No. 662,514. Patented Nov. 27, 1900.

R. WÜNSCHE.

CARBURETER.

(Application filed June 22, 1900.)

(No Model.)

Fig. 1.

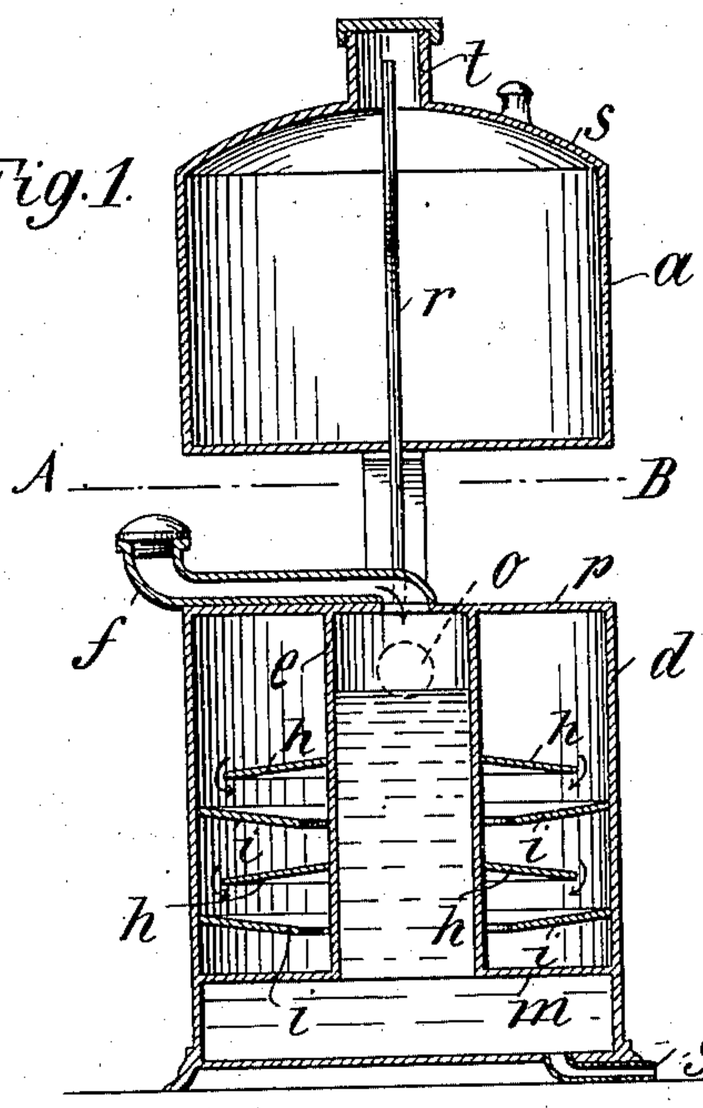


Fig. 2.

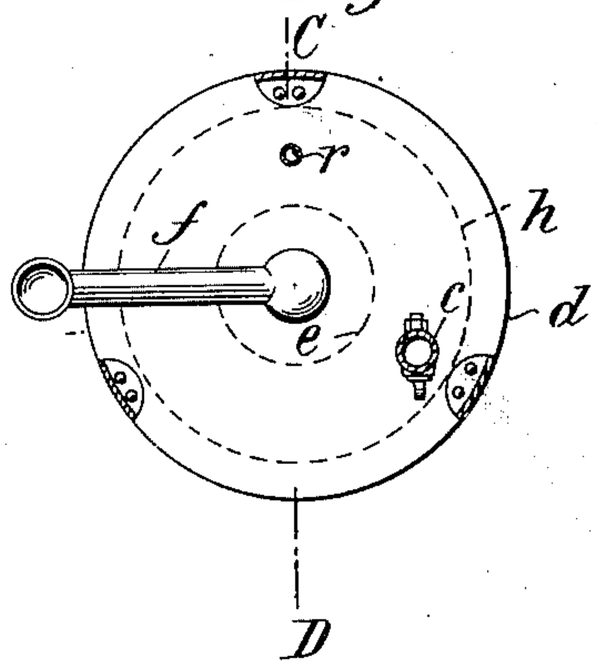


Fig. 3.

