GEORGE EDMONDS.

Improvement in Apparatus for Cabureting.

No. 115,182. Patented May 23, 1871.

Fig. 1.

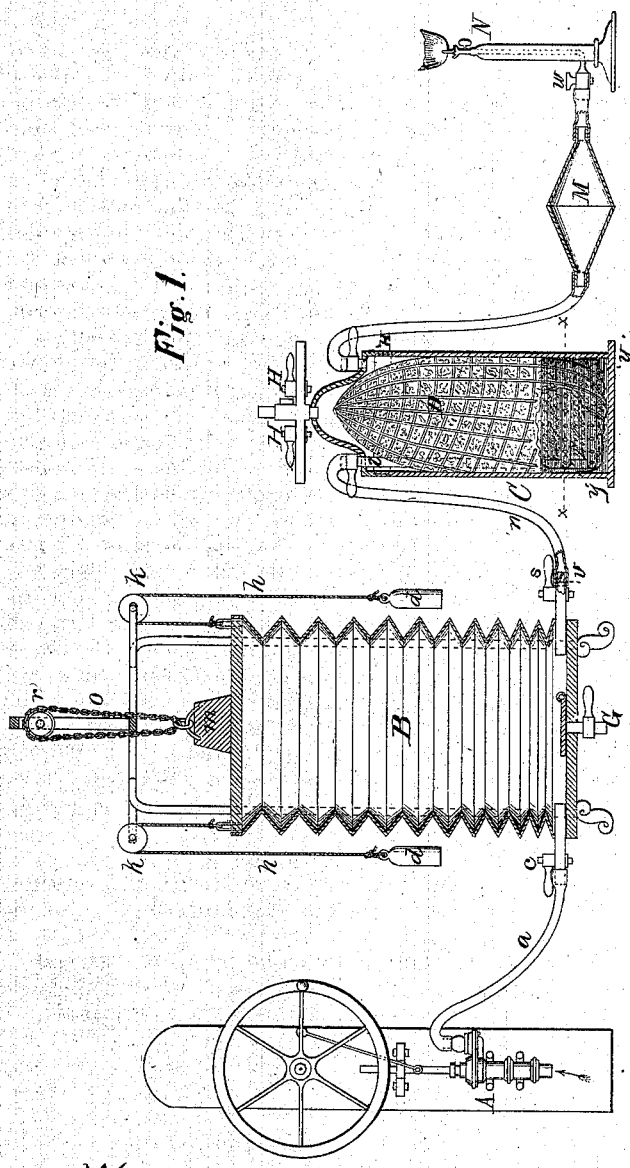


Fig. 3.

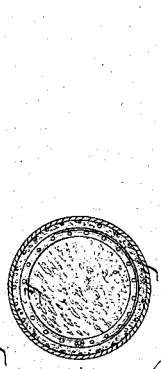
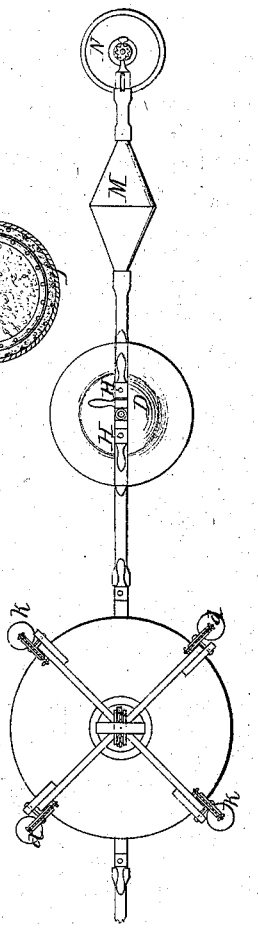


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

GEORGE EDMONDS, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN APPARATUS FOR CARBURETING.

Specification forming part of Letters Patent No. 115,182, dated May 23, 1871.

To all whom it may concern:

Be it known that I, GEORGE EDMONDS, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and valuable Improvement in Carbureting Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical section of my apparatus. Fig. 2 is a top or plan view; and Fig. 3 is a detail, showing the construction of the distributing-rings of the wire basket D.

My invention has relation to means for producing light from volatile hydrocarbon oils; and consists in a novel arrangement of devices intended to serve as an improved apparatus for the purpose mentioned.

A of the drawing represents an air-pump; B, an air-holder; and C, a reservoir for hydrocarbon-oil. The air-holder B is constructed of any suitable elastic substance, and is arranged in a frame in such manner that it shall expand vertically or otherwise as the air is introduced by the pump through the tube *a*. The letter *c* represents a stop-cock, by means of which the flow of air to the holder may be regulated or stopped at will. The letters *d d* represent weights connected, respectively, with cords *h* that pass over pulleys K, and are secured to the top of the holder, as shown. These weights, cords, and pulleys serve to aid the operator in expanding the elastic air-holder, when desirable so to do. The letter *m* represents a weight arranged to sit upon the top of the air-holder, and force the air therefrom into the reservoir C through the pipe *n*. I connect a chain, *o*, and pulley I with this weight, to enable the operator to adjust the same in any desired position. The letter G represents an opening in the bottom of the holder, and a stop-cock therein. This device is intended to aid in raising the air-holder, which, it will be observed, closes and expands like an ordinary bellows. I place a stop-cock, *s*, on the pipe *n*, and also arrange a valve, *v*, in said pipe. This stop-cock serves to regulate the flow of air through said pipe, and the valve operates to prevent the return of air to the air-holder. The letter D represents a wire basket, constructed substantially in the manner shown, which I arrange inside the reservoir C, above or partly in volatile oil. In the lower end of this basket I arrange two or more tubular and perforated rings, marked *y*, and connect the same with the induction-pipe *z*, in the manner shown. The basket D is filled with cotton, sponge, wool, or other suitable porous substance, and the air being forced through the oil and said distributing-rings, together with said porous filling, becomes evenly freighted with the hydrocarbon gas or vapor, and is ready for combustion. The letter H represents openings in the reservoir, with stop-cocks therein, through which the air is conducted from the oil-reservoir to the burners. These openings may be increased or diminished in number, according to the capacity of the apparatus and the local demand. The letter M represents an air-chamber, which I usually construct in the form of a double cone, the bases of which are united, as shown. The office of this air-chamber is to aid in securing an even flow of the carbureted air to the burner. The letter N represents the burner; and *w* is a stop-cock, through which the gas is admitted thereto.

I claim as my invention—

1. The basket D provided with distributing-rings *y*, constructed substantially as and for the purpose specified.

2. In combination, the pump A, bellows B, reservoir C, basket D, and air-chamber M, constructed and connected substantially as and for the purpose specified.

3. The air-chamber M, arranged between the reservoir and the burner, and constructed substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE EDMONDS.

Witnesses:

FRANK B. CURTIS,

J. M. HYNE.