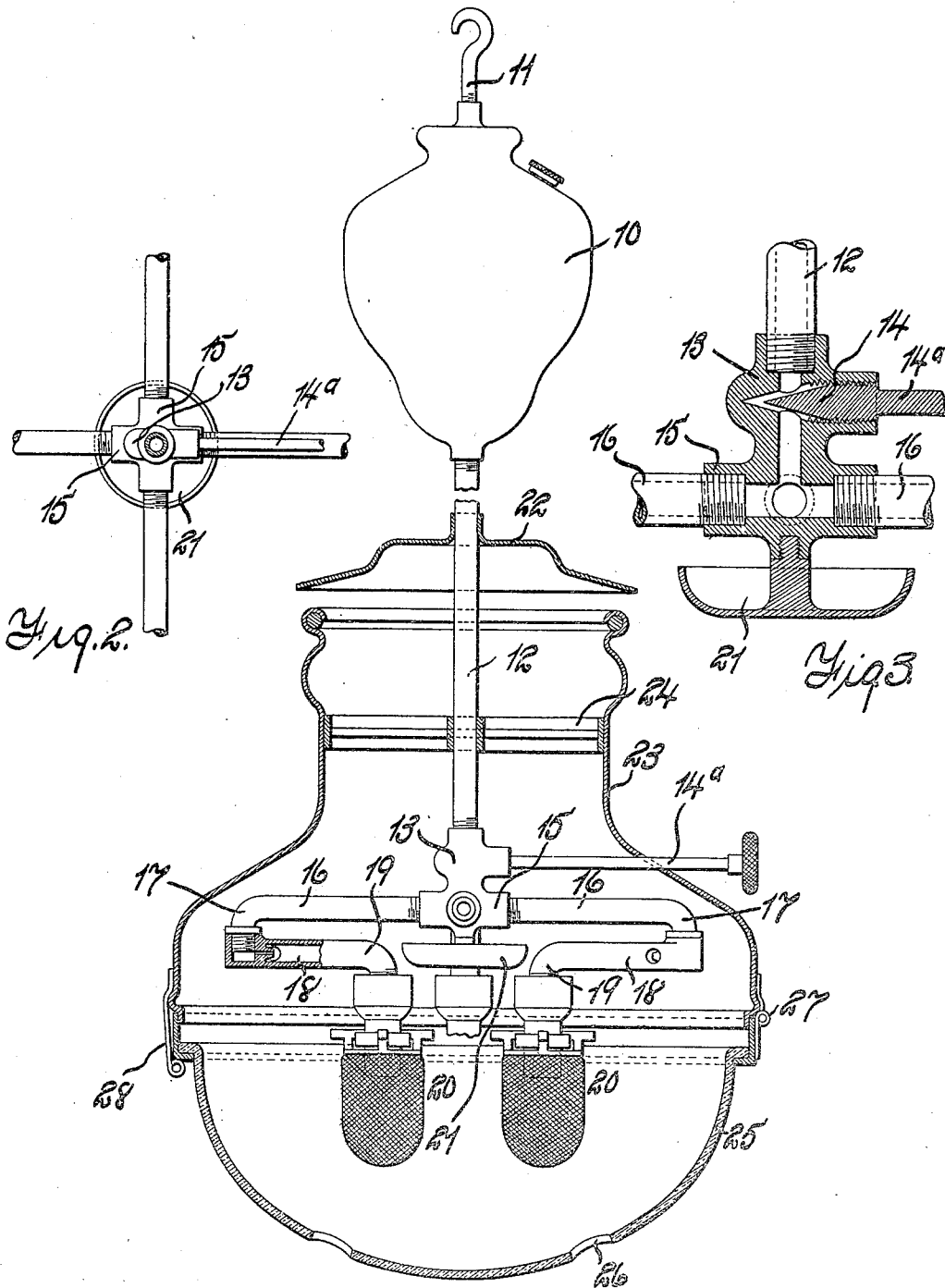


A. RECTOR.
ALCOHOL VAPOR LAMP.
APPLICATION FILED MAR. 26, 1907.

958,310.

Patented May 17, 1910.



WITNESSES:
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Fig. 1.

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ALCORN RECTOR, OF NEW YORK, N. Y., ASSIGNOR TO WARREN B. HUTCHINSON,
TRUSTEE, OF NEW YORK, N. Y.

ALCOHOL-VAPOR LAMP.

958,310.

Specification of Letters Patent.

Patented May 17, 1910.

Application filed March 26, 1907. Serial No. 364,615.

