

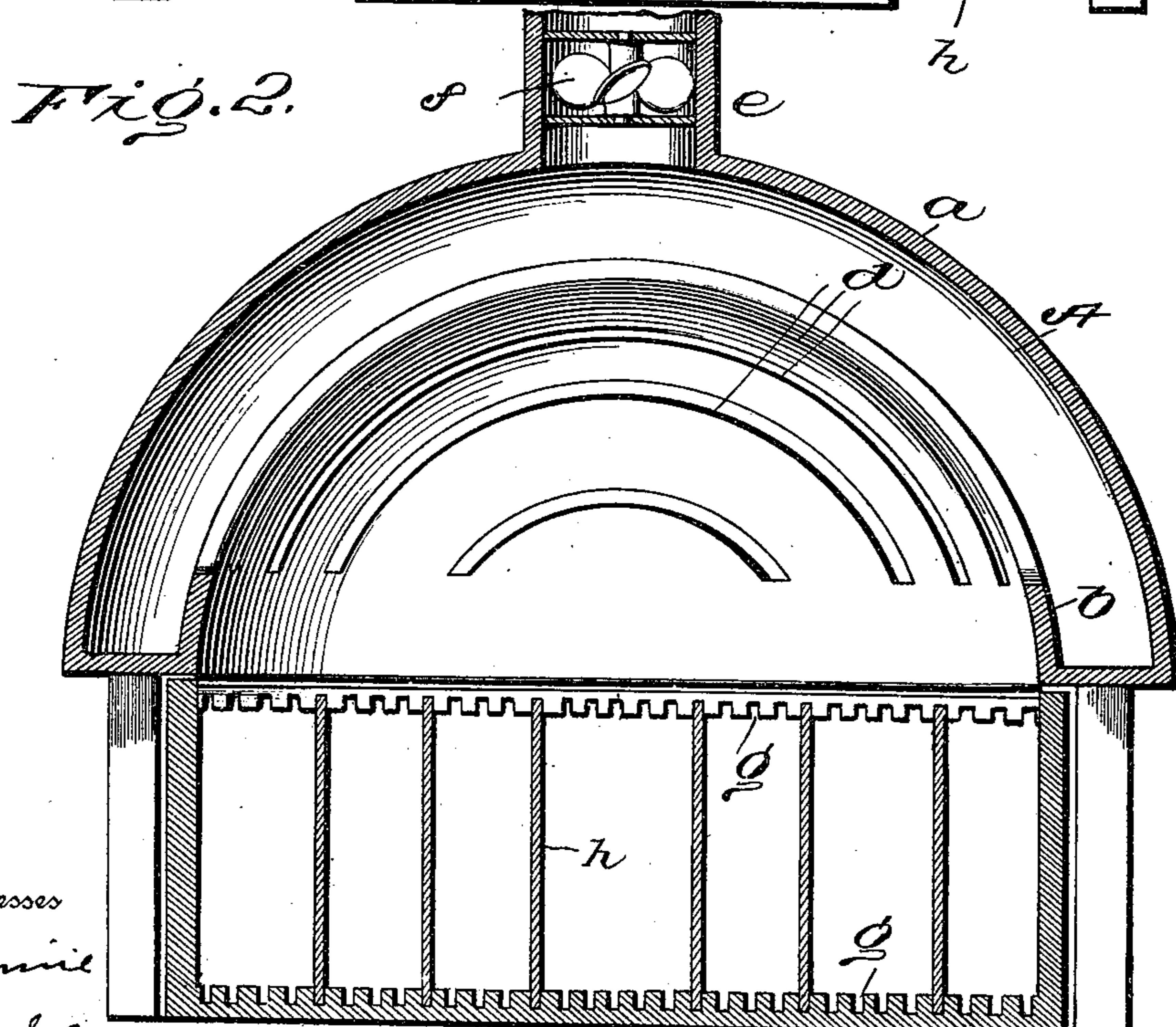
