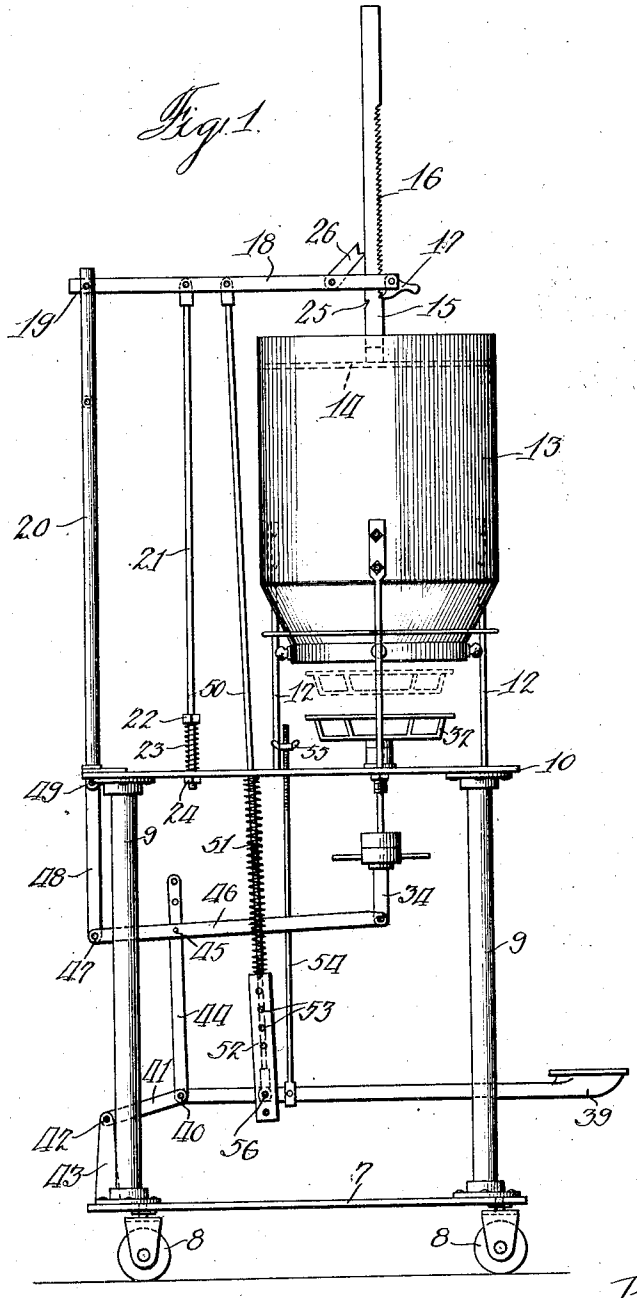
Jan. 3, 1928. 1,654,538

W. EHRLICH

MERINGUE APPLYING DEVICE

Filed Jan. 3, 1922 3 Sheets-Sheet 1

Fig. 1.



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Inventor:
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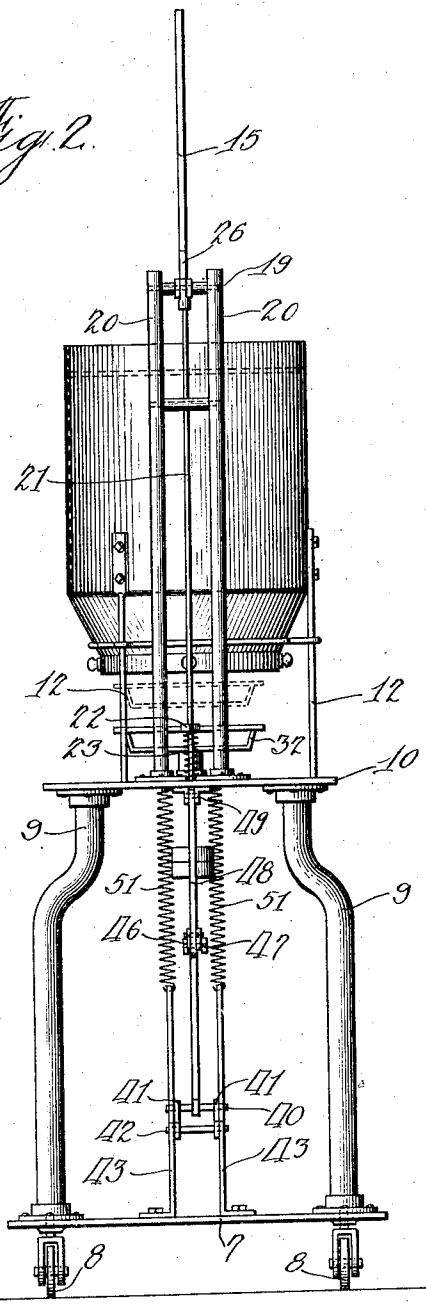
Jan. 3, 1928. 1,654,538

