

G. C. TREWBY.

APPARATUS FOR CHARGING GAS RETORTS.

No. 468,374.

Patented Feb. 9, 1892.

FIG. 1.

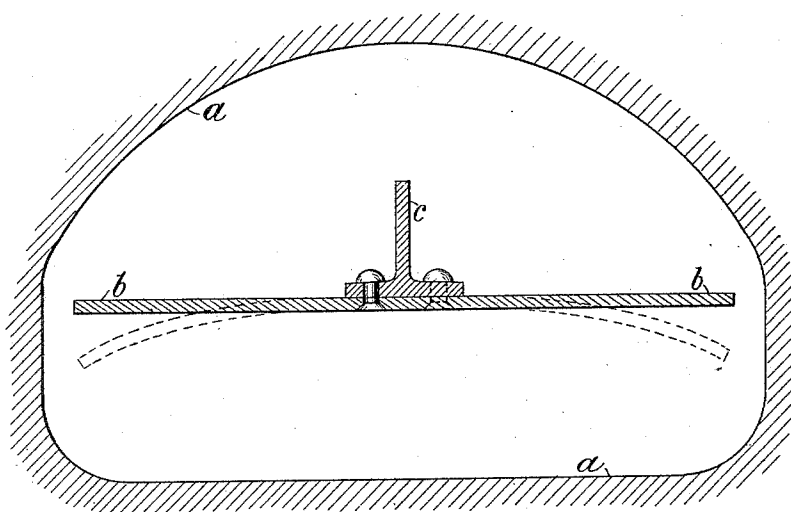
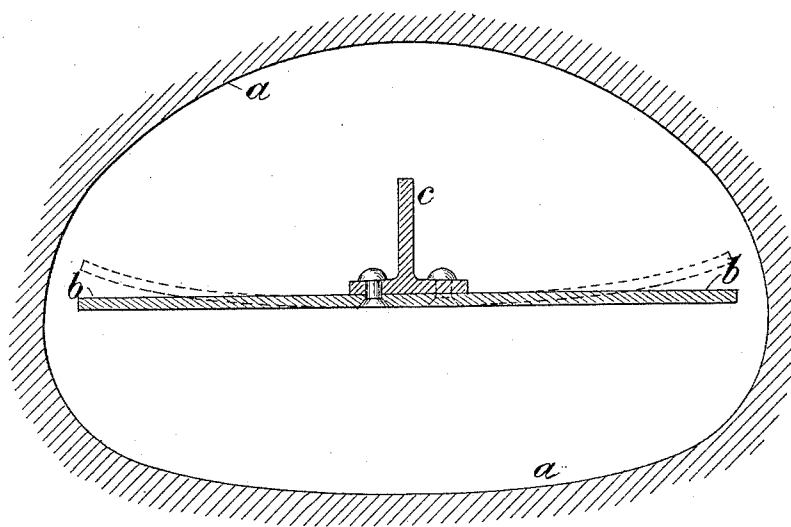


FIG. 2.



WITNESSES:

E. B. Colton

C. L. Champion.

INVENTOR:

