

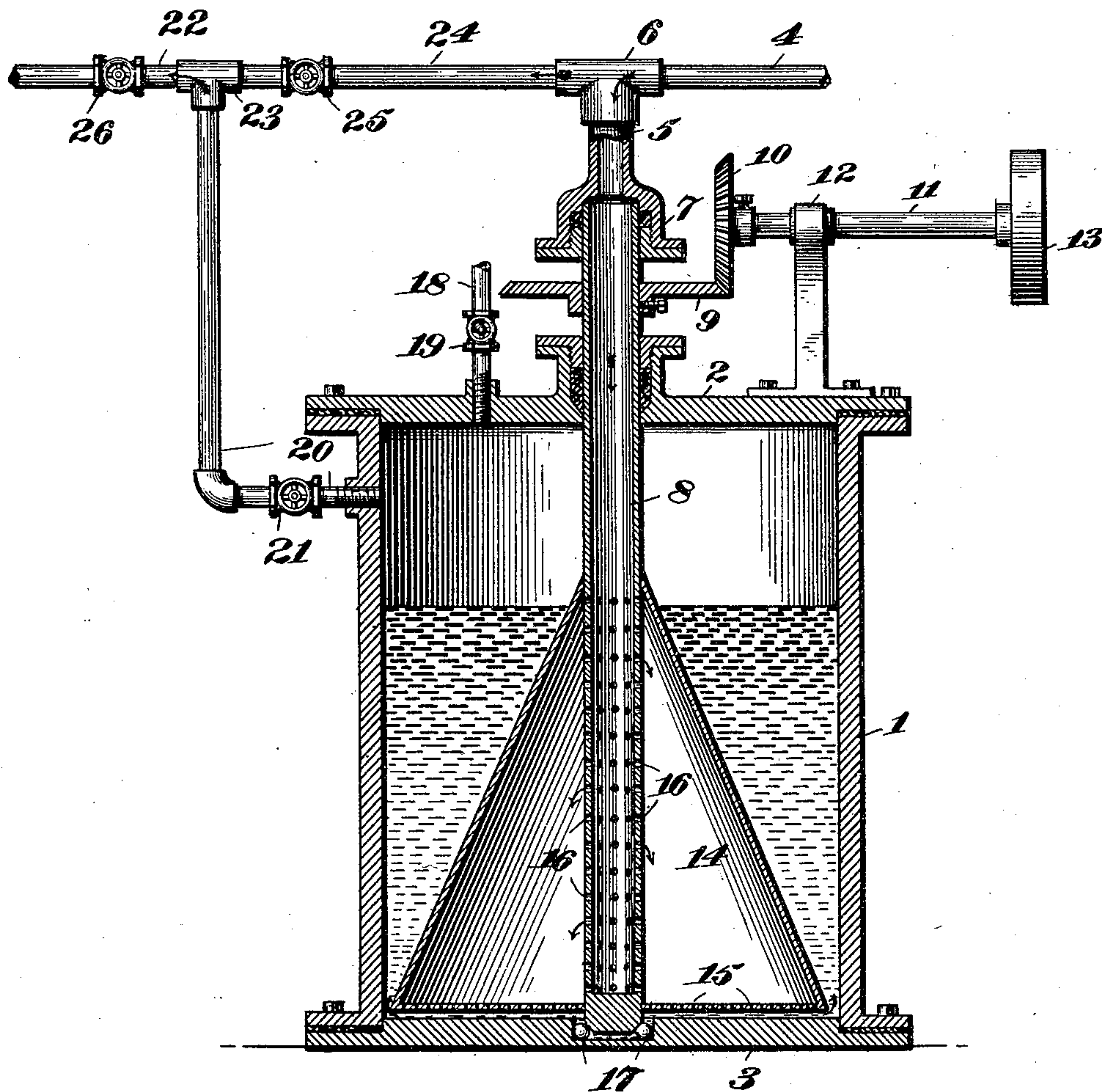
No. 704,034.

Patented July 8, 1902.

W. S. HEAD & G. J. DOVEY.
CARBURETER.

(Application filed Apr. 9, 1902.)

(No Model.)



Witnesses
Chas Seavey
C. Hugh Duffy

Inventors
W. S. Head, and
George J. Dovey,
By
C. E. Duffy Attorney

UNITED STATES PATENT OFFICE.