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Filed Jan. 3, 1922 3 Sheets-Sheet 2

Fig. 2.



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MERINGUE APPLYING DEVICE

Filed Jan. 3, 1922 3 Sheets-Sheet 3

Fig. 3.

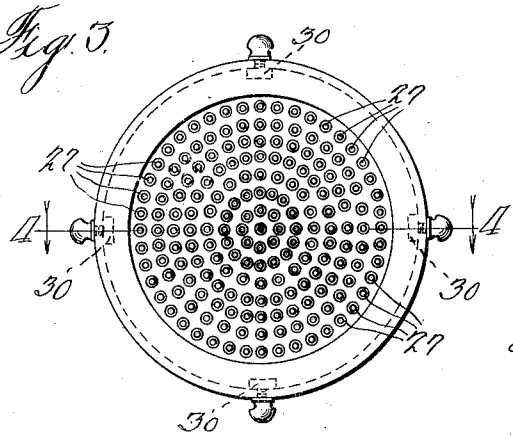


Fig. 6.

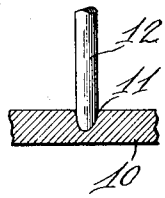


Fig. 4.

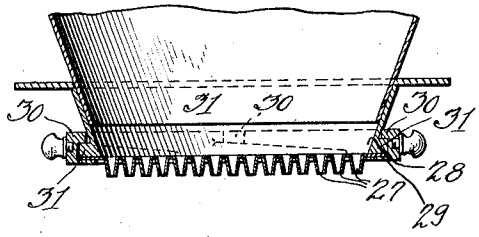
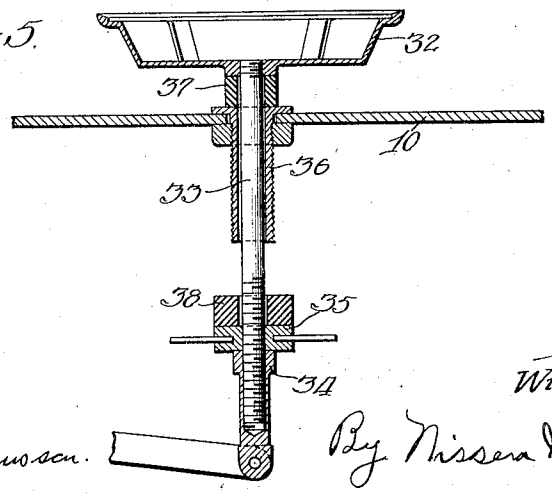


Fig. 5.



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Patented Jan. 3, 1928. 1,654,538

UNITED STATES PATENT OFFICE.

WILLIAM EHRLICH, OF CHICAGO, ILLINOIS, ASSIGNOR TO CASE & MARTIN COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

MERINGUE-APPLYING DEVICE.

Application filed January 3, 1922. Serial No. 526,622.

My invention relates to devices for applying frosting or meringue to pies, and the like.

One object of my improvement is the provision of a simple and efficient device for quickly and easily applying a meringue or frosting to pies, and the like.

A further object is the provision of a device of the character mentioned in which the meringue holding hopper can be quickly and easily taken from or replaced into the device.

A further object is the provision of a device of the character mentioned in which the amount of meringue used can be gaged.

Other objects will appear hereinafter.

