J. S. JOBE AND J. DIXON.

METHOD AND APPARATUS FOR COATING OR ENAMELING METAL.

APPLICATION FILED DEC. 10, 1919.

1,348,361.

Patented Aug. 3, 1920.

2 SHEETS—SHEET 1.

Fig. 1.

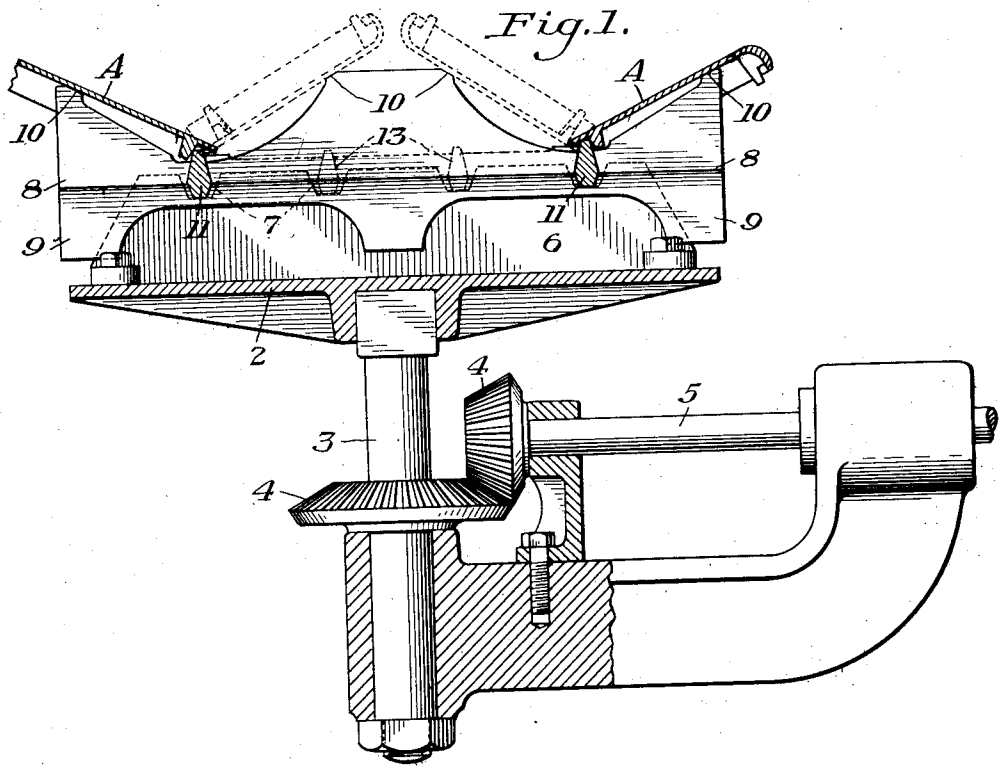
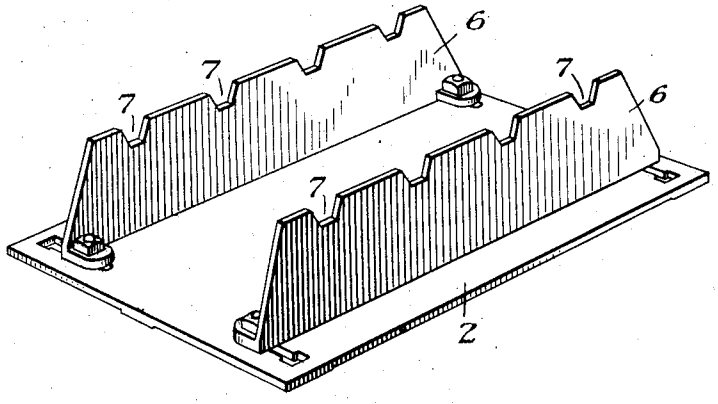


Fig. 2.



WITNESS

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2 SHEETS—SHEET 2.

Fig. 3.

