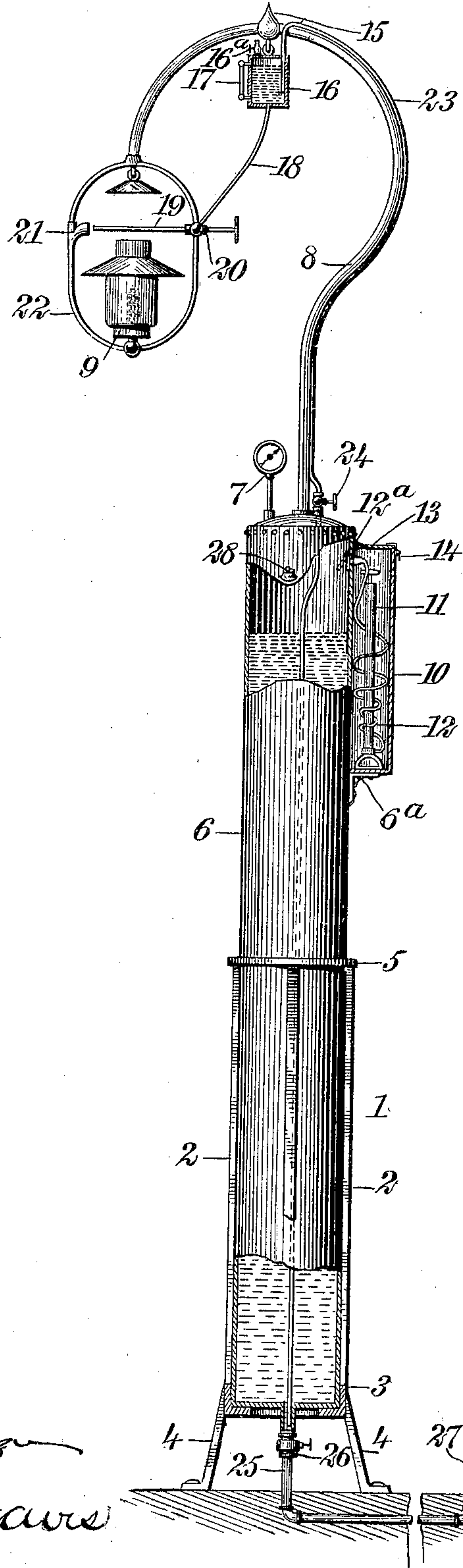


No. 887,698.

PATENTED MAY 12, 1908.

W. S. RYAN.  
LAMP.

APPLICATION FILED MAR. 5, 1906.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM SPENCER RYAN, OF VIOLA, ILLINOIS.

## LAMP.

No. 887,698.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed March 5, 1906. Serial No. 304,369.

*To all whom it may concern:*

Be it known that I, WILLIAM SPENCER RYAN, a citizen of the United States, and a resident of Viola, in the county of Mercer and State of Illinois, have invented a new and Improved Lamp, of which the following is a full, clear, and exact description.

This invention is an improvement in lamps, and has for an object, among others, to provide a lamp which has its supply of illuminating oil or gasolene ever ready, thus dispensing with the work of daily refilling.

It is especially designed to have the oil tank or reservoir in the form of a street lamp post, which connects with a small feed tank for supplying the lamp for a predetermined length of time. By this construction the feed tank can be filled from the reservoir to feed the lamp for any desirable period, and when the fuel is consumed in the feed tank, the lamp will automatically go out.

Reference is to be had to the accompanying drawing, and to the characters of reference thereon, the figure representing a partly sectional side elevation of a lamp post of novel construction, having other details of the invention mounted thereon.

The numeral 1 indicates a framework or stand for a lamp post, made up of longitudinal bars 2 equally spaced apart and secured to a base 3 mounted on legs 4. At the upper end of the bars 2 is a ring 5 integral therewith, for holding the bars securely together. Carried in the framework 1 and resting on the base 3, is a large tank or reservoir 6, having a pressure gage 7, and a hooked arm 8 for suspending a lamp 9. At one side of the reservoir 6, mounted on a bracket 6<sup>a</sup>, is a pump casing 10, for containing a hand pump 11, of ordinary construction, secured to the bottom of the casing and having a tube 12, for connecting it through a valve 12<sup>a</sup>, to the reservoir. At the upper end of the casing 10 a lid 13 is hinged, and held in closed position by a catch 14 when the pump is not in use.

