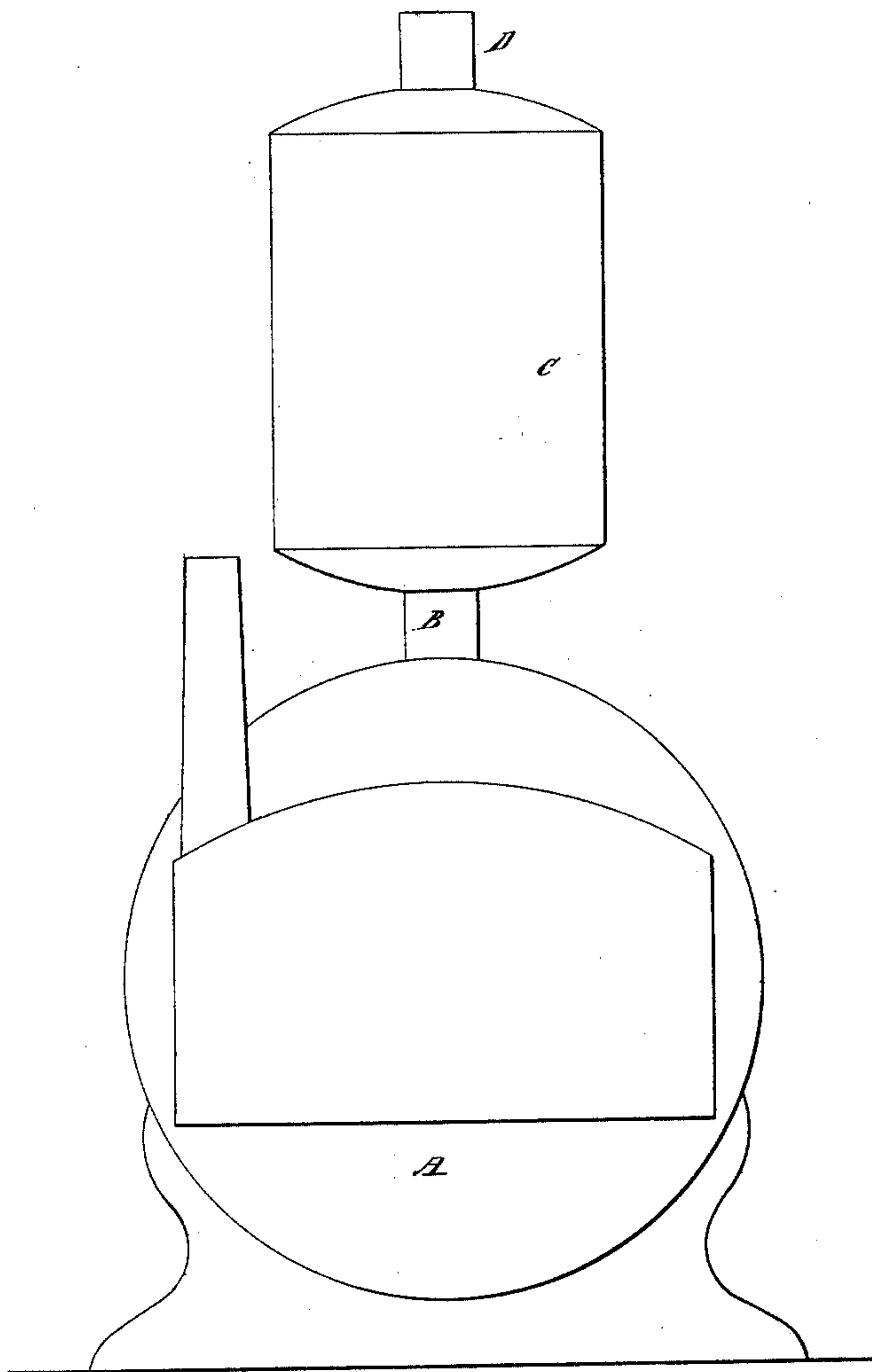


A. WALTON.
APPARATUS FOR MIXING GASES.

No. 34,994.

Patented Apr. 15, 1862.



Witnesses
Charles E. Foster
C. Howson

Inventor
A. Walton
by Henry Howson
Att'y

UNITED STATES PATENT OFFICE.

ALLEN WALTON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN APPARATUS FOR MIXING GASES.

Specification forming part of Letters Patent No. 34,994, dated April 15, 1862.

To all whom it may concern:

Be it known that I, ALLEN WALTON, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Gas-Meters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention relates to an improvement in the meter for which an English patent was granted to James Crutchett July 12, 1842, and in which a given quantity of air is mixed with a definite quantity of gas, my improvement consisting of a chamber or reservoir into which both air and gas are admitted, and in which they are intimately mixed together prior to being discharged into the distributing-pipes, the object of my invention being that thorough and complete admixture of air and gas which cannot be accomplished in Crutchett's patent meter.

On reference to the accompanying drawing, which forms a part of this specification, A represents a front view of the meter for which a patent was granted in England to James Crutchett January 12, 1842, the said meter being so constructed that air in given quantities is introduced into the gas.

In using this meter in connection with apparatus by which gas is generated from the residuum after the distillation of coal-oil, and

from rosin or other substances, I have found that the air is not thoroughly mixed with the gas in the meter, and consequently that the flame is wanting in uniformity. In order to remedy this defect I secure to the outlet-pipe B a chamber or reservoir, C, from the top of which passes the pipe D. The air and gas passing from the pipe B into the chamber become mixed together therein, so that when they pass through the pipe D into the distributing-pipes the admixture has become so thorough that the flame is unvarying and of a uniform brilliancy.

Without confining myself to any particular form or arrangement of chamber C, I claim as my invention and desire to secure by Letters Patent—

Combining a chamber or reservoir, A, with Crutchett's patent gas-meter, the said chamber being so situated that both the air and gas must pass into and be mixed intimately together in the said chamber prior to escaping to the distributing-pipes.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALLEN WALTON.

Witnesses:

HENRY HOWSON,
JOHN WHITE.