

(No Model.)

C. THERYC & A. OBLASSER.

BOX FOR SECONDARY BATTERIES, ELECTRIC CELLS, &c.

No. 502,643.

Patented Aug. 1, 1893.

FIG. 1

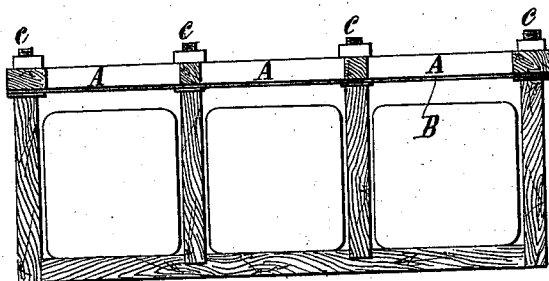


FIG. 3.

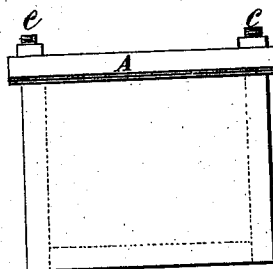
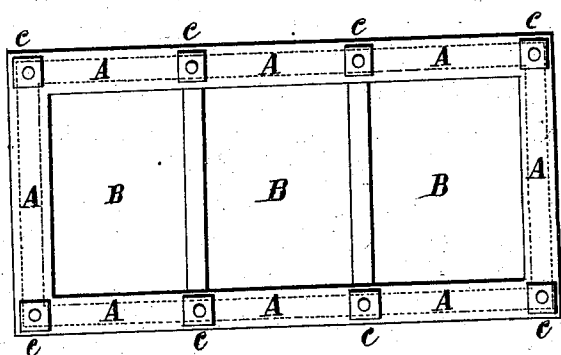


FIG. 2.



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UNITED STATES PATENT OFFICE.

CHARLES THERYC AND ALFRED OBLASSER, OF PARIS, FRANCE.

BOX FOR SECONDARY BATTERIES, ELECTRIC CELLS, &c.

SPECIFICATION forming part of Letters Patent No. 502,643, dated August 1, 1893.

Application filed December 1, 1892. Serial No. 453,775. (No model.) Patented in France April 26, 1892, No. 221,204; in Switzerland October 24, 1892, No. 6,030; in Belgium October 24, 1892, No. 101,872; in Italy October 25, 1892, XXVII, 32,886; in Spain October 26, 1892, No. 13,906, and in England October 26, 1892, No. 19,242.

To all whom it may concern:

Be it known that we, CHARLES THERYC and ALFRED OBLASSER, citizens of the Republic of France, and residents of Paris, France, have
5 invented certain new and useful Improvements in Boxes for Secondary Batteries, Electric Cells, &c., which are fully set forth in the following specification, and for which we have obtained Letters Patent in France, No. 221,204,
10 dated April 26, 1892; in Spain, No. 13,906, dated October 26, 1892; in Switzerland, No. 6,030, dated October 24, 1892; in Italy, XXVII, 32,886, dated October 25, 1892; in Belgium, No. 101,872, dated October 24, 1892, and in
15 England, No. 19,242, dated October 26, 1892.

The invention has reference to the construction of boxes, vessels or tanks for electric batteries, particularly for secondary or storage batteries, and consists (first) in the application to such boxes, vessels or tanks of an
20 interior coating adapted to render the same absolutely tight, and impervious, and (second) in closing such boxes, vessels or tanks, with a special transparent covering as hereinafter
25 pointed out.

In the accompanying drawings, Figure 1, is a longitudinal section; Fig. 2, a top view and Fig. 3, an end elevation, of a battery tank or vessel, illustrating the practical embodiment
30 of our invention.

The coating which we use for battery vessels, as well as for other receptacles that are to be water tight, is a substance which is adhesive, insulating and insensible to electrical
35 influences, and unattackable by acids. We manufacture this coating by treating cellulose with nitric or sulphuric acid to which may be added camphor or any similar substance, from ten to forty per cent. according to circumstances. This mixture dried in the open
40 air, in an oven or by compression is then dissolved by ethers, by acetic or pyroligneous acid or by acetone or other solvent.

To obtain good results we prefer to proceed
45 as follows:—To the cellulose agglomerated in a vessel by means of camphor we add one liter of solvent (acetone, crystallizable acetic acid, acetic ethers, alcohol at 90° mixed with

one third of acetone, or acetic acid or ethers) for four hundred grams of agglomerated cellulose. After mixing for from five to ten
50 minutes the agglomerated cellulose is allowed to macerate for twenty four hours. The paste thus obtained is not ready for immediate use. It is lacking in consistency, is not sufficiently
55 elastic, and contains too much water. To remedy these defects it is necessary to force the paste several times through a fine sieve, or subject it to a prolonged stirring or agitation. The removal of the water renders the
60 paste more adhesive. The same results may be obtained by dissolving by the above described process cuttings, clippings or other waste substances having a cellulose base, instead of cellulose itself. To employ the com-
65 position thus obtained, we apply it with a brush, roller or in any suitable way, on the bottom and walls of the receptacle, which may be of wood, fiber, pasteboard, or tissue, or any other suitable material. By mixing
70 our coating with certain substances, an agglomerate susceptible of molding may be obtained. Such agglomerate is composed of a paste, of any suitable solid substance such as asbestos, glass or other suitable minerals,
75 broken or pulverized, saw-dust, cork shavings or powder, metallic oxides, starch, resinous substances, pulverized coal. In these conditions instead of making a wooden or other vessel water-proof, the vessel or recipient may
80 be made directly of the compound by molding.

The system of closing which we employ for our receptacle is as follows:—A transparent sheet of celluloid B is put under a frame A,
85 which closes the top of the walls and partitions of the box. This cover is fixed upon the box by bolts C, of cellulose, elastic or other analogous material, and in the joint may be placed a packing of soft rubber. A light cover is thus obtained which will allow
90 of the examination of the interior and a tight joint is assured without the use of metal, which is an advantage. Such a closing means may be used with any other receptacle which is intended to retain corrosive liquids.
95

Having now fully described our invention,

what we claim, and desire to secure by Letters Patent, is—

A battery tank or vessel provided with a continuous lining of agglomerated cellulose
5 and hermetically closed by a cover of transparent celluloid, substantially as described.

In testimony whereof we have signed this

specification in the presence of two subscribing witnesses.

CHARLES THERYC.
ALFRED OBLASSER.

Witnesses:

ROBT. M. HOOPER,
VICTOR BARBANCE.