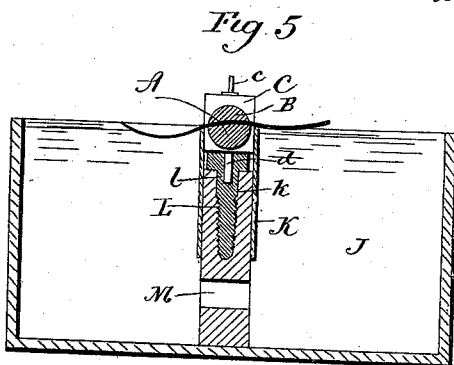
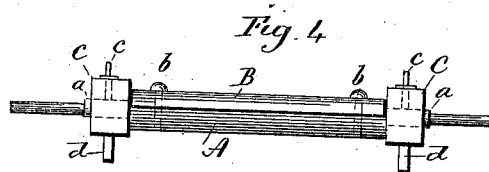
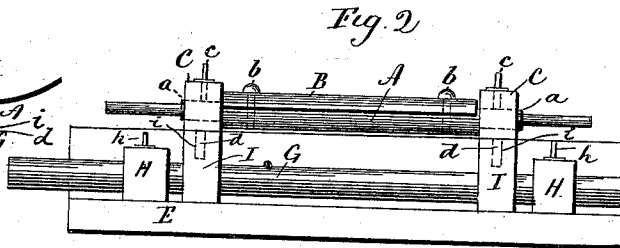
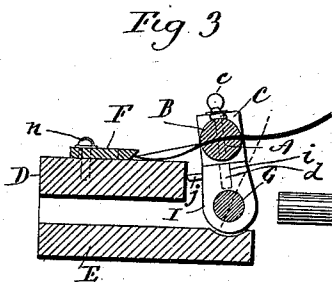
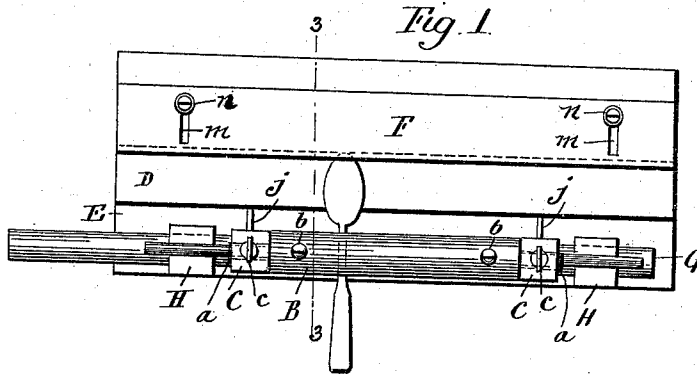


(No Model.)

E. R. ALLEN.
HOLDER FOR ELECTROPLATING.

No. 550,812.

Patented Dec. 3, 1895.



Witnesses.
J. H. Shumway.
Lillian D. Kelbey

Albert R. Allen.
Inventor.
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UNITED STATES PATENT OFFICE.

ELBERT R. ALLEN, OF WALLINGFORD, CONNECTICUT, ASSIGNOR TO SIMPSON, HALL, MILLER & CO., OF SAME PLACE.

HOLDER FOR ELECTROPLATING.

SPECIFICATION forming part of Letters Patent No. 550,812, dated December 3, 1895.

Application filed September 30, 1895. Serial No. 564,103. (No model.)

To all whom it may concern:

Be it known that I, ELBERT R. ALLEN, of Wallingford, in the county of New Haven and State of Connecticut, have invented a new Improvement in Holders for Electroplating; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a top view of a holder as arranged in connection with a gage; Fig. 2, a side view of the same; Fig. 3, a section on line 3 3 of Fig. 1; Fig. 4, a side view of the holder detached; Fig. 5, a sectional view of the holder as arranged in the bath.

This invention relates to a holder for spoons and forks to be used in connection with an electroplating apparatus.

In the higher grades of spoons and forks certain portions receive an extra deposit of metal, so as to increase their wearing qualities. Difficulty has been experienced in holding the articles so as to submerge these parts.

The object of this invention is to construct a holder in which the spoons or forks are readily arranged and which may be turned to submerge opposite ends of the articles; and it consists in the construction as hereinafter described, and particularly recited in the claims.

The holder proper consists of a bar A, formed with a trunnion *a* at each end and adapted to receive a cap B, which is secured thereto by thumb-screws *b b*. The trunnions *a* are mounted in bearing-blocks C, through which set-screws *c* extend into engagement with the trunnions *a*, so as to lock the bar against rotation in the bearings. From the under side of the blocks pins *d* depend. This holder is used in connection with a setting device or gage, which consists of a bed D, formed with a flange E, projecting outward from its lower edge. On the face of the bed is a slide F, formed with slots *m*, through which set-screws *n* extend into the bed, whereby the said flange is adjustably secured to the bed and undercut at its forward end. Upon the flange E a rock-shaft G is mounted in bearings H H, in which set-screws *h h* are arranged,

whereby the rock-shaft may be clamped against rotation. On the said shaft between the bearings are arms I I, fixed to the shaft and formed with recesses *i* in their upper ends corresponding to the pins *d* on the holder. From the inside of the arms adjustable pins *j* project, which will engage with the front edge of the bed D. In the bath J, which is of usual construction, is a wall K, in which recesses *k* are formed corresponding in position to the position of the pins *d*. In these recesses screws L are arranged, which screws are formed with a vertical opening *l* in their upper ends, which openings correspond in size to the size of the said pins. The holder is first placed in the gage and the rock-shaft turned so that the pins strike the bed, as shown in Fig. 3. The cap B is removed and the spoons or forks placed upon the bar A, one end extending beneath the undercut strip F, which is adjusted on the bed in position, according to the shape of the article to be plated. When the articles are in place, the cap B is secured in position by the set-screws *b* and the rock-shaft turned to throw the ends of the articles out of engagement with the strip F, as indicated in broken lines, Fig. 2. The holder is then removed from the arms I and inserted into the wall K of the bath, the pins *d* entering the openings in the upper ends of the screws, as before described. These screws are raised or lowered in the wall to raise or lower the holder, as may be necessary, to more or less submerge the article to be plated.

If desired to change the position of the articles with relation to the bath, the set-screw *c* may be loosened, so that the bar may be turned in its bearings C, thereby permitting a great degree of adjustment.

If the wall K extends entirely through the bath, it will preferably be provided with an opening M, through which the fluid will flow to secure the same level on both sides of the wall.

I claim—

1. The herein described holder for electroplating, consisting of a bar mounted in bearings, a cap detachably secured to the upper surface of said bar, and between which the articles to be plated are clamped, pins de-

pending from said bearings, and supports formed with recesses to receive said pins, substantially as described.

2. The combination with a holder for electro-plating consisting of a bar mounted in bearings, a cap detachably secured to the upper surface of said bar and between which the articles to be plated are clamped, pins depending from the said bearings, and a support comprising a block, an adjustable slide mounted thereon, a rock-shaft provided with

arms formed with recesses in their upper ends to receive said pins, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ELBERT R. ALLEN.

Witnesses:

C. H. BROWN,

R. F. ANDREWS.