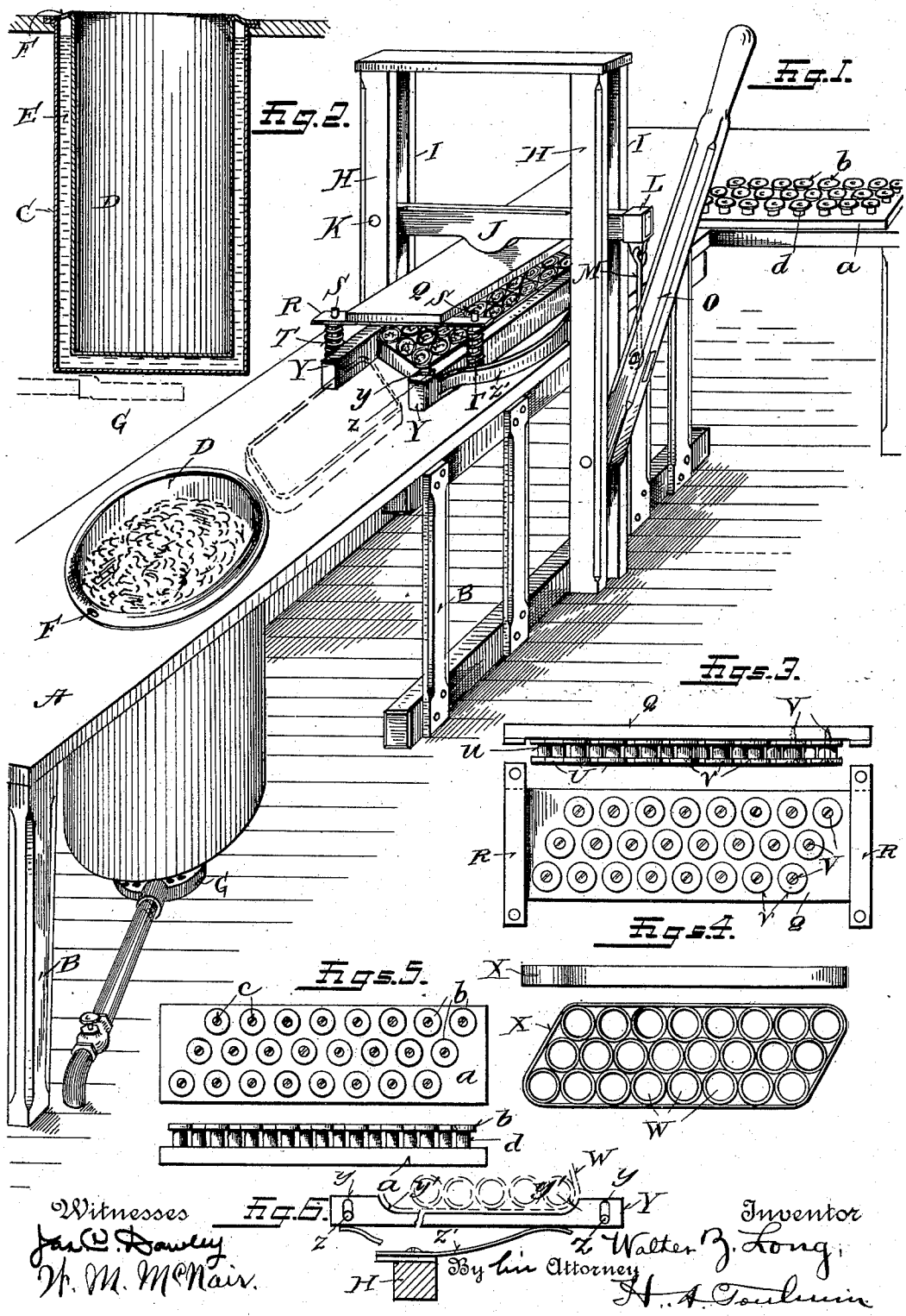
(No Model.)

W. Z. LONG.

POP CORN FRITTER MACHINE.

No. 567,836. Patented Sept. 15, 1896.



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WALTER Z. LONG, OF SPRINGFIELD, OHIO.

POP-CORN-FRITTER MACHINE.

SPECIFICATION forming part of Letters Patent No. 567,836, dated September 15, 1896.

Application filed September 23, 1895. Serial No. 563,284. (No model.)

To all whom it may concern:

Be it known that I, WALTER Z. LONG, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Pop-Corn-Fritter Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain new and useful improvements in pop-corn-fritter machines.

