

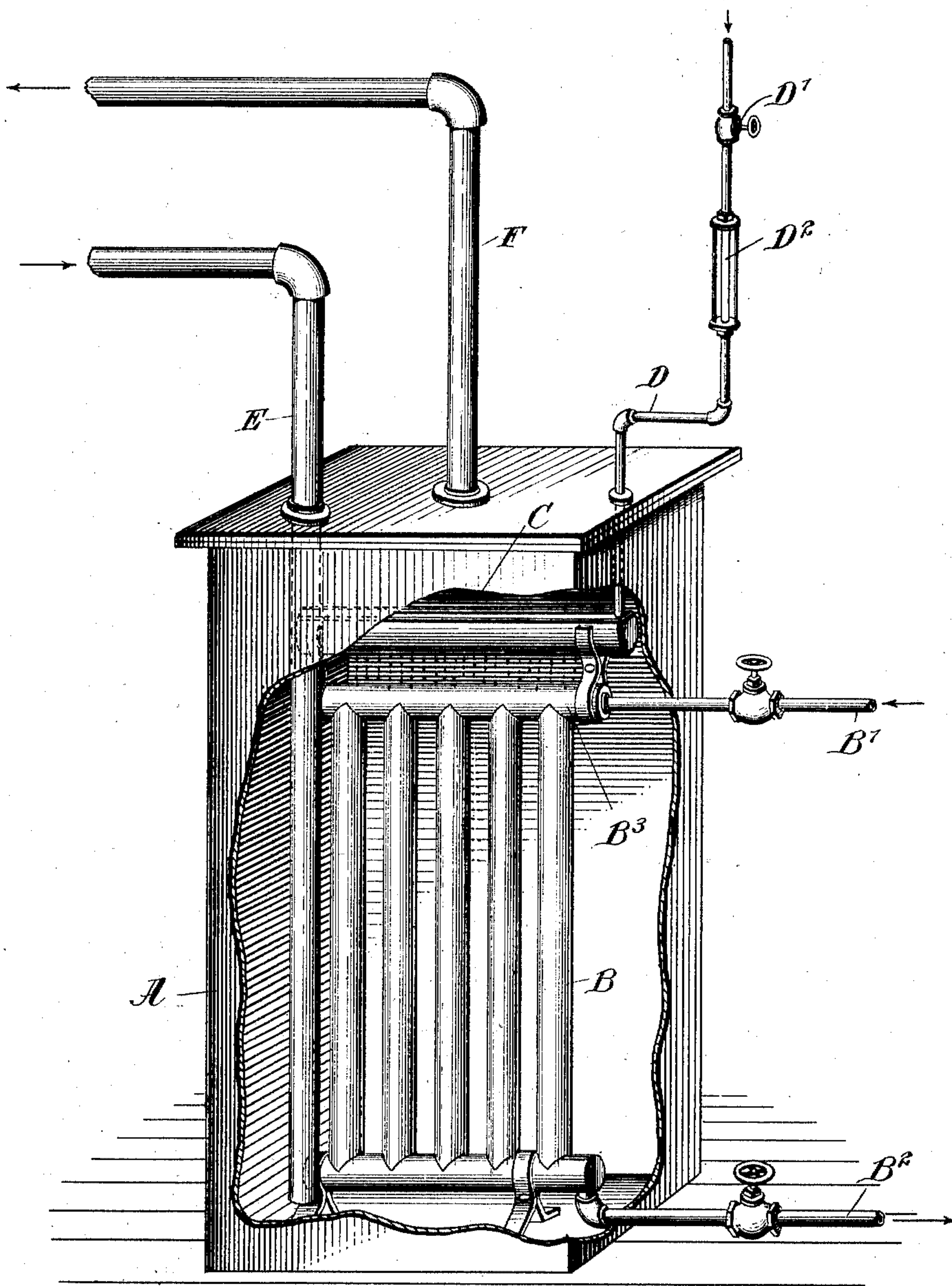
No. 760,247.

