June 7, 1938. E. S. PRESTON 2,120,221

HANDLE FOR HEATING APPLIANCES

Filed Aug. 2, 1937

FIG. 1.

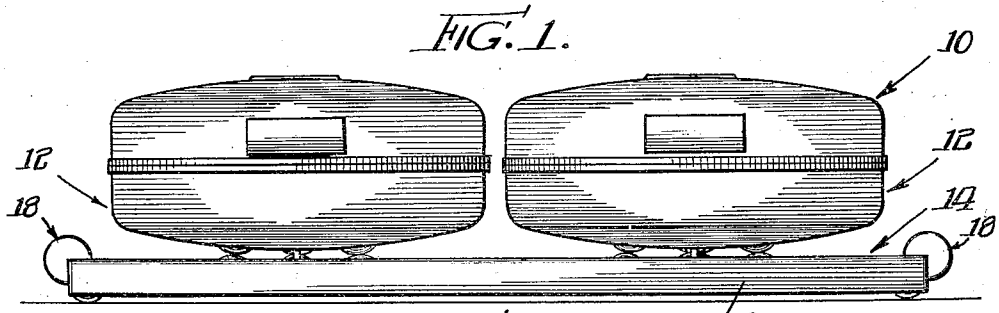


FIG. 2.

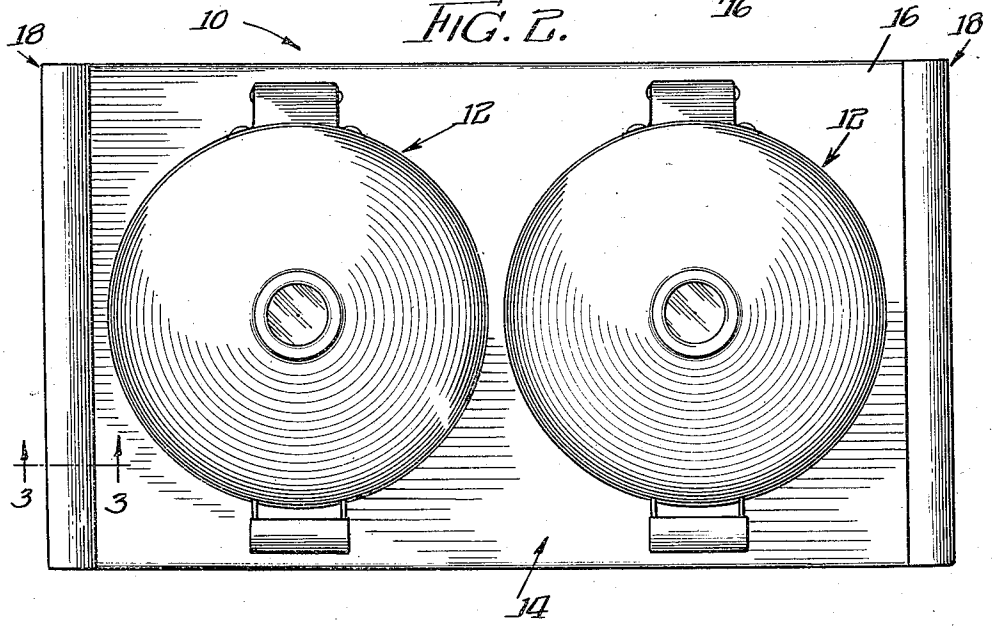


FIG. 3.

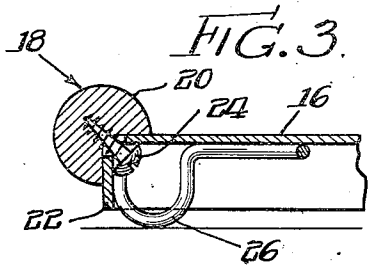


FIG. 4.

