No. 737,423.

PATENTED AUG. 25, 1903.

M. LAERNOES & J. DUNN.

CATHODE FOR ELECTRIC DETINNING BATHS.

APPLICATION FILED NOV. 25, 1902.

NO MODEL.

Fig: 1.

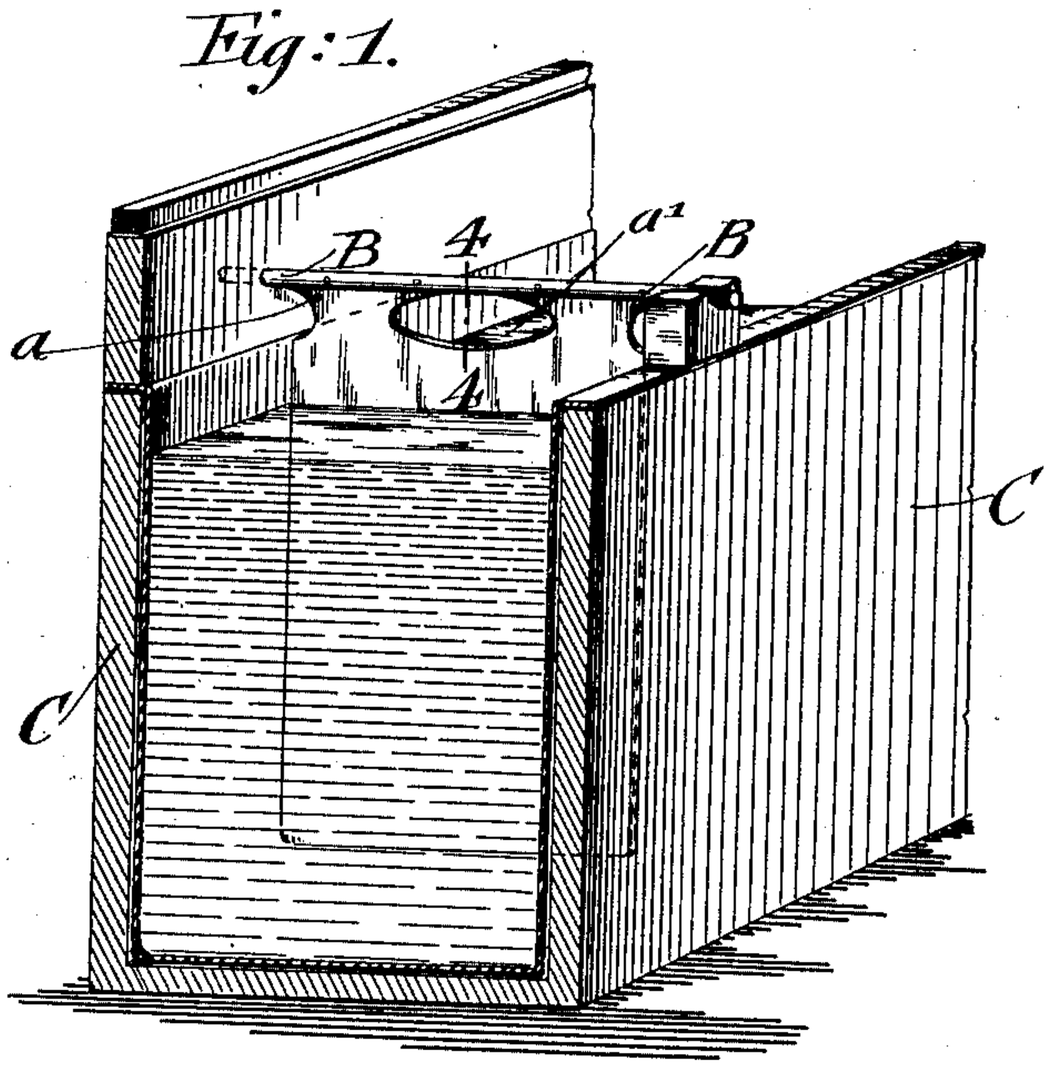


Fig: 2.

