No. 711,837. Patented Oct. 21, 1902.

H. O. EVANS.

FOOD CHOPPER.

(Application filed May 11, 1901.)

(No Model.)

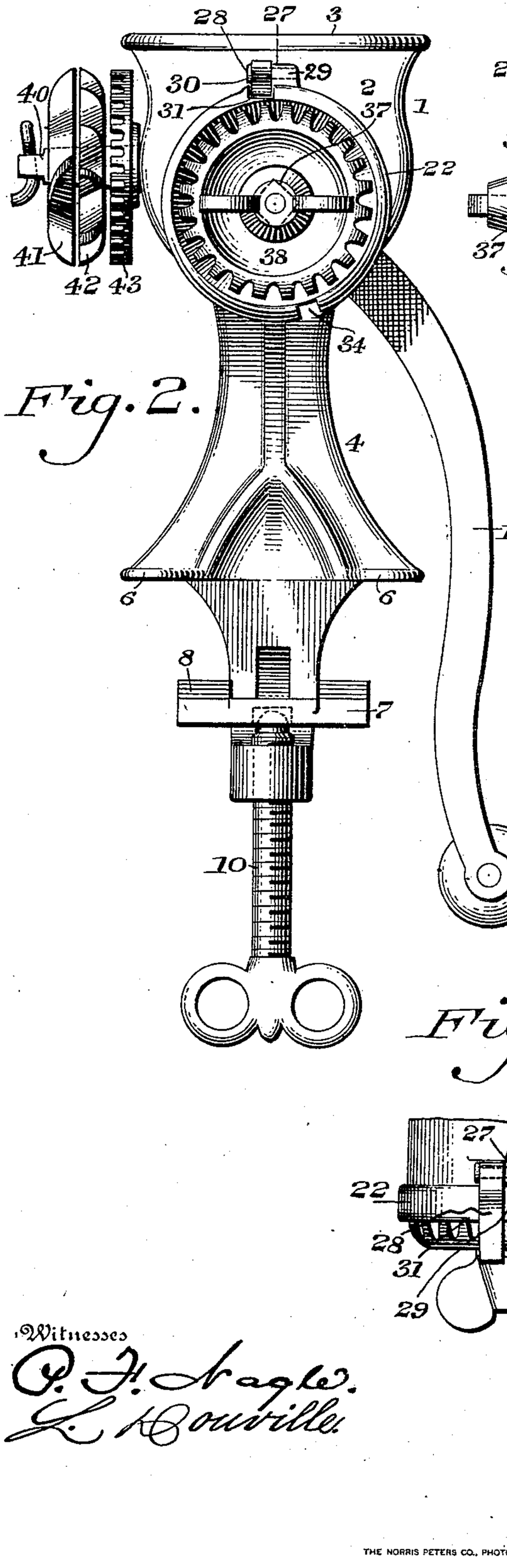

Fig. 2.