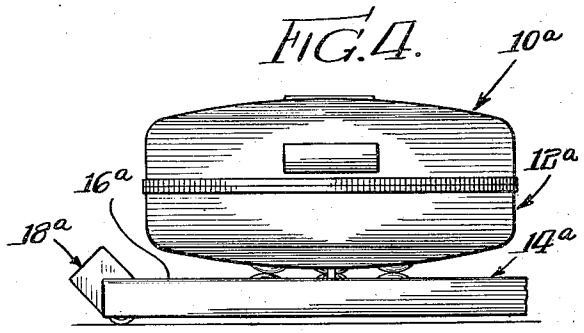
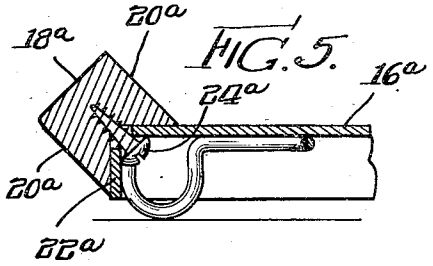


FIG. 5.



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HANDLE FOR HEATING APPLIANCES

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Application August 2, 1937, Serial No. 156,868

4 Claims. (Cl. 16—110)

This invention relates generally to heating appliances and more particularly to handle constructions adapted for use with the metallic tray of such heating appliances.

Heating appliances such as waffle irons, sandwich toasters and the like in many instances incorporate a metallic tray which forms the support for the unit or units which are heated. It is advantageous, therefore, to provide such trays with oppositely disposed handles. The present invention contemplates a new and improved handle construction for metal trays of the type just referred to, which handle construction is extremely simple in design and so disposed with respect to the tray as to materially facilitate manual manipulation of the tray.

The invention contemplates a handle construction of the type referred to above which is readily attachable to the corner presented by the top and depending flange of a tray, and to this end I propose to provide a handle having a recess which is complementary to said corner, thereby enabling the handle to project outwardly and upwardly from the tray.

It is a further object of the present invention to provide handles along oppositely disposed sides of a metallic tray which are adapted to firmly bear against both the top and depending flange of the tray through the agency of a simple clamping means or screw which urges the handle downwardly and laterally into clamping relation with the tray.

The foregoing and other objects and advantages will be more apparent when the following detailed description of the drawing is considered, wherein:

Figure 1 is a front elevational view of a heating appliance, to wit, a waffle iron, equipped with a metallic tray having handle constructions of the type contemplated by the present invention;

Figure 2 is a plan view of the device shown in Figure 1;

Figure 3 is an enlarged fragmentary transverse sectional view taken substantially along the line 3—3 of Figure 2 to more clearly illustrate the manner in which the handle is clamped against the corner structure of the tray;

Figure 4 is a fragmentary front elevational view of a heating appliance, namely, a waffle iron, the metallic tray of which is equipped with a handle construction of slightly modified form; and

Figure 5 is an enlarged fragmentary transverse sectional view of the handle structure of Figure 4, to more clearly illustrate the manner in which the handle is secured to the corner of the tray.

Referring now to the drawing more in detail, wherein I have employed like numerals throughout the various figures to indicate similar parts, it will be seen that for the purpose of illustration I have shown in Figures 1–3, inclusive, a heating appliance designated generally by the numeral 10, which includes a pair of waffle irons 12 mounted upon a metallic tray 14. This tray 14 has a top surface 16, preferably of the type having a high luster, as for example a bright chromium plated surface.

Secured along oppositely disposed sides or corners of the tray 14 are handles 18. Each of these handles 18 is provided with a curved exterior surface 20 adapted to be conveniently gripped by the user. Each handle 18 is longitudinally recessed so as to present two right angularly disposed surfaces which are adapted to engage complementary surface portions of the top 16 and the depending end flange 22, respectively, as clearly shown in Figure 3. In order to continuously urge the right angular surfaces of the handle 18 into firm clamping relation with the top and flange surfaces of the tray, I employ suitable tightening means such as screws 24. These screws 24 serve to urge the handle downwardly and laterally into firm interlocked relation with the corner presented by the top and end depending flange of the tray.