The general objects of my invention are to provide a concrete machine embracing a heater by which to raise the temperature of the pop-corn with its mixture of sweetened and adhesive material to a high temperature, a fritter-crate, a press for compressing the fritters in the crate, and an ejector to dislodge the fritters from the crate. These general objects I carry into practical effect and operation by the mechanism shown, and to be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings, on which like reference-letters indicate corresponding parts, Figure 1 is a perspective view of my pop-corn-fritter machine entire; Fig. 2, a vertical sectional view of the heater; Fig. 3, a side elevation and an inverted plan view of the follower with its compressing-pillars; Fig. 4, a side elevation and plan view of the fritter-crate; Fig. 5, a plan view and a side elevation of the ejector, and Fig. 6 a detail view of the tray-guide.

The letter A designates a suitable table or platform consisting of wood, marble, iron, or other suitable material, and supported upon legs B. A heating vessel for the pop-corn and the sweetened and adhesive material is mounted upon the top A, and consists of an outer vessel C and an inner vessel D, with a space between them for water, as designated at E. One or more orifices F permit the steam to exhaust to prevent creating pressure between the vessels. A natural-gas burner G or other heating means is provided for the purpose of heating the water and thereby enabling the operator to keep to the desired temperature and consistency the pop-corn and the sweetened adhesive material which has been mixed with it. I should also observe that this sweetened adhesive material is first cooked to about 300° to 325°, and then placed in the heater on the pop-corn which has been previously placed therein. I prefer to keep this temperature of from 300° to 325° Fahrenheit maintained in this heater. This is done to keep the proper consistency to enable the material and corn to be worked. Hereinafter in speaking of pop-corn I wish to be understood as meaning the pop-corn combined with this sweetened and adhesive material.

I erect over the top A a press of any suitable kind, say consisting of uprights H and I, between which I fit a presser-bar J, pivoting it at one end, as shown at K, and connecting it by a band L and a rod M at the other end with a suitable lever O, also pivoted between two of the uprights H and I. Beneath the bar J is a follower-plate Q, whose cross-bars R fit over rods S, with springs T beneath them to suitably support the plate and to lift it to normal position after being depressed by the press mechanism. The lower side of the plate Q is provided with a series or suitable number of compressing-pillars U, secured to the plate by screws V or otherwise. These pillars are contracted to form a neck *u*, leaving a head *v*. The neck allows space for the material which escapes past the head, so as to prevent the accumulations enlarging the pillars to an extent that will prevent them from entering the tray, now to be described. This tray consists of a series of short tubes W, suitably connected together and bound by a band or hoop X. The tubes are open at both ends, and when the crate is placed on the top A near the vessel, as seen in dotted lines in Fig. 1, the pop-corn is dipped out of the vessel and placed in the pockets of the crate. The surplus is scraped off back into the vessel and the crate is pushed between the guide-bars Y back under the follower-plate Q to a place to bring the pockets in line with the pillars of the plate. The press is then operated, say by taking hold of the lever O, and the pillars forced down upon the pop-corn in the various pockets, compressing it into a thin fritter. The lever being released and raised and the springs T expanding, the plate with its pillars is withdrawn from the crate and it is pushed through the machine

and placed upon the ejector. This ejector consists of a plate or board *a* and a series of pillars *b*, secured thereto by screws *c* or otherwise. These pillars are also formed with necks *b* to give space for any accumulations. When the tray is forced or pressed down on these ejector-pillars, they eject the fritters from the crate. While this is being done another operator is busy filling other crates, while another may be busy in compressing a third crate of fritters. One or several operators may work at a time, and in either case the output of the machine is rapid and large, many thousands of fritters being formed in an hour.

The apparatus from which the accompanying drawings and this specification have been prepared is in actual use, and the statements here made are based upon practical experience with such machine.

It will be seen from Fig. 6 that one of the guides Y is slotted at *y*, and pins *z*, extending from the top A, fit these slots, and that a spring *z'*, secured to one of the uprights H, bears against such guide. The guide is shouldered at *y'* to receive and hold the tray W in the proper place under the ejector-pillars. The spring *z'* yields to the guide Y in pushing the tray in and pulling it out from between the guides.

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

1. In a pop-corn-fritter machine, the following instrumentalities: a suitable top, a double-walled vessel with a water-space within it, means for heating it, one or more movable crates, a spring-supported follower-plate beneath which the crates are adjustable, compressor-pillars on the plate adapted to enter the pockets of the crate, a presser-bar and a lever therefor to act on the said plate, and an ejector consisting of a plate and numerous ejector-pillars adapted to fit the crate.

2. In a pop-corn-fritter machine, the combination with a fixed top, a fritter-crate adapted to be placed on and removed from said top, supports or guides, a follower-plate mounted therein, devices to raise and lower said follower-plate, said plate having pillars adapted to enter the pockets in the crate, while the pockets are closed at their lower ends by the said top, whereby the corn can be compressed in the pockets, and a stationary ejector-plate placed in proximity to the follower and having a series of upwardly-projecting pillars arranged to be projected into the pockets of the crate when the latter is removed from under the follower and placed thereon by hand, whereby a compressing and an ejecting operation are both provided for.

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

WALTER Z. LONG.

Witnesses:
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