

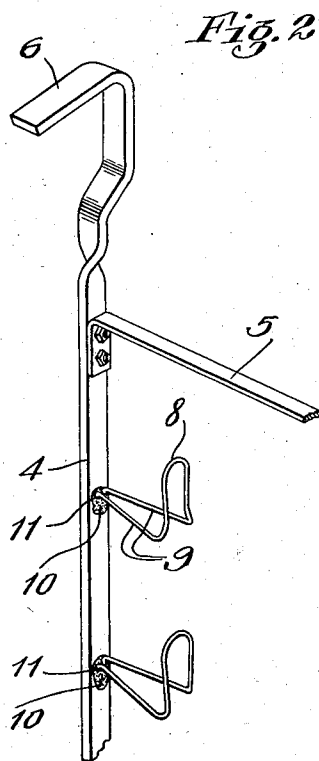
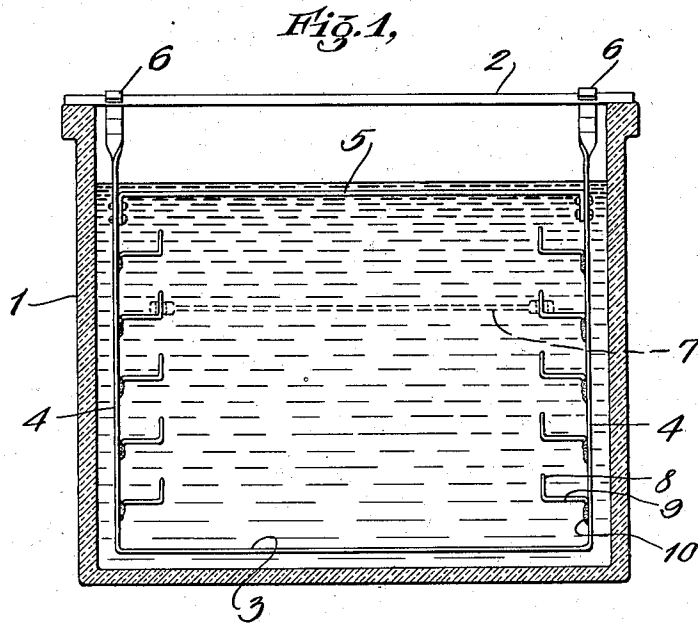
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RACK FOR SUPPORTING ARTICLES TO BE ELECTROPLATED

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RACK FOR SUPPORTING ARTICLES TO BE ELECTROPLATED

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This invention is an improvement in racks for supporting articles to be electro-plated, and more particularly in means to support relatively long articles in a favorable position to receive the deposit.

Since the article to be plated is a part of the circuit, there must be a good electrical connection between it and the rack, from which the negative lead of the circuit extends.

In certain ware, such for instance, as the brace arms of automobile tops, a firm grip and close contact between the article and the rack is somewhat difficult to obtain.

Articles of this character have an opening at each end, and it is desirable that the supporting elements of the rack engage within the openings to leave the exterior of the article wholly exposed for the deposit.

One of the primary objects of the present invention is the provision of a type of rack or hanger, especially adapted for supporting ware of this character, wherein the engaging elements of the rack or hanger are so arranged as to engage within the openings at the ends of the article, and to depress resiliently into contact with the article, whereby to insure good conduction.

With these and other objects in view the invention consists in the construction and novel combination of parts fully described hereinafter, illustrated in the accompanying drawings, and pointed out in the claims appended hereto, it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims, may be resorted to without departing from the spirit of the invention.

In the drawings forming a part hereof:—

Fig. 1 is a transverse vertical section of a tank provided with the improved tank or hanger.

Fig. 2 is a detail in perspective of a part of the rack.

The present embodiment of the invention is shown in connection with a plating tank 1 of usual construction, having a plurality of cross bars 2 extending either transversely or longitudinally of the tank, and resting at

their ends upon the walls of the tank. The bars 2 are of conducting material, and the negative lead of the circuit is connected to said bars. The elements of the rack proper to be described, are also of conducting material.

The improved rack comprises a substantially rectangular frame, composed of a bottom member 3, side or end members 4, and a top member 5. Each of the side members 4 extends above the top member 5, and the extended end is provided with a hook 6 for engaging a cross bar 2. As shown in Fig. 2, these hooks are so arranged that the rack will hang vertically from the bar 2, the hook being so constructed that the members 4 of the rack will be directly below the cross bar.

Each of the side members 4 is provided with a set of hangers, and the hangers of the sets are in substantial register, so that the article indicated at 7 will be supported horizontally in the tank. Each hanger is composed of wire of suitable gauge, which is doubled upon itself, as shown in Fig. 2, to provide a substantially U-shaped member composed of a body and arms extending alongside each other in spaced relation. The U-shaped member is then bent to provide portions 8 and 9 extending at substantially a right angle with respect to each other, and the ends of the arms are secured to the side member 4 by soldering indicated at 10, or otherwise, as may be desired. The end of each arm remote from the body is bent laterally as shown, at 11, and it is these portions of the arms which are connected to the side members.

Each of the hangers is connected to the side member with the portion 8 of the hanger extending upwardly, and the spacing of the arms of the hanger at their connection is somewhat greater than the opening of the article with which the hanger is to engage. In use, the rack is supported as shown in Fig. 1, and the side members 4 are spaced apart from each other so that the openings of the article will be in register with the upturned portions 8 of the hangers. The portions 8 of the hangers are pressed into the openings of the articles, and the resiliency

of the hangers makes a good electrical connection between the hanger and the arms, while leaving the entire external surface of the article exposed to receive the deposit.
5 The improved hanger is of particular benefit in plating with chromium.

What is claimed as new is:—

1. A rack or hanger for articles having spaced openings, including hangers having
10 compressible portions adapted to enter the openings, and to expand into close contact with the walls thereof.
2. A rack or hanger for elongated articles having end openings, including opposed side
15 members, each provided with a set of resilient compressible hangers adapted to engage within the end openings of the articles and to expand into close contact with the walls thereof.
- 20 3. A rack or hanger for elongated articles having end openings, including opposed side members, each provided with a set of resilient compressible hangers adapted to engage within the end openings of the articles and
25 to expand into close contact with the walls thereof, the hangers of the sets being in substantial register, and each hanger having means to limit movement of the article in a downward direction.
- 30 4. A rack or hanger for elongated articles having end openings, including opposed side members, each provided with a set of resilient compressible hangers adapted to engage within the end openings of the articles
35 and to expand into close contact with the walls thereof, said members being connected at their lower ends and near their upper ends, and each having a hook for the purpose described.
- 40 5. A rack or hanger for elongated articles having end openings, including a substantially rectangular frame, opposite members thereof having hangers, each hanger including a substantially horizontal portion con-
45 nected with the member and a substantially vertical portion at the outer end thereof, said last named portion compressible to enter an opening of the article and resilient to expand to close contact with the walls thereof, the
50 horizontal portions serving as stops to limit the downward movement of the article.

Signed at New York city, in the county of New York and State of New York, this 5th day of November, A. D. 1928.

55 LOUIS LICHTMAN.