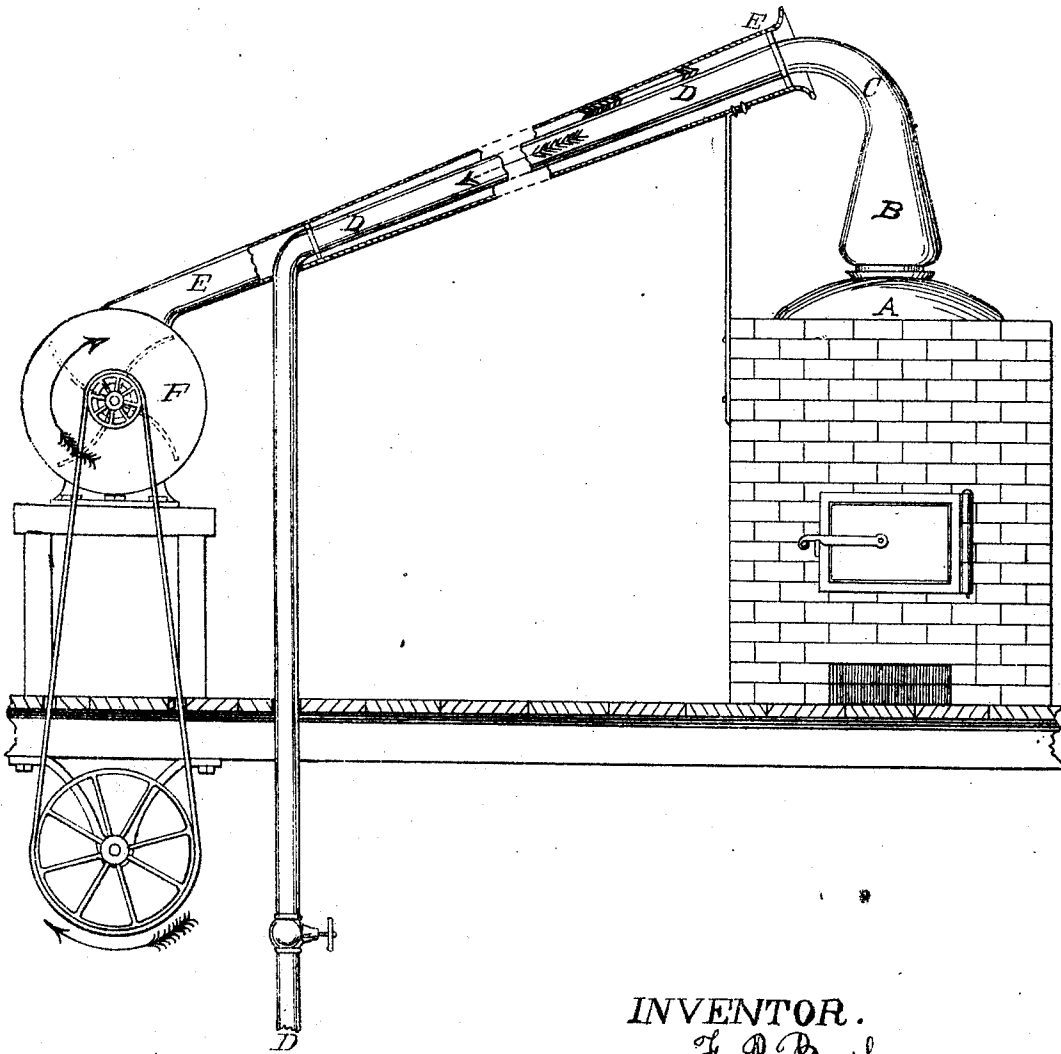


F. P. Bush.

Still.

N<sup>o</sup> 76156

Patented Mar. 31, 1868.



INVENTOR.

F. P. Bush.

Wm Knight Bros.  
Atty.

Attest.

Jas H. Layman.  
J P Magee

United States Patent Office.

FRANKLIN P. BUSH, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND  
JEPHTHA GARRARD, OF SAME PLACE.

*Letters Patent No. 76,156, dated March 31, 1868.*

IMPROVED STILL.

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

TO WHOM IT MAY CONCERN:

Be it known that I, FRANKLIN P. BUSH, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Stills; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification.

My invention relates to a device for condensing alcoholic vapors by a blast or current of cold air through a pipe which surrounds or encloses that which conducts off the alcoholic vapor from the still.

The accompanying drawing is a side elevation of a condenser embodying my invention, a portion of the outer pipe being in section.

A is the still proper, having a customary head, B, and goose-neck C, from which emanates a discharge-pipe, D, whose length (varying from twenty-five to one hundred feet) should be adapted to the size of the still, nature of the spirit, and other circumstances. The pipe D is so placed as to decline from the goose-neck at an angle of about fifteen degrees with the horizon, and is enclosed within a larger pipe, E, which, proceeding from a blower, F, envelopes the pipe D in a blast of cold air, which, rapidly abstracting the heat of said pipe, effectually condenses its contained vapor.

This mode of condensation is found especially convenient in distilleries which possess only a limited supply of water, or no more than sufficient for the purposes of the engine, the mash, &c.

I claim herein as new, and of my invention—

The vapor-discharge pipe D, enclosed within the cold-blast pipe E, the whole being arranged and adapted to operate in the manner and for the purpose set forth.

In testimony of which invention, I hereunto set my hand.

FRANKLIN P. BUSH.

Witnesses:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.