An embodiment of my invention is illustrated in the accompanying drawings, forming a part of this specification, and in which—

Fig. 1 is a side elevation of a device embodying my invention;

Fig. 2 is a rear view of the same;

Fig. 3 is an enlarged bottom view of a meringue dispensing die used in the construction;

Fig. 4 is a view taken on line 4—4 of Fig. 3;

Fig. 5 is an enlarged fragmental section showing an adjustment of the pie holder; and

Fig. 6 is an enlarged fragmental detail showing the connection of the meringue holding hopper with the frame.

Referring more particularly to the drawings, I have shown a base 7 mounted on casters 8 for convenience in moving the device about. It will be apparent that such a mounting may be provided or dispensed with as desired. On the base 7 are posts 9 having a plate or table 10 at their tops.

The top 10 is provided with a plurality of recesses 11, see Fig. 6, for engagement of the legs 12 of the meringue holding hopper 13. With this arrangement the meringue holding hopper can be lifted off the plate 10 when desired and again placed in position by simply lifting the meringue holding hopper off the table 10. This has the advantage in that when one hopper is emptied a new hopper can be set in place quickly so that the machine can be kept in continuous operation.

In the hopper 13 is a plunger 14 having an upwardly extending rod 15 for operating said plunger. The rod 15 has notches 16 therein adapted for cooperation with a dog 17 pivotally mounted in the end of a lever 18. The lever 18 is pivoted as at 19 to an upright 20 on plate 10. A rod 21 is pivoted to lever 18 and slidably mounted through plate 10. An enlargement 22 is provided on the rod 21 and a compression spring 23 mounted between the plate 10 and enlargement 22 for supporting the lever 18 normally in the position shown in Fig. 1.

A nut 24 may be threaded on rod 21 so as to limit the influence of spring 23 on said rod. With this arrangement a hopper containing meringue when placed in position will be directly under the plunger 14. The rod 15 has a notch 25 adapted to be engaged by a dog 26 for holding the plunger 14 above the hopper 13 when not in use. When in use the plunger 14 rests on top of the meringue in the hopper and the dog 17 cooperating with notches 16 serves to force the plunger downwardly to discharge the meringue through the bottom of the hopper.

At the bottom of the hopper I provide a die 27 which may be attached to the hopper in any desirable manner. In the present instance a ring 28 has a flange 29 under the peripheral edge of the die 27. Lugs 30 are formed on the ring and engage wedge-like projections 31 on the bottom of the hopper so that the die may be drawn tightly up against the bottom of the hopper. The connection illustrated is sort of a bayonet connection and one which can be quickly and easily adjusted for removing the die or placing the latter in position. The number of openings in the die 27 may be varied at will. I preferably arrange a large number of them so that the meringue will run together on the pie, making a solid mass.

Below the die 27 is a pie tin holder 32 provided with means for holding it close to the die so that a pie on the holder will receive the meringue from said die. In the present instance the holder 32 is fixed on the upper end of a vertical rod 33 which is adjustably mounted in a member 34. Adjustable connections between rod 33 and member 34 are indicated as screw threads and a lock nut 35 is provided to hold the rod in adjusted positions. Said rod 33 is free to rotate in the guide 36 in plate 10, as clearly illustrated in Fig. 5. A cushion 37 is provided between holder 32 and plate 10.

Also, a cushion 38 is provided between the lock nut 35 and the bushing 36.

A foot lever 39 is pivoted as at 40 to a link 41, which in turn is pivoted at 42 to an upstanding ear 43 on base 7. The link 44 is pivoted as at 45 to an intermediate point of a lever 46 which has one end pivoted to member 34 and its other end pivoted as at 47 to a link 48, and the latter pivoted at 49 to plate 10.

A rod 50 is pivoted at one end to lever 18 and at its other end to foot lever 39 for operating said lever 18. Springs 51 have their upper ends attached to plate 10 and their lower ends attached to strap members 52. The straps 52 have a plurality of openings 53 therein for adjustable engagement with foot lever 39 so that the effective tension of springs 51 can be varied. A rod 54 is also pivoted to lever 39 and has its upper end extending through plate 10 with a thumb nut 55 on its upper end.