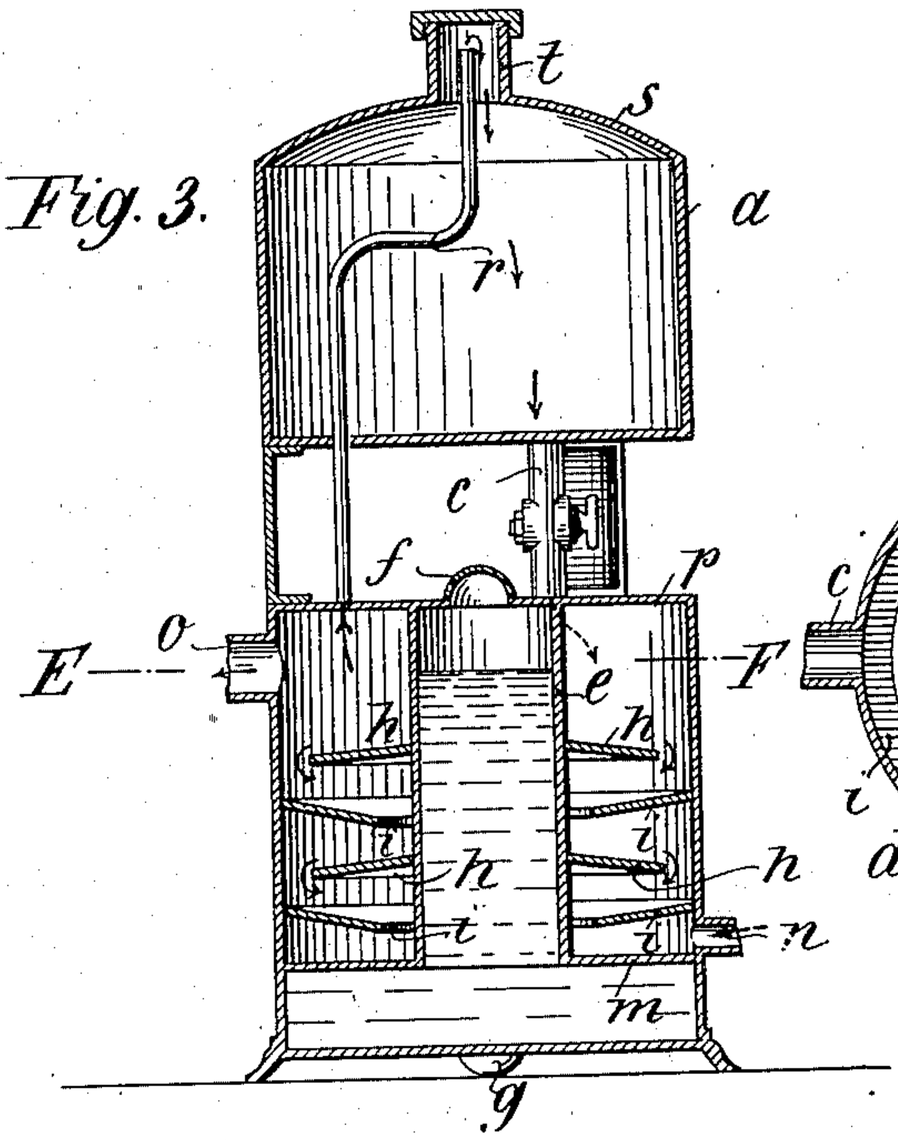
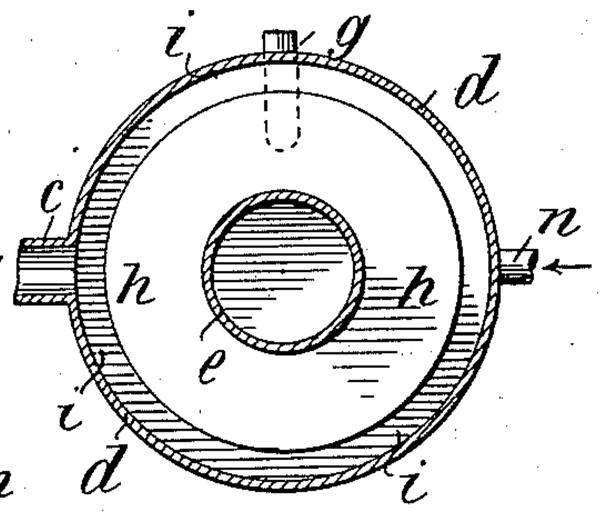


Fig. 4.



