## (No Model.) J. MULHOLLAND, Jr. APPARATUS FOR GALVANIZING AND COATING SHEET IRON AND OTHER PLATES.

No. 256,494.

Patented Apr. 18, 1882.



South States

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WITNESSES

BY ATTORNEY.

## N. PÉTERS, Photo-Lithographer, Washington, D. C

## UNITED STATES PATENT OFFICE.

JAMES MULHOLLAND, JR., OF PHILADELPHIA, PENNSYLVANIA.

APPARATUS FOR GALVANIZING AND COATING SHEET-IRON AND OTHER PLATES.

SPECIFICATION forming part of Letters Patent No. 256,494, dated April 18, 1882.

Application filed August 20, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES MULHOLLAND, Jr., a citizen of the United States, residing in the city and county of Philadelphia, and State 5 of Pennsylvania, have invented a new and useful Improvement in Apparatus for Galvanizing and Coating Sheet-Iron and other Plates, which improvement is fully set forth in the following specification and accompanying 10 drawings, in which—

Figure 1 is a top or plan view of the apparatus for galvanizing and coating embodying my invention. Fig. 2 is a central longitudinal vertical section thereof. Fig. 3 is a central 15 transverse vertical section thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of an apparatus for galvanizing and coating sheet-iron and other 20 plates, wherein the plates are introduced into the pot on their flat sides in contradistinction to such introduction on their edges, the conthe employment of a shallow pot, a reduced quantity of galvanizing metal or material, saving of metal, owing to the decreased forma-55 tion of dross, avoiding the thickening of the edge of the plate or sheet due to dripping, better results, as the surface of the plate is smooth and uniform, and there is less labor, better and easier work, and a greater product 60 than by the mode heretofore practiced.

In order to prevent the plates or sheets returning or rolling back on the upper rack, the rear end of the latter is provided with guides D, which project horizontally from said 65end into the way a, and are somewhat bent upwardly, so as to direct the plates properly from the way a, as shown by the arrow at the right hand of Fig. 2, said guides being also applicable to the front end of the rack to direct 70the entrance of the plates.

The racks BC, being of open form, do neither materially reduce the holding capacity of the pot nor prevent full access of the galvanizing metal to the plates or sheets, nor interfere with 75 the proper dripping of the plates or sheets as they leave the racks. I am aware that it is not new to provide an apparatus for coating metal with guides, whereby the metal may be passed horizontally 80 through the bath, and do not therefore claim said feature, broadly. Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is— 1. The pot A, in combination with the rack C, of depressed form and constructed as described, and the rack B, constructed as described, sustained within the rack C, above the same, the rack B being suspended from its 90 sides and the rack C being suspended from its ends, the horizontal way a existing between the two racks, substantially as and for the purpose set forth. 2. The pot A, in combination with the top 95 rack, B, and the lower rack, C, of depressed

- struction and operation being hereinafter fully set forth.
- Referring to the drawings, A represents a pot for galvanizing or coating metal, and B C two racks of different lengths and depths, which are suspended from the top or sides of the pot, one above the other, so as to form a
  way, a, between them, the lower rack, C, being dishing or depressed and sustained by its ends on the pot, and the upper rack, B, being sustained by its sides on the pot and depending within the lower rack, the way a existing
  between the two racks, as has been stated. Both racks are removable, so that the pot may be used for other purposes and the scum readily removed from the bath when required.

The racks are formed of suitable metallic 40 parts, preferably longitudinal pieces b and cross-bars c, and may have screws or other fastenings, although ordinarily their weight is sufficient to retain them in position.

The sheet or plate is introduced horizontally

- 45 or flat into the pot at one end of the way *a*, run through the length thereof, guided by the racks, and withdrawn at the other end, and thus subjected to the action of the galvanizing or coating metal or material in the pot.
- 50 Among the advantages of my invention over the apparatus heretofore in use and the introduction of the plates edgewise into the pot are
- form, the two racks being constructed as described and detachably suspended, as stated, the rack B having projecting guards D, substantially as and for the purpose set forth. JAMES MULHOLLAND, JR.

Witnesses:

JOHN A. WIEDERSHEIM, F. COOPER.