(No Model.)

W. R. GAUDIE.

PIE RAISING AND LIDDING MACHINE.

No. 492,531. Patented Feb. 28, 1893.

Fig. 1

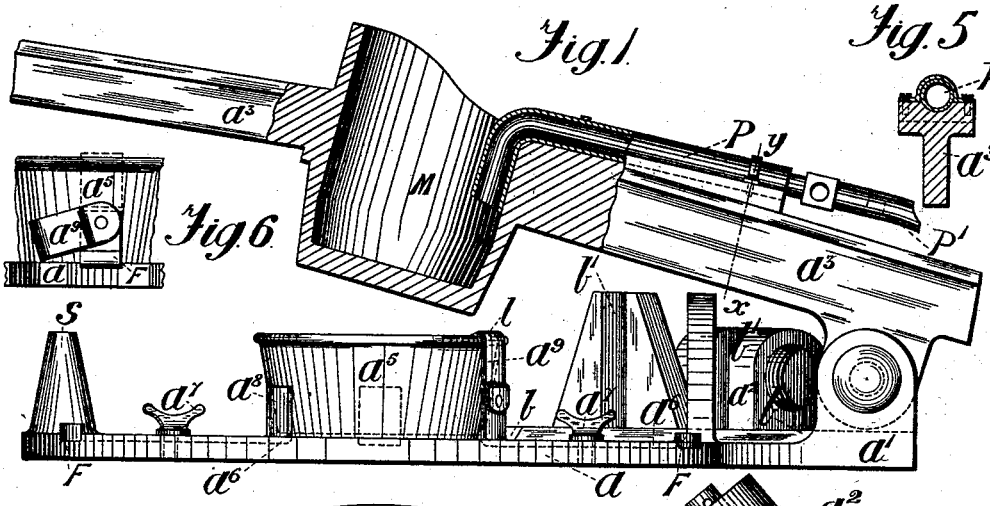

Fig. 5

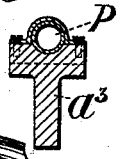

Fig. 6

Fig. 2

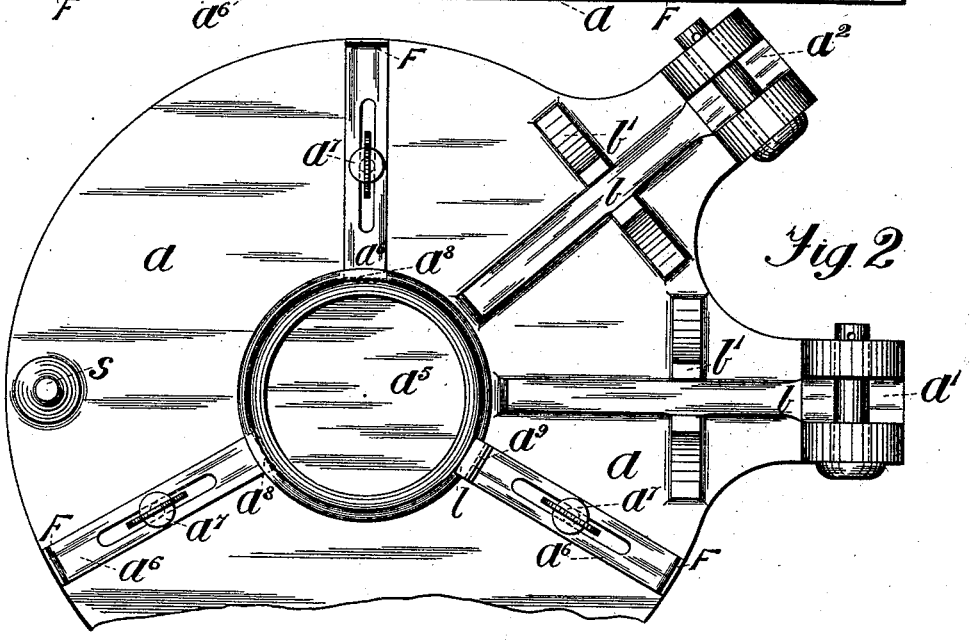

Fig. 4

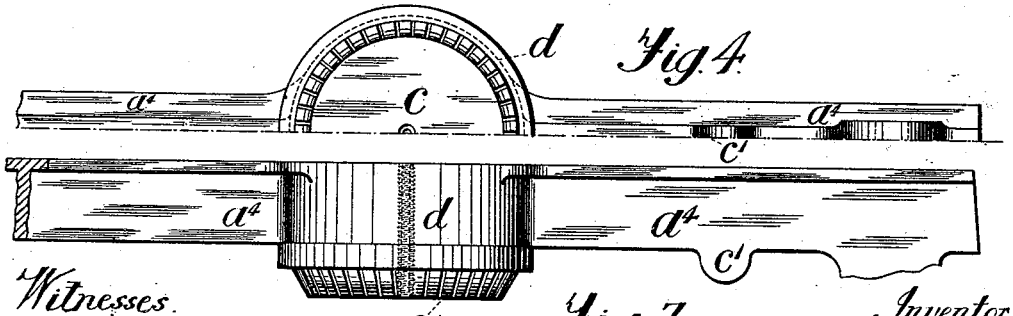

Fig. 3

Witnesses.
J. A. Harvey
J. Johnston.

Inventor.
W. R. Gaudie
by his attorney
A. Crawhall Chapman

UNITED STATES PATENT OFFICE.

WILLIAM R. GAUDIE, OF JARROW, ENGLAND.

PIE RAISING AND LIDDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 492,531, dated February 28, 1893.

