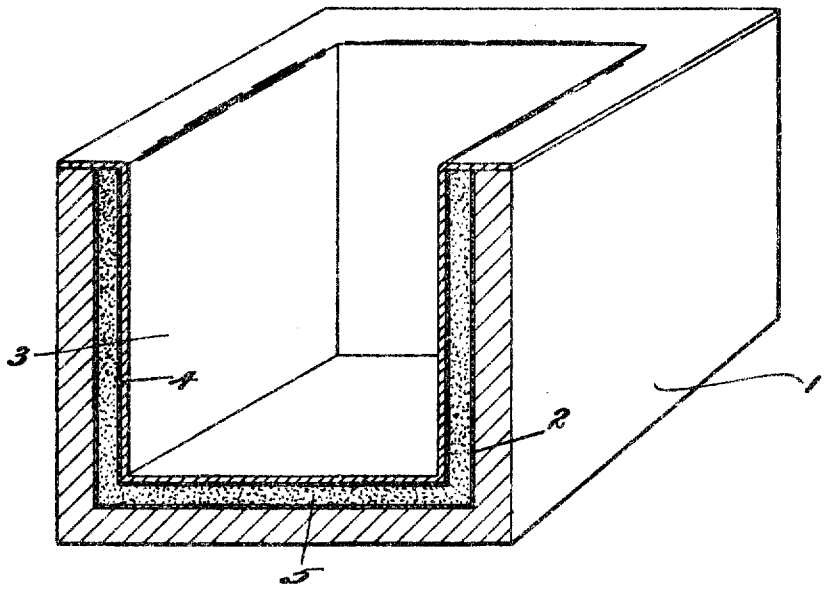
T. A. WILLARD.

STORAGE BATTERY TANK.

APPLICATION FILED MAY 14, 1907.

942,990. **Patented Dec. 14, 1909.**

Fig. 1.



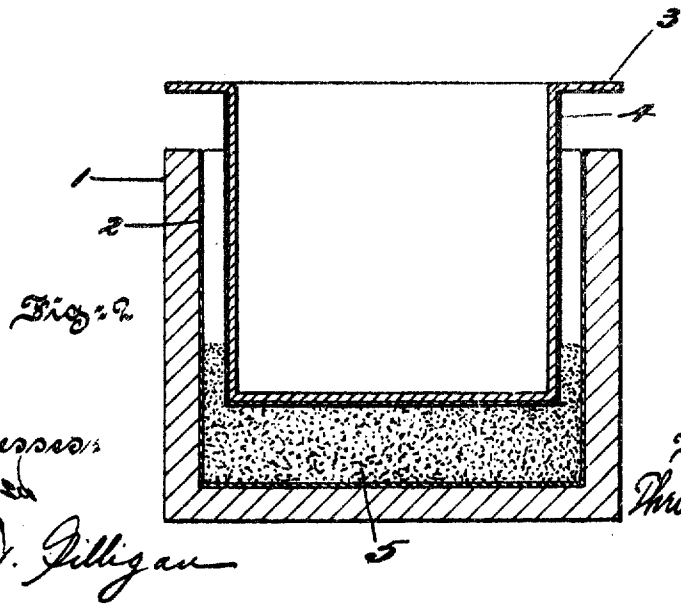


Fig. 2.

Witnesses:

K. W. Gilligan

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UNITED STATES PATENT OFFICE.

THEODORE A. WILLARD, OF CLEVELAND, OHIO.

STORAGE-BATTERY TANK.

942,990. Specification of Letters Patent. Patented Dec. 14, 1909.

Application filed May 14, 1907. Serial No. 373,586.

To all whom it may concern:

Be it known that I, THEODORE A. WILLARD, a citizen of the United States, and a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Storage-Battery Tanks, of which the following is a specification.

Storage battery tanks are usually made of wood and lined with lead and for certain purposes it is desirable to coat the abutting surfaces of the lead and wood with material such as pitch or petrolyte. The latter is of jet black color. Its melting point is from 220° to 230° F. and its specific gravity approximates 1. Petrolyte is a product of coal tar similar to pitch and much like common asphalt. It is furnished to the market by oil refiners in three grades, one melting at 180° F., one at 220° F., and one at 250° F. The one melting at 180° F., is well adapted for my use. These materials afford the requisite protection, but they cause the lead and wood to adhere in such a way that it is practically impossible to separate them without destroying them for the purpose of making repairs.

It is the principal object of the present invention to obtain the advantages incident to the use of pitch or petrolyte, or some other similar material, and at the same time to provide for the ready separation and reassemblage of the wooden and lead parts of the tanks.

To this and other ends hereinafter set forth the invention stated in general terms comprises the improvements to be presently described and finally claimed.

The nature, characteristic features and scope of my invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, and in which—

Figure 1, is a view partly in section illustrating a tank embodying features of the invention, and Fig. 2, is a view illustrating the manner of assembling the parts of the tank.

In the drawings 1, is the wooden tank or exterior casing. 2, is a coating of pitch, petrolyte, or the like, applied to its inner face. This coating 2, has a relatively high melting point and in some instances is somewhat porous, but it is efficient for the purposes intended. 3, is the lead lining and 4, is a coating similar to the coating 2, applied to its exterior.

5, is a layer interposed between the wooden casing and the lead lining and it consists of material of comparatively low melting point as paraffin, which serves to close any pores that may exist in the coatings 2 and 4.

To assemble the parts, the wooden casing 1, with its coating 2, receives melted paraffin, whereupon the lead lining 3, with its coating 4, is inserted into the casing 1, and thus the melted paraffin is caused to flow and fill the space between the parts 1 and 3. This is represented in Fig. 2. To remove the lead lining the paraffin may be sufficiently softened by the application to it of heat, which may be accomplished by the use of hot water. When the paraffin is softened the lining may be lifted out of the wooden casing and the parts conveniently repaired or replaced by new ones. If it were not for the paraffin or low melting layer 5, the parts could not be separated because the melting point of the other coatings is so high that in attempting to soften them such heat would have to be applied as would injure the parts of the tanks.

What I claim is:

1. A storage battery tank comprising an exterior wooden casing having an internal adherent protective coating of high melting point, an internal lead lining having an external adherent protective coating of high melting point, and a layer interposed between the protective coatings of the lead and wooden parts and of relatively low melting point, whereby it can be softened to permit of their separation each retaining its coating of high melting point, substantially as described.

2. A storage battery tank comprising an exterior wooden casing having an internal coating of petrolyte, an internal lead lining having an external protective coating of petrolyte, and a layer of paraffin interposed between the coatings of the lead and wooden parts whereby they may be assembled and separated each retaining its coating of petrolyte, substantially as described.

3. A storage battery tank comprising an exterior wooden casing and an internal lead lining, and having a plurality of interposed layers of protective material between them, said layers being, with respect to each other, of relatively high and low melting points, substantially as described.

In testimony whereof I have hereunto signed my name.

THEODORE A. WILLARD.

Witnesses:
EDSON B. BAUDER,
SETH. A. LEONARD.