WILLIAM SAMUEL HEAD AND GEORGE JAMES DOVEY, OF LATROBE,
PENNSYLVANIA.

CARBURETER.

SPECIFICATION forming part of Letters Patent No. 704,034, dated July 8, 1902.

Application filed April 9, 1902. Serial No. 101,981. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM SAMUEL HEAD and GEORGE JAMES DOVEY, citizens of the United States, residing at Latrobe, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Carbureters; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

Our invention relates to gas-making machines, and has for its object to provide a device of the class commonly known as "carbureters."

A further object of our invention is to provide a carbureter embodying a revolving interior cone and air-shaft.

With these objects in view our invention consists in the particular arrangement and construction of the interior revolving air-shaft and cone.

Our invention also consists in the particular connections and in certain other novel features of construction and in combination of parts which will be first fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawing, the figure represents a vertical central section of a carbureter constructed in accordance with our invention.

Referring to the figure by reference-numerals, 1 is the shell or cylinder, having the top 2 and bottom 3, the said top and bottom being securely bolted to the cylinder, as shown.

4 indicates an air-pipe leading from an air-compressor of any approved type and connecting to the enlarged pipe 5 by means of a T 6. Said pipe 6 carries a packing-box 7, within which the revolving air-shaft 8 enters. A packing-box of similar construction is located in the top 2, through which said air-shaft 8 passes. Intermediate said packing-boxes and securely fastened around the air-shaft 8 is a bevel-gear 9, meshing with a bevel-gear 10, secured to a shaft 11, which is jour-

naled in the boxing 12, securely bolted to the top 2. Said shaft 11 carries a belt-wheel 13 for the purpose of communicating power from a motor to the revolving air-shaft 8.

14 indicates a cone secured to the revolving shaft and provided with a perforated bottom 15. Within said cone, intermediate the top and bottom thereof, said revolving shaft is perforated, as shown at 16. Said shaft is also set in a ball-bearing 17 in the bottom 3 of the machine.

18 indicates a pipe entering the top 2 for the purpose of feeding the carbureter with oil, said pipe being provided with a suitable cock or valve 19.

20 indicates a gas-line leading from the cylinder or shell 1, which is also provided with a suitable cock or valve 21, said gas-line 20 connecting with the main gas-line 22 by means of a T 23.

24 indicates a pipe connection between the air-pipe 4 and the main gas-line 22 and which is also provided with a suitable cock or valve 25 for the purpose of allowing when necessary a quantity of air to enter the main gas-line 22 and mix with the carbureted air therein when it is desired to thin the carbureted air for use for heating purposes. We also provide a suitable cock or valve 26 in the main gas-line 22 for the purpose of regulating the flow of carbureted air from the carbureter.

Having thus described the several parts of our invention, its operation is as follows: A sufficient quantity of oil having been introduced into the carbureter, the revolving air-shaft and cone are set in motion and air is forced through the air-pipe into the now revolving air-shaft. Said air passes out through the perforations in said shaft and through the oil in the cone, taking a downwardly direction and passing out into the oil-chamber through the perforations in the bottom of said cone, whence it passes up through the oil and into the gas-line. During this operation the air-shaft and cone are revolving rapidly, churning the oil and distributing and intimately mixing the air therewith. When it is desired to thin the carbureted air, the cock or valve 25 in the pipe connection 24 is opened to the desired degree. Thus the density of the carbureted air may be controlled

so as to be used for heating or lighting purposes, as desired.

Having thus fully described our invention, we do not wish to be understood as limiting
5 ourselves to the exact construction herein set forth, but consider ourselves clearly entitled to all such changes and modifications as fall within the scope of our invention as defined by the following claims.

10 What we claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a gas-machine, the combination with a shell of a revolving air-shaft carried therein provided with perforations therein, a cone
15 carried on said shaft, a perforated bottom on said cone, means for admitting air to said

revolving shaft, and means for conducting the carbureted air from the machine.

2. In a gas-machine the combination with a shell of an air-pipe, a gas-line leading from 20 said shell a pipe connecting said air-pipe and gas-line, a revolving perforated air-shaft, a cone carried thereon and provided with a perforated bottom.

In testimony whereof we affix our signatures in presence of two witnesses. 25

WILLIAM SAMUEL HEAD.
GEORGE JAMES DOVEY.

Witnesses:

HARRY L. SHOWALTER,
RAY C. HEAD.