When the device is ready for use with the plunger 14 resting on top of the meringue in the hopper 13, the operator places a pie or other article to be coated in the holder 32 and moves downwardly with his foot on pedal 39. Due to the strength of springs 51, points 56, Fig. 1, serve as a fulcrum, causing the pivotal point 40 to be moved upwardly. This upward movement forces link 44 and lever 46 upwardly. The upward movement of lever 46 raises the pie holder and connecting parts until the cushion 38 engages the bottom of sleeve 36. This engagement arrests the upward movement of lever 46 and the continued downward movement of pedal 39 then flexes spring 51, and rod 50 moves lever 18 downwardly. This downward movement of lever 18 moves plunger 14 downwardly to force the meringue out through die 27 onto the pie or other article to be coated. As soon as pressure is relieved on foot pedal 39, springs 23 and 51 cause the lever 18 to be raised. The raising of lever 18 will not disturb the plunger 14 since dog 17 can move upwardly along the notches 16. The nut 24 serves as a stop for rod 21 to limit the upward movement of lever 18. When the pedal 39 is released, as above mentioned, the holder 32 will be lowered until cushion 37 is engaged by the holder and plate 10, as indicated in Figs. 1 and 5. The pie can then be removed and a new one placed in the holder. The nut 55 can be adjusted along rod 54 to vary the amount of meringue forced out of the die at each downward movement of the pedal. By moving the nut 55 downwardly, less meringue will be fed, and moving it upwardly, more meringue will be fed.

I claim:—

1. In combination, a frame; a link pivoted in the frame; a foot lever pivoted to said link; a link pivoted to the pivotal points of the first-mentioned link and foot lever; a lever pivoted to the second-mentioned link; a pie holder mounted on said lever; a meringue holder above said pie holder; a plunger in the meringue holder; and a connection betwen the plunger and said foot lever for operating both the plunger and said pie holder.

2. In combination, a frame; a lever pivotally mounted at one of its ends; a pie holder pivoted to the other end of the lever; a meringue holder above the pie holder; a meringue feeding device in the meringue holder; a foot lever pivotally connected at one end with an intermediate part of the first-mentioned lever; a spring connected to an intermediate part of the foot lever; a connection betwen the foot lever and meringue feeding device; and a stop associated with the pie holder, a movement of the foot lever being adapted to move said foot lever on a fulcrum with its connection with said spring and swing the first-mentioned lever in a direction until arrested by said stop.

3. In combination, a frame; a foot lever mounted in the lower portion of said frame; a lever pivotally mounted in said frame above said foot lever; a rod connected with the second-mentioned lever; a pie holder on the upper end of said rod; a removable meringue holder mounted on the frame above the pie holder; a spring connected with said frame and foot lever adapted to provide a fulcrum for the foot lever during a portion of its movement; a connection between said levers; and a stop on said rod adapted to engage the frame and change the fulcrum of said foot lever from said spring to the connection between said levers.

4. In combination, a frame having a supporting plate thereon, a pie holder disposed above said plate, said plate having depressions therein distributed about said pie holder, a meringue holder having legs distributed about the periphery thereof and spaced to register with the depressions in said plate, the ends of said legs being freely removable from said depressions to permit ready removal of said meringue holder, a plunger arranged to enter the top of said meringue holder, a support for said plunger, means for moving said pie holder upwardly to a position adjacent the lower end of said meringue holder, and means for moving said plunger downwardly within said meringue holder to force material from said holder onto the top of a pie supported by said pie holder.

5. In combination, a frame having a supporting plate thereon, a standard projecting upwardly from said plate, a lever pivoted to said standard, a plunger slidably mounted on said lever, ratchet mechanism arranged to permit downward movement of said plunger but to arrest said plunger against upward

movement, a detent for holding said plunger in upper position, a meringue holder movable into and out of registering position beneath said plunger, legs secured to said holder in distributed relation about the periphery thereof, said plate having depressions in the upper face thereof arranged to register with the lower ends of said legs, said legs when resting in said depressions being held therein by gravity only, a pie holder disposed above said plate within the space encompassed by said legs, and a foot pedal connected with said pie holder and plunger and arranged, when depressed, first, to raise said pie holder and thereafter to depress said plunger.

In testimony whereof I have signed my name to this specification on this 12th day of December, A. D. 1921.

WILLIAM EHRLICH.