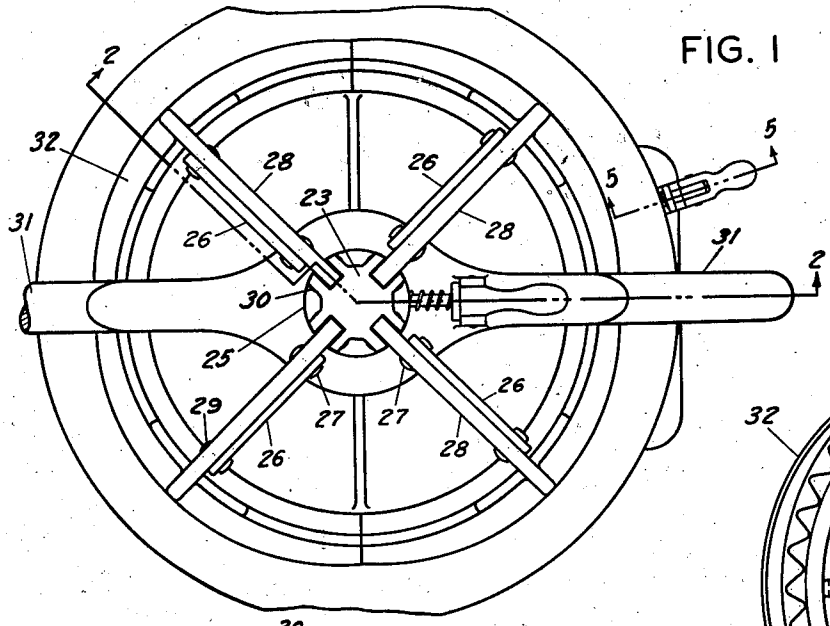
Feb. 19, 1935. C. F. WATERMAN 1,991,588

PIE CRUST FORMING MACHINE

Filed Jan. 30, 1933

FIG. 1



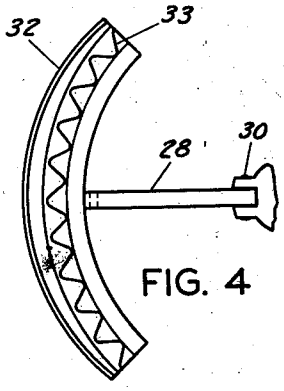


FIG. 4

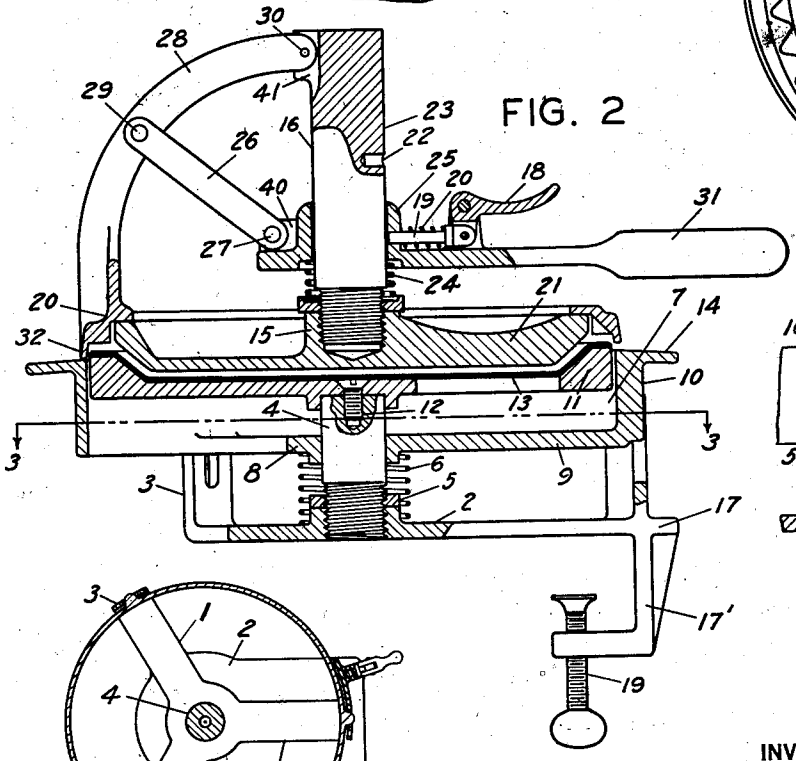


FIG. 2

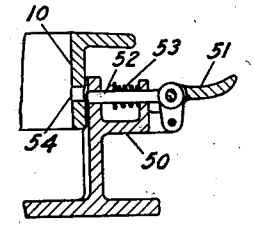


FIG. 5

FIG. 3

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UNITED STATES PATENT OFFICE

1,991,588

PIE CRUST FORMING MACHINE

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Application January 30, 1933, Serial No. 654,205

2 Claims. (Cl. 107—49)

The present invention relates to a pie crust forming machine, and more particularly to a machine for forming pie crusts for pies having no top cover.

