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J. FOSTER, JR

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METHOD OF MAKING ENAMEL WARE ARTICLES

Filed June 16, 1927

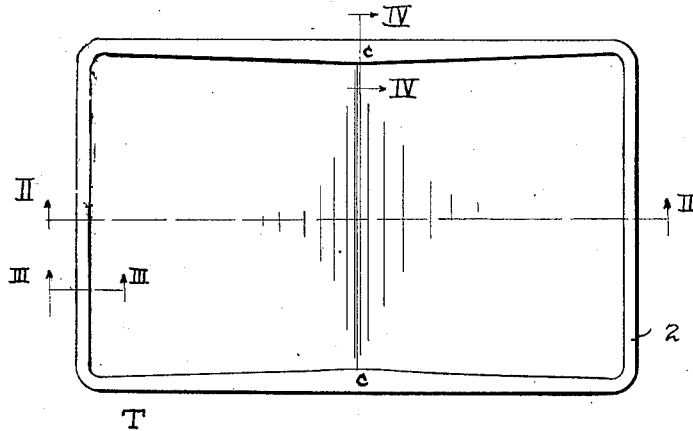


Fig. 1

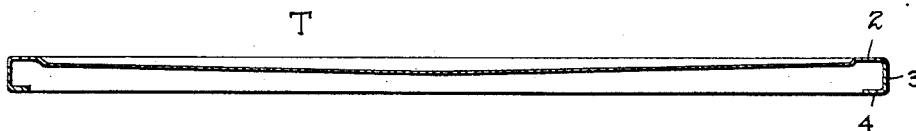


Fig. 2

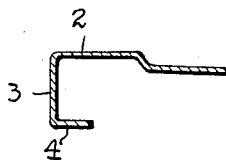


Fig. 3

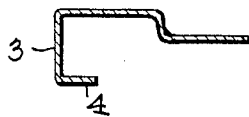


Fig. 4

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METHOD OF MAKING ENAMEL-WARE ARTICLES

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In the manufacture of large pieces of enamel ware such as table tops and the like, there is a tendency for stresses developed in the manufacturing to ultimately occasion buckling and distortion, thus depreciating the value of an otherwise first class article. The avoidance of such buckling is essential to satisfactory usage, and the prevention of this difficulty is accordingly highly desirable.

To the accomplishment of the foregoing and related ends, the invention, then, consists of the features hereinafter fully described and particularly pointed out in the claims, the following description and the annexed drawing setting forth in detail certain features embodying the invention, such being however illustrative of but one of the various ways in which the principle of the invention may be employed.

In said annexed drawing:—

Fig. 1 is a plan view of a table top embodying the invention; Fig. 2 is a longitudinal section taken on a plane indicated by the line II—II, Fig. 1; Fig. 3 is a fragmentary section on enlarged scale taken on a plane indicated by the line III—III, Fig. 1; and Fig. 4 is a similar view taken on a plane indicated by the line IV—IV, Fig. 1.

Referring more particularly to the drawing, the reference character T designates generally a table top stamped up of sheet metal, the stamping device being arranged to shape the sheet with a marginal ledge 2, and a downturned flange 3 with an inwardly directed secondary flange 4. In shaping, in accordance with this invention a corrective stress is introduced into the sheet, such as to counteract the tendencies to buckling, otherwise prevalent. Such corrective stress may be introduced in slightly different ways, preferably the marginal ledge being somewhat widened at the central zone. In Fig. 1, this is indicated on an exaggerated scale for the purpose of making more clear the feature involved, it being noticed that at the point c the ledge is widest, and thence tapers gently to the uniform width of the remaining portions. A corrective stress may also be introduced by shaping so as to depress the central zone more sharply, such depression sloping gently to-

ward the ends, in a manner which in practice would be almost imperceptible, the showing on Fig. 2 being purposely considerably exaggerated in order to bring out more clearly the point involved. The effect of this, it may be observed, is to establish a sort of truss-like structure, and any stresses latent in the metal are controlled by such buttressing either in the matter of the widened ledge or the depressed center or both. Depending upon the size of the article, the gauge of the metal, and the manufacturing conditions generally, these features singly or together may be employed as desired. The article after shaping may then be finished up in any usual or preferred manner, as cleaning, polishing, coating, or applying an enamel composition and baking.

While more especially applicable for table tops, it will be seen that the same principles are also generally applicable for analogous extensive plate-like articles in which it is desired to counteract buckling tendency, and it will be seen that in this manner, such result may be readily accomplished and without unduly complicating or burdening manufacturing operations and costs.

Other modes of applying the principle of the invention may be employed, change being made as regards the details disclosed, provided the features stated in any of the following claims, or the equivalent of such, be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. A process of manufacturing enamel ware pieces having a plain central expanse, which comprises stamping a sheet metal blank with a raised marginal ledge and introducing a corrective stress in the plane of the sheet by widening the ledge at the middle zone, and finally finishing the article.

2. A process of manufacturing enamel ware pieces having a plain central expanse, which comprises stamping a sheet metal blank with a raised marginal ledge and introducing a corrective stress in the plane of the sheet by forming a depression deepest at and extending across the middle zone and tapering to the ends.

3. A process of manufacturing enamel ware
pieces having a plain central expanse, which
comprises stamping a sheet metal blank with
a raised marginal ledge and introducing a
5 corrective stress in the plane of the sheet by
depressing more deeply at the middle zone
and correspondingly widening the ledge, and
finally finishing the article.

Signed by me this 10th day of June, 1927.

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JOSEPH FOSTER, JR.

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