

No. 639,811.

Patented Dec. 26, 1899.

H. L. HAAS.
ELECTRODEPOSITING ANODE.

(Application filed Jan. 26, 1898.)

(No Model.)

Fig. 1.

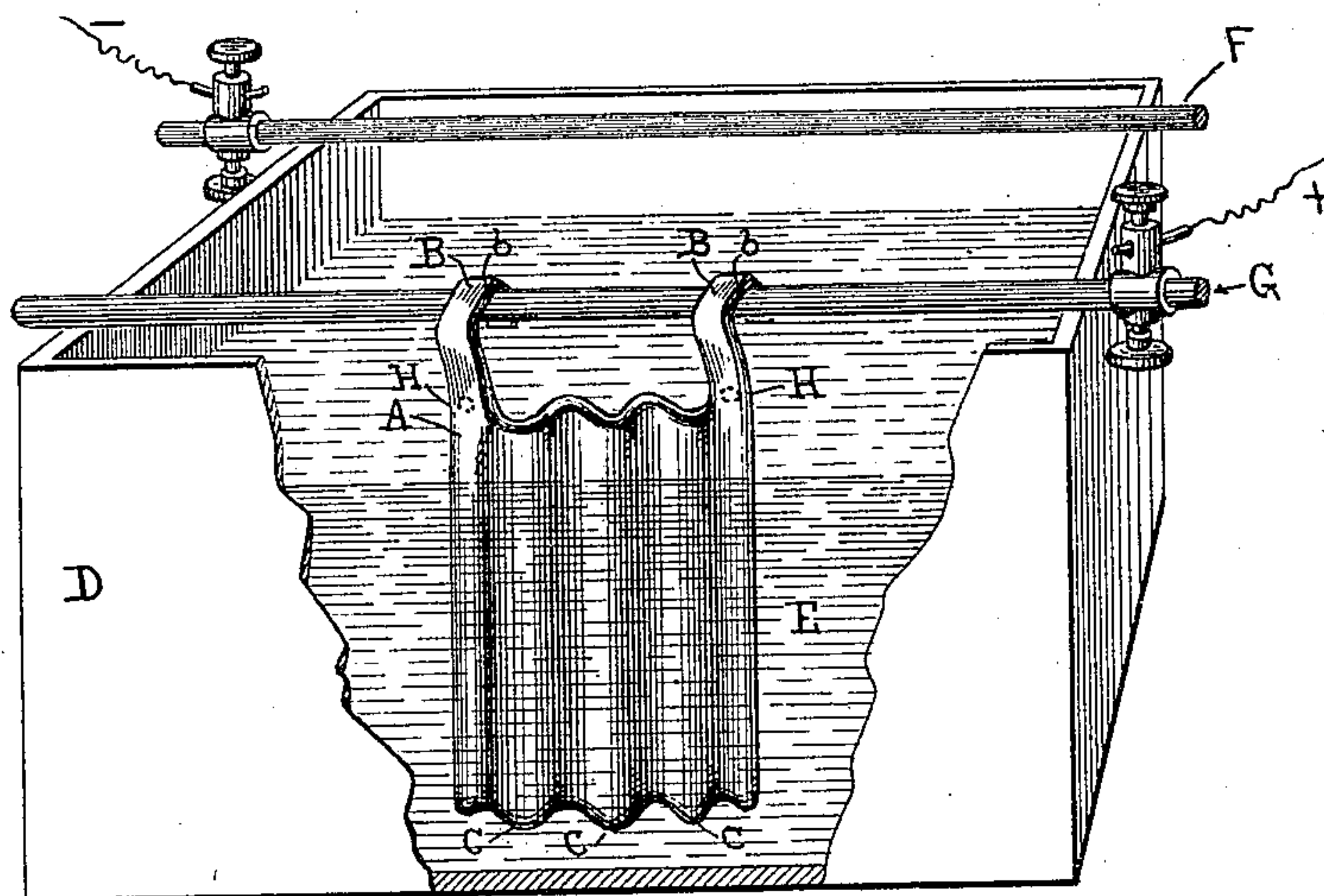
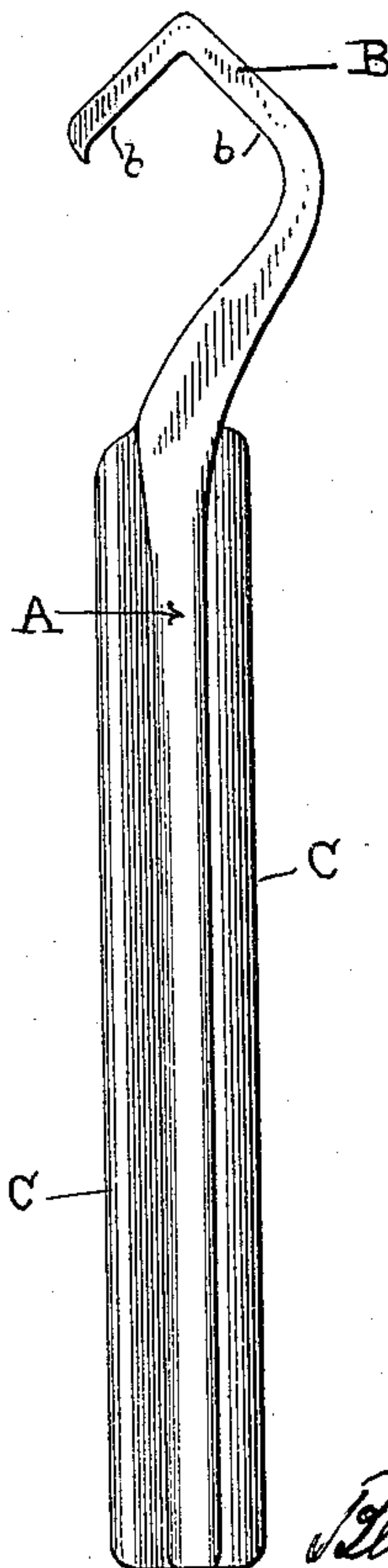


