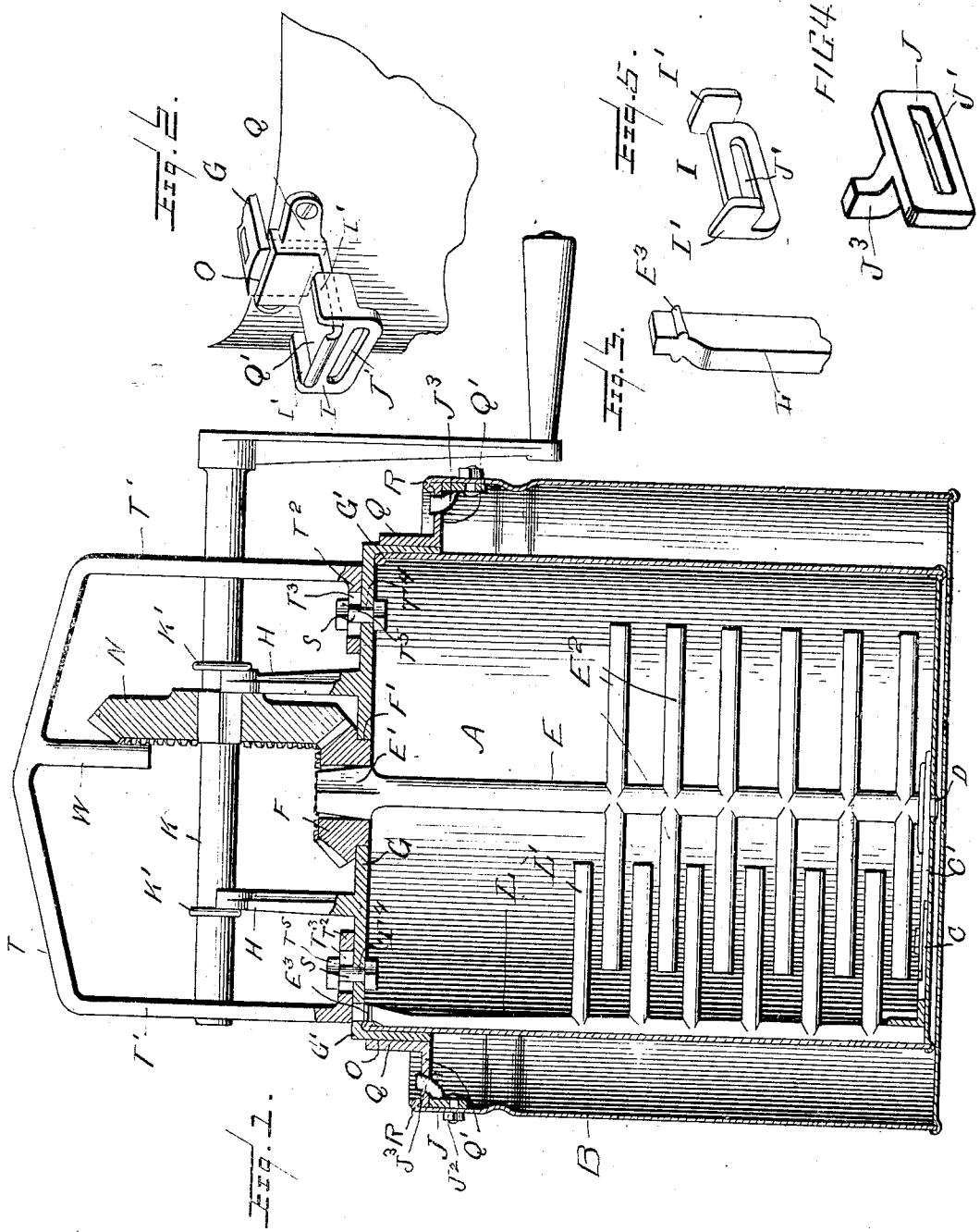
B. N. HAWES.

BUTTER MERGER.

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920,738.

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WITNESSES:

INVENTOR

Benjamin N. Hawes,

BY Franklin N. Hough

Attorney

UNITED STATES PATENT OFFICE.

BENJAMIN N. HAWES, OF WASHINGTON, DISTRICT OF COLUMBIA.

BUTTER-MERGER.

No. 920,738. Specification of Letters Patent. Patented May 4, 1909.

Application filed January 12, 1909. Serial No. 471,924.

To all whom it may concern:

Be it known that I, BENJAMIN N. HAWES, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Butter-Mergers; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in butter mergers and consists of a simple device of this nature, comprising various details of construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a vertical sectional view through the apparatus. Fig. 2 is a detail perspective view of a slight modification of a part of the apparatus. Fig. 3 is a detail perspective view of the upper end of a stationary bar having stirrer arms. Fig. 4 is a detail view of an adjustable plate having an integral lug projecting therefrom, and Fig. 5 is a detail in perspective of the modified form shown in Fig. 2.

Reference now being had to the details of the drawings by letter, A designates a receptacle of any suitable size or shape adapted to contain the articles to be merged, and B designates an outer receptacle designed to contain preferably hot water. Within the receptacle A is a bearing plate made up of two parts, designated respectively by letters C and C′, the adjustment being for the purpose of allowing the bearing member to be applied to various sizes of receptacles. In the present instance, the plate C′ is provided with a flanged plug, designed by letter D, the shank portion of which passes through an aperture in the bottom of the receptacle A and is soldered or otherwise secured thereto. The upper surface of the plug D has a bearing member in which the lower end of the stirrer shaft E is journaled, the other end being angularly outlined at E′ and adapted to fit within a similar shaped opening within a bevel gear F. Said gear wheel F has a portion thereof passing through a cross-piece G which rests upon the upper edge of the receptacle A at positions diametrically opposite and a shouldered portion F′ of the gear wheel F rests upon the upper surface of said cross-piece, as shown clearly in Fig. 1 of the drawings.

