No. 882,110. PATENTED MAR. 17, 1908.

A. M. HILL.

ANODE.

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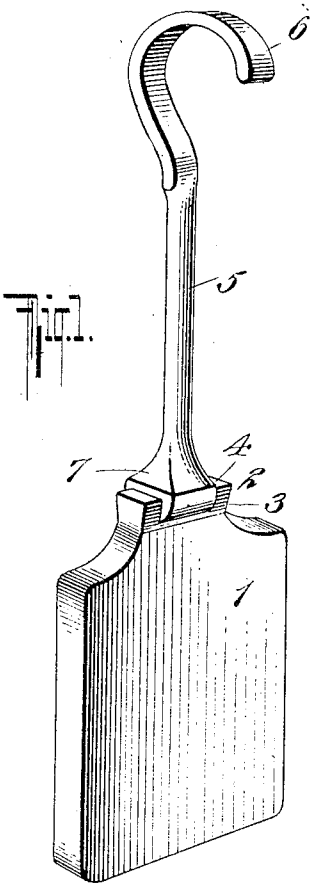


Fig. 1.

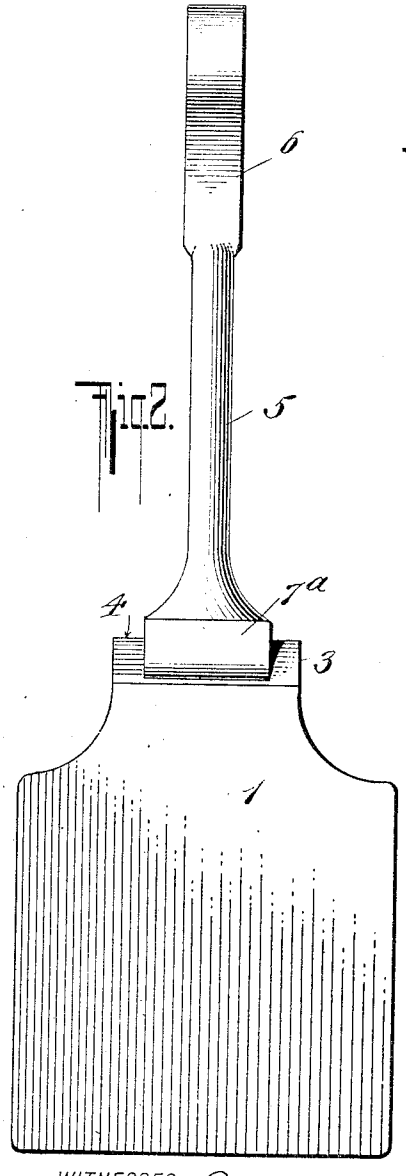


Fig. 2.

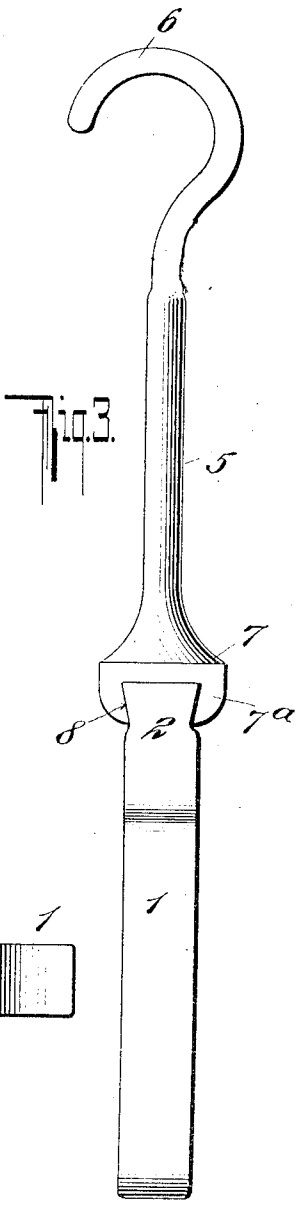


Fig. 3.

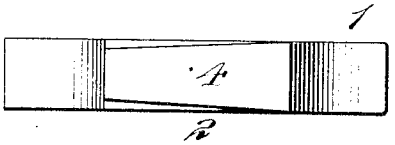


Fig. 4.

WITNESSES

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ANODE.

No. 882,110. Specification of Letters Patent. Patented March 17, 1908.

