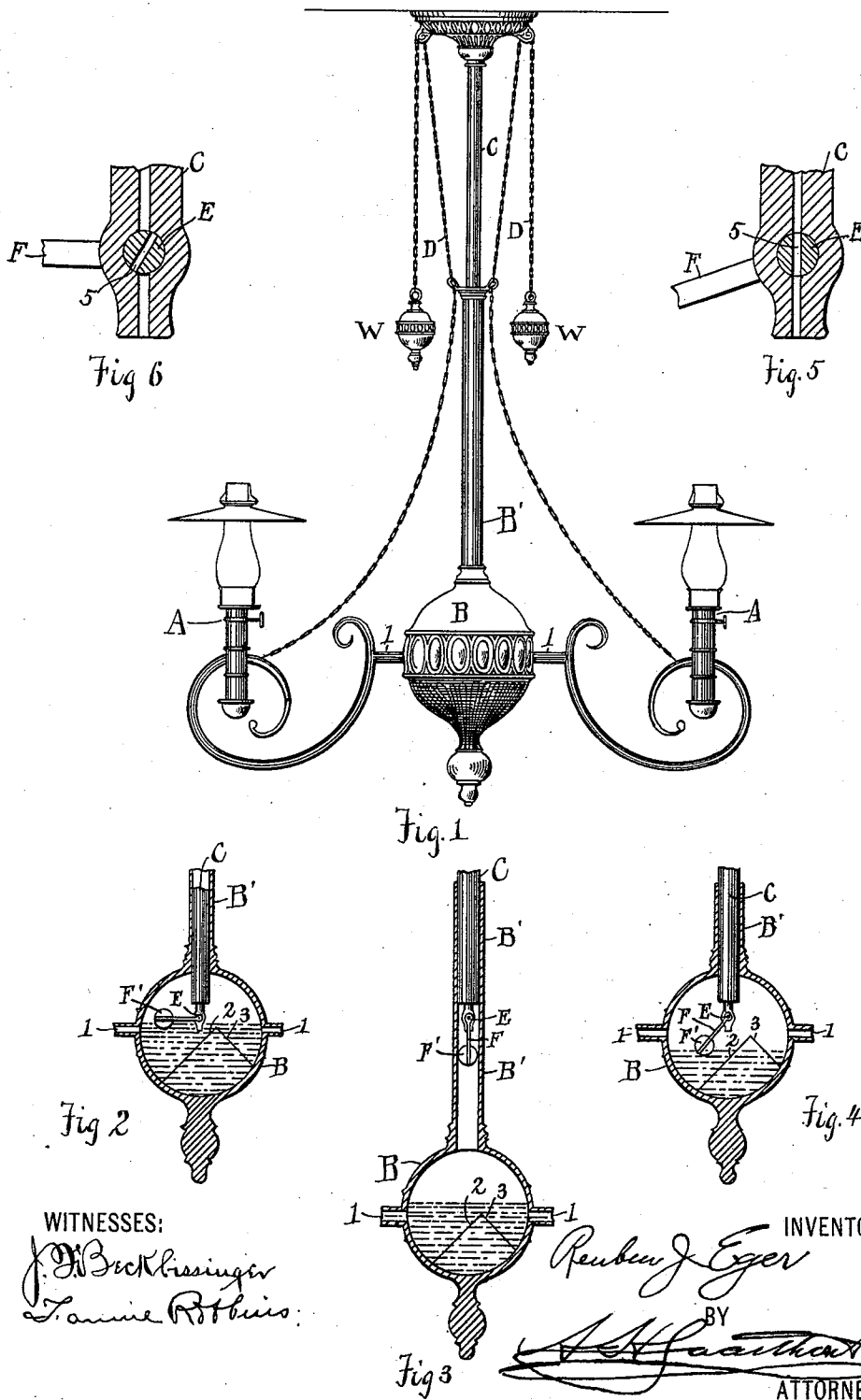


(No Model.)

R. J. EGER.
HYDROCARBON LIGHTING SYSTEM.

No. 539,173.

Patented May 14, 1895.



WITNESSES:

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REUBEN J. EGER, OF BAY CITY, MICHIGAN.

