

G. DESGEORGES.

Apparatus for the Storage of Petroleum.

No. 160,511.

Patented March 9, 1875.

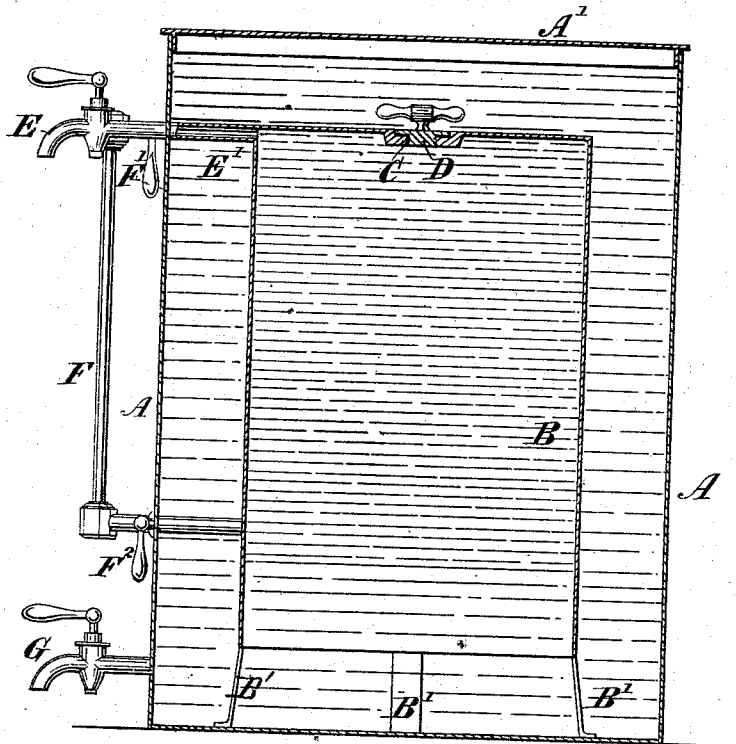


FIG. 1

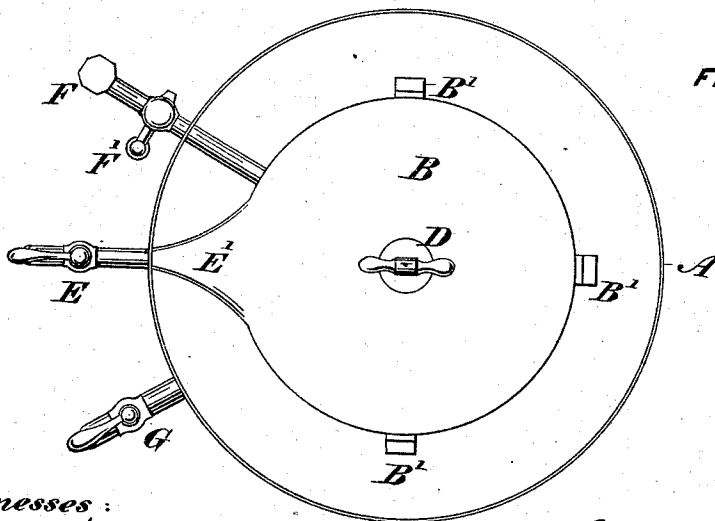


FIG. 2

Witnesses:

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IMPROVEMENT IN APPARATUS FOR THE STORAGE OF PETROLEUM.

Specification forming part of Letters Patent No. **160,511**, dated March 9, 1875; application filed December 8, 1874.

To all whom it may concern:

Be it known that I, GABRIEL DES GEORGES, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Apparatus for the Storage and Transportation of Petroleum; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of my invention is to store and hold petroleum and other oils inflammable at a low temperature, under the pressure of water surrounding the same, by means of a novel and cheap apparatus, which allows the stored oils to be conveniently handled and drawn off as desired, protects them from fire, and permits the oil to partially purify itself, by keeping it in contact with the water.

This apparatus consists of an outer vessel, provided near its bottom with a let-off valve; an inner concentric vessel, open at the bottom, with an opening in its top, closed with an air-tight removable plug; a let-off valve near its upper end, and an outside gage, all constructed and arranged to operate as hereinafter shown and described.

For fuller comprehension of my invention reference must be had to the annexed drawings, in which similar letters of reference indicate like parts, and where—

Figure 1 is a vertical sectional elevation of the apparatus. Fig. 2 is a plan view with the outer cover removed.

A is the outer vessel, made of any suitable material, and of any size and proportion thought desirable, either, as shown in the drawings, cylindrical, or of any other shape found convenient. A¹ is the cover, which may, however, in many instances, be dispensed with advantageously. B is the inner vessel, open at the bottom, and supported, as shown, on any suitable number of legs or stays, B¹. This vessel B is in shape similar to A, and, if cylindrical, is placed concentrically, or, with any other configuration, arranged so as to be on all sides equidistant from A. In the top of B is formed an aperture, C, which is closed by

means of a plug, D, made air-tight by a rubber washer. E is a valve for drawing off the contents of the vessel B, and formed, where it connects with B, preferably as shown at E¹ in Fig. 2. F is a gage, of any ordinary kind, for showing the amount of oil in the vessel B, and provided, as shown, with valves F¹ F². G is a discharge-valve for the water contained in the vessel A.

The manner in which my apparatus is operated is as follows: The cover A¹ having been removed, the plug D is taken out and the whole apparatus filled with water. A pipe, communicating with the tank or reservoir in which the petroleum is stored, is then connected with the opening C, and the valve G is then opened, allowing the water to run off, the petroleum entering the vessel B as fast as the water falls therein, the gage F showing its level. When the oil, by the discharge of the water, reaches the level desired, the valve G is shut, the plug D screwed into its seat, (thus shutting up the vessel B,) and the apparatus is then filled up with water, thus completely isolating the oil contained therein from contact with any source of danger.

The oil contained in B may be drawn off, as occasion requires, by means of the valve E, additional water being poured in as the oil is diminished in volume.

The gage F may also be cut off, at will, from connection with the vessel B by means of the valves F¹ F².

It will thus be seen that the oil is held by the pressure of the water in the upper part of the inner vessel B; that it can partially purify itself by precipitation; that the upper or purer portions can be first drawn off, and that it is perfectly protected from fire, and can be safely moved or transported.

It must be understood that I do not confine myself to the exact form of the apparatus, or precise relative position of its parts, or any means for introducing the petroleum, as these may be slightly altered to suit varying circumstances. For instance, the outer

vessel may, when a large quantity of oil is to be kept in store, be built of brick-work or masonry, instead of being formed of metal.

What I claim as my invention is as follows:

In apparatus for holding petroleum and similar articles in store, surrounded by and under the pressure of water, an inner open bottom vessel, B, provided with an opening, C, plug D, let-off valve E, and gage F, in com-

bination with an outer vessel, A, provided with let-off valve G, substantially as herein described.

Montreal, 27th day of November, A. D. 1874.

G. DES GEORGES.

Witnesses:

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