Rising from the piece G are two integral flanges H, the upper end of each of which is concaved and forms a bearing surface for the shaft K, having ribs K′ thereon which serve to contact with the outer faces of the flanges H and prevent a longitudinal movement to said shaft. Mounted upon and adapted to rotate with the shaft K is a beveled gear N which is in mesh with the teeth of the gear F and a suitable crank is attached to the shaft K for rotating said gear. The ends of the cross-piece G are bent at right angles, as at G′, and engage recesses O formed in the inner faces of the straps Q which are fastened to the outer surface of the receptacle A at the top thereof. Each of said straps Q has a laterally extending finger Q′ which engages underneath the inwardly turned beading R about the marginal edge of the receptacle B in the manner shown clearly in Fig. 1 of the drawings. In order to prevent the receptacle A from turning within the receptacle B, plates J are provided, each having an elongated slot J′ and an integral lug J³, said plates being fastened to the receptacle by means of bolts J² at positions diametrically opposite. Each lug J³ is adapted to pass through a slot in the finger Q′, thus serving as means for preventing the turning of the receptacle independent of the fingers Q′.

In Fig. 2 of the drawings, I have shown a slight modification of the device for holding the receptacles from rotating independent one of the other and said modification is shown in Fig. 5 and designated by letter I. In Fig. 2, it will be noted that lugs I′ project from the shank portion of the device I and one is adapted to engage each side of the edge of the finger Q′ and serves the same purpose as the form shown in Fig. 1 of the drawings.

Mounted within the receptacle A is a bar L having integral fingers L′ projecting therefrom and between which the fingers E² upon the shaft E pass as the shaft E is rotated, the upper end of the bar L being adapted to engage an aperture in the cross-piece G,

while the lugs E^3 upon said bar will serve to prevent an upward longitudinal movement of the bar L by their coming in contact with the cross-piece G.

A handle, designated by letter T, has parallel arms T', the lower ends of which are angled as at T^2 and each of said angled arms is slotted as at T^3. A bolt S passes through each of said slots T^3 and also through apertures T^4 formed in the cross-piece G. A nut T^5 is mounted upon each of the screws S and serves to hold the ends of the handle in adjusted positions. Depending from said handle is a finger W which is adapted to form means for holding the gear wheel N from movement in one direction upon the angular portion of the shaft K upon which it is mounted and also serving to steady the gear wheel N.

By the provision of the adjusting means as shown and described, it will be noted that the play of the gear wheel may be taken up by moving the handle upon the cross bar G and securely holding the same in an adjusted position. By having the straps upon the cross-piece engaging the inwardly turned rib about the marginal edge of the outer receptacle, said receptacle A will be prevented from lifting out of the outer receptacle incident to any slight pressure which might have a tendency to raise the inner receptacle. By the provision of the adjustable bearing member in the bottom of the inner receptacle, means is afforded whereby the device may be applied to things of different sizes.

What I claim to be new is:—

1. A butter merger, comprising an inner and an outer receptacle, a cross - piece mounted upon the inner receptacle, a vertically mounted rotatable stirrer shaft, a gear wheel rotating with said shaft and having a bearing in said cross-piece, a handle adjustably mounted upon said cross-piece, a shaft carried by said handle, a gear wheel rotating with said shaft and in mesh with said gear wheel having bearings in said cross-piece, the ends of said cross-piece being angled, straps fastened to the inner receptacle and having recesses therein for the reception of the angled ends of said cross-piece, and means for holding one receptacle within the other, as set forth.

2. A butter merger, comprising an inner and an outer receptacle, a cross - piece mounted upon the inner receptacle, a vertically mounted rotatable stirrer shaft, a gear wheel rotating with said shaft and having a bearing in said cross-piece, a handle adjustably mounted upon said cross-piece, a shaft carried by said handle, a gear wheel rotating with said shaft and in mesh with said gear wheel having bearings in said cross-piece, the ends of said cross-piece being angled, straps fastened to the inner receptacle and having recesses therein for the reception of the angled ends of said cross-piece, said straps having laterally projecting fingers, the outer of said receptacles having an inwardly extending beading about its upper marginal edge underneath which said fingers engage to hold one receptacle within the other, as set forth.

3. A butter merger, comprising an inner and an outer receptacle, a cross - piece mounted upon the inner receptacle, a vertically mounted rotatable stirrer shaft, a gear wheel rotating with said shaft and having a bearing in said cross-piece, a handle adjustably mounted upon said cross-piece, a shaft carried by said handle, a gear wheel rotating with said shaft and in mesh with said gear wheel having bearings in said cross-piece, the ends of said cross-piece being angled, straps fastened to the inner receptacle and having recesses therein for the reception of the angled ends of said cross-piece, said straps having laterally projecting fingers, the outer of said receptacles having an inwardly extending beading about its upper marginal edge underneath which said fingers engage to hold one receptacle within the other, and means fastened to the outer receptacle and adapted to engage said fingers to prevent the receptacles rotating independent of each other, as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

BENJAMIN N. HAWES.

Witnesses:

ADA R. FOWLER,

A. L. HOUGH.