Suspended by means of a hook 15 is a small feed tank 16, having a glass gage 17, connected by a pipe or hollow wire 18, with a nozzle 19 through a cock 20. The feed tank has on its upper face a small stop valve 16<sup>a</sup>, which can be opened or closed according to whether a gravity or a combined gravity and air pressure feed, is desired. Adjacent to the outer end of the nozzle 19 is a funnel or enlarged pipe 21, attached to

a curved pipe 22 leading to the lamp. The nozzle 19 is as shown, passed over the top of the lamp, in order that the gasolene or oil may be converted into a gas before the combustion takes place.

Projecting into the top of the tank 16, and preferably following around the hook member 8 down through a cock 24 and reservoir 6, and ending slightly below the bottom of the reservoir in a pipe 25, is a pipe or hollow wire 23. The pipe 25 is provided with a cock 26 adjacent to the reservoir, and may pass underground, as shown, and terminate at the other end in a small pipe or hollow wire 27, for conducting the fluid for house or other lighting. At the side of the reservoir 6 near its upper end, is a filling plug 28, slightly below the valve 12<sup>a</sup>, in order that the reservoir may not be filled beyond this point, and the valve will be above the oil surface at all times.

The operation of the device is as follows: The cock 26 having been closed, the reservoir 6 is filled through the filling plug 28 until the oil rises to within a short distance of the cock 12<sup>a</sup>. The cock 24 is then closed and the pump 11 operated until the pressure gage 7 indicates the desired pressure in the reservoir. The cock 12<sup>a</sup> is then closed, which leaves the tank in condition to supply the oil or gasolene to the hollow wires 23 and 27 under pressure. To light the lamp 9, the cock 24 is opened and the oil is forced, by reason of the pressure above it, through the pipe 8 into the tank 16. When the gage 7 indicates a sufficient supply of fuel, the cock 24 is closed; then, by opening the cock 20 and heating the nozzle 19, the lamp 9 can be lighted and will burn until the fuel in the tank 16 is exhausted.

It will be seen, that the tank 16, may have a capacity for holding liquid, sufficient to maintain a light in the lamp 9, a predetermined length of time, which is very advantageous in lighting streets and public places, as it dispenses with the necessity for manual extinguishment of the light when it is not needed.

It is not my intention to limit the invention to the exact details of construction hereinbefore described, but consider that I am entitled to such modifications as fall within a fair interpretation of the claims.

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



1. In a lamp, a supporting stand, a long tank or reservoir slidably mounted therein, a pressure gage and filling plug connected to the reservoir, a hand pump carried in a casing at the upper end of the reservoir, a hooked arm extending from the upper end of the reservoir, a lamp and a small feed tank suspended from the arm, a gage carried by the feed tank, a hollow wire extending from the feed tank to the reservoir, a second hollow wire extending from the feed tank to a nozzle, and means in front of the nozzle for conducting fuel to the lamp.

2. The combination of a supporting stand adapted to receive the lower end of a long main tank and hold it in an upright position, forming a lamp post, a small feed tank supported above the main tank, a lamp connected to the feed tank, a feed pipe leading from the feed tank to the main tank and passing through and below the bottom of the main tank, and means for forcing air above the free surface of the fuel contained in the main tank.

3. The combination of a long main tank forming substantially the entire length of a lamp post, a small feed tank supported above the main tank, a supply pipe leading from the bottom of the main tank, a hollow wire leading from the feed tank to the main tank and passing through the main tank below the bottom of the same and into said feed pipe, a lamp, means connecting the feed tank with the lamp, and means for forcing air into the main tank above the free surface of the fuel contained therein.

4. The combination of a long, cylindrical main tank forming substantially the entire length of a lamp post, a feed tank supported

above the main tank, a lamp, means connecting the lamp with the feed tank, a hollow wire leading from the feed tank to the main tank and passing through the main tank below the bottom thereof, a casing secured to one side of the main tank, a pump within the casing, means connecting the pump to the main tank above the free surface of the fuel contained therein, and a valve for cutting off communication between the pump and main tank.

5. The combination with an upright reservoir, a supporting stand carrying the same, a lamp supported by the reservoir, a gage on the reservoir, a pump connected to the reservoir adapted to force air above the free surface of the fuel therein, a small feed tank and a lamp, a hollow wire leading from the feed tank through and below the bottom of the reservoir, and means connecting the feed tank with the lamp.

6. The combination with a supporting stand, a reservoir held upright therein, a casing secured to the reservoir, a pump in the casing, a hooked arm projecting from the upper end of the reservoir, a lamp and a feed tank suspended from the arm, means for supplying the feed tank from the reservoir, and means for supplying the lamp from the feed tank.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM SPENCER RYAN.

Witnesses:

M. DEMPSTER,  
FRANK TENNEY.