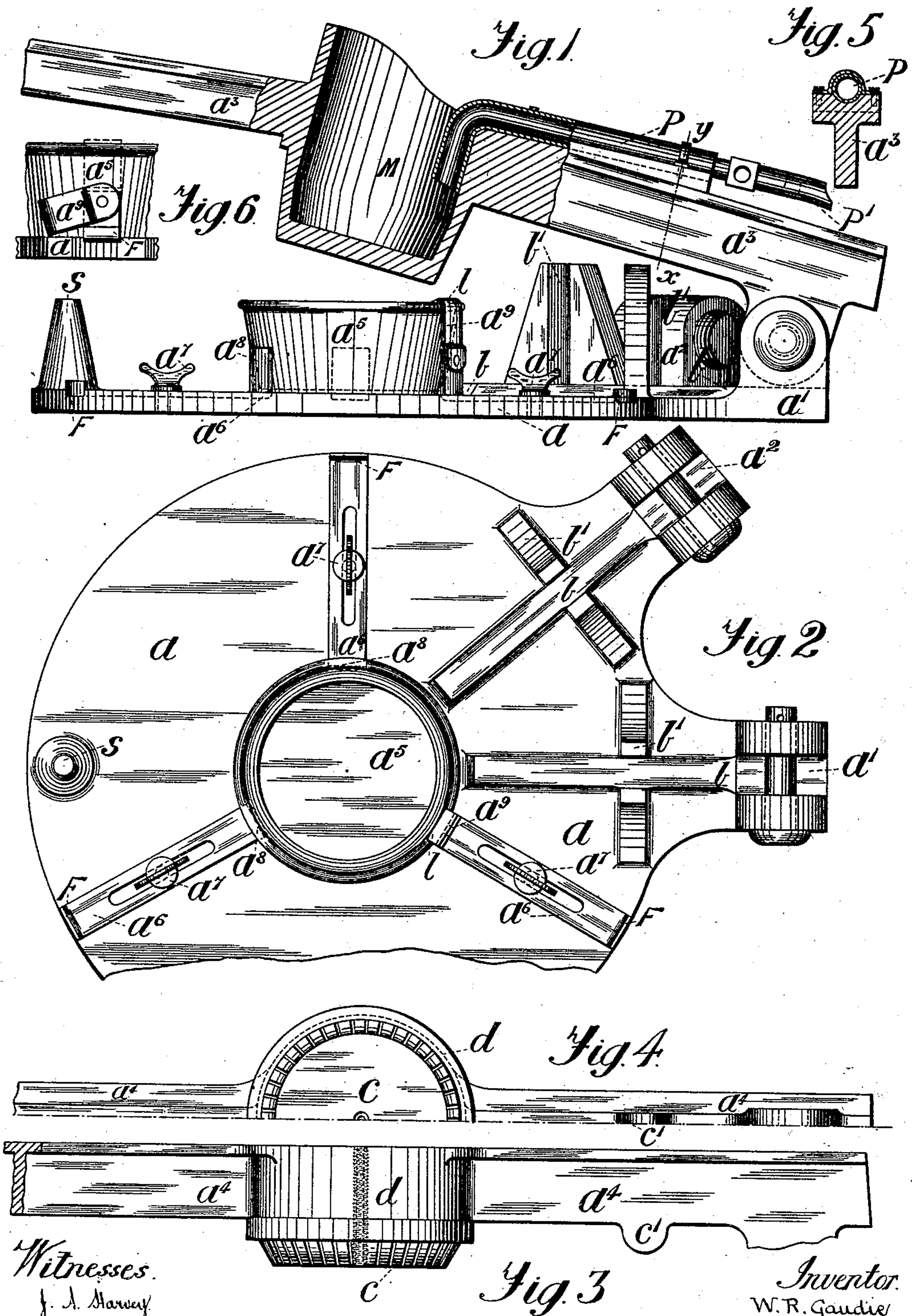


(No Model.)

W. R. GAUDIE.  
PIE RAISING AND LIDDING MACHINE.

No. 492,531.

Patented Feb. 28, 1893.



Witnesses.  
J. A. Marway  
J. Johnston.

Inventor.  
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# 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 *xy* 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<sup>2</sup>, one of which is intended to carry the plunger lever and the other the lidder lever. In the bracket A' the plunger lever A<sup>3</sup> is pivoted and in the bracket A<sup>2</sup> a lidder lever A<sup>4</sup> is secured to work in a similar manner.

In the center of the base plate the tin A<sup>5</sup> in which the pie is to be molded is placed and secured in position by means of certain movable slotted plates A<sup>6</sup>. These work in radial grooves formed in the baseplate and by means of thumb screws or clamps A<sup>7</sup> 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<sup>8</sup> 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<sup>9</sup>.

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 base-  
 plate in the required position. Sufficient  
 dough is then put into it to form the bottom  
 5 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  
 10 contents of the pies are then inserted in suc-  
 cession and pastry lids laid over their tops.  
 The tins or pies thus far advanced in manu-  
 facture are then each placed in succession un-  
 der the lidder lever, the descent of which se-  
 15 curely 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 per-  
 formed. While lidding, the plunger lever can  
 20 be thrown back and while molding, the lidder  
 lever can be similarly placed out of the way.

If desired, the plunger lever may be re-  
 moved after molding and the lidder lever in-  
 serted in its bracket thus dispensing with a  
 25 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 con-  
 30 sisting of a baseplate containing radially ar-  
 ranged grooves and slotted plates adapted to  
 be secured therein in certain desired posi-  
 tions by thumb screws or clamps the inner  
 ends of the slotted plates being flanged up in  
 35 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 le-  
 vers being pivoted in lugs formed on an ex-  
 tension of the baseplate and adapted to de- 40  
 scend and ascend radially toward and from  
 the molding tins by means of handles or ex-  
 tensions formed on the levers the several  
 parts being arranged and adapted to operate  
 substantially as and for the purposes herein- 45  
 before described.

2. A pie raising and lidding machine con-  
 sisting of a baseplate containing radially ar-  
 ranged grooves and slotted plates adapted to  
 be secured therein in certain desired posi- 50  
 tions 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 55  
 lidding lever the said plunger and lidding le-  
 vers being pivoted in lugs formed on an ex-  
 tension of the baseplate and adapted to de-  
 scend and ascend radially toward and from  
 the molding tins by means of handles or ex- 60  
 tensions formed on the levers, the lidder le-  
 ver having a boss formed on it to which the  
 lidder itself is adapted to be secured, the sev-  
 eral parts being arranged and adapted to op-  
 erate substantially as and for the purposes 65  
 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.