

No. 691,955.

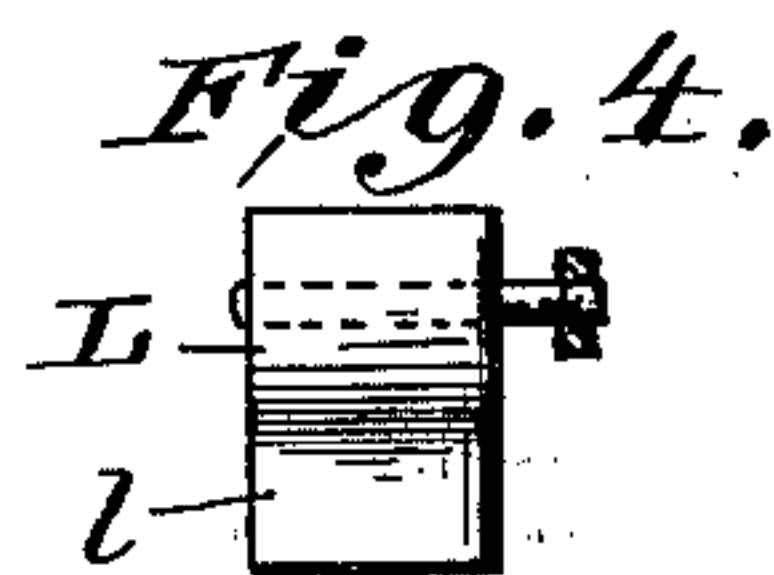
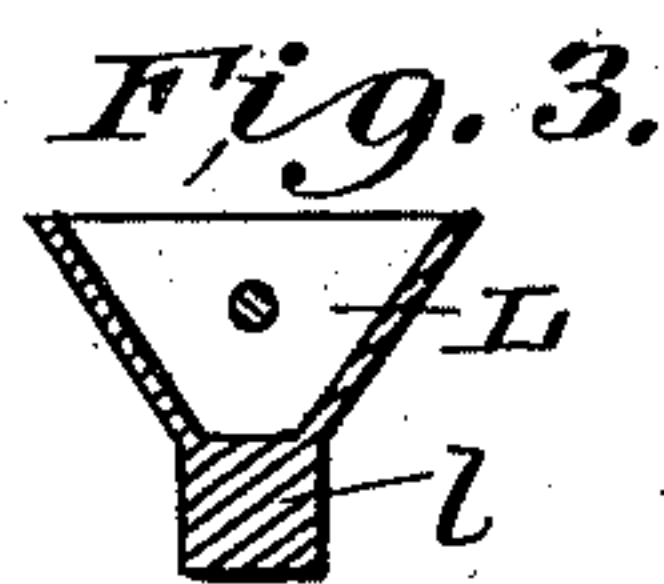
