PATENT SPECIFICATION

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COMPLETE SPECIFICATION.

Machine for the Production of Ices.

We, The BING WERKE, vorm. GEBRÜDER BING A.-G., of No. 16, Blumenstrasse, Nuremberg, Free State of Bavaria, Germany, a corporation duly organized under the German law, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to a machine for the production of ices in which in an outer stationary receptacle for the freezing mixture a vessel is revolubly mounted in the well known manner which contains the mass to be frozen, the stripping wing of which is stationary.

The characteristic feature of the invention consists in that the bridge, which carries the driving wheel for the revoluble vessel and which can be easily put in place, is secured in its position by the crank handle. With this object in view the wall of the outer receptacle and the bent flaps of the bridge have each a round hole. The hub of the crank handle to be placed upon the driving shaft is inserted through these two holes which serve so to say as bearings for the hub.

On the drawing,

Fig. 1 shows the ice machine in longitudinal section.

Fig. 2 is a plan view of the machine.

Fig. 3 shows in perspective view the removable bridge and part of the receptacle and the crank handle.

In the receptacle 1 for the freezing mixture the vessel 2 is revolubly mounted which contains the mass to be frozen. A cavity 4 of the vaulted bottom plate 3 of receptacle 1 serves as stop bearing for a nipple 6 on the bottom 5 of the vessel 2. The top bearing for the vessel 2 is formed by a hub 7 on the lid 8 of the vessel mounted upon the shaft 9 which carries the stripping wings 10. The upper square end 11 of shaft 9 projects through the bridge 12 which securely holds the shaft in its position. The lower end of the shaft 9 is mounted in the cavity formed by the nipple 4 in the bottom plate 5 of the vessel.

The bridge 12 consists of a piece of band iron the two longitudinal edges 13 of which are bent downward in order to strengthen the bridge. One end of bridge 12 is terminated by an upwardly bent flap 14, the other end forming a U-shaped downwardly bent flap 15. The driving shaft 16, on the end of which the gear wheel 17 is keyed, is mounted in two flaps 18, 19 stamped out of the bridge 12 and bent down at right angles. The flap 14 at the one end of the bridge 12 is inserted into a slit in the upper part of the wall of the receptacle 1 and the flap 15 at the other end of the bridge is placed upon the upper edge 21 of the receptacle 1. The hub 22 of the crank handle 23 has a boring 24 of approximately semi-circular cross section designed to be placed upon the correspondingly shaped end of the driving shaft 16. If the hub 22 of the crank handle is inserted through an aperture 25 of flap 15 of the bridge 12 and through the opening 26 in the wall of receptacle 1 to be pushed over the end of shaft 16, the bridge is secured in its position and at the same time a convenient bearing for the hub of the crank handle is provided, wherefrom results the advantage that no special devices for securing the bridge in its position nor for a special device to serve as bearing for the crank handle are required.

A further advantage resulting from this invention is the simplicity of the driving elements. Only one gear wheel 17 is necessary, the second gear wheel consisting of a toothed crown 27 pressed into the lid 8 of the vessel. The transmission into slow speed enables a rapid

[*Price* 1/-]

production of ice as the mixture contained in vessel 2 has sufficient time to form a crust which is stripped off by the stripping wings and admixed with the mixture which is still liquid, the freezing of the mass being thus considerably accelerated.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. Machine for the production of ices in which in an outer receptacle for the freezing mixture a vessel for the mass to be frozen is revolubly mounted characterized in that the bridge (12) which carries in the well known manner the gear wheel (17) for the revoluble vessel 2 is secured in its position by the hub 22 of the crank handle (23).

2. Machine for the production of ices as claimed in Claim 1 characterized in that a U-shaped downwardly bent flap (15) of bridge (12) and the wall of the outer receptacle (1) have each an aperture (25 26) respectively through which the hub (23) of the crank handle is inserted and in which said hub is mounted.

3. Machine for the production of ices as claimed in Claims 1 and 2 characterized in that for driving the revoluble vessel (2) a transmission into low speed is provided, the larger gear wheel being formed by a toothed crown (27) pressed into the lid (8) of the vessel (2).