In pies of this group are usually included all kinds of custard and other soft pies, such as lemon, cream or squash pies.

In the prior art most of this work was done by hand, except perhaps in very large establishments where various heavy and expensive machines are sometimes employed.

It is essential in forming the sides of the pie crusts to build them up above the pie plate in such a manner that the crust has sufficient strength to hold together and to contain the pie filling.

In the present invention a simple portable machine is provided for building up the side walls of the pie crust with a single operation and at the same time forming and crimping the crust in the desired mold or shape.

The present invention provides a simple inexpensive machine which can be manually operated without any special skill or training on the part of the operator.

Further features of the invention will be understood in connection with the following description which describes the embodiment of the invention as illustrated in the drawing annexed hereto, in which:

Figure 1 is a plan view looking downward on the device.

Figure 2 is a section on the line 2—2 of Figure 1.

Figure 3 is a section on the line 3—3 of Figure 2.

Figure 4 shows a detail of the forming crimping mold.

Figure 5 shows a further detail.

As indicated more specifically in Figure 2, a base 2 is provided having radially extending arms 1 at the ends of which are angular guiding elements 3 extending upward. The base 2 is also provided with an extending arm 17 to which a bracket 17' is integrally formed to provide a clamping element in which the clamping bolt 19 serves to clamp the base to a table or board. A shaft or bearing 4 threads into a boss 5 in the middle of the base 2. About the shoulders of the boss rests a helical spring 6. The frame 7 having a central bearing 8 is positioned to work up and down on the shaft 4, the bearing 8 resting on the spring 6.

The frame 7 as indicated more clearly in Figure 2 comprises the central circular bearing 8 from which extend radially the arms 9 supporting the outer cylindrical collar 10 at the top of which there extends a flange 14 sloping slightly downward at an angle.

Mounted upon the top of the bearing 4 is a retaining plate 11 which is held into the bearing 4 by means of a machine screw 12. The top of the bearing plate 11 is formed to receive a pie plate such as indicated at 13. The mechanism which is placed on top of the pie plate will now be described.

This comprises a plate 21 having a lower surface corresponding to that of the pie plate. On the upper side of the plate 21 is a central boss 15 in which is threaded an upwardly extending shaft 16. About the shaft 16 is a travelling bearing 25, having two extending arms 31 formed at the ends in handles. Mounted on top of the arm is a locking device comprising a pivoted thumb lever 18 operating a locking bolt 19 working through the bearing 25 against the spring 20. The bearing 25 is provided with projecting ears 40 in which the arms 26 are pivoted by the bearing 27. At the other end of the arm 26 is a bearing 29 which links the arm 26 to the arm 28 pivoted by the bearing 30 in the ear 41 extending from the top of the shaft 16. The arm 28 as indicated in Figure 4 carries at its lower end a horizontal arm 20 carrying the forming mold 33 which is provided with a downwardly extending flange 32 adapted to run over the surface 14.

Before the pie plate is placed upon the plate 11, the arm 31 is raised until the bolt 20 engages in the bolt hole 22. The pie plate 13 is then placed in position with the dough spread out over it and extending over the flange 14. When the arm 31 is depressed by pressing the thumb lever 18 the arms 28 which are extended outward, swing in, and the flange 32 bearing against the surface 14, as the arms swing inward, force the collar 10 downward. The collar 10 is forced downward until it is locked in place by means of the lock 50.

Mounted on the arm 3 of the base plate 2 the lock 50 is similar to that mounted on the arm 31 having a pivoted lever handle 51 and a bolt 52 which is pulled backwards against the spring 53. When the collar 10 moves downward, the bolt 52 engages in the bolt hole 54 and the surface 14 is thereby held solidly in place. The flange 32 therefore passes over the surface 14 forcing the dough laying over it into the mold 33 thus forming the crust at the top outer rim of the pie.

The invention described above has been repeatedly used by the applicant with great con-

venience and success and has enabled him to make more uniform soft pies with very little expenditure of time.

Having now described my invention, I claim:

1. A machine for building up crusts for soft pies, comprising a base having a plate holder, a vertically movable surrounding shell having a downwardly inclined top surface, a centering member fitting upon said plate holder and having an upwardly extending support, a plurality of adjustable arms carried by said support and having peripheral molds adapted to lock with the edge of the centering member to build up the crust.

2. A machine for building up crusts for soft pies comprising a center table for holding the pie plate, an apron formed about the table as a sideways-extending flange with reference to the table, and normally positioned above the table, a centering support adapted to be positioned over the center of the table, a forming mold having a plurality of sections supported from said support, means operating said forming mold to scrape the latter over the apron and means for allowing said apron to yield below the top of said table.

CLARENCE F. WATERMAN.