It will be apparent from the foregoing description that the handle 18 extends laterally and upwardly with respect to the tray so as to present oppositely disposed portions of the external curved surface 20 in a convenient position to be gripped by the user. This precludes the necessity of employing finger receiving recesses, and the exterior surface portions of the handle are freely accessible for gripping by the user. Securely clamping the handle in a direction which is substantially forty-five degrees to the horizontal not only renders the handle freely accessible but also insures a firm, rigid connection between the handle and the structure of the tray. Any tendency for the handle to be rotated about its axis is counteracted by the right angularly disposed surfaces of equal size bearing against the complementary surface portions of the top and depending flange of the tray. A suitable foot construction, designated by the numeral 26, may be employed.

In Figures 4 and 5 I have disclosed an electrical heating appliance designated generallly by the numeral 10a, which includes a waffle iron 12a

carried by a metal tray **14***a*. This tray **14***a* has a top surface **16***a* and is provided along oppositely disposed ends thereof with handles **18***a*. These handles **18***a*, like the handles **18**, extend laterally and upwardly at substantially forty-five degrees to the horizontal and are recessed so as to provide right angularly disposed surfaces of equal size adapted to be clamped against complementary surface portions of the top and depending flange portion **22***a* of the tray. A suitable fastening means, such as a screw **24***a*, is disposed at forty-five degrees and serves to securely clamp the handle in position along the corner of the tray, as clearly illustrated in Figure 5. The handle **18***a*, like the handle **18**, is firmly secured against displacement through the action of the screw **24***a*, which firmly clamps the right angularly disposed surfaces against the tray structure. The handle **18***a* differs from the handle **18** only in cross sectional shape. The handle **18***a* is of polygonal cross section, as distinguished from the circular cross section of the handle **18**. The oppositely disposed surface portions **20***a* of the handle **18***a* are conveniently accessible for gripping by the user, and preclude the necessity of employing finger recesses and the like.

The handles are preferably non-conductors of heat. Obviously the invention is not limited to the particular structural features disclosed herein but is capable of other modifications and changes coming within the scope of the claims appended hereto.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A handle construction for a metallic tray of a heating appliance having oppositely disposed corner portions, said handle construction including handle members longitudinally recessed to provide right-angularly disposed bearing surfaces, and fastening means extending through the corner portion of said tray for securing said bearing surfaces in clamping relation with respect to the surfaces of the tray in the vicinity of the corner portions thereof, said handles having opposed gripping surfaces projecting laterally and upwardly with respect to the tray so as to present oppositely disposed surfaces of the handles in convenient finger gripping positions, the said opposed gripping surfaces of each handle being curved.

2. A handle construction for a metallic tray of a heating appliance having oppositely disposed corner portions, said handle construction including handle members longitudinally recessed to provide right-angularly disposed bearing surfaces, and fastening means extending through the corner portion of said tray for securing said bearing surfaces in clamping relation with respect to the surfaces of the tray in the vicinity of the corner portions thereof, said handles having opposed gripping surfaces projecting laterally and upwardly with respect to the tray so as to present oppositely disposed surfaces of the handles in convenient finger gripping positions, said handles being substantially polygonal in cross section.

3. A handle construction for a metallic tray of a heating appliance having oppositely disposed corner portions, said handle construction including handle members recessed to accommodate complementary corner portions of said tray, each handle projecting laterally and upwardly with respect to the tray so as to present oppositely disposed portions of said handle in convenient finger gripping positions, and fastening means extending through the corner portion of said tray for securing said handles firmly in position.

4. A handle construction for a metallic tray of a heating appliance having oppositely disposed corner portions, said handle construction including handle members longitudinally recessed to provide right-angularly disposed bearing surfaces, and fastening means extending through the corner portion of said tray for securing said bearing surfaces in clamping relation with respect to the surfaces of the tray in the vicinity of the corner portions thereof, said handles projecting laterally and upwardly with respect to the tray so as to present oppositely disposed surfaces of the handles in convenient finger gripping positions.

EDWARD S. PRESTON.