HYDROCARBON LIGHTING SYSTEM.

SPECIFICATION forming part of Letters Patent No. 539,173, dated May 14, 1895.

Application filed November 28, 1894. Serial No. 530,246. (No model.)

To all whom it may concern:

Be it known that I, REUBEN J. EGER, a citizen of the United States, residing at Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Hydrocarbon Lighting Systems; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention is a hydrocarbon lighting system.

Many systems of like character have been in use, some operated by a siphon, and others by gravity and the operation of springs or weights. The system hereinafter described is safe, simple, and easily cared for. The flow of the oil is automatically controlled, being supplied to the burner by pipes in the arms of the chandelier or in the support for the lamp from a fount in the bulb of the chandelier, or in some other convenient place, and is on a level with the head of the oil in the lamp. The oil is conveyed to the fount by pipes which may be concealed in the ceiling, as gas pipes, and are connected to a reservoir of any desirable size placed within or without the building and above the level of the lamps.

Figure 1 is a chandelier fitted with my system. Fig. 2 is a sectional view through the bulb or fountain and pipe leading to the chandelier. Fig. 3 is a similar view showing the position of the parts when the chandelier is drawn down. Fig. 4 is a similar view showing the position when the oil is low in the fountain and the valve open. Figs. 5 and 6 are sections of the valve, showing the different positions.

A, A, are the lamps supported on the chandelier by the hollow rods 1 connected to the bulb B of the chandelier, which is hollow and in this construction answers the purpose of a fount. It is connected to a large pipe B' passing outside of the wall pipe C conveying oil to the fount. This chandelier is operated by weights W, W, on the chains D, D, as is common. On the lower end of the pipe C is a

valve E which controls the flow of the oil into the fount.

F is an arm connected to each end of the valve E on each side of the pipe C, and to the other end of the arm is attached a ball or weight F'. This weight, while it is heavy enough to turn the valve, floats upon the surface of the oil 2 in the bulb.

5 is the central hole through the valve, and when the valve is in the position shown in Fig. 5 it connects with the hole through the pipe C, but acts as a cut off when in the position shown in Figs. 2 and 6. The tube B' is large enough to permit of the weight F' passing inside of it when the chandelier is drawn down, as shown in Fig. 3, the valve cutting off the oil when in this position.

3 is a bridge extending upward from the bottom of the fountain at the center thereof and is for the purpose of turning the ball F' to one side as the chandelier is pushed up, so as to prevent the ball from catching and the operation of the valve being interfered with in any manner.

It is obvious that when the oil 2 has a head in the fount of the depth shown in Fig. 2 the feed from the reservoir is cut off and no more oil can enter the fount until its head has been lowered so as to bring the valve in the position shown in Fig. 5, when the oil will again enter the fount from the feed pipe and continue to flow into it until the ball is again raised to the position shown in Fig. 2.

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

1. In an automatic hydrocarbon lighting system, the combination with the feed pipe, a chandelier telescoping the feed pipe, means for raising and lowering the chandelier, a fount in the chandelier directly underneath the feed pipe, a cut off valve near the end of the feed pipe, an arm connected to the valve at one end and having its other end connected to a weight, a weight adapted to float upon the surface of the oil in the fount and connected to the arm of the valve and controlling the valve, and adapted to pass within the chandelier pipe when the chandelier is drawn down, and a bridge in the bottom of the fount for the purpose of turning the weight

to one side as the chandelier is raised to its normal position, as and for the purpose set forth.

2. In an automatic hydro-carbon lighting
5 system, a chandelier having a fount in its
body, the fount connected by pipes to the
lamps and feeding the oil thereto as consumed, a pipe entering the fount from the
reservoir through the chandelier, the pipe
10 having on the lower end thereof a valve connected to a float resting on the surface of the
oil the float being small and adapted to swing

underneath the end of the pipe as the chandelier is drawn down, a bridge in the center of the fount extending upward and adapted 15
to turn the float to one side as the chandelier is pushed up and the feed pipe enters the fount, substantially as described.

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

REUBEN J. EGER.

Witnesses:

A. H. SWARTHOUT,
FANNIE ROBBINS.