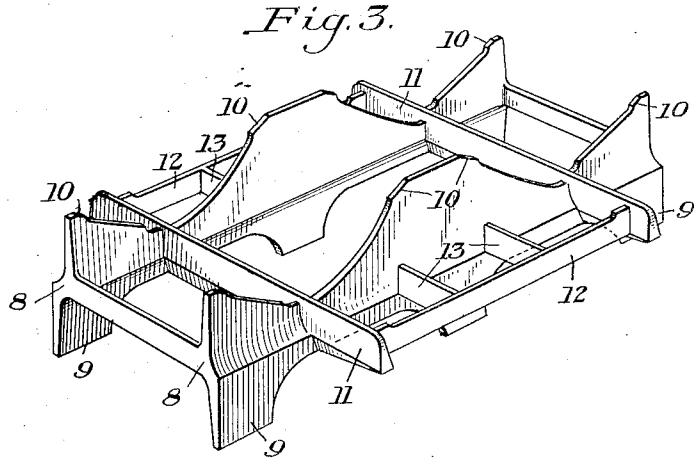


Fig. 4.

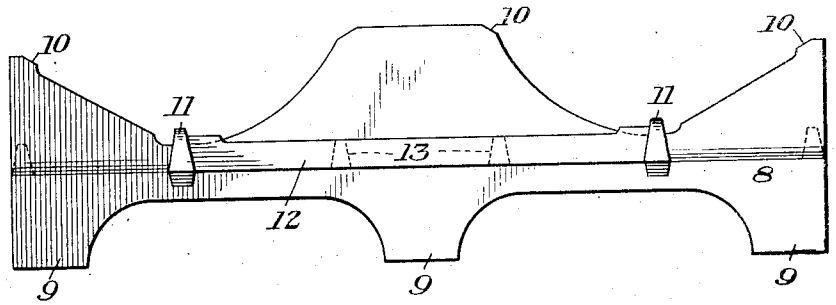
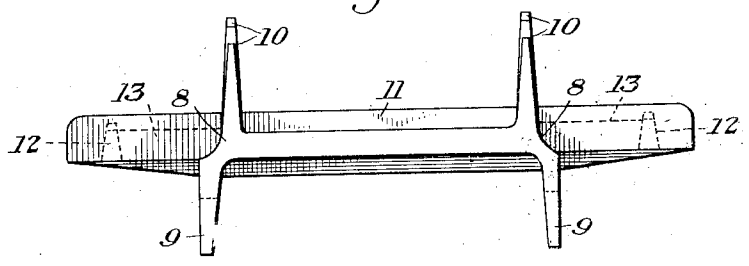


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN S. JOBE, OF ROCHESTER, AND JOHN DIXON, OF MONACA, PENNSYLVANIA, ASSIGNORS TO UNITED STATES SANITARY MANUFACTURING COMPANY, OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

METHOD AND APPARATUS FOR COATING OR ENAMELING METAL.

1,348,361. Specification of Letters Patent. Patented Aug. 3, 1920.

Application filed December 10, 1919. Serial No. 343,774.

To all whom it may concern:

Be it known that we, JOHN S. JOBE, of Rochester, Beaver county, Pennsylvania, and JOHN DIXON, of Monaca, Beaver county, Pennsylvania, have invented certain new and useful Improvements in Methods and Apparatus for Coating or Enameling Metal, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which:

Figure 1 is a sectional elevation of an enameling table embodying our invention;

Fig. 2 is a perspective view of the supporting portion of the table;

Fig. 3 is a perspective view of the saddle or buck; and

Figs. 4 and 5 are side and end views, of the saddle or buck.

Our invention has relation to a method and apparatus for use in coating or enameling metal castings, and is designed to provide a method and means whereby this work may be done much more rapidly and economically than has heretofore been possible.

The invention has been particularly designed for use in coating or enameling the covers of enameled metal flush tanks, but may be used for other articles. The usual practice heretofore in coating such articles has been to place them singly upon an enameling table, coat one side thereof, and turn them over and coat the other side and then lift them singly into the baking oven. This involves considerable handling of the articles.

In accordance with our invention, we provide for the handling of two or more of the articles at the same time and also in order that the coating operations may be carried out more easily and effectively.

Referring to the accompanying drawings, the numeral 2 designates a rotary enameling table mounted upon a shaft 3 and driven through the beveled gears 4, from a driving shaft 5.

