

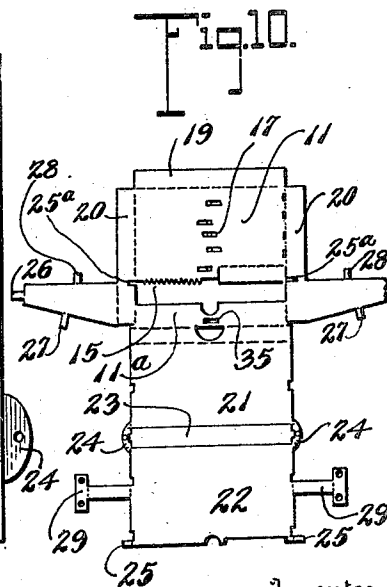
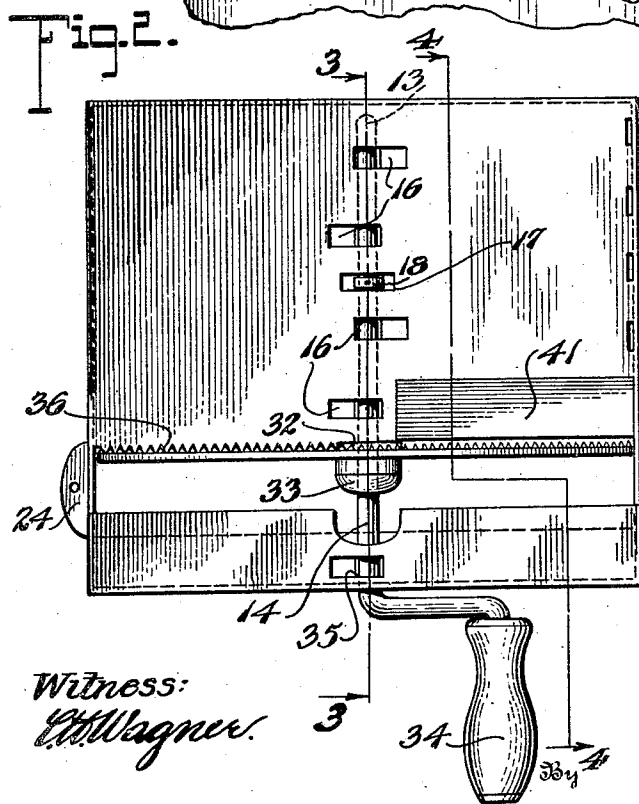
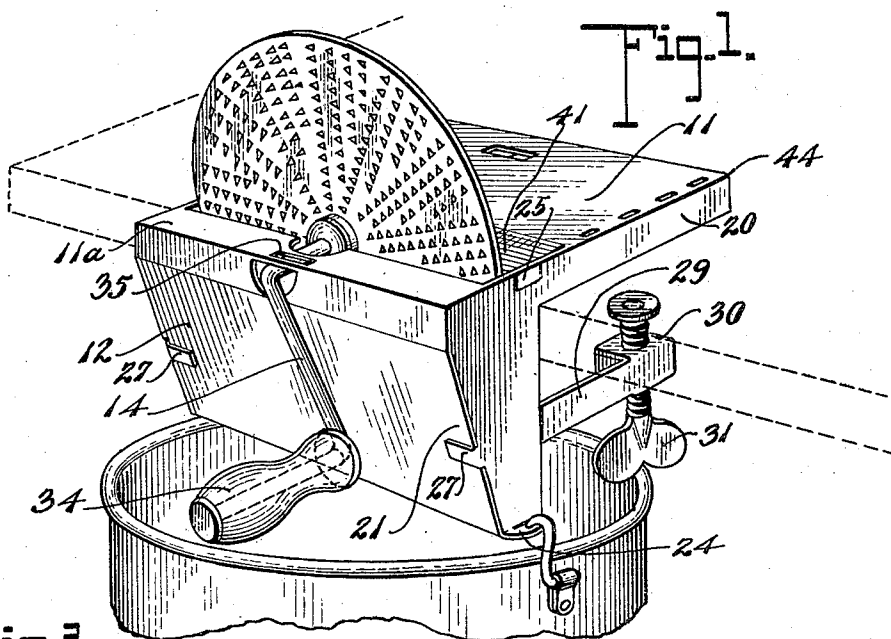
R. W. CHARLTON.
KITCHEN UTENSIL.

APPLICATION FILED DEC. 4, 1920. RENEWED APR. 7, 1922.