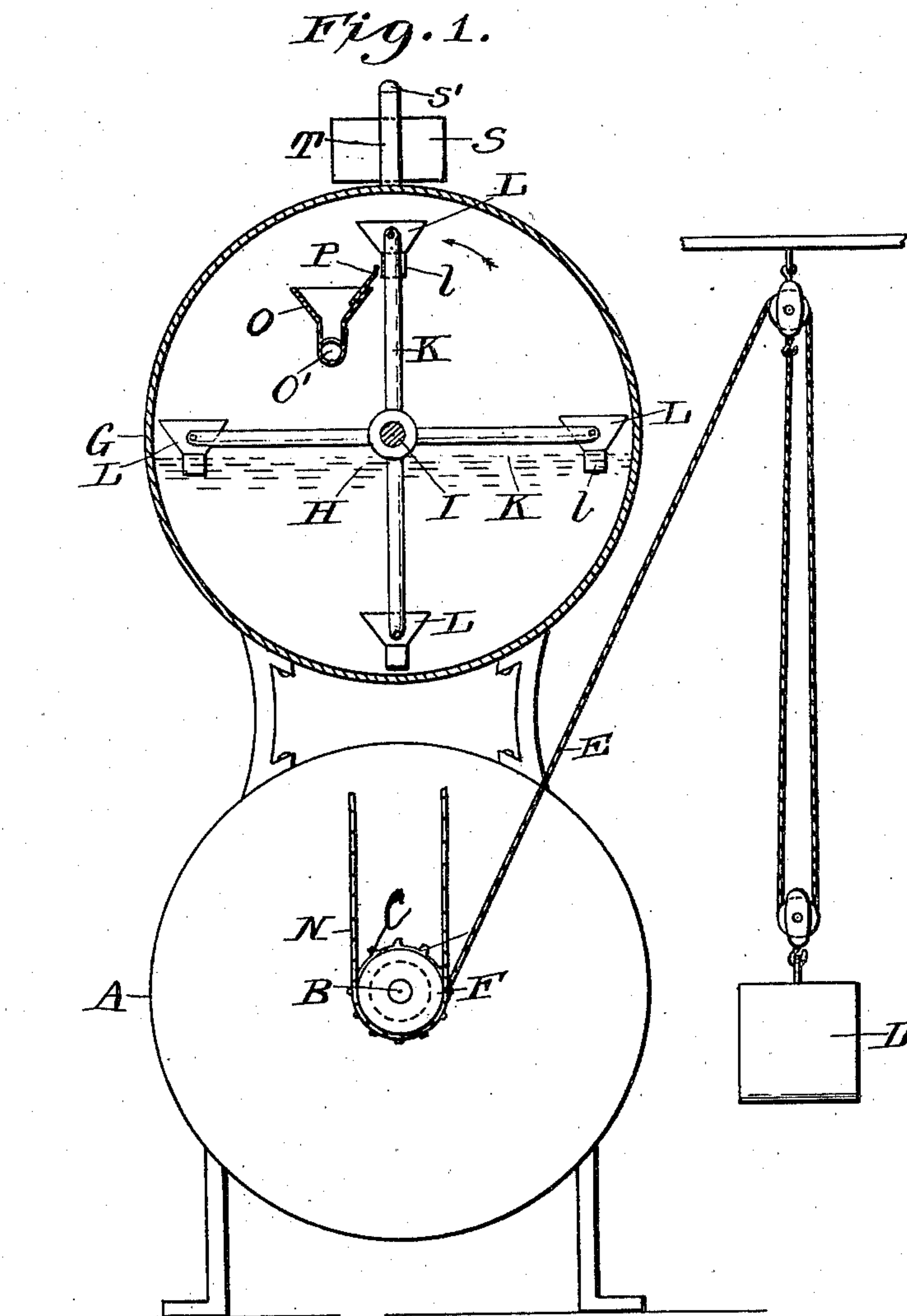
Patented Jan. 28, 1902.

