

F. K. PLUMBLY.  
Storing-Tanks for Petroleum.

No. 217,955.

Patented July 29, 1879.

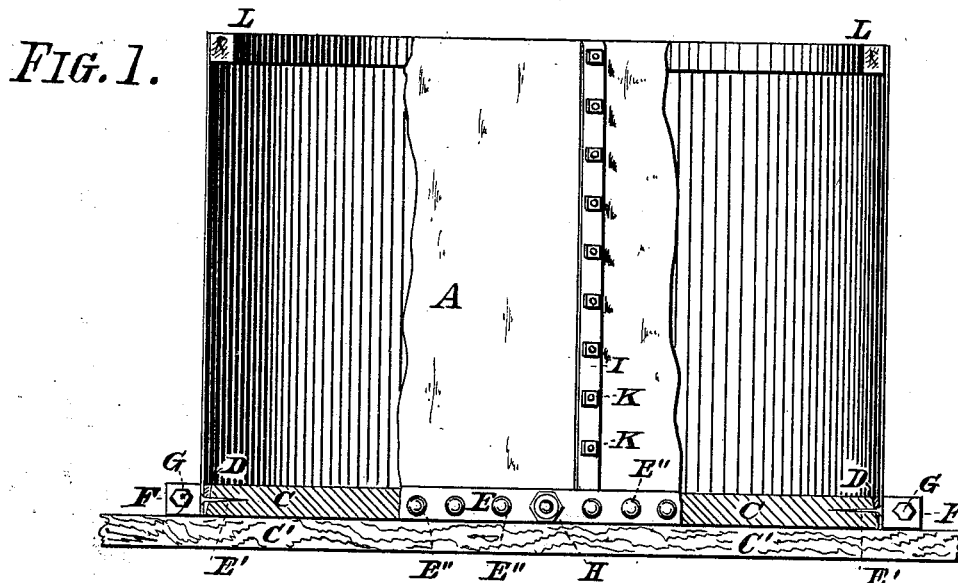


FIG. 2.

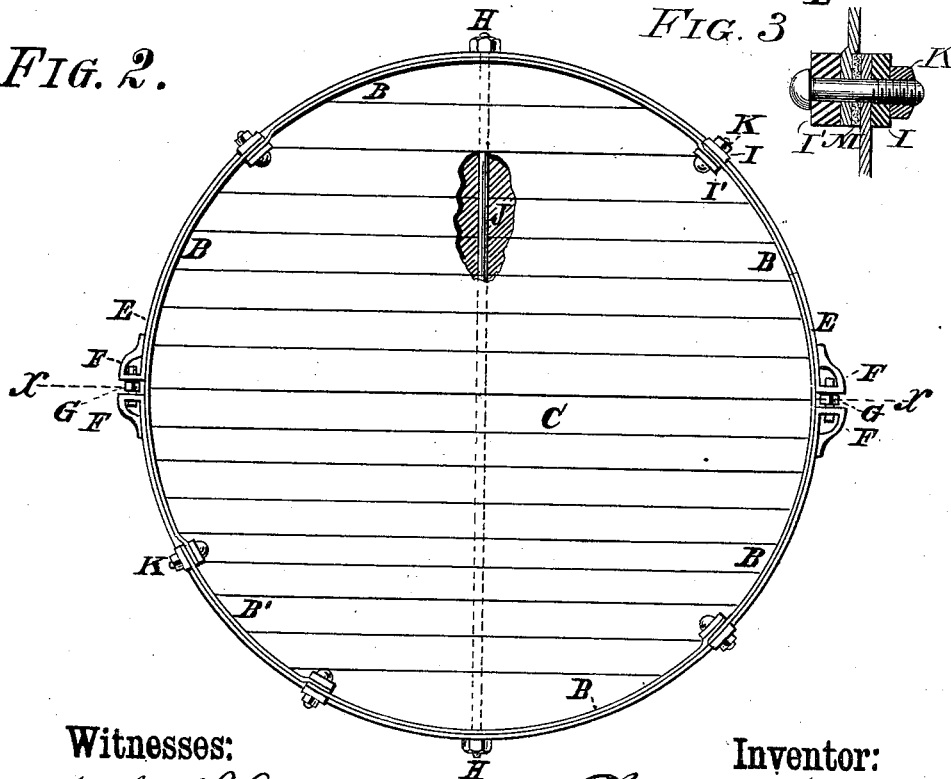
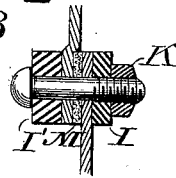


FIG. 3.