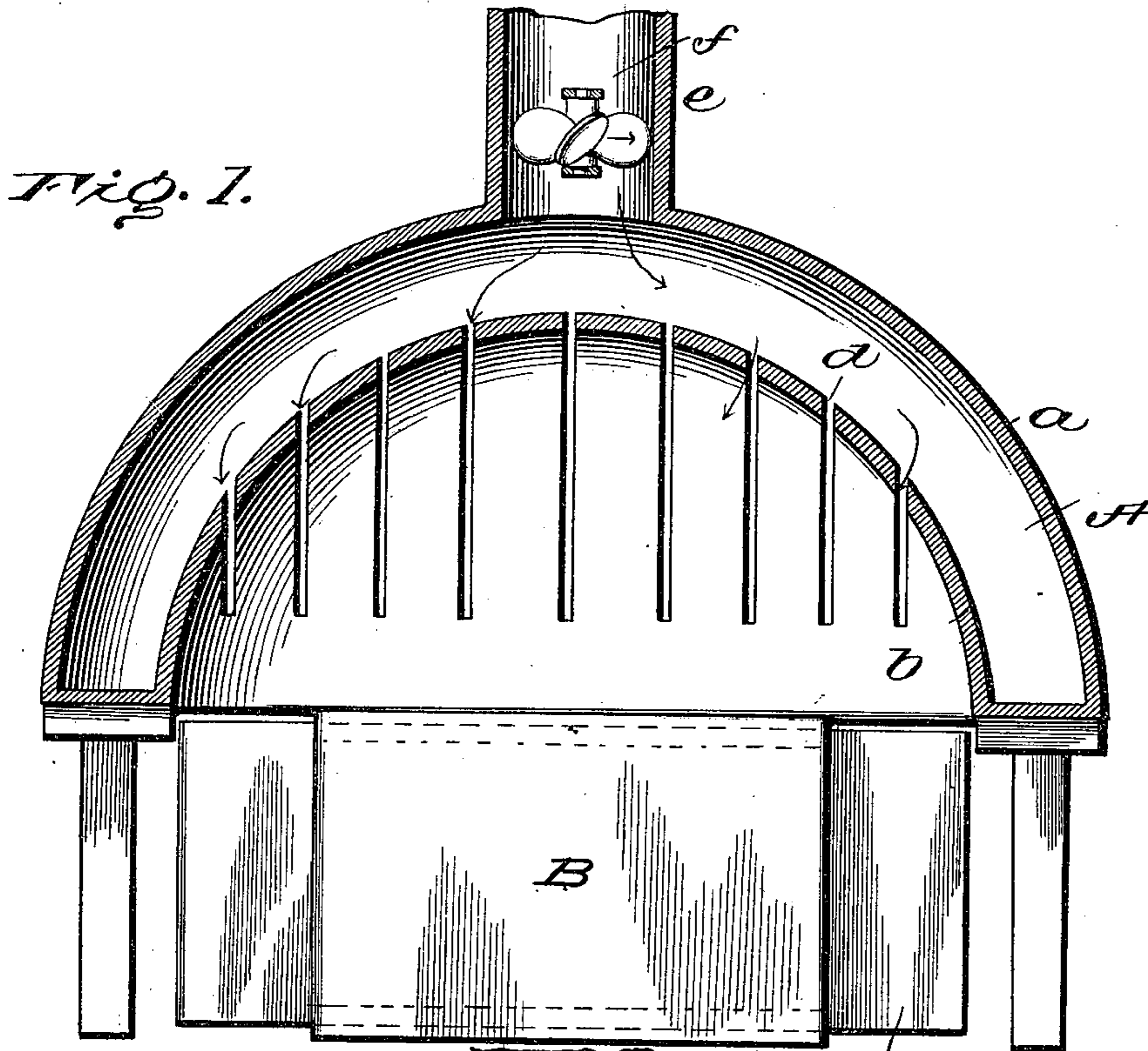
No. 668,553.

