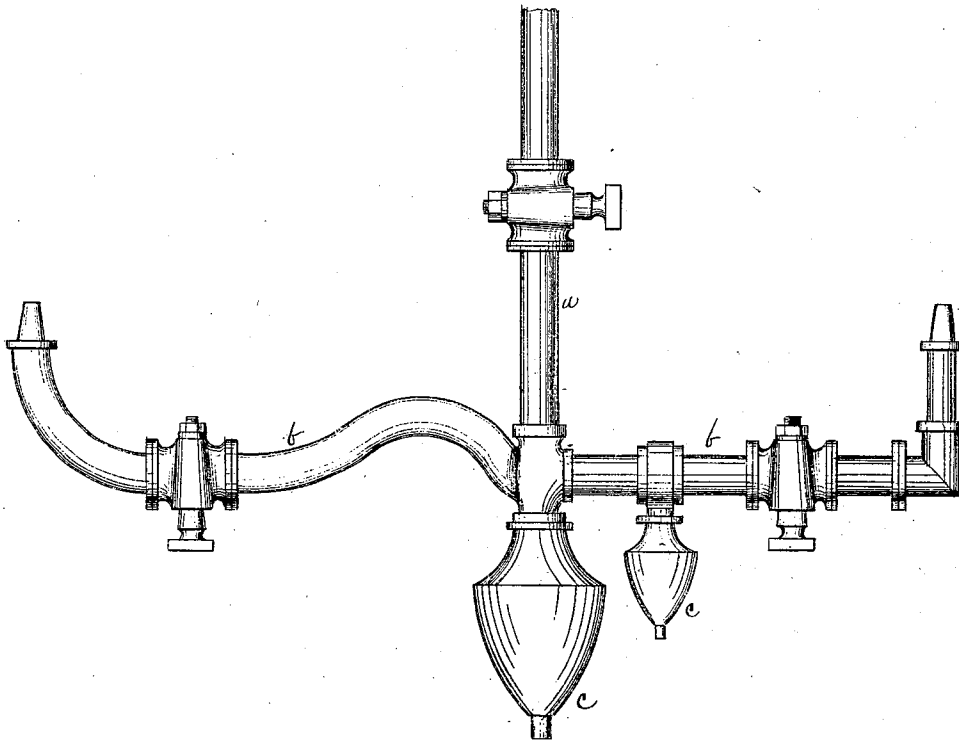


J. B. HYDE.

Gas-Fixture Attachment.

No. 107,264.

Patented Sept. 13, 1870.



C. B. Davis
Witness
J. H. Merrill

J. B. Hyde

United States Patent Office.

J. BURROWS HYDE, OF NEW YORK, N. Y.

Letters Patent No. 107,264, dated September 13, 1870.

IMPROVEMENT IN TRAP-ATTACHMENT FOR GAS-FIXTURES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, J. BURROWS HYDE, of the city, county, and State of New York, have invented a new and useful Trap Attachment to arrest and hold condensed hydrocarbon fluids from gas-pipes and burners; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon.

In producing illuminating or heating-gas by passing atmospheric air through or over light hydrocarbon fluids, and in enriching ordinary commercial gas by the same process, the air or the gas being thereby saturated with the vapors of the fluid, in proportion to the temperature of either one or the other, when passing into the carbureting-vessel or apparatus, and the nature or condition of the fluid used, it follows that if the temperature of the carbureted medium be lessened in the conducting-pipes, condensation must occur, and be due to the equation of the two temperatures. For example: If the gas or the air passes into the carbureter at 80° temperature, and when in the pipes or gas-holder falls to 60°, a due proportion of the vapor returns to its fluid condition.

This fluid trickles along the pipes, and finally down to the lowest point of rest, which is usually at or near a burner branch, where it accumulates until, on turning the stop-cock, a stream of fluid escapes unseen in the dark, and as the flame or spark for ignition is applied, instead of an upright flame of gas, a downward stream of liquid fire startles the attendant, whose clothing, if intervening, is ignited, and if not, the fire, which water will not extinguish, is communicated to the floor, carpet, or other property, if not to the building itself.

Such occurrences have been frequent, but, like other

"accidental" incendiarisms, are usually suppressed, from the interest or pride of the parties employing these inventions. Their frequency, however, and the attendant loss therefrom, have induced the insurance officials to resolve not to take risks in property where this system of lighting is used, except under special regulations as to locality and management, if at all.

The nature of my invention consists in attaching a closed drip-vessel or ultimate safety-reservoir, to some proper part of the gas-pipe, or placed under and near to the branches or burners, according as the locality and position of the gas-pipes, shall render necessary, but so that the condensed fluid shall flow into the vessel from the pipes, instead of out at the burner-jet.

To this receiving-vessel or trap a small cock is attached, for drawing off the fluid, when necessary, or the cock may be dispensed with, and the reservoir be unscrewed and removed from the pipe or branch, and the contents emptied out.

In the drawings—

a represents the gas-supply pipe;

b, the burner-branches; and

c, the trap-vessel, which may, however, be attached to any proper part of the supply-pipes, instead of to the branch, as represented.

What I claim, and desire to secure by Letters Patent, is—

The construction of a closed safety-drip vessel, attached to a tube or a branch, for illuminating or commercial gas, substantially in the manner and for the purpose set forth.

J. BURROWS HYDE.

Witnesses:

C. B. DAVIS,

F. G. MORRILL.