Witnesses:

Michael J. Stark.  
Frank Hirsch

Inventor:

Fred. K. Plumbly  
by Michael J. Stark  
att'y.

# UNITED STATES PATENT OFFICE.

FREDERIC K. PLUMBLY, OF BUFFALO, NEW YORK.

## IMPROVEMENT IN STORING-TANKS FOR PETROLEUM.

Specification forming part of Letters Patent No. **217,955**, dated July 29, 1879; application filed November 7, 1878.

### *To all whom it may concern:*

Be it known that I, FREDERIC K. PLUMBLY, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements on Storing-Tanks for Petroleum; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This present invention refers, generally, to improvements on storing-tanks for coal-oil, &c.; and it consists in the peculiar arrangement of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claims.

In the drawings already referred to, which serve to illustrate my invention more fully, Figure 1 is an elevation of a tank, parts being shown in section. Fig. 2 is a plan view, and Fig. 3 is an enlarged sectional view, showing sections of the shell united, with packing interposed.

Like parts are designated by corresponding letters of reference in both figures.

This tank is constructed, in the main, in accordance with my Letters Patent No. 207,301, dated August 20, 1878—that is to say, it consists of a metallic shell, A, composed of sections B, secured together on their laps by means of bolts K passed through metallic or other slats I I' and the sheathing, a layer of elastic material, M, being interposed between the overlapping edges of the sections of the shell A to make tight joints.

This shell or sheathing I place around a bottom, C, and fasten it to said bottom by means of nails, spikes, &c., E', after which I pass a band, E, around the shell, and draw said band tight by means of a right and left screw-bolt, G, having its nuts or threads in the lugs F on said band. The bottom C is made of planks, in the usual manner, and drawn tight by a screw-rod, J, passed centrally through said planks, the sheathing, and the tightening-band E, nuts H being placed onto said rod to draw the parts together. In the upper part of the

sheathing I place, if desired, a rim, L, using the wedges described in my Letters Patent of May 14, 1878, or the screw-expanding device described in my patent of August 20, already mentioned.

This tank is placed upon the usual false bottom C' to protect the bottom proper, C, against the influences of moisture and dampness, which, if the bottom is left unprotected, soon rot the said bottom, and thus render expensive repairs necessary, while the removal and renewal of said false bottom are a comparatively cheap matter.

To put the tank together I first arrange the bottom of proper size and thickness, and then place the sheathing around the same, merely fastening it to the bottom sufficiently to retain a perpendicular position, and leaving the sections so as not to encircle the entire bottom. Now I draw the tightening-band E tightly around the bottom and sheathing to contract the same as much as possible, and then mark the last row of holes in the overlapping joint of the last section, after which I take the last section out to perforate the same. In this manner I obtain a shell that fits the bottom as tightly as possible, so that but little, if any, calking (D, Fig. 1) needs to be done to make the lower part of the shell, at its junction with the bottom, perfectly tight. In Fig. 2 I have marked the last section, B', which usually will be narrower than the remaining sections, B.

The band E is preferably made in two sections or more, because it will draw better than a single band applied around the periphery of the shell. By applying the band, as described, directly around the sheathing and the bottom, I can produce a tank of superior stiffness and tightness at less expense than any other tank with which I am acquainted.

It will be readily observed that, on account of my nailing the shell to the bottom before applying the band E, said nails form a stop for the oakum which is used in calking, and thereby prevent the said oakum from being passed through. After the tank is perfectly erected I use screws or additional nails or spikes E'' through the band and sheathing to retain the parts in juxtaposition.

Having thus fully described my invention, I claim as new and desire to secure to me by Letters Patent—

1. The combination, with the bottom C, of the shell A, tightening-band E, and the transverse bolt J passed through and binding the specified parts, as and for the object stated.

2. The combination, with the bottom C, of the shell A, composed of sections, as described, the tightening-band E, composed of sections, and having the lugs F with the right and left tightening-screw G, and the transverse bolt J,

as stated, the shell being first secured to the bottom by the nails E', and the band E and shell A together by the nails, screws, &c., E'', as stated.

In testimony that I claim the foregoing as my invention I have hereunto set my hand and affixed my seal in the presence of two subscribing witnesses.

F. K. PLUMBLY. [L. S.]

Attest:

MICHAEL J. STARK,  
FRANK HIRSCH.