F. L. MARTENETTE.
CARBURETER.

(Application filed May 11, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses

John A. Blackwood
W. Randolph, Jr.

Inventor

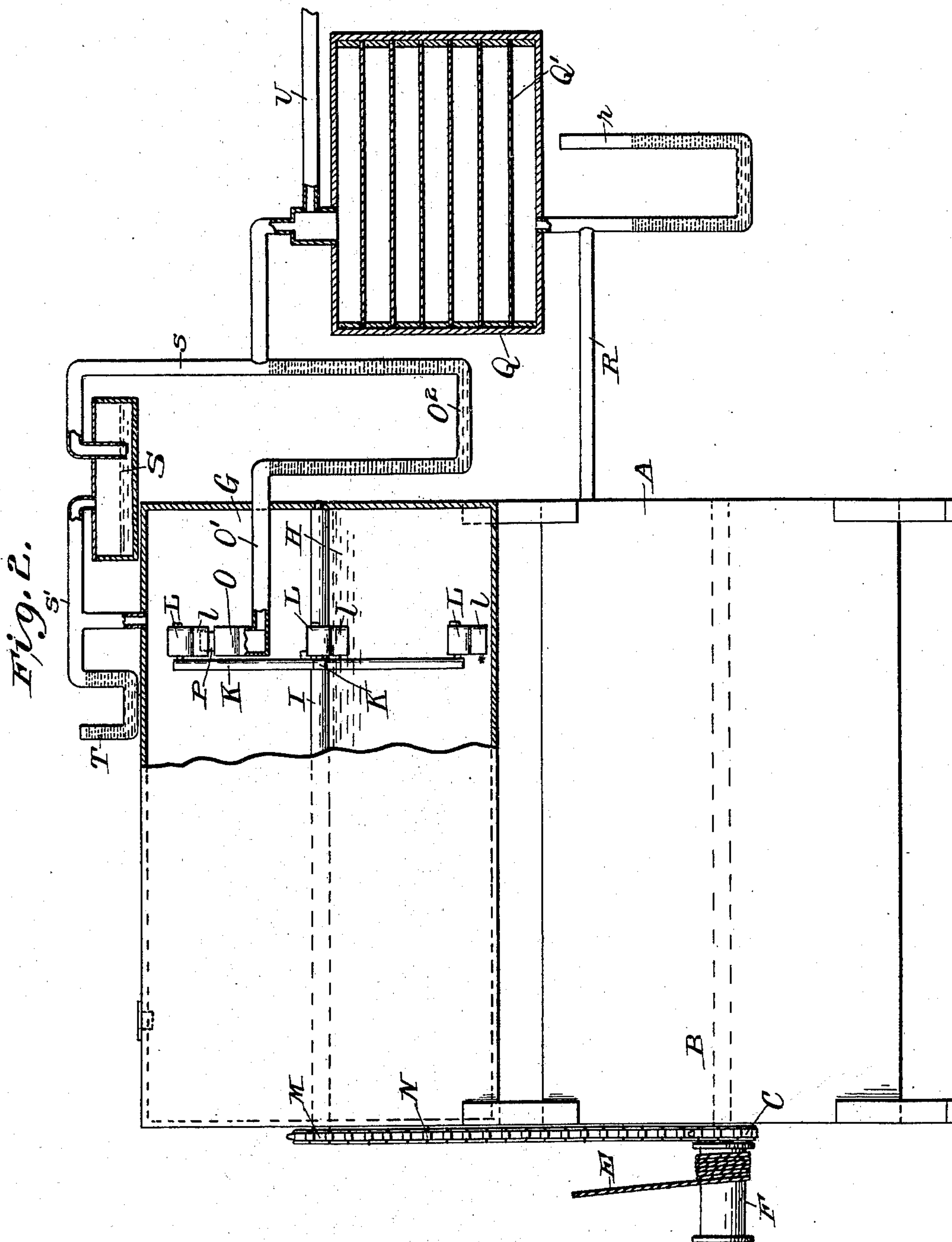
Frank L. Martenette
by *N. A. Gouvier*
Attorney

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CARBURETER.

(Application filed May 11, 1901.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses

Jas. H. Blackwood
V. H. Randolph, Jr.

Inventor
Frank L. Martenette
by S. A. Gowrick
Attorney

UNITED STATES PATENT OFFICE.

FRANK L. MARTENETTE, OF CHICO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO H. W. CAMPER, H. W. HEATH, AND HARRY H. CAMPER, OF BUTTE COUNTY, CALIFORNIA.

CARBURETER.

SPECIFICATION forming part of Letters Patent No. 691,955, dated January 28, 1902.

Application filed May 11, 1901. Serial No. 59,768. (No model.)

To all whom it may concern:

Be it known that I, FRANK L. MARTENETTE, a resident of Chico, in the county of Butte and State of California, have invented certain new and useful Improvements in Carbureters, of which the following is a specification.

My invention relates to machines for carbureting air, and has for its object to provide a device that is simple in construction, easy to operate, and that is reasonable in cost of manufacture.

Another object of my invention is to provide a machine in which a given quantity of volatile fluid may be supplied to the mixer in proportion to the amount of air used.

A further object attained by my device is to provide sufficient gas to the oil-receptacle to prevent a vacuum being formed therein and also to provide a blow-off for vaporized oil.

I attain these objects by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical transverse view, partly in section, of my invention; Fig. 2, a vertical longitudinal view, partly in section, of same; Figs. 3 and 4, detail views of oil-cups.

Referring to the drawings, in which similar letters of reference denote like parts throughout the several views, A represents the cylinder, containing an air-pump of any desired construction, which is fastened to a shaft B, on which is fixed a sprocket-wheel C. The air-pump is actuated by any suitable means, that shown in the drawings being a weight D, suspended by ordinary means to a rope E, wrapped around the drum F, fixed to the shaft B.

G represents a cylinder containing the gasoline or other volatile fluid H and the oil-feeding apparatus, consisting of the shaft I, to which are fixed the arms K, carrying the cups L, which are weighted at their bottoms l to keep them in an upright position.