1,417,453.

Patented May 23, 1922.

2 SHEETS—SHEET 1.



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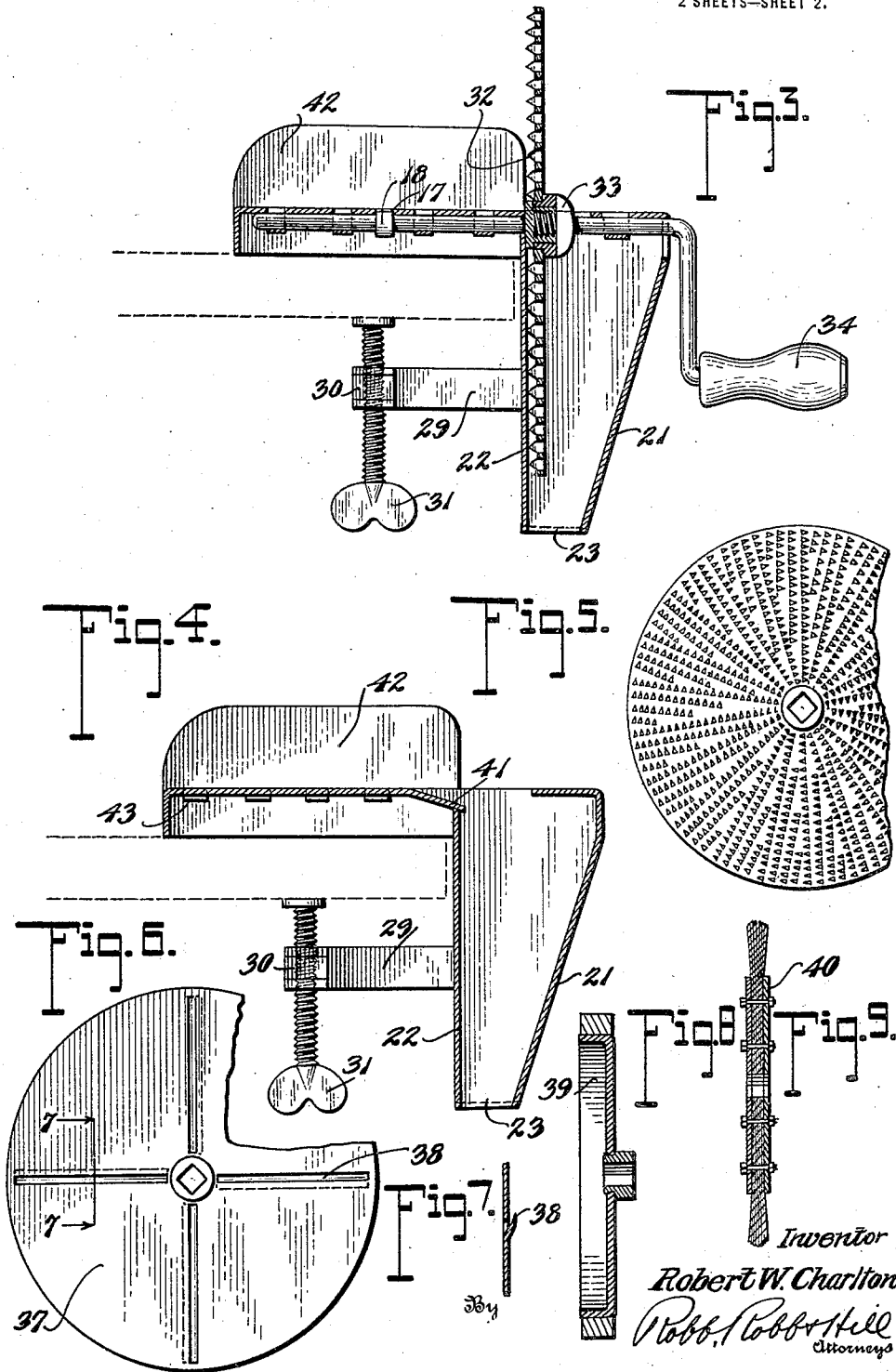
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UNITED STATES PATENT OFFICE.

ROBERT W. CHARLTON, OF PINEVILLE, LOUISIANA, ASSIGNOR OF ONE-THIRD TO AUGUST F. KLUMPP AND ONE-THIRD TO ARTHUR R. CHAMBERLAIN, BOTH OF PINEVILLE, LOUISIANA.

