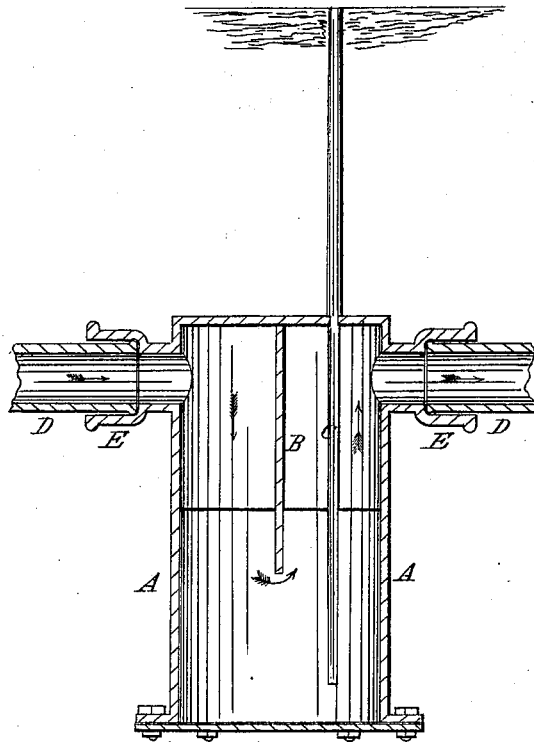


J. BATTIN.
Gas Purifier.

No. 5,295.

Patented Sept. 18, 1847.



UNITED STATES PATENT OFFICE.

JOSEPH BATTIN, OF PHILADELPHIA, PENNSYLVANIA.

HYDROSTATIC STOP FOR GAS-PIPES.

Specification of Letters Patent No. 5,295, dated September 18, 1847.

To all whom it may concern:

Be it known that I, JOSEPH BATTIN, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Instrument for Cutting Off the Supply of Gas from Gas-works Through the Distributing-Pipes, which instrument I denominate a "Water Seal," or "Hydrostatic Gas-Trap"; and I do hereby declare that the following is a full and exact description thereof.

For the purpose of cutting off the supply of gas, the distributing pipes have been furnished with cocks, or with valves, variously constructed; but these methods have not only been complicated and expensive, but likewise imperfect in their operation, as they almost invariably allow of the escape of gas when closed, a circumstance which is particularly objectionable on various accounts.

My water seal, or hydrostatic gas trap is perfect in its action, its cost is small, and it is not liable to get out of order.

In the accompanying drawing I have given a vertical section of this instrument through its middle. It consists of a vessel or tank A, A, which may be of cast iron, one foot in diameter, and two in height. B, is a thin partition descending from the top of said vessel, and which may be cast in one piece with it. D, D, are the distributing or supply, pipes for gas, placed at the usual depth below the surface of the ground; these pipes are inserted into collars E, E, in the usual manner.

C, is a tube which extends down from the surface of the ground to nearly the bottom of the tank; and through this water drawn therefrom by means of a small pump, as circumstances may require. When water

is poured in so as to rise to the height of four or five inches above the lower edge of the partition B, it will form an effectual barrier against the flow of gas, at any ordinary pressure.

The great advantage arising from the use of this apparatus will be apparent from the large number of valves or other instruments for cutting off the supply of gas, that are required at all extensive gas works, and the perfection of its action will be at once obvious to every person of common intelligence.

Having thus fully described the nature and operation of my hydrostatic gas trap, what I claim as new therein, and desire to secure by Letters Patent, is—

The manner in which I have arranged and combined the respective parts thereof so as to effect the purpose herein made known; that is to say, I claim, in combination, the use of a tank furnished with a partition which shall operate as a water trap, or seal, and with a tube for supplying and drawing off the water the gas being admitted into the upper part of said tank, and the whole arrangement and operation being substantially the same with that herein fully described and represented, and I do hereby declare that I do not claim either of the parts of which my said seal, or trap, is composed, as in itself new, but I limit my claim, as above set forth, to the particular arrangement of said parts so as to adapt it to the performance of the office for which it was designed.

JOSEPH BATTIN.

Witnesses:

HENRY D. HEDDEN,
H. D. STEEVER.