M is a sprocket-wheel fixed to the shaft I, and N a chain passing over the sprockets C and M.

O is a funnel to catch the oil that may be turned out of the cups L by contacting with the flexible projection P, and O' the pipe

leading to the carbureting-chamber Q and containing a trap O².

Q' represents horizontal partitions in the carbureting-chamber Q, made of any absorbent material, such as felt.

R is a pipe for conveying the air from the pump-cylinder A to the carbureting-chamber Q, which is provided with a suitable blow-off r.

S is a liquid-check valve connected to the pipe O' by the pipe s and to the oil-cylinder G by the pipe s' to vent the said cylinder G, and T a blow-off for the cylinder connected to the pipe s'.

U is the service-pipe for supplying the gas to the burners.

The operation is as follows: By starting the air-pump the oil-feed apparatus is set in motion at the same time and the oil carried in the cups L to the funnel O, where the cup is upset by the projection P, and the oil flows through the pipe O' and trap O² to the carbureting-chamber Q, where it is diffused through the partitions Q' and the vapor therefrom taken up by the air coming from the pump-chamber A and carried through the service-pipe U to the burners. It will be seen that by this arrangement the amount of oil supplied to the carbureting-chamber is governed by the speed of the fan in the pump-cylinder and the oil is delivered in small quantities.

Having thus described my invention, what I claim is—

1. In a carbureter, coacting oil and air feeds, a liquid-check valve to vent the chamber containing the oil-feed, in combination with a carbureting-chamber containing a plurality of horizontal partitions of fibrous material, substantially as shown and described.

2. In a carbureter, the combination of an air-pump cylinder, an oil-feed cylinder, a carbureting-chamber, pipes for conveying air and oil to said chamber, a fluid-sealed vent-valve, and a fluid blow-off for said oil-feed cylinder, substantially as shown and described.

3. In a carbureter, the combination of an air-pump cylinder, an oil-feed cylinder, said cylinders being vertically disposed, shafts connected to the oil-feed and air-pump, means

for connecting said shafts and to revolve them in a predetermined relative speed, and a fluid-check valve to vent said oil-feed cylinder, substantially as shown and described.

5 4. In a carbureter, the combination of an oil-feed cylinder, an air-pump cylinder, said cylinders vertically disposed, a carbureting-chamber separated from said cylinders, pipes to connect said cylinders with the carbureting-chamber, a trap in the oil-feed pipe, a fluid-check valve to vent said oil-feed cylinder connected to said oil-feed pipe, and a blow-off for said oil-feed cylinder, substantially as shown and described.

15 5. In a carbureter, the combination of two vertically-disposed cylinders, one for supplying oil, the other air, a carbureting-chamber, means for regulating the amount of oil to the amount of air supplied to said chamber, and a fluid-sealed check-valve to vent said oil-feed cylinder, substantially as shown and described.

20 6. In a carbureter, the combination of a carbureting-chamber, an oil-feed cylinder and an air-pump, a pipe connecting the bottom of the carbureting-chamber with said air-pump, a pipe connecting the top of said carbureting-chamber with said oil-feed cylinder, said pipe containing a trap and also

connected to a fluid-sealed vent-valve for said oil-feed chamber, a funnel connected to the oil-feed pipe, said oil-feed comprising a series of radial arms mounted on a shaft, cups on the end of each arm having weighted bottoms, means for upsetting said cups and means for rotating said shaft at a determinable speed as compared to the speed of the air-pump, substantially as shown and described.

7. In a carbureter, the combination of two vertically-disposed cylinders, one an oil-feed, the other an air-feed, a carbureting-chamber, pipes to connect said chamber with the oil and air feed cylinders, said oil-feed consisting of a plurality of radial arms mounted on a horizontal shaft, cups pivotally mounted at the ends of said radial arms, said cups being funnel-shaped and having their bottoms weighted, a funnel to receive the oil from said cups, said funnel being fixed to the end of said oil-feed pipe, and a fluid-sealed check-valve to vent said oil-feed cylinder, substantially as shown and described.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

FRANK L. MARTENETTE.

Witnesses:

J. MCC. STILSON,
CHARLES FETTERS.