Dated this 18th day of December, 1922.

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[This Drawing is a reproduction of the Original on a reduced scale]

Fig.1

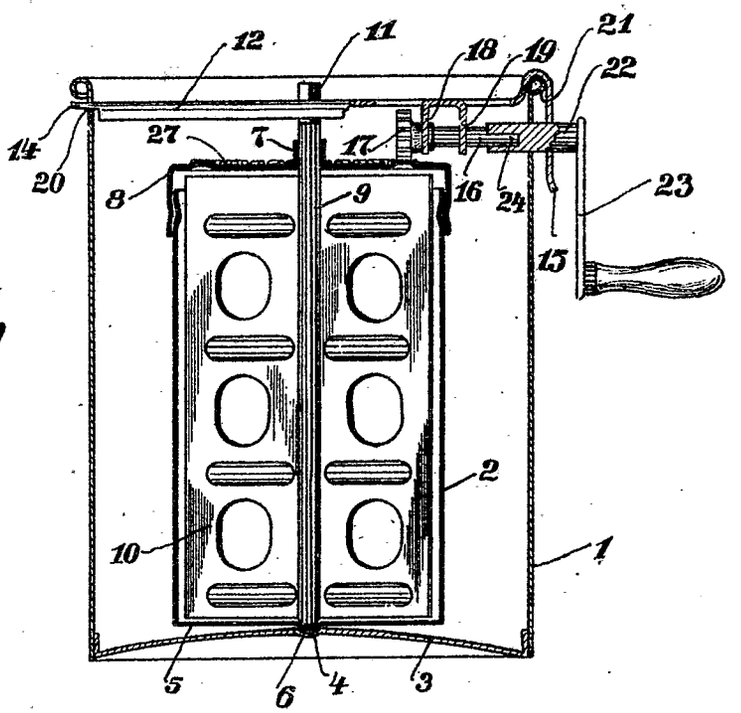


Fig.2

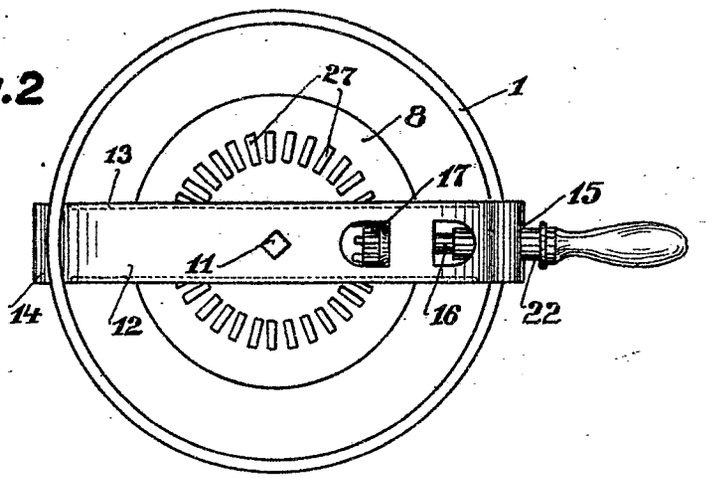
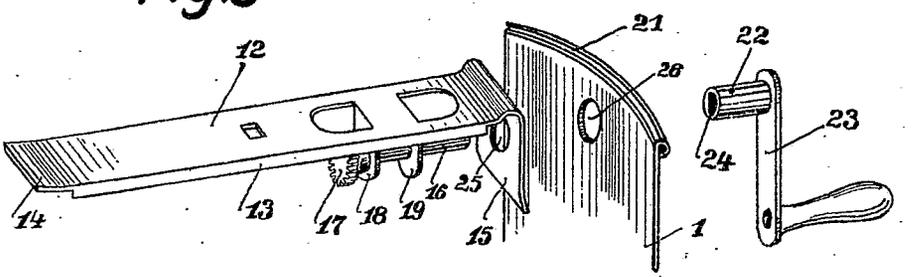


Fig.3



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