To all whom it may concern:

Be it known that I, ALCORN RECTOR, of the city, county, and State of New York, have invented a new and useful Improvement in Alcohol-Vapor Lamps, of which the following is a full, clear, and exact description.

My invention relates to improvements in lamps which burn alcohol or other liquid or fluid, in a vaporized or gasified condition, and the object of this present invention is to produce an alcohol lamp which is similar to the so called gas arc lamp, and which has its parts arranged in a simple and compact manner so as to thoroughly gasify the fuel and burn it in a mantle or group of mantles, more particularly a group.

To get the effect of the gas arc lamp my invention is intended to group the mantles so that the pipes are inturned, thereby arranging the mantles in relatively close proximity rather than to have them extend outward and get the chandelier effect.

To these ends my invention consists of certain features of construction and combinations of parts which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawing forming a part of this specification, in which similar letters and figures of reference indicate corresponding parts in all the views.

Figure 1 is a sectional elevation of the lamp embodying my invention. Fig. 2 is a detail sectional plan showing how the fuel pipes diverge, and Fig. 3 is an enlarged detail of the valve and initial heating device of the lamp.

The lamp is intended to be hung from the ceiling or other support, and to this end the fountain 10 which can be of any approved sort, is provided with a suspending hook 11, and with the drop fuel pipe 12 which connects with the valve casing 13, and this can be of any approved kind, and is controlled by the valve 14, which also may be of any usual type, and the valve has an elongated stem 14^a long enough to extend out through the housing of the lamp, which will be hereinafter referred to.

The casing 13 has below the valve diverging or radiating parts 15 in which are sockets to receive the ends of the fuel pipes 16, which are preferably arranged in a radial manner as shown in Fig. 2, and these pipes

are bent over at their outer ends at at 17, and connected with Bunsen tubes 18, these extending inward beneath the pipes 16, and having terminal bends 19 which connect with the mantles 20, the latter being hung on the Bunsen tubes in any preferred way. I have shown the bent parts 17 and 19 as illustrating the most simple manner of connecting the pipes 16, 18, and the mantles 20, but obviously any usual pipe connections can be substituted for those shown, without in the least affecting the invention. The Bunsen tubes 18 can be of any preferred kind, and should have the usual jet delivery and air in-take.

To start the lamp, a cup 21 is used which contains alcohol or other heating medium, and this cup is attached directly to the under side of the casing 13, so that the fuel which is admitted through the casing 13 is gasified from the heat of the fuel in the cup 21 until the generators are heated, after which the heat rising from the mantles keeps the parts 16 hot, and the fuel is thereafter thoroughly gasified as it is delivered to the mantles.

Obviously any suitable housing can be used, but I prefer the kind shown, and above the housing I arrange upon the pipe 12 a guard 22, to prevent too much heat from rising against the fountain 12, or against surrounding material or parts. The housing proper 23, can be of any approved design, and it is secured to the pipe 12 through the medium of an open or spider collar 24. The lamp has a suitable globe 25, preferably provided with air in-lets 26, and the globe is hinged as at 27 to the housing 23, and is secured by a suitable catch 28.

It is evident that the housing and the accessories form no part of the lamp proper, and can be changed as desired.

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

1. A lamp of the kind described, comprising a vertical fuel supply pipe connecting at its lower end with a series of horizontally radiating pipes having downward bends at their outer ends, a bunsen connected with each radiating pipe and extending inward directly beneath and parallel with the same, said bunsens terminating at their inward ends in downward bends, and mantle supports secured to the downward bends of the

bunsens in such manner that each mantle support is directly beneath both the downward bend of the bunsen and the horizontal fuel pipe above it.

- 5 2. A lamp of the kind described, comprising a vertical drop pipe having a valve therein, and merging at its lower end into horizontally radiating branch pipes having downward bends, bunsens secured to the said
10 branch pipes and extending inward directly beneath and parallel with the same, said bunsens terminating in downward bends, mantle supports secured to the downward
15 bends of the bunsens, a single housing inclosing the aforesaid structure, and a valve stem operating the valve and extending out through the housing.

3. A lamp of the kind described, compris-

ing a vertical fuel supply pipe connecting with a source of fuel supply and terminating 20 at its lower end in a head, said head being connected with a fuel pan suspended directly beneath the head, a series of horizontally radiating pipes having downward bends at their outer ends, a bunsen connected with 25 each radiating pipe and extending inward directly beneath and parallel with the same, said bunsens terminating at their inward ends in downward bends, and mantle supports secured to the downward bends of the 30 bunsens.

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Witnesses:

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