Patented Feb. 19, 1901.

W. G. BRANGHAM.  
MEANS FOR MOTTLING TIN PLATES.

(Application filed June 14, 1900.)

(No Model.)



Witnesses  
*John M. ...*

*Frank S. Maguire.*

Inventor

*William F. Brangham.* Attorney  
*W. S. ...*

# UNITED STATES PATENT OFFICE.

WILLIAM G. BRANGHAM, OF NILES, OHIO.

## MEANS FOR MOTTLING TIN PLATES.

SPECIFICATION forming part of Letters Patent No. 668,553, dated February 19, 1901.

Application filed June 14, 1900. Serial No. 20,296. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM G. BRANGHAM, of Niles, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Means for Mottling Tin Plates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention contemplates certain new and useful improvements in means for mottling tin plates.

The primary object of the invention is to insure the even or uniform mottling of tin plates at all points, giving to such plates a complete finished appearance.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical sectional view of an apparatus constructed in accordance with my invention, showing a plate in position in the rack. Fig. 2 is a similar view at right angles to Fig. 1, several of the plates being indicated in section.

Referring to the drawings, A designates an air-chamber composed of an outer solid wall *a* of hemispherical formation and an inner concentric wall *b*. In this inner wall *b* are formed several slots *d*, which extend over the crown of this inner wall and to near its lower edges. From the top of the outer wall extends a tube *e*, wherein is located a fan or blower, (indicated at *f*.) Beneath the space formed by the inner wall *b* is located a rack B, which is open at its top and longitudinal sides, its top and bottom parts being formed with grooves *g* to receive and accommodate tin plates *h*, which latter are passed transversely through the frame and at right angles to the slots *d* in the inner wall of the air-chamber.

In practice the plates as they come from between the rolls, having been previously dipped in the melted alloy used in tinning, are taken at once by an attendant, handling them by means of tongs, to the rack B, wherein they are placed on edge within the grooves *g* at right angles to the slots *d*. Air is forced into

chamber A by the blower *f* and, passing through the slots *d*, will come in contact with the top, bottom, middle, and sides of the plates beneath with equal or uniform force and quantity. The plates after being thus subjected to the action of the blasts of air are taken out immediately on the other side of the rack, having been chilled sufficiently to make the mottlings less than a minute under the blast. Practice has demonstrated that by thus distributing uniformly and evenly the air-blasts against the plates the mottling will be pronounced, regular, and attractive. The air-chamber is constructed with a dome-shaped inner or under wall *b*. I have found that this form of chamber with slots in the wall for directing the discharge of air in line with the plates insures the best results, the blasts being evenly distributed over the entire surface of each plate. It is obvious that the air-chamber and the rack beneath the inner dome thereof may be supported in any suitable or preferred way, the invention not being limited in this respect.

The process embodied in mottling tin plates as herein described forms the subject-matter of a concurrent application for patent filed June 14, 1900, Serial No. 20,297.

I claim as my invention—

1. An apparatus for mottling tin plates comprising an air-chamber having a dome-shaped inner wall, means for forcing air therein, the said inner wall having a series of spaced-apart air-outlets, and means for supporting tin plates in the line of the air discharged through said outlets.

2. An apparatus for mottling tin plates comprising an air-chamber having a dome-shaped under wall, means for forcing air therein, a series of spaced-apart air-outlets formed in said under wall, and means for supporting tin plates beneath said outlets.

3. An apparatus for mottling tin plates comprising an air-chamber, means for forcing air therein, the bottom or underside of said chamber having a series of spaced-apart slots, and means for supporting tin plates transversely of or at right angles to said slots.

4. An apparatus for mottling tin plates, comprising an air-chamber having a lower dome-shaped wall formed with a plurality of slots,

means for forcing air into said chamber and out through said slots, and means for supporting tin plates beneath said lower wall transversely or at right angles to said slots, 5 substantially as set forth.

5. An apparatus for mottling tin plates comprising an air-chamber, means for forcing air thereinto, said air-chamber having air-outlets in its under side, and a rack beneath such 10 chamber open at its top and sides and having

spaced-apart grooves to receive the edges of the tin plates, substantially as set forth.

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

WILLIAM G. BRANGHAM.

Witnesses:

WILLIAM HY. WELLCOME,  
BENJAMIN L. HARRIS.