George Careless Trewby

By

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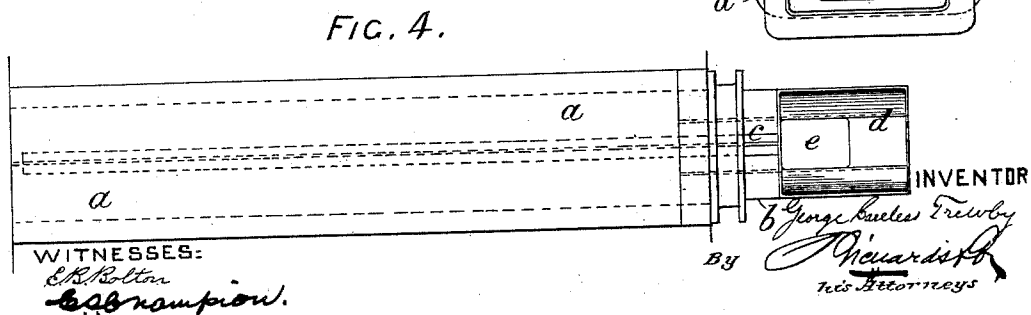
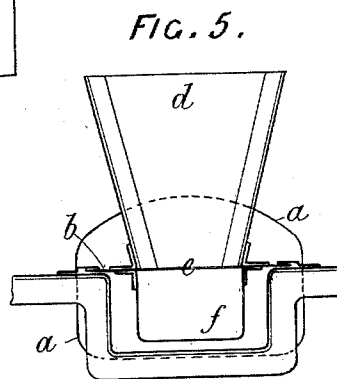
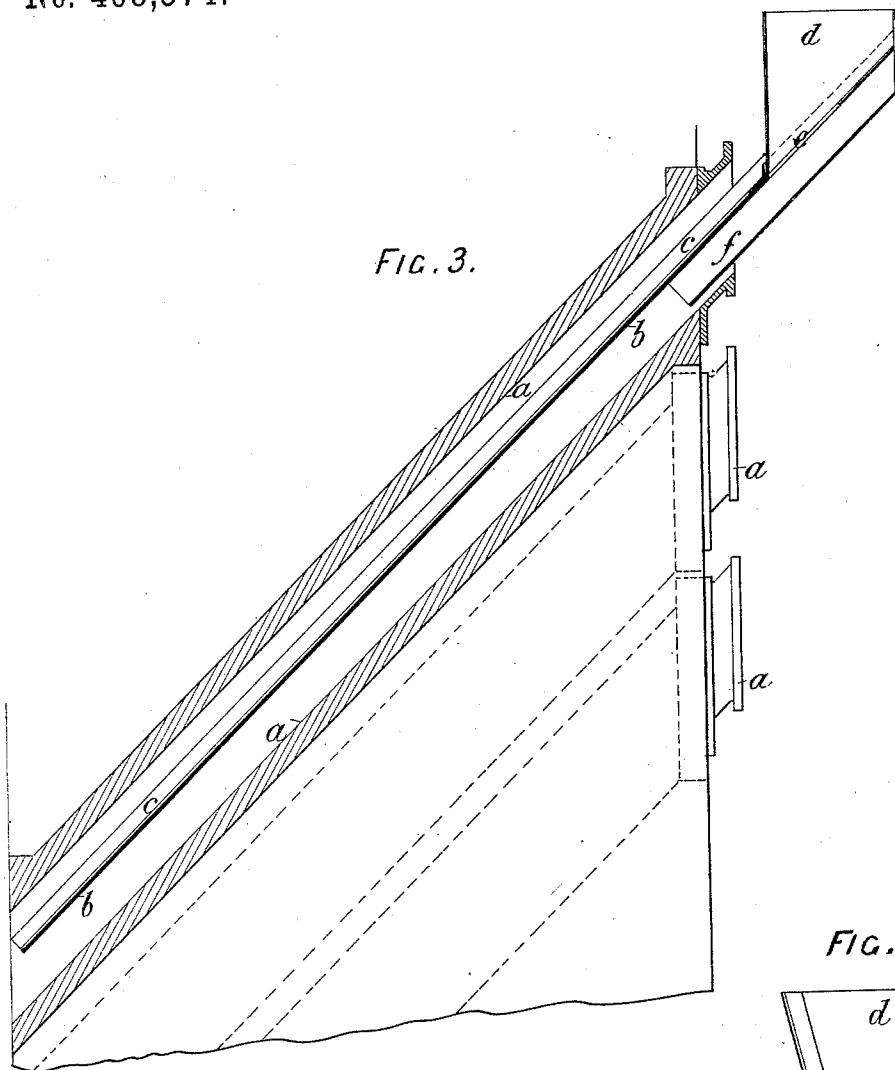
(No Model.)

