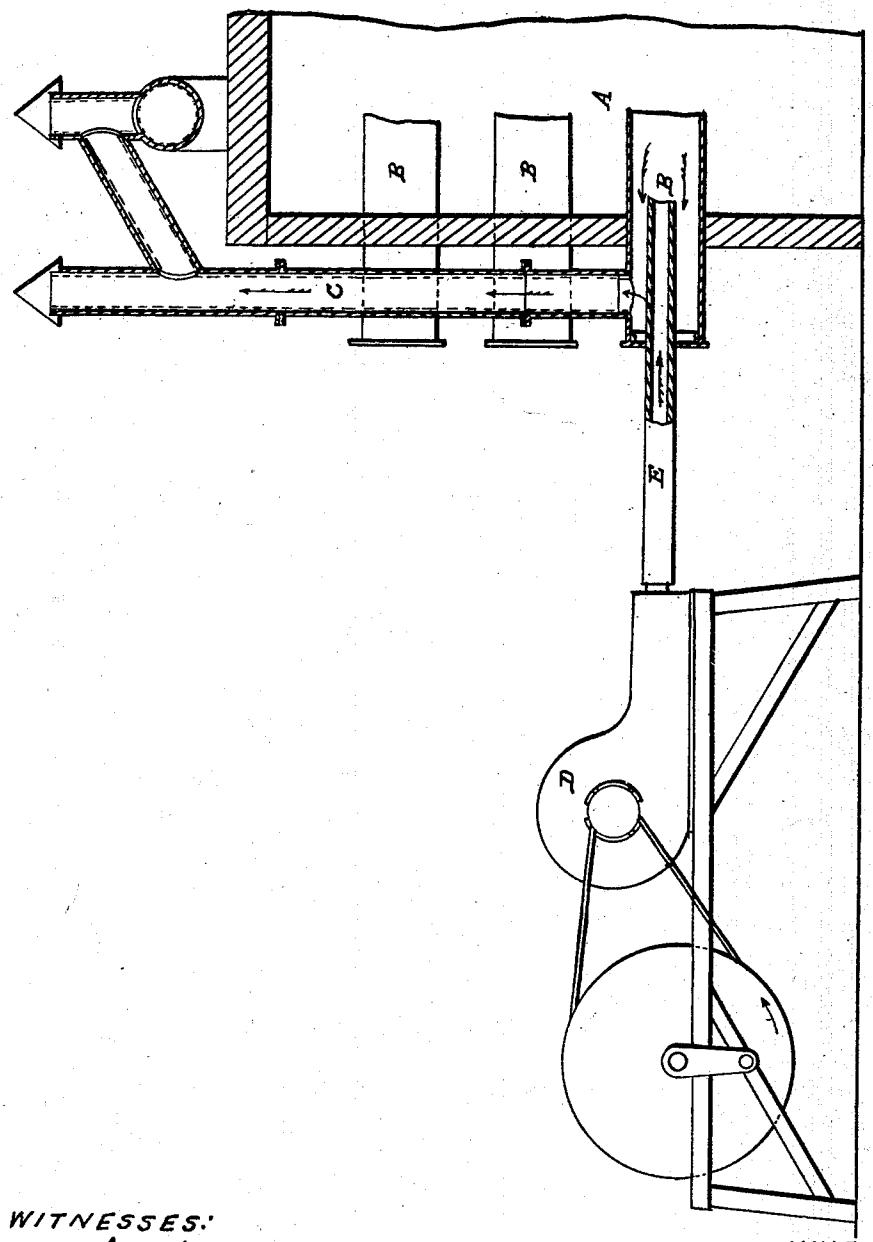
A. J. WHITE.

Method of Removing Incrustation in Gas Retorts.

No. 49,329. Patented Aug. 8, 1865.



WITNESSES:

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AMBROSE J. WHITE, OF NEW YORK, N. Y.

IMPROVED METHOD OF REMOVING INCRUSTATIONS FROM GAS-RETORTS.

Specification forming part of Letters Patent No. **49,329**, dated August 8, 1865.

To all whom it may concern:

Be it known that I, AMBROSE J. WHITE, of the city, county, and State of New York, have invented a new and Improved Means for Removing the Incrustations in Gas-Retorts; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The drawing represents a vertical section of a bank of retorts with my improvement applied to one of the retorts.

In the distillation of coal for the manufacture of illuminating-gas the retorts become incrusted with a hard deposit, (carbon,) which requires to be removed from time to time, as said incrustation diminishes the capacity of the retorts, and when the latter become thickly coated it seriously interferes with the proper roasting of the coal.

The means now employed to remove the incrustation consists in inserting a tube into the mouth of the retort and removing the cap from the top of the pipe which leads to the hydraulic main, so as to admit a current of air through the retort, which, coming in contact with the incrustation, cools the same, causing it to crack and loosen after a time, (three or four days,) so that it can be removed by means of scrapers. This is a slow and tedious operation.

My invention consists in forcing a current of air through the retort by means of a pump, fan, or other suitable device, causing the oxygen to come in contact with the incrustation in sufficient volume to enable it to burn, the heat of the retort being sufficient for that purpose. In the original plan the air merely passes through under a natural draft, and simply cools down the retort, so that the incrustation will crack in cooling and contracting.

By my plan the incrustation may be removed in about twenty minutes, and is thereby attended with a great saving, not only as regards the short time in which the retort is idle, but also as regards the consumption of coal to heat the retorts, as in the plan now practiced the same amount of coal is required to heat the retorts in use in the bank as if the idle one, or the one being cleaned, were also in use.

In the drawing, A represents a bank of three retorts. B are the retorts, and C the pipes leading therefrom to the hydraulic main.

D represents a rotary fan-case, and E a tube leading from said case into one of the retorts B to be cleaned. The cap at the top of the pipe C of said retort is removed. By this means a strong current of air is forced through the retort, which is kept heated by the fire in the furnace below, and the oxygen coming in contact with the heated incrustation causes it to be entirely consumed, a few minutes—say twenty or thirty—being sufficient for the purpose.

I claim as new and desire to secure by Letters Patent—

The removing of the incrustation from the interior of gas-retorts by forcing a current of air through them by means of a pump, fan, or other equivalent device, substantially as shown and described.

AMBROSE J. WHITE.

Witnesses:

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