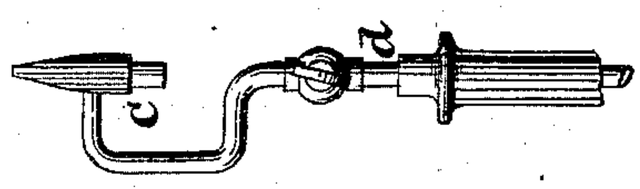
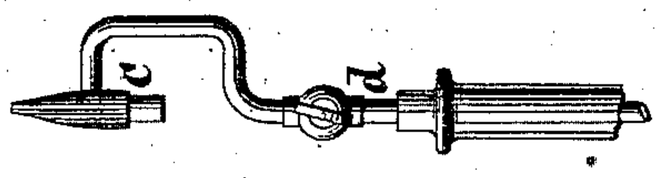
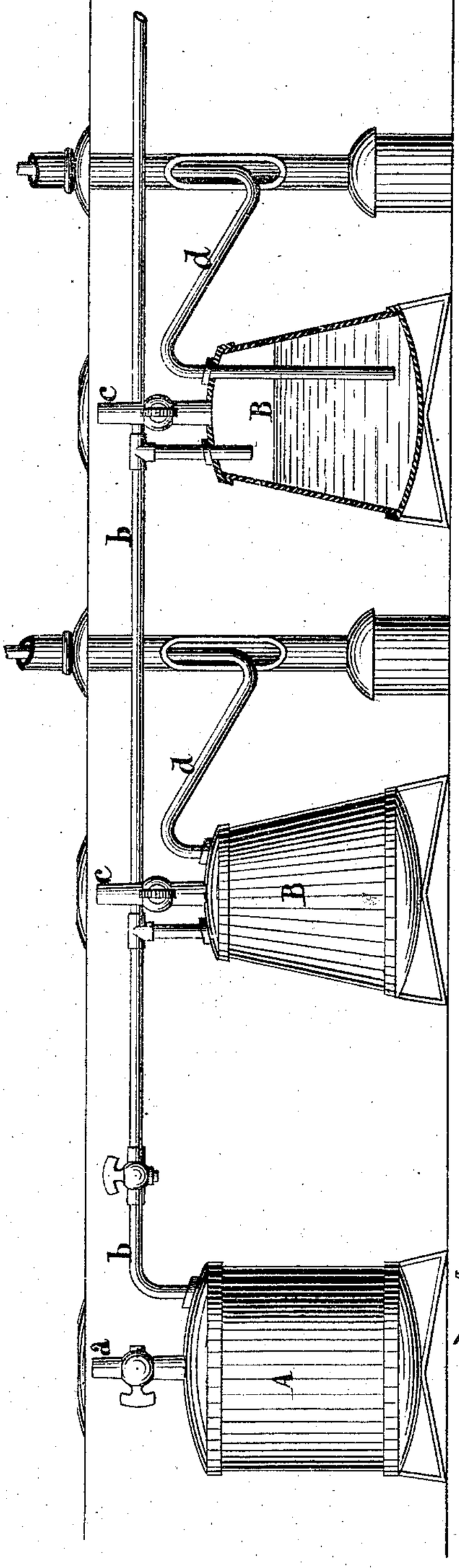
R. V. De GUINON.

Apparatus for Supplying Oil to Lamps.

No. 160,653. Patented March 9, 1875.







Witnesses.

Henry Gentner.

Chas. Wahlers

Inventor.

Richard V. De Guinon

per

Van Santwood & Hauff

attys

UNITED STATES PATENT OFFICE.

RICHARD V. DE GUINON, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN APPARATUS FOR SUPPLYING OIL TO LAMPS.

Specification forming part of Letters Patent No. **160,653**, dated March 9, 1875; application filed August 13, 1874.

To all whom it may concern:

Be it known that I, RICHARD V. DE GUINON, of Jersey City, in the county of Hudson and State of New Jersey, have invented a certain new and Improved Apparatus for Supplying Oil to Lamps, of which the following is a specification:

This invention consists in the combination of a vessel containing air under pressure with one or more cisterns containing petroleum or other burning-fluid, and with one or more burners, in such a manner that when the communication between the air-chamber and the oil cistern or cisterns, and between the oil-cisterns and the burners, is opened the pressure of the air forces the oil to the burners, which may be situated at different distances from the air-vessel, and a uniform supply of oil to the burners can be effected.

This invention relates to certain improvements in that class of apparatus in which oil is elevated to a burner-tube from an oil-tank by means of compressed air.

This invention is illustrated in the accompanying drawing, which represents a sectional side view.

The letter A in this drawing designates a vessel, which is charged with air under pressure, said vessel being provided with a supply-pipe, *a*, which can be connected to an air-pump, so that the supply of compressed air can be renewed whenever it may be required, or that a uniform pressure can be maintained in the air-vessel. From said air-vessel extends a pipe, *b*, which communicates with one or more oil-cisterns, B, so that, if said cistern or cisterns are charged with petroleum or other burning-fluid, and the communication between the air-vessel and the cistern or cisterns is opened, the liquid in said cistern or cisterns is exposed to a pressure corresponding to the pressure existing in the air-vessel. Said cisterns are provided with supply-pipes *c*, through which the burning-fluid is introduced, and this fluid discharges through pipes *d*, which extend down nearly to the bottoms of the cisterns, and which serve to carry the burning-fluid to the burners C.

If my apparatus is to be used for street-lamps I use a large air-vessel situated at any convenient place, and connected to an air-pump which will be driven by steam-power. Near each lamp-post I place an oil-cistern, as described in my Patent No. 140,815, dated July 15, 1873, and each of these cisterns communicates with the air-vessel and with the burner of the lamp situated next to it. By this arrangement I am enabled to produce a uniform supply of oil to a large number of street-lamps distributed over an extensive area with little trouble and expense.

The cisterns B can be made large enough to hold a sufficient supply of oil for several months, so that the lamps can be supplied with oil for a long time simply by opening the communications between the cisterns and the air-vessel. As soon as these communications are closed the oil ceases to flow to the burners, and the flames are extinguished.

My apparatus may, however, be also used for lighting buildings, and in this case one air-vessel and one oil-cistern may be used, the cistern being made to communicate with all the burners which are to be supplied with oil. If the burners are situated at different levels above the oil-cistern the supply of oil to the several burners can be regulated by suitable stop cocks.

The great advantage of this arrangement is that the oil-cistern can be located outside the building which is to be lighted, and it may be placed under ground, so that the risk of fire is reduced to a minimum.

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

The combination, with a street-lamp post having a burner, of one or more oil-cisterns having discharge-pipes emanating from the oil-space of the same, and leading to the burner or burners, said cistern or cisterns being connected by an air-supply pipe having a stop-cock, said pipe extending from an air-chamber for holding compressed air located at a suitable distance from the cistern or cisterns, the compressed air being releasable at will from its chamber into the oil cistern or cisterns, and serving to force the liquid oil to the burner or burners, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of August, 1874.

R. V. DE GUINON.

Witnesses:

J. VAN SANTVOORD,

CHAS. WAHLERS.