2 Sheets—Sheet 2.

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E. R. Rotton

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UNITED STATES PATENT OFFICE.

GEORGE CARELESS TREWBY, OF LONDON, ENGLAND.

APPARATUS FOR CHARGING GAS-RETORTS.

SPECIFICATION forming part of Letters Patent No. 468,374, dated February 9, 1892.

Application filed June 17, 1890. Serial No. 355,757. (No model.) Patented in England November 30, 1889, No. 19,256.

To all whom it may concern:

Be it known that I, GEORGE CARELESS TREWBY, a subject of the Queen of Great Britain, and a resident of Fenton House, The Grove, Hampstead Heath, London, N.W., England, have invented certain new and useful Improvements in Apparatus for Charging-Gas-Retorts, (for which I have obtained Letters Patent in Great Britain, No. 19,256, dated November 30, 1889,) of which the following is a specification.

In charging gas-retorts with coal there is considerable difficulty in spreading the coal evenly, as required in the retorts, and this difficulty is greatly increased when the retorts are inclined or set obliquely, as is now frequently the case.

The chief object of my invention is to overcome this difficulty, and I attain this object by the use and application of a movable division-plate, which prior to charging is inserted into the inclined retort and temporarily divides the same into two longitudinal chambers. A hopper, which may or may not be combined with the movable division-plate, is employed to guide the coal into the desired portion of the inclined retort, whereby the coal is laid in an even column between the movable plate and the flat side or bottom of the retort. When the inclined retort is charged, the hopper and plate are removed and the end made up in any suitable manner.

In order that my invention may be fully understood and readily carried into effect, I will describe the accompanying two sheets of drawings, reference being had to the letters marked thereon.

Figures 1 and 2 are front sectional end views of inclined gas-retorts; and Figs. 3, 4, and 5 are side elevation, plan, and end views, respectively, of a retort on a reduced scale, to all of which my improvements are applied.

In the drawings, *a* represents the retort to be charged with coal, the retort being shown in the small views inclined or set obliquely. In order to overcome the difficulty of spreading the coal evenly, I employ a division-plate *b*, which prior to charging is inserted into the retort and temporarily divides the same into two longitudinal chambers. The plate *b* has attached to it a strengthening-web of

metal *c*. These parts in Figs. 3, 4, and 5 are shown connected to a hopper *d*, provided at *e* with a movable door, which divides the hopper *d* from a chute or trough *f*, fitted below the division-plate *b* and formed with it.

In charging retorts set obliquely the operation is as follows: The division-plate *b* is placed in the retort so as to divide it longitudinally from end to end, the hopper and chute, where such are employed, occupying a position, as in Fig. 3, with the door *e* closed. The hopper is preferably just large enough to hold sufficient coal to charge one retort, so that when the hopper is filled and the door *e* opened the charge of coal passing through the chute *f* into the retort will be spread evenly along its whole length. The division-plate and the hopper are now drawn forward ready to be used in charging another retort, while the filled retort is ready to have its mouth made up in any suitable manner. The plate *b* may be curved in any desired direction to suit the retort to be charged and the quality of coal used. For example, the plate *b* is shown straight in full lines and curved in dotted lines in Figs. 1 and 2, while the retort *a* is shown in Fig. 1 of D section and in Fig. 2 nearly oval.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The combination, with an inclined gas-retort, of a movable division-plate extending the full length of the retort and dividing said retort into two longitudinal divisions, a strengthening-web *c*, and a hopper provided with a movable door, substantially as set forth.

2. The combination, with a gas-retort, of the movable division-plate *b*, extending the length of the retort, and a hopper connected to the upper end of said plate, substantially as and for the purposes specified.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 24th day of May, 1890.

GEORGE CARELESS TREWBY.

Witnesses:

W. SANCROFT RANDALL,
CHAS. SHOEBRIDGE.