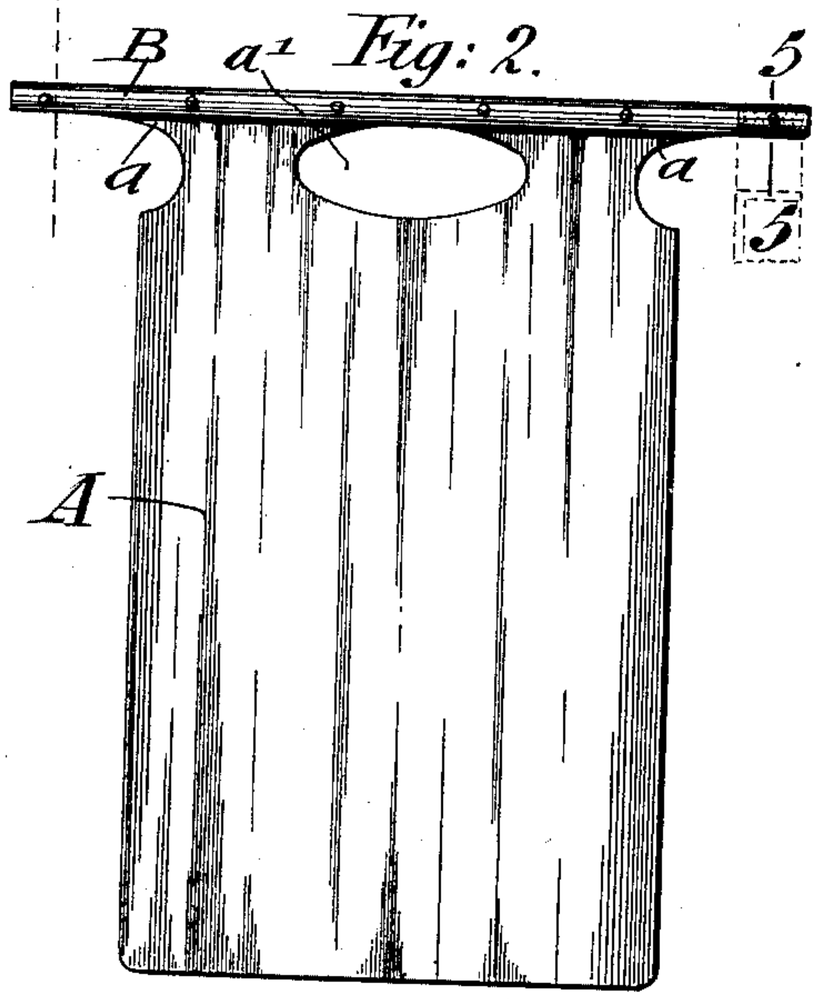


Fig: 3.

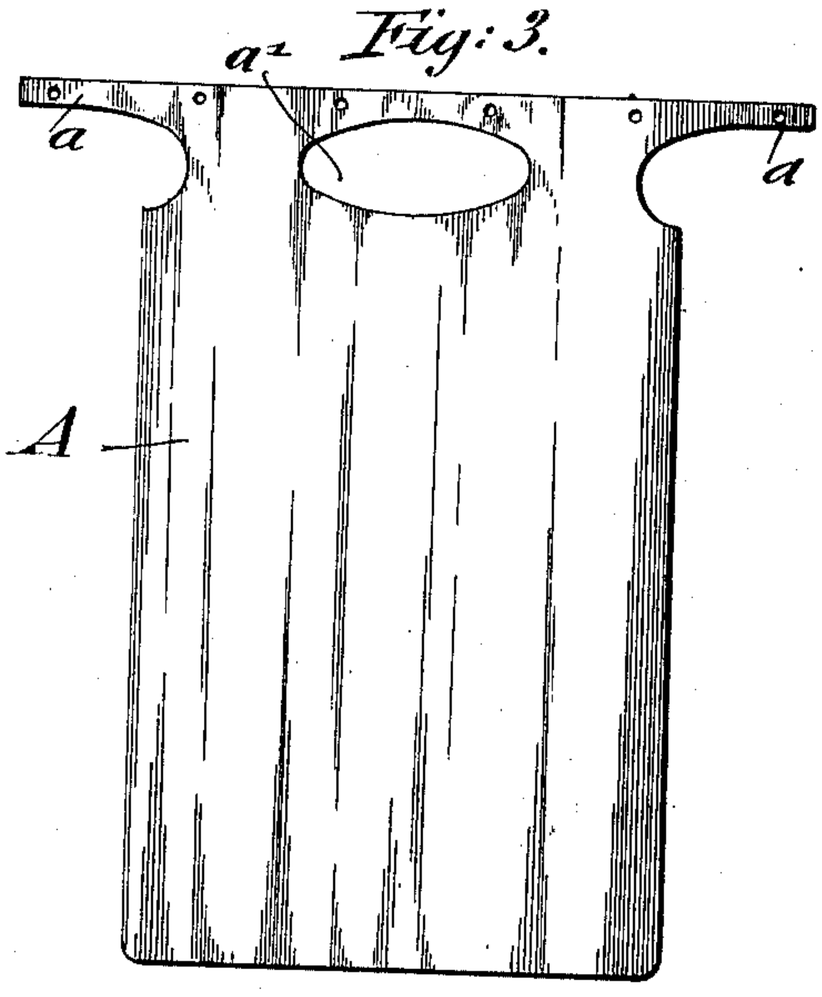


Fig: 4.