Fig. 2.



WITNESSES:

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HARRY L. HAAS, OF NEW YORK, N. Y., ASSIGNOR TO THE ZUCKER & LEVETT & LOEB COMPANY, OF SAME PLACE.

ELECTRODEPOSITING ANODE.

SPECIFICATION forming part of Letters Patent No. 639,811, dated December 26, 1899.

Application filed January 26, 1898. Serial No. 667,960. (No model.)

To all whom it may concern:

Be it known that I, HARRY L. HAAS, a citizen of the United States, and a resident of the borough of Manhattan, in the city, county, and State of New York, have invented certain new and useful Improvements in Electrodepositing Anodes, of which the following is a full and accurate description, reference being had to the accompanying drawings, which show one form of my invention.

One object of my invention is to provide an anode for electrodepositing purposes, with one or more hooked hangers integrally secured to and formed of the same piece of metal, whereby a very efficient anode of high electric conductivity is economically made, and a second object is to provide the bearing-surfaces of the hooked hanger with two or more flat faces, whereby the conducting-surface between the hanger and rod is increased.

My invention consists in providing an anode with a hook or suspending device having flat and comparatively broad contact-faces, both of which are disposed at an angle with relation to each other and to the plate.

Referring to the accompanying drawings, Figure 1 illustrates an electrodepositing apparatus, part being broken away to show the preferred form of my new anode; and Fig. 2 shows a side view of the anode of Fig. 1.

A indicates the body or plate of the anode.

B B indicate hooked hangers formed with the body or plate.

The body of the anode is provided with lengthwise corrugations C. Corrugating the body results in exposing to the action of the electric current and the electrolyte a greater surface than would be presented by an anode having a plane flat surface, the advantages resulting therefrom being set forth in Letters Patent of the United States No. 564,748, dated July 23, 1896, and granted to me.

D represents the box, containing the electrolyte or solution E in which the anode is immersed.

F is the rod from which the article to be plated is to be suspended, and G is the rod which supports the anode.

In the drawings I have shown a preferred form of plate or body, as A, and one or more suspending-hangers B, formed or cast integrally with the plate, a construction which prevents leakage of current at any point from the upper end of the hanger to the electro-

lyte, and there is no liability of electrodeposition of the metal of the hanger upon the plate.

Prior to my invention electrodepositing anodes were generally suspended by means of separate links or hooks depending from the rod G and with the lower hooked ends fitted in openings, as H in Fig. 1. The preferred form of hook, as shown in the drawings, has two inner contact-surfaces *b b*, disposed at an angle with relation to each other and with relation to the body of the anode. When suspended from a bar, both contact-faces *b b* will bear against the bar G, thus providing two points of contact between the bar and the anode. It has been found with prior forms of hangers that a sufficient contacting surface between the bar and the hanger is not afforded, and there is a leakage of current at and near the contacting points. In the case of my invention the two flat faces *b b* bear down upon the bar from both sides, and the contacting area of hangers and rod is greatly increased.

I am aware of United States Patents No. 310,533, to Moebius, and No. 226,616, to Kleinhans, and do not claim the anodes described and shown therein. The Moebius patent shows an anode having a small flat extension at each edge of the plate for supporting the anode. The Kleinhans patent shows an anode having hooked upper and lower ends, the extremity of the hook and the back thereof being at right angles to each other and to the plate.

What I claim, and desire to secure, is—

1. An anode for electroplating, consisting of a plate or body and an integral upwardly-extending hanger provided with a suspending-hook having adjacent flat contact-faces disposed at an angle with relation to each other and to the plate, substantially as and for the purpose described.

2. An anode for electroplating, consisting of a plate or body and a hanger provided with a suspending-hook having adjacent flat contact-faces disposed at an angle with relation to each other and to the plate, substantially as and for the purpose described.

In witness whereof I have hereunto signed my name this 22d day of January, 1898.

H. L. HAAS.

In presence of—

ALBERT KORTUM,
HENRY BUCKMER, Jr.