KITCHEN UTENSIL.

1,417,453.

Specification of Letters Patent. Patented May 23, 1922.

Application filed December 4, 1920, Serial No. 428,252. Renewed April 7, 1922. Serial No. 550,514.

To all whom it may concern:

Be it known that ROBERT W. CHARLTON, a citizen of the United States, residing at Pineville, in the Parish of Rapides and State of Louisiana, have invented certain new and useful Improvements in Kitchen Utensils, of which the following is a specification.

My invention has to do with rotary grinding and cutting implements and relates particularly to the employment of such implements in culinary apparatus, it being the object of this invention to provide means whereby such operations of the housewife as are adapted to be performed by rotating tools may be performed in a single device by an interchanging of work wheels or discs. It is contemplated that there shall be disc or work wheels, disc or wheel holding and operating means, and mountings or housings therefor, such mountings or housings being of simple construction and providing at a low manufacturing cost a novel combination work or feed table and discharge chute.

An additional object of my invention is to provide a means for mounting the wheel or disc operating or holding mechanisms in such a manner that the parts thereof may not become dis-associated yet permit of quick interchange of discs or wheels, and a further object is to provide a unique work table and discharge chute adapted to be stamped from sheet material, and bent to shape, the table having the added utility of providing bearings for the wheel or disc carrying parts.

The invention rests, primarily, in the construction, combination, and arrangement of the several parts of the device, it having already been pointed out that the work table and chute are capable of being integral, the form of the blank therefor providing means whereby the table and chute are rigidly locked in completed relation, offering in the completed device one readily attachable to a kitchen table, shelf, or a like object.

The objects which I have recited and other objects which will become apparent as the description proceeds I have attained by the device illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of the inven-

tion showing the manner in which a receptacle may be held upon the discharge chute; 55

Fig. 2 is a top view thereof;

Fig. 3 is a sectional view on the line 3—3 of Fig. 2;

Fig. 4 is a sectional view on the line 4—4 of Fig. 2;

Fig. 5 is a fragmentary elevation of a grating disc or wheel adapted to be used on my device;

Fig. 6 is a fragmentary elevation of a slicing disc for use thereon;

Fig. 7 is a vertical fragmentary section on the line 7—7 of Fig. 6;

Figs. 8 and 9 show, respectively, vertical sections of polishing and brush members; and

Fig. 10 is a plan view of the work table and chute as cut from sheet material.

Corresponding parts are referred to by like reference characters throughout the description which follows and in the several views above referred to.

Well knowing that the principal occupations in the kitchen are slicing, grating, rasping, polishing and cleansing, and that these operations can best be done by employing wheels or discs having faces or constructions adapted for these purposes, I have provided a work table 11 upon which materials or objects to be brought in contact with the work wheels or discs are held, a chute 12 for conveying the materials as discharged from the work wheels, a shaft 13 journaled upon the work table and carrying discs or wheels, and manipulative means 14 connected to said shaft and locking the working discs or wheels carried upon the latter rigidly in operative position.

Work table 11 and chute 12 may be stamped or cut from sheet metal in a single operation. The cut or stamped sheet material comprises, as clearly shown in Fig. 10, the working table proper designated by the numeral 11 and an outer table or shelf 11^a in the same plane and separated from the table 11 by a slot 15 in which the working wheels or discs to be hereinafter described rotate. A number of oppositely arranged tongues 16 are stamped from the material comprising the work table parallel to the length of the latter and are bent about the shaft 13 to form bearings there-

for, said shaft being arranged beneath and transversely of the work table substantially midway its length. A slot 17 is cut in said material, preferably between several of the
5 tongues 16, to admit the attachment of a collar 18 to said shaft 13 and to prevent longitudinal displacement thereof.

Projecting from the back edge of the work table 11 is a leaf or extension 19 of the same
10 length as the table 11, its outer edge being parallel to the edge of the table. Upon each end of said table 11 are leaves 20 of irregular marginal contour but of the same width as leaf 19 from the back edge of said
15 table to a point substantially in the same perpendicular plane as the front edge thereof. The outer edges of this portion of the leaves 20 are parallel to the ends of the work table 11 so that when said leaves 19
20 and 20, are bent downwardly at right angles to the work table 11 they form a substantial and elevating support and provide means whereby the device will rest solidly
25 upon flat surfaces and allow free movement of the shaft 13.

