of filter and settling tank through centre of plan; Fig. 2,

30 plan of filter.

a, sewage inlet.

b, brick subsiding tank.

c, iron screens.

d, cemented tanks filled with cinders or coke, or part cinders and

35 part coke, and a small quantity of old iron.

Willetts, Harris, & Lund's Improvements in Filtering Sewage.

e, iron or stoneware perforated to aerate the water.

f, outlet for effluent water.

g, surface and coping.

Having thus described the nature and object of our said Invention we declare that what we claim and desire to be secured to us by the herein- 5 before in part recited Letters Patent is, the improvements in filtering sewage and in the means of effecting the same, substantially as herein-before described and illustrated on Drawing or any mere modification thereof.

In witness whereof, we, the said George Willett, Robert James 10 Harris, and James Lund, have hereunto set our hands and seals, this Twenty-first day of January, in the year of our Lord One thousand eight hundred and seventy-five.

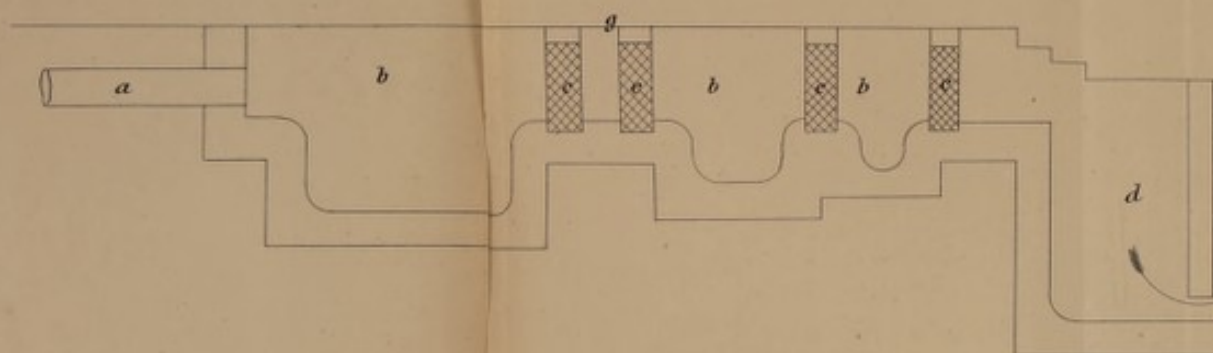
GEO. WILLETT. (L.S.)

ROBERT JAMES HARRIS. (L.S.) 15

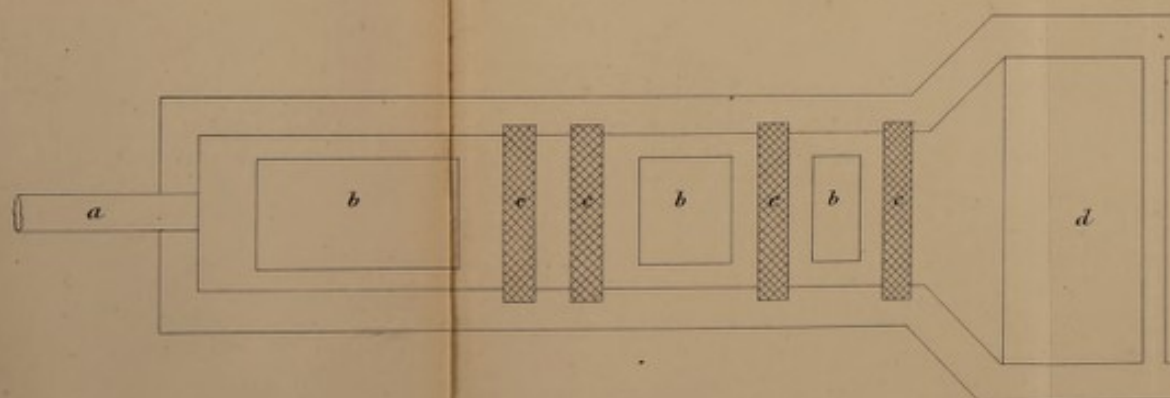
JAMES LUND. (L.S.)

LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1875.



Section



Inches 25 c o f

The filed drawing is not colored.

