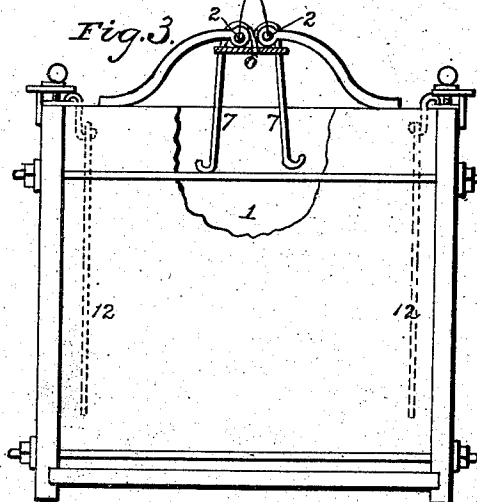
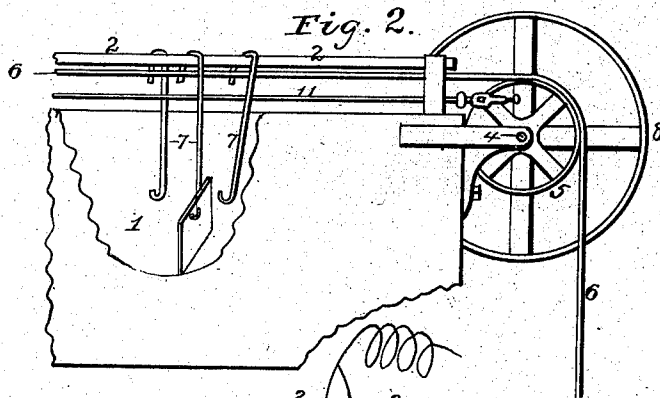
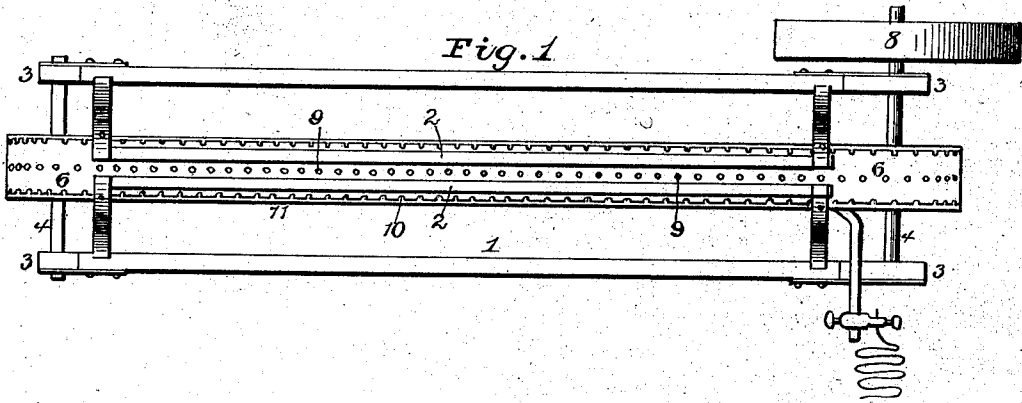


(No Model.)

J. W. CONCHAR.
ELECTRODEPOSITING DEVICE.

No. 580,451.

Patented Apr. 13, 1897.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES W. CONCHAR, OF DUBUQUE, IOWA.

ELECTRODEPOSITING DEVICE.

SPECIFICATION forming part of Letters Patent No. 580,451, dated April 13, 1897.

Application filed June 22, 1896. Serial No. 596,564. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. CONCHAR, a citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Electrodepositing Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in electrodepositing devices; and it consists, essentially, in a tank and fixed rods for the hooks which support the articles to be deposited upon in the bath, mounted above the tank, combined with an endless belt which is moved endwise longitudinally below them and to which the hooks supporting the articles to be plated are loosely connected while suspended from said rods, as will be more fully described hereinafter.

In the accompanying drawings, which illustrate my invention, Figure 1 is a plan view of a mechanism which embodies my invention. Fig. 2 is a side elevation of the same, a portion of the tank and mechanism being removed. Fig. 3 is an end view of the same, portions being broken away.

Like figures of reference denote corresponding parts in all of the drawings.

In the drawings, 1 represents the tank containing the bath, and mounted above its central portion in suitable supports at each end of the tank are the stationary rigid rods 2, which not only serve to support the hooks 7, but also to convey the cathode-current to the hooks and the articles to be deposited upon.

Mounted in suitable bearings 3 at each end of the tank are shafts 4, and secured to each of them is a pulley 5, around which the endless belt 6 passes. The top edges of these two pulleys 5 support the belt just below the rod 2 and above the bath, and the belt passes out and under the tank, being kept in motion by the driving-pulley 8, to which the power is applied. This endless belt is provided with a series of perforations 9 along its central portion and a series of notches 10 in each edge, the notches being placed exactly opposite the central perforation, so as to receive the shanks of the hooks.

The articles to be plated are hung upon the lower ends of the hooks 7, which extend a suitable distance below the top of the bath, while their bent upper ends engage the supporting-rods 2 and pass down through the central perforations 9 in the belt and their shanks engaging the notches 10 in the belt. Then as the belt travels around the tank beneath the rods 2 it will draw the hooks along on the rod 2, and with the hooks the articles hung upon their lower ends, through the bath. To avoid the danger of imperfect contact between the rods 2 and the hooks 7, metallic bars 11 may be used, as shown in Figs. 1 and 2, in which case the bars extend from one end of the tank to the other in such a relation to the rods 2 and belt 6 that the shanks of the supporting-hooks 7 will bear directly against said bars 11. Through these bars 11 also the cathode-current may be supplied and the articles in the bath receive the cathode-current through the hooks 7 by their contact with the rods 2 or said bars 11, or by both. In this manner it will be seen that if the rods 2 become corroded or in any way inactive to the influence of the cathode-current then the current may be at the same time introduced through the bars 11, and thus the cathode-current will always be uninterrupted.

The usual anodes 12 are suspended within the bath from the top of the tank.

Having now described my invention, I claim—

1. An electrodepositing device consisting of a tank containing a depositing-bath, with anode connections, a rigid rod above the tank, hooks for suspending the articles to be deposited upon in the bath, engaging said rod, cathode connections with the articles in the bath, through said rod and hooks, and a belt traveling beneath said rod and engaging said hooks for drawing the hooks along on said rod, and with them the articles in the bath, as and for the purposes shown.

2. An electrodepositing device, consisting of a tank containing a depositing-bath, having anode connections, a supporting metallic bar above the bath, hooks to which the articles to be deposited upon are suspended within the bath from said supporting-rod, and bearing against the metallic bar, and a belt traveling below the supporting-rod and adapted

to engage the said hooks, whereby the hooks are drawn along on said rod and with them the articles in the bath, as and for the purposes shown.

5 3. In an electrodepositing device, means for advancing the articles along in the bath, consisting of one or more rods above the bath, hooks for suspending the articles in the bath, hanging upon said rod, and a belt traveling
10 below said rod and having holes and notches

therein which engage with the points and shanks of said hooks, for drawing the hooks along on said bar, and with them the articles through the bath, substantially as set forth.

In testimony whereof I affix my signature 15
in the presence of two witnesses.

JAMES W. CONCHAR.

Witnesses:

M. E. EDDY,
M. M. CADY.