Leaves 20 extend outwardly substantially to the outermost edges of shelf 11^a and when folded downwardly and at right angles, as heretofore described, form opposite end
30 walls of the chute 12 which latter is completed by, first, bending the material downwardly at right angles to shelf 11^a, then slightly inwardly until the extremities of the leaves 20 are reached to form the front
35 21 of said chute, then horizontally and inwardly along the extremities of said leaves, and then vertically upward to form the back wall 22 of said chute, the slot 23 stamped in the material forming a discharge opening
40 between the several walls of the completed chute.

Short extensions of the material which may be designated as leaves 24, are arranged at and about the ends of the slot 23 connecting
45 the front wall 21 and the back wall 22, and form hooks or means whereby receptacles receiving materials discharged through the chute may be retained in position, as clearly illustrated in Fig. 1.

To lock the material in its bent relation and to lend strength to the device numerous tongues and slots to receive same are provided. These may be arranged at points which appear most expedient; in practice
55 it is found that the back wall 22 of the chute may be most firmly locked in position by inserting the tongues 25 carried thereby into slots 25^a cut through leaves 20 and bending said tongues 25 inwardly or outwardly
60 therealong; the leaves 24 may be held in position and strengthened by bending the tongues 26 at the extremity of leaves 20 thereupon, while tongues 27 and 28 upon the sides of said leaves 20 reinforce the
65 chute when bent about the front and back

walls, 21 and 22 respectively, thereof. At proper points in the margin of the material indentations are provided to permit of a snug interfit and flush joining between the
70 contacting edges of the folded parts.

Arms 29, obviously capable of being carried by other portions of the material are shown projecting from the back wall 22. The purpose of these arms is to provide a convenient means for attaching the work table
75 11 to a flat object such as a table or shelf, and in carrying out this object, said arms 29 are bent inwardly and at right angles to said back wall 22, the apertured wings
80 30 at the free end thereof being bent inwardly and toward one another until at right angles to the arm 29 and parallel to one another. A thumb screw 31 passing
85 through said apertures permits of a rigid engagement of the device upon a table or other supporting mediums.

As hereinbefore stated, the shaft 13 is inserted into the bearings provided therefor by the bent tongues 16, and held in proper position by the detachable collar 18. Carried upon the outer end of shaft 13 is a disc
90 or wheel holding head 32 best shown in Fig. 3, the external portions thereof adjacent to the table 11 limiting the inward extension of the shaft 13 when inserted into its bearings and preferably being circular. The material of table 11 is cut away slightly to receive this head 32. Said head externally has a squared or rectangular portion to receive
95 the discs and working wheels which will hereafter be described.

Internally the head 32 is threaded to receive the operating crank 14 which carries an externally threaded portion for insertion therein. Adjacent to the threaded portion
105 of said operating crank 14 is a collar 33 adapted to frictionally engage and hold rigid any disc or wheel carried by the shaft 13 when the crank 14 is screwed into operating position thereon.

A handle 34 or grip piece preferably rotatable is carried by the crank at its free end, and held in position thereon by a rivet or nut.

That the crank 14 may be retained in close
115 association with the shaft 13 although disconnected therefrom and that there can be no possibility whereby said crank may be lost or misplaced a tongue 35 is stamped from the material composing the shelf 11^a and bent
120 about said crank 14 in such a manner as to form a bearing therefor and prevent its removal from the device. This arrangement does not interfere with the removal of discs or wheels from the shaft 13, which operation
125 is performed by holding the shaft 13 rigid and rotating the crank 14 backwardly until said shaft and operating handle are separated when the working disc or wheel may be removed, and that there may be a wider
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movement of the crank 14 when work wheels or discs are being placed upon the shaft, parts of the shelf 11^a and the front wall 21 of the chute 12 are stamped out as may be clearly seen from Fig. 10.

Fig. 5 depicts one type of grating wheel adapted for use in my invention. The teeth employed on said wheel, it will be noted, are concentric in arrangement. This admits of ready cleansing by the device itself. To accomplish this the portion of the outer edge of the work table on the side not used for feeding is serrated as indicated at 36. Material clinging to the disc will be scraped therefrom and allowed to fall through the chute 12 as the wheel revolves always presenting to the material held upon the work table a clean surface and avoiding the clogging so frequently encountered in grating devices.

A slicing wheel 37 having knives 38 is shown in Fig. 6. With each revolution of this disc four slices of the material are made and deposited in the chute 12. The rapidity with which the material may be cut into slices is determined only by the speed with which the wheel may be rotated and the material fed thereto. Thin or thick slices may be obtained by the use of different wheels.