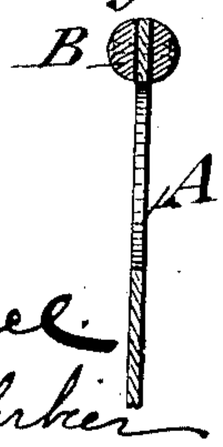
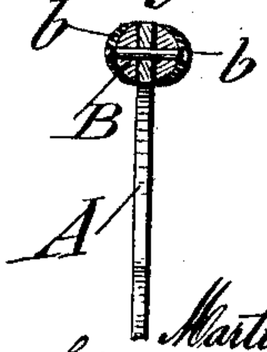


Fig: 5.



Witnesses
C. P. Goepel.
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Inventors
Martin Laernoes and John Dunn
By his Attorneys
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No. 737,423. Patented August 25, 1903.

UNITED STATES PATENT OFFICE.

MARTIN LAERNOES AND JOHN DUNN, OF STREATOR, ILLINOIS, ASSIGNORS TO THE VULCAN DETINNING COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

CATHODE FOR ELECTRIC DETINNING-BATHS.

SPECIFICATION forming part of Letters Patent No. 737,423, dated August 25, 1903.

Application filed November 25, 1902. Serial No. 132,721. (No model.)

To all whom it may concern:

Be it known that we, MARTIN LAERNOES, a citizen of the Kingdom of the Netherlands, and JOHN DUNN, a citizen of the United States of America, both residing in Streator, in the county of Lasalle and State of Illinois, have invented certain new and useful Improvements in Cathodes for Electric Detinning-Baths, of which the following is a specification.

The cathode-plates for the baths used for detinning tin scraps and clippings were heretofore made of metallic tin plates which were rivited to iron suspension-straps which were made hook-shaped at the upper ends and suspended from transverse rods supported on the supporting side walls of the vat. This construction prevented the convenient removal of the tin oxid deposited on the cathode, which after the cathodes are removed from the vat is removed by suitable scrapers. The iron suspension-rods formed an obstruction to the scrapers and rendered the cleaning of the plates difficult, especially near the suspension-straps, and subjected the plates to considerable wear, so that their durability was impaired.

This invention relates to an improved cathode for detinning-vats, in which the plate is made of sheet iron or steel and attached directly to the transverse supporting-rod by riveting the cathode to the suspension-rod, so that there is no obstruction to the scraping-tool when removing the tin deposited thereon, by which improvement a greater durability is imparted to the plate; and for this purpose the invention consists of a cathode-plate for detinning-vats which comprises a sheet iron or steel plate provided with an elongated upper end and a hand-hole between the extensions of said end, said upper elongated end of the plate being riveted directly to the transverse suspension-rod, which is formed of two semicircular pieces that are riveted to the upper ends of the cathode-plate, one end being provided with exterior metallic conductors for the current, as will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a perspective view of our improved cathode-plate, shown as suspended in a vat for detinning tin scraps. Fig. 2 is a side elevation of the cathode-plate drawn on a larger scale. Fig. 3 is a side elevation of the sheet iron or steel plate itself, shown as detached from the transverse suspension-rod; and Figs. 4 and 5 are vertical transverse sections, respectively, on lines 4 4, Fig. 1, and 5 5, Fig. 2.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a cathode-plate which is supported in the vat C, used in the detinning process, and made of sheet iron or steel of any suitable gage and provided with lateral extensions *a* and a hand-hole *a'* between said extensions. The upper end of the plate is brazed or riveted to two semicircular iron bars that extend along to the full length of the extensions *a a*, the iron bars extending along the upper edge of the hand-hole *a'*, so as to serve, in connection with the same, as a handle for removing or submerging the cathode-plate in the baths. In place of the semicircular bars any other cross-section may be used for the same. One end of the handle-bar rod B is provided with exterior sheet-copper facings or shells *b*, (shown in Fig. 5,) which are soldered on with tin and which serve to convey the electric current passing through the cathode-plate and from the same to the bath and thence into the tin-scrap suspended in baskets for detinning.

The advantages of our improved cathode-plate are, first, that the tin products deposited thereon can be conveniently scraped off from the plate without injuring the same, and, secondly, that the cathode-plate can be handled with great facility by the arrangement of the hand-holes and use of the transverse suspension-bar as a handle-bar for removing the plate.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A cathode-plate for detinning-baths consisting of a plate of sheet iron or steel provided at the upper end with a hand-hole, a

suspension rod or bar formed of two sections and attached to the upper edge of said plate, and an exterior facing or shell at one end of said bar, substantially as set forth.

2. A cathode-plate for detinning-baths, consisting of a plate of sheet iron or steel provided at the end with extensions, a hand-hole between said extensions, and a suspension rod or bar composed of two sections riveted to said plate and extensions, one end of said bar or rod being provided with copper facings or shells, substantially as set forth.

In testimony that we claim the foregoing as our invention we have signed our names in presence of two subscribing witnesses.

MARTIN LAERNOES.
JOHN DUNN.

Witnesses:
H. W. LUDINS,
HERMAN A. NATER.