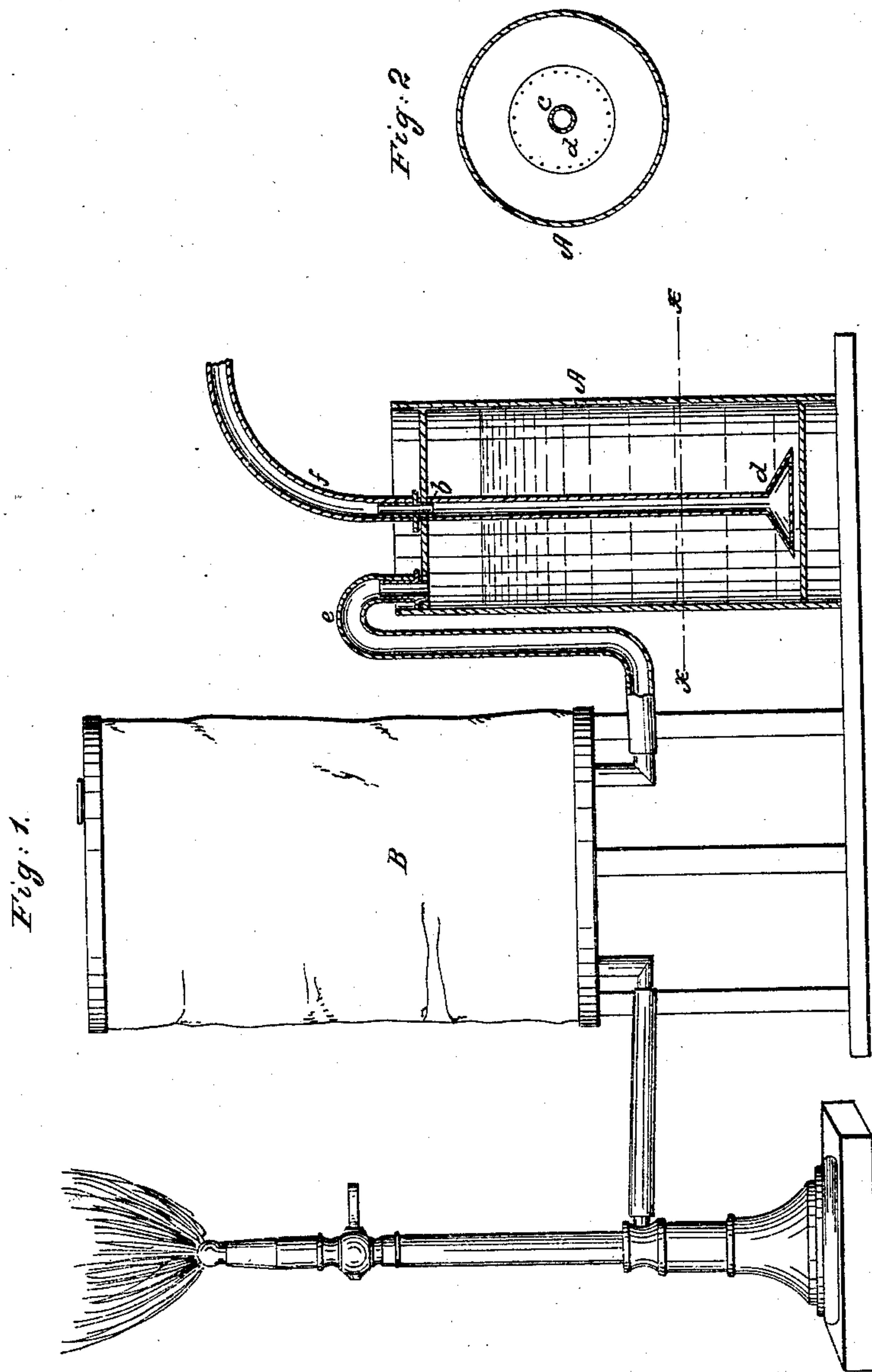


J. S. LIPPS.
Barrel for Petroleum, &c.

No. 57,738.