A sharpening wheel 39 is illustrated in Fig. 8 and in Fig. 9 is found a cleansing wheel 40 formed by the use of a number of stiff bristle or wire members having their ends projecting outwardly from said disc.

To enable the operator to feed small pieces of material against the several working discs an incline 41 is provided at one side of the table, this incline permitting of a more secure holding of the material to be worked upon and admitting of a more perfect feeding thereof. In slicing pineapple or other tenacious material it is advisable to have a rest against which the material may be held as it is forced down the incline and against the cutting or grating wheels. I have, therefore, provided my device with a siding 42 having multiple tongues 43 insertable into slots 44 adjacent the outer edge of the work table 11. When the siding is used, material may be more firmly held and fed with a degree of regularity not possible when this siding is not employed.

I believe that from the foregoing my invention may be fully understood. The interchanging of wheels or discs is a simple matter. To remove a wheel or disc the crank 14 is reversely rotated while the shaft 13 is held stationary until the crank 14 and shaft 13 are separated. The wheel or disc carried on the shaft is dislodged and a new wheel placed thereon. The crank 14 is then rotated directly, the shaft 13 remaining stationary until said crank 14 is screwed home, when the shaft can no longer be held stationary while the crank 14 revolves. The more resistance offered to the operation of the wheel

or disc carried by the shaft 13 the firmer the connection between the shaft 13 and the crank 14 and the more rigidly the working disc is locked in position.

While I have described and illustrated one form of my invention, it is not my intention to be limited or bound thereby, for such modifications, alterations and changes as come within the scope of the claims hereto appended are to be resorted to when desired.

Having thus described my invention, what I claim as new and desire to secure by Letters-Patent of the United States, is:—

1. As a new article of manufacture, a kitchen utensil comprising a sheet metal blank bent intermediate its length to form a horizontal work table at one end and a vertically disposed chute at its other end, the work table section having strips stamped therefrom at spaced points in the surface to form shaft-bearing supports, and the chute section being formed with an arm bent at right angles thereto into position beneath the work table support and constituting means for sustaining a clamping device, and grating, means mounted at one side of the work table support.

2. As a new article of manufacture, a kitchen utensil comprising a sheet metal blank bent intermediate its length to form a horizontal work table support at one end, the edges of said support being bent downwardly therefrom to form supporting flanges, and the material of said support having strips stamped therefrom to provide shaft bearings, the other end being formed into a chute and having an extension at one side thereof bent at right angles thereto into position beneath the work support for carrying a clamping member engageable with a table or the like, and clamping and grating means mounted upon said member.

3. A kitchen utensil comprising a work table and discharge chute, a tool holding shaft and detachably connected manipulative means therefor arranged transversely of said work table, and a tool removably connected to said shaft, said table engaging the manipulative means to prevent its removal from the utensil when detached from said shaft.

4. In a kitchen utensil, the combination of a work table, a chute at one end thereof, said table having a feeding incline leading into said chute, a portion of the edge of said table adjacent said chute being serrated, a shaft supported by said table, a disc carried by said shaft and projecting into said chute and means for rotating said disc, the serrated edge of said table being adapted to cooperate with a face of said disc as the latter is rotated for cleaning said face.

5. A kitchen utensil comprising a work table, a chute beneath one end portion of said table, said table having an elongated

slot therein over said chute, a shaft rotatably supported by said table at one side of said slot, detachable operating means for said shaft supported by said table at the opposite side of said slot, and a disc mounted upon said shaft and projecting through said slot into said chute, said disc being releasably locked upon said shaft by said operating means.

- 10 6. In a kitchen utensil, a stationary part comprising a work table, a chute leading therefrom, extension members forming supports for said table and walls for said chute, and arms to receive locking members, a ro-
15 tatable part comprising a shaft, interchangeable discs carried by said shaft, and manip-

ulative means for the latter locking the former in operative position, and table or shelf engaging members carried by said arms to lock the utensil thereon.

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7. In a kitchen utensil, a one-piece sheet metal structure comprising a work table, a chute beneath one end portion of said work table, and members extending from the opposite ends of said chute beneath said table and adapted to support clamping screws, said table having an elongated slot over said chute, one edge portion of said slot being serrated for the purpose set forth.

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In testimony whereof I affix my signature. 30

ROBERT W. CHARLTON.