(No Model.)

E. E. HENDRICK.

Storage Tank.

No. 234,185. Patented Nov. 9, 1880.

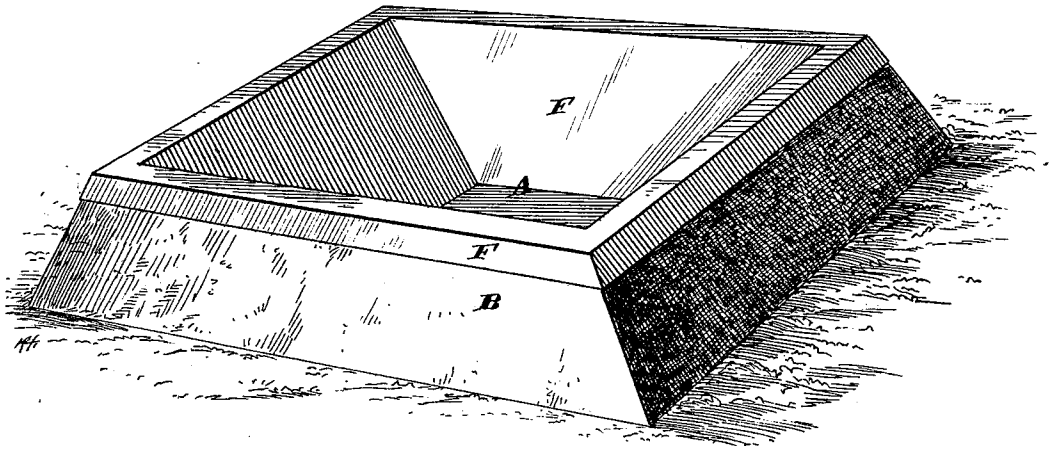


Fig. 1.

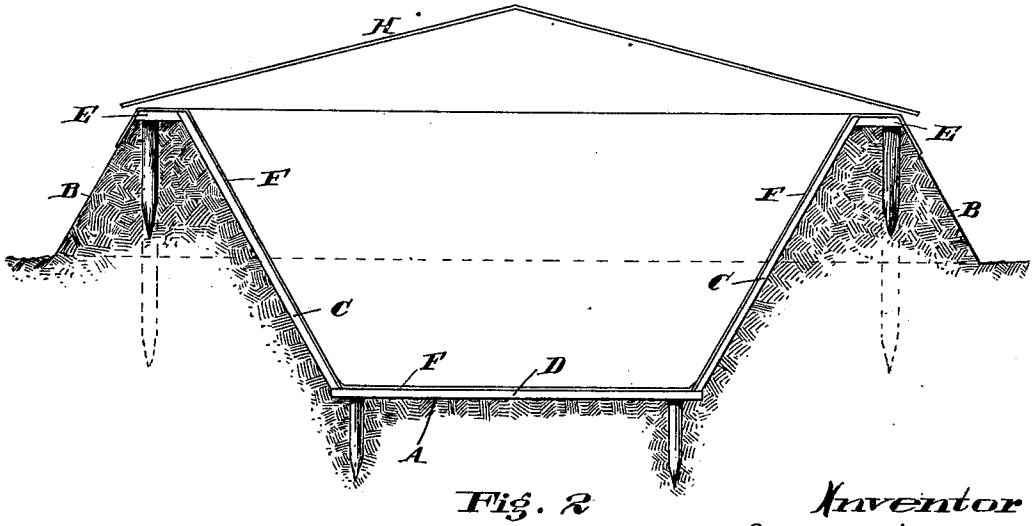


Fig. 2.

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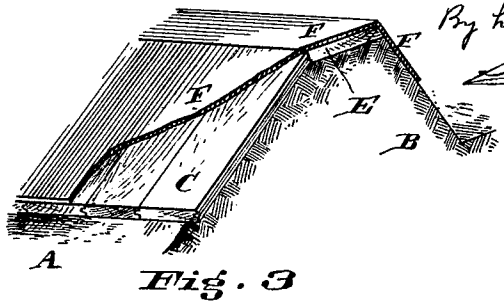


Fig. 3.

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UNITED STATES PATENT OFFICE.

ELI E. HENDRICK, OF CARBONDALE, PENNSYLVANIA.

STORAGE-TANK.

SPECIFICATION forming part of Letters Patent No. 234,185, dated November 9, 1880.

Application filed April 3, 1880. (No model.)

To all whom it may concern:

Be it known that I, ELI E. HENDRICK, of the city of Carbondale, county of Lackawanna, and State of Pennsylvania, have invented an Improvement in Storage-Tanks, of which the following is a specification.

My invention relates to storage-tanks designed to hold the excess in the yield of crude petroleum over the consumption; and it consists in forming an excavation in the ground and lining it with suitable metallic material to contain the oil, as more fully set forth in the specification, shown in the accompanying drawings, and referred to in the appended claims.

The object of my invention is to construct a storage-tank to contain the excess of petroleum, which shall be cheap to construct, durable in its construction, and effectual in its purpose.

In the drawings, Figure 1 is a perspective view of a tank embodying in it my invention. Fig. 2 is a cross-section of same. Fig. 3 is an enlarged perspective view, showing the method of construction preferred.

After selecting, if possible, a level or nearly level site, the earth is excavated to any desirable depth, forming a hole, A, and to save necessary work the earth taken out of the excavation A is used to build up the sides B. This will increase the capacity of the tank without extra work.

The inner wall and also the exterior walls are preferably made sloping to prevent the sides B breaking down. When this is done, if desired, the piles shown in Fig. 2 may be driven in to form a solid bottom and top ridge; but this is not necessary to my invention. The ground being smoothed off, the metallic lining F may be laid directly upon the same if the ground be sufficiently hard, or if it be soft the planking D may be laid over the bottom, and then the planking C C, forming the sides to the interior. The planking E may then be laid upon the top ridge all around. When this is done sheets of lead F or other cheap material of analogous character are then laid upon the above-described planking or upon the ground, and the sheets joined together, forming liquid-tight seams, by any of the well-known methods used to join sheets of such materials. This lining F covers the entire interior of the tank, and, if desired, it can be extended over the top ridge and extend some distance down the outside, as shown in Figs. 2 and 3.

A roof, H, of any desirable construction can be placed over this tank in the usual manner. This tank will take the place of the extension sheet-iron tanks now in use, and which cannot be moved from one place to another without great expense. Should the oil region run dry and it become necessary to move to other regions, the roof can be taken down, the lead lining taken out, and all of the planking removed, leaving nothing but the hollow or excavation in the earth; hence this tank might almost be termed a "portable tank."

With large iron tanks the side sheets of iron must withstand enormous strains, and hence must be firmly constructed, whereas with my improved tank there is no strain upon the lead lining, since it is supported by the solid earth.

By this construction of a tank there is no expensive wooden tank to construct, which must be strongly hooped to resist the enormous outward pressure of the oil, and besides a tank of this construction is almost or entirely in the ground, and thereby lessens the chance of being struck by lighting, and should it be struck, little or no damage is done, which is not so of tanks above ground.

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

1. A tank for storing crude petroleum, &c., consisting of an excavation in the earth lined with sheet-lead or analogous material, substantially as and for the purpose specified.

2. A storage-tank composed of an excavation in the earth, lined with planking and supporting an interior lining of sheet-lead, substantially as and for the purpose specified.

3. In a storage-tank for holding crude oils, an excavation, A, and embankment B, in combination with supporting-piles, planking D, C, and E, sheet-lead lining F, and roof H, substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

ELI E. HENDRICK.

Witnesses:
BEN. GREENSTED,
D. A. BASSETT.