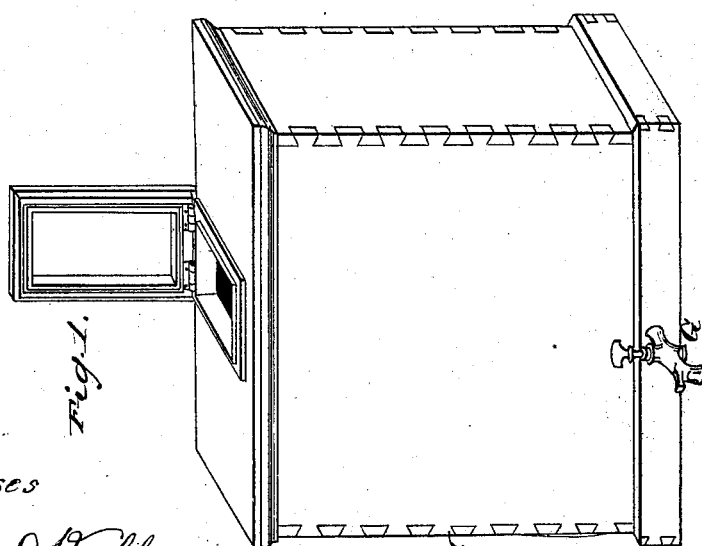
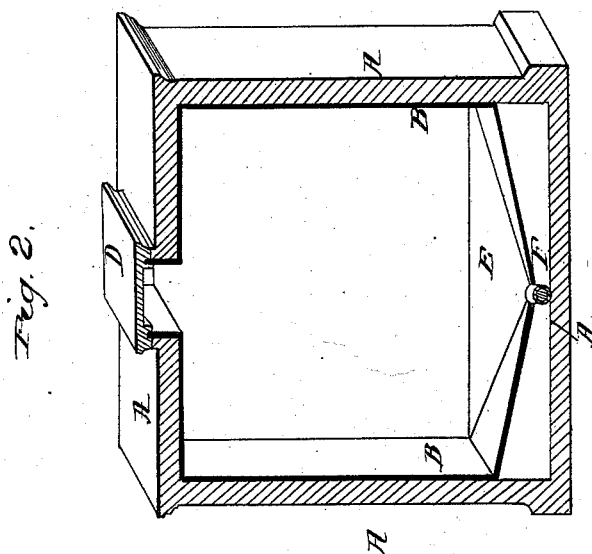


E. L. Allen,
Oil Vessel.
N^o 54,657. Patented May 8, 1866.



Witnesses

Charles H. Kellum
R. H. Kuller

Inventor

Edward L. Allen

UNITED STATES PATENT OFFICE.

EDWARD L. ALLEN, OF FAIR HAVEN, VERMONT.

IMPROVED VESSEL FOR PETROLEUM, &c.

Specification forming part of Letters Patent No. 54,657, dated May 8, 1866.

To all whom it may concern:

Be it known that I, EDWARD L. ALLEN, of Fair Haven, Rutland county, Vermont, have invented a new and useful Improved Safe for Holding Kerosene and other Volatile Oils; and I hereby declare that the following is a full, clear, and exact description of the said invention, reference being had to the accompanying drawings and the letters of reference marked thereon, which drawings make a part of this specification.

Like letters represent and refer to like or corresponding parts.

Figure 1 is a view of my improved safe, showing the exterior construction of the same. Fig. 2 is a vertical section of my said improved safe, showing the interior construction and the mode of operation thereof.

The nature of my invention consists in constructing a receptacle for kerosene and other volatile oils entirely of metal, substantially as hereinafter described, so as effectually to prevent loss by leakage or evaporation, and in entirely surrounding said metal receptacle with a tight wooden casing firmly joined at the corners, as hereinafter described, for the purpose of supporting the bottom and sides thereof and preventing the same from being parted or ruptured by the pressure of the oil therein contained.

It also consists in so constructing the bottom of said receptacle that it shall incline downward in a conical or other form or shape to a single point, at which point a discharge-pipe is inserted, in the manner and for the purposes hereinafter described and set forth.

Having thus described the nature of my said invention, and to enable others skilled in the art to which it relates to make and use the same, I will here proceed to describe the construction and operation thereof, which is as follows, to wit:

It has been ascertained by experience that kerosene and other oils of the same penetrating and volatile nature cannot be safely kept in barrels or any other wooden receptacles, because they will inevitably escape through the joints of the vessel and the pores of the wood, thus causing a heavy loss by leakage and evaporation. To avoid this I construct the inner receptacle, B, Fig. 2, of any metal suitable for that purpose, though I have used zinc as pref-

erable to any other. The bottom is constructed in the manner hereinafter described. For the sake of both economy and convenience, I construct this receptacle of plates of metal much too thin to bear the pressure of the fluid when filled without outside support. Entirely around this inner metal receptacle I construct the wooden box or casing A, Fig. 2, tightly inclosing the said metal receptacle and firmly joined at the corners by dovetails, as shown at H, Fig. 1. By this means the said wooden casing gives a firm and solid support to the sides and bottom of the receptacle and prevents any parting or rupture from the pressure of the oil when it is filled. This is different from a wooden receptacle lined with metal, inasmuch as the metal is not attached to the wood, but a perfectly tight reservoir of metal is first constructed and then the wooden casing built around it to support the same in the manner aforesaid.

My improved safe is principally intended for the use of dealers retailing kerosene or similar oils, and it is found that when such oils stand in large quantities for a length of time there is a sediment deposited which renders it necessary to frequently clean the vessel containing the same, and which corrodes metals with which it is in contact. To remedy this I construct the bottom of the said receptacle E, Fig. 2, in such a manner that it inclines downward from each side to the center in a conical shape or form, at which point I place the discharge-pipe F, to which is attached the stop-cock G, Fig. 1. This point need not be at the center, but may be at any other point in the bottom. It is sufficient, if the said bottom is so constructed, that it inclines to the entrance of the discharge-pipe; nor is this device confined to a square-shaped receptacle, but is equally applicable to one of a cylindrical or other different shape. The advantage of this arrangement is that, as the oil is drawn off from time to time through the discharge-pipe, the sediment, which always settles to the lowest point, is drawn off with it, thus preventing the corrosion of the metal and the necessity of cleaning. By this means, also, the safe can be entirely emptied without the necessity of tipping or handling the same.

The cover D, I construct according to the patent of M. Ludlum, granted July 5, 1859,

which shuts closely and prevents evaporation, and also prevents the offensive odor of the oil from escaping.

Having thus described the construction and operation of my said invention, what I claim as my invention, and desire to secure by Letters Patent, is—

1. The employment of the wooden box or casing A, in combination with the metal receptacle B and surrounding the same, in the manner and for the purposes hereinbefore described and set forth.

2. The employment, in a reservoir for the re-

ception of kerosene and other volatile oils, of the bottom E, so constructed as to incline downward in a conical or other shape or form to the point where the discharge-pipe F is inserted, substantially in the manner and for the purposes herein described and set forth.

In testimony whereof I have, on this 14th day of April, A. D. 1866, hereunto set my hand.

EDWARD L. ALLEN.

Witnesses:

CHARLES D. KELLUM,

- E. COWEN.