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RICHARD WÜNSCHE, OF HERRNHUT, GERMANY.

CARBURETER.

SPECIFICATION forming part of Letters Patent No. 662,514, dated November 27, 1900.

Application filed June 22, 1900. Serial No. 21,229. (No model.)

To all whom it may concern:

Be it known that I, RICHARD WÜNSCHE, manufacturer, a subject of the German Emperor, residing at Herrnhut, Germany, have invented new and useful Improvements in Carbureters, of which the following is a specification.

The present invention relates to an apparatus for generating gasolene-gas to be employed for the purpose of illumination or heating of calendering-machines in the process of finishing cloths, or in combination with a soldering-tool, and for similar purposes.

I will now proceed to describe my invention more fully, reference being had to the accompanying drawings, which illustrate the invention.

Figure 1 is a vertical section. Fig. 2 shows a section on line A B of Fig. 1. Fig. 3 illustrates a vertical section through the apparatus on line C D of Fig. 2, and Fig. 4 is a section on line E F of Fig. 3.

My improved apparatus consists of the upper reservoir *a*, which is adapted to be filled in any suitable and desired manner with liquid hydrocarbon. The hydrocarbon reaches the gas-generator *d* by way of the pipe *c*. In the generator *d* a cylinder *e* is centrally provided, which receives warm water or steam through the pipe *f*. The water or condensation-water may be let off through the exhaust-pipe *g*. Externally of the heating-cylinder *e* and at the inner wall of the generator *d* rings *h h i i* are secured horizontally, or almost so, in such a manner that between the outer edges of the rings *h h* and the inner wall of the generator *d*, on the one hand, and between the inner edges of the rings *i i* and outer wall of the heating-cylinder *e*, on the other hand, a space is left which enables the liquid dropped onto the upper ring *h* from the pipe *c* to drop onto the ring *i* below it. Above the bottom *m* the air-pipe *n* terminates in the generator *d*, through which cold air is forced into the apparatus and passes through same, circulating around the rings *i h i h* in a direction which is reverse to the direction of the liquid hydrocarbon in its passage through the apparatus, and the air-current enriched by the contact with the liquid hydrocarbon finally reaches the gas-pipe *o*, from whence it is led to the place for the consumption of the gas. On its way through the generator *d* the cold air is saturated with the hydrocarbon and simultaneously heated by virtue of the heat radiated by the cylinder *e*. Owing to the heat emitted by the cylinder *e* a more intimate mixture with the hydrocarbon is attained in addition than would be possible without the provision of said cylinder.

From the lid *p* of the generator *d* a pipe *r* starts upward, entering the reservoir *a* for the liquid hydrocarbon and terminating in a dome *t* on the lid *s* of said reservoir. This tube *r* conveys gas from the generator *d* to the space above the surface of the liquid in the reservoir *a* in order to prevent the formation of a vacuum by the liquid hydrocarbon leaving the reservoir *a*.

The apparatus as hereinbefore described is fitted with the necessary safety appliances of any suitable kind.

What I claim as new, and desire to secure by Letters Patent, is—

Apparatus for generating gasolene-gas comprising in combination a reservoir *a* for the reception of liquid hydrocarbon, a generator *d* connected with the hydrocarbon-reservoir by means of a pipe *c*, said generator containing centrally a cylinder *e* adapted to be heated by steam or water, a number of dropping-rings *h*, *i* intermittingly secured to the outer wall of the heating-cylinder *e* and to the inner wall of the generator *d*, a gas-pipe *r* leading from the generator to the space above the level of the liquid hydrocarbon in the reservoir *a*, an air-admission pipe *n* at the lower end of the generator and a gas-outlet pipe *o* at the upper end of same, substantially as described and shown.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. Signed by me at Zittau, Germany, this 28th day of May, 1900.

RICHARD WÜNSCHE. [L. S.]

Witnesses:

WILLIAM K. HERZOG,

FRIEDRICH HEINEMANN.