Patented Sept. 4, 1866.



Witnesses:
Otto Gromer
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Inventor:
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UNITED STATES PATENT OFFICE.

JOHN S. LIPPS, OF BROOKLYN, NEW YORK.

IMPROVED BARREL FOR PETROLEUM, &c.

Specification forming part of Letters Patent No. 57,738, dated September 4, 1866.

To all whom it may concern:

Be it known that I, JOHN S. LIPPS, of Brooklyn, county of Kings, and State of New York, have invented a new and Improved Barrel for Hydrocarbon Liquids; and I do hereby declare that the following is a full, clear, and exact description thereof, enabling those skilled in the art to fully understand and use the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a vertical central section of this invention. Fig. 2 is a horizontal section of the same, the line *xx*, Fig. 1, indicating the plane of section.

Similar letters of reference indicate corresponding parts.

This invention relates to an improvement in that class of barrels which are intended for the transportation of light or volatile hydrocarbon liquids, such as gasoline, naphthaline, benzine, &c. Those liquids are used in many cases with great advantage, for the purpose of producing an illuminating-gas, by passing through the same a current of air which takes up a quantity of hydrocarbon vapors, and, on emanating from the vessel containing the hydrocarbon liquid, can be ignited, and produces a good light. This method of producing illuminating-gas would no doubt be in universal use, if it was not for the necessity of pouring the hydrocarbon liquid from the barrel in which it is shipped into the apparatus in which it is converted into gas, for if this operation is not conducted with the greatest care the light and volatile hydrocarbon liquid is liable to catch fire and to explode.

This difficulty is avoided by the arrangement of an air-pipe extending from one head or side of the barrel nearly to the opposite head or side, in combination with an orifice, to which an escape-pipe can be conveniently attached in such a manner that when the barrel has reached its place of destination nothing is required but to connect the air-pipe with a suitable blower, bellows, air-pump, or other device capable of producing an impelled current of air, and to attach to the escape-orifice a pipe leading to a gas-holder or directly to the burners, and the production of the illuminating-gas can be effected without removing the hydrocarbon liquid from the barrel in which it has arrived.

A represents a barrel, which may be made

of wood or any other suitable material, but which, by preference, is made of sheet metal, as tight as possible in all its joints, to prevent the escape of its contents. This barrel is provided in one of its heads or in its side with two apertures, *a b*, which are so arranged that they can be conveniently closed with screw-plugs, or with plugs of any other suitable description.

From the orifice *b* extends a pipe, *c*, nearly to the opposite head or side of the barrel, and this pipe is provided with a rose, *d*, at its bottom end.

Through the orifice *a* the barrel is filled, and after the same has arrived at its place of destination the plugs are removed from the apertures *a b* and replaced by nipples to which pipes *e f* can be conveniently attached.

Through the pipe *f* a current of air is forced, which, passing down through the air-pipe *c*, is spread by means of the rose *d*, and, on being permitted to escape through the pipe *e*, is saturated with hydrocarbon vapors, so that it can be used immediately for illuminating or heating purposes.

In practice the pipe *e* will be connected to a suitable gas-holder, B, from which the gas is conducted to the various burners, as shown in Fig. 1 of the drawings.

After the contents of the barrel are completely exhausted the connecting-pipes *e f* are removed and connected to a full barrel, the empty barrel being returned to the oil-refinery for a fresh supply.

By this arrangement the necessity of removing the hydrocarbon liquid from the barrel after the same has reached the place of its destination is avoided, and every person is enabled to manufacture his own gas with little trouble or expense and without danger of an explosion.

I do not claim as my invention the production of illuminating-gas by passing a current of air through hydrocarbon liquid; but

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

A barrel for hydrocarbon liquids, provided with an air-pipe, *c*, and escape-orifice *a*, substantially as and for the purposes described.

JOHN STEPHEN LIPPS.

Witnesses:

ANDREW I. TODD,
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