Application filed April 15, 1907. Serial No. 368,189.

To all whom it may concern:

Be it known that I, ALBERT M. HILL, a citizen of the United States of America, and a resident of New Haven, county of New Haven, State of Connecticut, have invented certain new and useful Improvements in Anodes, of which the following is a specification.

This invention relates to a device for supporting a nickel or other anode in an electrolytic tank or receptacle.

The object of the invention is to provide simple and effective means for connecting a suspension arm with the anode of such a character that the two parts may be easily separated and a new anode suspended whenever desired.

The invention consists essentially in a supporting rod or arm provided on its lower end with a socket which engages an interlocking head on the anode, and thus enables an effective connection to be made between them; and it also consists in various details and peculiarities in the construction and combination of parts, substantially as will be hereinafter described and claimed.

In the accompanying drawing, illustrating my invention, Figure 1 is a perspective view of my new and improved anode, and the means for suspending it. Fig. 2 is a front elevation of the same. Fig. 3 is an edge view. Fig. 4 is a top plan view of the anode proper.

Similar characters of reference designate corresponding parts throughout the different figures of the drawing.

1 designates an anode of nickel, copper, or any other desired metal or material adapted for use in an electrolytic cell. The shape, size and form may vary within very wide limits. The upper end is fashioned with a head 2, having longitudinal sides inclined from top to bottom, as shown in Fig. 1, and having also said sides inclined towards each other at one end, as indicated more clearly in Fig. 4, the said head 2 thereby partaking of the form of a wedge as well as a dove-tail. The vertically inclined sides 3 are preferably the widest apart at the top, so that the lower portion of the head 2 nearest to the body of the anode is contracted, thereby providing the dove-tail shape. Also, the upper flat face 4 of the anode shows how the sides 3 are longitudinally inclined in addition to being vertically inclined, so that said face 4 is wider at one end than at the other. This enables a socket to be used with this doubly inclined head, which will grasp it so as to hold it, and, at the same time, is capable of being locked thereto by a wedging action to a sufficient extent so as to prevent a detachment of the two parts one from the other, except at such times as it may be necessary to separate them for the purpose of introducing a new anode.

5 denotes a rod or arm having on the upper end a hook 6, said rod or arm being adapted to occupy a vertical position, with the hook engaging some suspension wire or device that will properly hold it. The lower end of the rod 5 is provided with a socket 7 whose side flanges 7^a, as indicated in Fig. 2, are interiorly inclined vertically, and also longitudinally, so as to correspond with the double inclination of the head 2. The vertical bevels of the side flanges 7^a enable said flanges to grip under the inclined sides 3 of the head 2, and thus hold the anode in a suspended position; and the longitudinal inclination of these sides 7^a enables the socket 7 to be slid over the head 2 in such a manner that the wedge shape of head 2 will bind sufficiently within the socket 7 and hold the anode in the desired manner. Of course, it is within the limits of my invention to omit the longitudinal wedge shape of the head 2 and of the socket 7, and provide merely the correspondingly inclined interlocking parts which, under many circumstances, might be sufficient to form a connection proper to adequately support the anode by means of the arm; but it is found in practice that in order to secure the best results it is preferable to have the longitudinal inclination so as to secure some wedging bind, and thus hold the two parts together in such a manner that they cannot be easily dislodged from each other, except as circumstances may require.

Various changes in the details in the form and arrangement of the invention may be made without departing from the scope of the claims as set forth.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

The combination with an anode having at one end a head formed with a flat transverse horizontal face which is at right angles to the longitudinal axis of the anode and is formed with side faces below said flat face, which

side faces are inwardly inclined at an angle to the said flat face vertically and are likewise longitudinally inclined so that the head partakes of the form of a double wedge shape, of a supporting hook having a socket at its lower end adapted to engage said wedge shape head, said socket containing a flat side which rests on the flat face of the head and also is formed with lateral flanges interiorly inclined in two directions so as to correspond to and engage with the double inclination of the sides of the head, all arranged so that an interlocking of the socket with the head may be effected when the two parts are connected together, the interlocking being of such a character as to prevent the hook from being disengaged from the anode except when moved in a particular direction for that purpose, substantially as and for the purpose set forth.

Signed at New Haven this 4th day of April, 1907.

ALBERT M. HILL.

Witnesses:
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NOBLE S. BLATCHLEY.