PATENTED MAY 17, 1904.

D. D. RANNEY.  
CARBURETER.

APPLICATION FILED NOV. 16, 1903.

NO MODEL.



WITNESSES:

*Paul Hunter*  
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# UNITED STATES PATENT OFFICE.

DARWIN DAVID RANNEY, OF PAYETTE, IDAHO.

## CARBURETER.

SPECIFICATION forming part of Letters Patent No. 760,247, dated May 17, 1904.

Application filed November 16, 1903. Serial No. 181,326. (No model.)

*To all whom it may concern:*

Be it known that I, DARWIN DAVID RANNEY, a citizen of the United States, and a resident of Payette, in the county of Canyon and State of Idaho, have invented a new and Improved Carbureter, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved carbureter which is simple and durable in construction, very effective in operation, and arranged to cause a proper vaporization of the oil and mixing of the oil-vapors with air to insure the formation of a rich and readily-combustible gas.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure is a perspective view of the improvement, part of the casing being broken out.

In a suitably-constructed closed casing A is arranged a vaporizer, preferably in the form of a radiator B, connected at its upper end by a valved pipe B' with a boiler or other heat-supply, and from the lower end of the said radiator leads a valved pipe B<sup>2</sup> for carrying off the water of condensation. Directly over the radiator B and supported from the latter is arranged a divider C, preferably in the form of a trough, having perforations in its bottom and connected at one end with a pipe D, leading from an overhead oil-supply tank. (Not shown.) The pipe D is provided with a valve D' to permit the user to regulate the amount of oil passing from the overhead tank to the divider C, and below the valve D' is arranged in the said pipe D a sight-feed tube D<sup>2</sup> to enable the operator to see the amount of oil passing to the divider C. The perforations in the bottom of the divider C extend directly over the upper cross member B<sup>3</sup> of the radiator, so that the oil fed into the divider C from the overhead tank passes in drops onto the cross member B<sup>3</sup> to be quickly and thoroughly

vaporized by the oil coming in contact with the heated cross member B<sup>3</sup>.

An air-supply pipe E, leading from a blower or other compressed-air supply, extends through the top of the casing A into the inside thereof to within a short distance of the bottom of the casing, so that air passing through the pipe E into the casing rises therein and comes in contact with the vaporized oil to form an intimate mixture with the same—that is, to produce a rich and readily-combustible gas. The gas thus produced passes from the upper end of the casing by way of a service-pipe F to the burners.

From the foregoing it will be seen that by the arrangement described the oil is thoroughly vaporized and intimately and quickly mixed with the air under pressure to form a rich and readily-combustible or inflammable gas.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A carbureter, consisting of a closed casing having a service-pipe leading from its top, a vaporizer arranged in the casing and connected with a heat-supply, said vaporizer comprising a plurality of tubular vertical members and upper and lower horizontal tubular members with which the vertical members are connected, a trough having perforations in its bottom, said trough being arranged above the upper horizontal member of the vaporizer and supported thereby, a valved oil-supply pipe leading from one end of said trough out through the casing, and an air-supply pipe leading into the casing and extending nearly to the bottom thereof, as set forth.

2. A carbureter comprising a closed casing, a service gas-pipe leading from the upper end of the casing, a steam-radiator held in the casing and having a steam-supply pipe and a water-of-condensation-discharge pipe, a divider arranged over the said radiator and supported from the same, the divider having perforations in its bottom, discharging directly onto the upper end of the said radiator, an oil-

supply pipe discharging into the said divider  
and connected with an oil-supply pipe, said  
oil-supply pipe having a valve and a sight-  
tube, and an air-supply pipe for discharging  
5 air into the casing a short distance from the  
bottom thereof, substantially as shown and  
described.

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

DARWIN DAVID RANNEY.

Witnesses:

M. F. ALBERT,  
ED. L. BRYAN.