In accordance with our invention, we provide the table 2 with the parallel supporting members 6, each of which is formed in its opposite upper edge with a plurality of notches or recesses 7. These supports are designed to receive a portable and removable saddle or buck which is shown in detail in Figs. 3, 4 and 5. In the particular construction illustrated in these figures, this saddle or buck consists of a casting having parallel side members 8, which are provided with supporting legs or feet 9, and whose upper edges are shaped to form two sets of oppositely inclined supporting surfaces 10. The device also comprises the parallel cross bars 11, which are connected by the longitudinal bars 12, the latter, in turn, being connected with the adjacent side members by the bars 13.

In the use of the apparatus in the particular form shown, two of the flush tank covers to be enameled and shown at A in Fig. 1 are placed in the saddle or buck in the positions indicated in dotted lines in Fig. 1, with their inner side uppermost. In these positions, the lower ends of the covers rest against the cross bars 11, and the upper portions of the covers rest against the upper portions of the inclines 10. The covers may be placed in this position on the saddle or buck while the latter is resting on any suitable support, or the saddle may first be placed on the supports 6 and the covers then placed thereon. When the buck or saddle is in position on the supports, the end portions of the cross members 11 and also the cross bars 13 rest in the notches 7 of the supports 6.

With the covers supported in the position shown in dotted lines in Fig. 1, the operator can very quickly coat the inner surface of both covers. The covers are then turned into the position shown in full lines in Fig. 1, in which their upper surfaces can be readily coated. The buck or saddle, as a whole, with the covers thereon, is then lifted bodily off the supports and is ready to be carried to and placed in the baking oven; the articles remaining on the saddle or buck during the baking.

It will be readily understood that the saddle or buck can be constructed, if desired, to support more than two of the articles to be coated simultaneously.

The advantages of our invention will be readily apparent to those skilled in the art. It reduces to a minimum the labor required in handling the articles while they are being coated, the only lifting required being to

turn the articles from one inclined position to a reverse inclined position. The handling of two or more articles at the same time in placing them in the oven largely increases the rapidity of the operations.

It will be readily understood that the details of construction and arrangement of the supporting devices may be widely changed. Thus the supporting devices, instead of being mounted upon the rotary table may be of any other suitable character and may be made to hold any desired number of the articles. The invention is adapted not only for use in enameling articles such as described, but may be also used for applying the first coatings thereto.

We claim:

1. In the art of coating metal castings, the method which consists in supporting the casting to be coated in an inclined position with one of its surfaces exposed to coating operations, coating such surface, and then turning the casting into a reverse inclined position to expose its other surface without removing it from its support and coating such other surface, substantially as described.

2. In the art of coating metal castings, the method which consists in supporting a plurality of the castings to be coated in inclined positions upon a common portable support with one surface of each of the castings exposed for coating operations, coating the exposed surface, and then turning the castings on said support in position to expose their opposite surfaces without removing them from the support, coating such exposed surfaces, and then transferring the support with the coated articles thereon to and into a baking oven, substantially as described.

3. An apparatus for coating castings, comprising a table and a buck or saddle adapted to be removably supported upon said table, said buck or saddle having a plurality of supports for holding the castings in different inclined positions, substantially as described.

4. Apparatus for use in coating castings, comprising a support and a buck or saddle adapted to be removably engaged with said support, said buck or saddle having means for supporting a plurality of the articles being coated, each in two different inclined positions, substantially as described.

5. Apparatus for use in coating castings, comprising a support having a plurality of seats and a removable portable buck or saddle having members for engaging said seats and also having supporting members for holding the casting to be coated in different inclined positions, substantially as described.

6. Apparatus for use in coating castings comprising a rotary table having parallel supports thereon, and a portable buck or saddle having members for engagement with said supports, also having a plurality of supports for engaging and holding the castings in different inclined positions, substantially as described.

7. Apparatus for coating castings comprising a supporting device having supports for holding a plurality of castings each in different inclined positions and to permit the castings to be turned thereon without removal from one of such positions to the other, substantially as described.

In testimony whereof we have hereunto set our hands.

JOHN S. JOBE.
JOHN DIXON.