Application filed November 14, 1892. Serial No. 451,886. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ROBERT GAUDIE, a subject of the Queen of Great Britain and Ireland, and a resident of Jarrow, county of Durham, England, have invented certain Improvements in Pie Raising and Lidding Machines, of which the following is a specification.

This invention relates to an improved pie raising and lidding machine, the present invention being an improvement on the patent granted to me October 4, 1892, No. 483,549.

The machine may be made in brass or iron and in order that my invention may be fully explained and rendered intelligible, I will now refer to the accompanying drawings, in which

Figure 1 shows a side elevation with the plunger hereinafter mentioned shown partly in section, and Fig. 2 a plan with the plunger and lidder levers, hereinafter mentioned, removed. Fig. 3 shows in side elevation part of the lidder lever, Fig. 4 being a half plan of the underside of same. Fig. 5 is a section on line *x y* in Fig. 1. Fig. 6 shows in elevation a detail hereinafter explained.

Throughout this description like letters of reference designate like parts.

Referring to the drawings A is a baseplate furnished with two radially placed bracket lugs A′ A^2, one of which is intended to carry the plunger lever and the other the lidder lever. In the bracket A′ the plunger lever A^3 is pivoted and in the bracket A^2 a lidder lever A^4 is secured to work in a similar manner.

In the center of the base plate the tin A^5 in which the pie is to be molded is placed and secured in position by means of certain movable slotted plates A^6. These work in radial grooves formed in the baseplate and by means of thumb screws or clamps A^7 can be tightened up in any desired position to suit any desired size of molding tin. Thus by loosening a thumb screw a slotted plate can be moved in its groove toward or from the molding tin and when it is in the required position it can be clamped there by the screw which works in a tapped hole provided in the baseplate. The inner ends of two of the three slotted plates are flanged up at A^8 to abut against and hold the tin in position while the inner end of the other slotted plate is turned up and provided with a hinged catch A^9.

When the molding operation is being performed, the lug *l* on the end of the hinged catch projects slightly over the edge of the tin and prevents the tin being lifted up when the plunger is being withdrawn from the paste in the molding tin.

When the lidding operation is being performed, the hinged catch is thrown over to one side, as shown in Fig. 6 when the turned up end of the slotted plate to which the catch is hinged is used to abut against and hold the tin in position as in the case of the upturned ends of the other slotted plates.

Small flanges F may be formed on the outer ends of the slotted plates whereby to more easily adjust them with the fingers in the required position as above described.

b are strengthening ribs on the baseplate.

b′ are vertically arranged guide brackets to guide the plunger and lidder levers in their descent toward the molding tin.

S is a stop against which the plunger or molding lever abuts at its lowest point so as to regulate the thickness of the pastry in the pie between the bottom of the mold M and the molding tin.

C is a lidder shown screwed onto or against the circular disk *d* formed on the lidder lever. This screw is hollow, in the form of a pipe, to allow the exit of air during the lidding process.

Any convenient size of lidder can thus be attached to the lidder lever and similarly a lever fitted with any required size of plunger can be fitted in bracket A′.

The projection C′ is for the purpose of guiding or directing the vertical descent of the lidding lever between the jaws of the guide brackets *b′*.

P is a pipe secured in any convenient manner on the plunger lever and to it is connected a flexible gas tube P′ fitted with a Bunsen burner. The gas issuing from the end of pipe P into the interior of the mold N, is allowed to burn inside the mold which thus warms the sides of the latter and this has the effect of preventing the external metal of the mold adhering to the pastry during the molding operation.

The operation of the machine is as follows:—First a tin is secured as described on the baseplate in the required position. Sufficient dough is then put into it to form the bottom and sides of the pie. The plunger lever is brought down and the bottom and sides of the pie are made. This tin is then removed and another put in its place. A hundred parts of pies may thus be rapidly made. The contents of the pies are then inserted in succession and pastry lids laid over their tops. The tins or pies thus far advanced in manufacture are then each placed in succession under the lidder lever, the descent of which securely lids and trims the edges of each pie, each of which is quickly removed by hand and replaced by another tin. The operations in this manner can be most expeditiously performed. While lidding, the plunger lever can be thrown back and while molding, the lidder lever can be similarly placed out of the way.

If desired, the plunger lever may be removed after molding and the lidder lever inserted in its bracket thus dispensing with a separate lidding lever bracket but I prefer the arrangement shown in the drawings.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A pie raising and lidding machine consisting of a baseplate containing radially arranged grooves and slotted plates adapted to be secured therein in certain desired positions by thumb screws or clamps the inner ends of the slotted plates being flanged up in order to abut against the molding tins and hold them in position in combination with a gas heated plunger or molding lever and a lidding lever the said plunger and lidding levers being pivoted in lugs formed on an extension of the baseplate and adapted to descend and ascend radially toward and from the molding tins by means of handles or extensions formed on the levers the several parts being arranged and adapted to operate substantially as and for the purposes hereinbefore described.

2. A pie raising and lidding machine consisting of a baseplate containing radially arranged grooves and slotted plates adapted to be secured therein in certain desired positions by thumb screws or clamps the inner ends of the slotted plates being flanged up in order to abut against the molding tins and hold them in position, in combination with a gas heated plunger or molding lever and a lidding lever the said plunger and lidding levers being pivoted in lugs formed on an extension of the baseplate and adapted to descend and ascend radially toward and from the molding tins by means of handles or extensions formed on the levers, the lidder lever having a boss formed on it to which the lidder itself is adapted to be secured, the several parts being arranged and adapted to operate substantially as and for the purposes hereinbefore described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

W. R. GAUDIE.

Witnesses:
A. CRAWHALL CHAPMAN,
J. A. HARVEY.