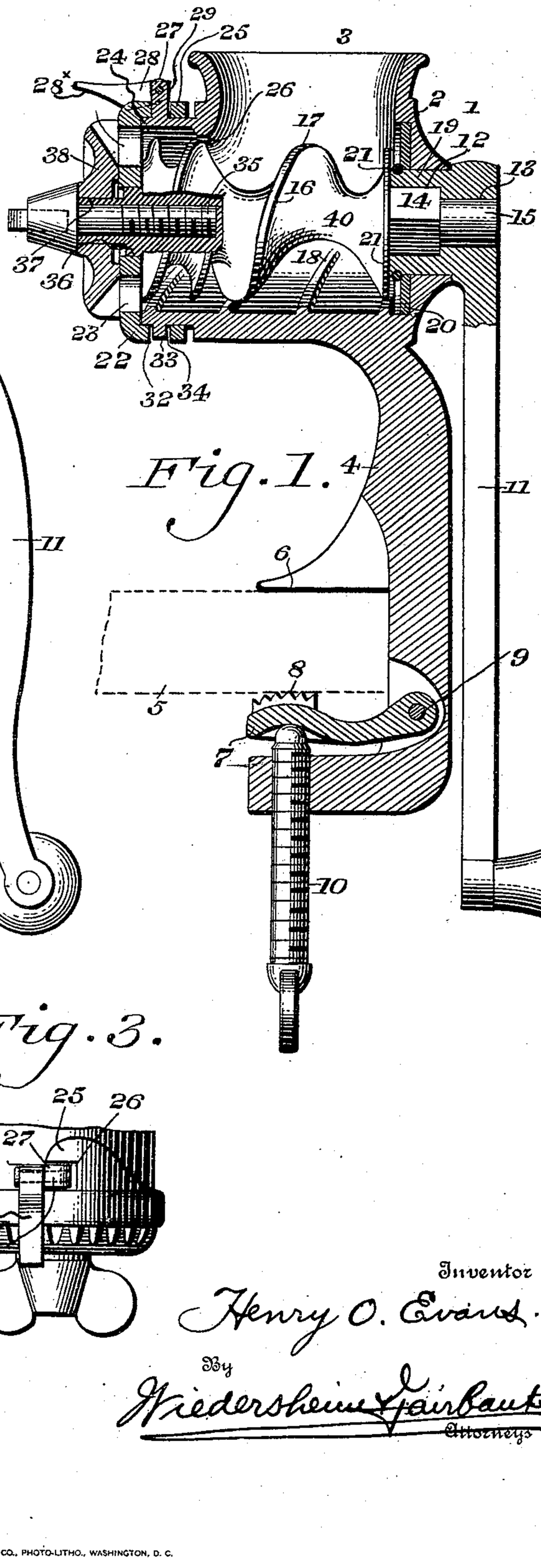

Fig. 1.

Fig. 3.

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FOOD-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 711,837, dated October 21, 1902.

Application filed May 11, 1901. Serial No. 59,821. (No model.)

To all whom it may concern:

Be it known that I, HENRY O. EVANS, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Food-Choppers, of which the following is a specification.

My invention consists of an improved construction of a food-chopper wherein I provide novel means for enabling the cutting device and its adjuncts to be withdrawn from the casing in an assembled condition in an expeditious manner, whereby the parts can be frequently inspected and cleaned, according to requirements.

It also consists of a novel construction of devices for locking the parts in assembled position.

It also consists of a novel construction of a pivotal jaw for holding the bracket which supports the casing or body of the chopper in position, whereby the device is rigidly held to the table or bed during the action of the chopper.

It further consists of novel details of construction, all as will be hereinafter fully set forth, and particularly pointed out in the claims.

Figure 1 represents a vertical sectional view of a food-chooper embodying my invention, certain of the parts being shown in elevation. Fig. 2 represents an end elevation of the chopper. Fig. 3 represents a plan view of the locking device seen in Fig. 2.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings, 1 designates the chopper, consisting of a casing or body 2, having the mouth or inlet 3, said casing being supported upon the bracket or post 4, which is secured to a table, bed, or other support 5 by means of the stationary jaw or jaws 6 and the movable jaw 7, which has the thumb-screw 10, bearing upon a recess in the under portion of said movable jaw, the extremity of said thumb-screw being seated in said recess or channel.

11 designates a crank or other handle having the squared or polygonal seat 12 and the opening 13 in the upper portion thereof, in which seat and opening, respectively, are received the parts 14 and 15, of corresponding contour, which extend from the forcer 16, which preferably consists of a worm or spiral 17, which is adapted to force the material to be chopped along the bottom 18 of the casing 2. The bearing 19 of the handle 11 is retained in position within the casing by means of the washer 20 and the retaining-ring or similar device 21.

22 designates a plate having the openings 23 therein, said plate being detachably mounted on the discharge end 24 of the casing 2, the upper portion of the plate 22 being provided with an inwardly-projecting lug 25, which has the recess 26 therein, which engages the upward projection or lug 27 of the casing, said lug 27 having the dog or catch 28 pivotally mounted thereon by means of the pin 29. The nose 30 of said dog engages a recess 31 in the periphery of the plate 22, whereby the latter is prevented from rotation and is detachably coupled in a simple and effective manner to the discharge end of the casing 2.

I desire to call especial attention to the feature of having the dog 28 projecting in longitudinal alinement with the forcer and having its under side $28^{\times}$ extended, so as to project beyond the plate 22 in the manner seen in Figs. 1 and 3, since the under side of said dog serves as a species of wiper and prevents clogging of the food which is being chopped around the outlet-openings 23 of the plate 22, as will be apparent. The under side of the plate 22 is provided with a recessed lug 32, which is similar to the lug 25 seen in Fig. 3 and is adapted to engage the lug or projection 33 on the under side of the body 2, said lug 32 being provided with a recess 34, so that the nose of the dog 28 is adapted to engage therein with the same facility as with the recess 31.

35 designates a thumb-screw which is adapted to be screwed into the forcer 16 in the manner indicated in Fig. 1, said forcer having the cylindrical journal 36 formed thereon, which has its bearing in the plate 22, and said forcer being continued to form the squared extension 37, which engages a squared or polygonal-shaped opening in the cutter 38, whereby it will be seen that when the parts are assem-

bled, as in Fig. 1, the forcer 16 has its bearing in the stationary plate 22, while the cutter 38, mounted on the squared extension 37 of said forcer, revolves in unison therewith.

I desire to call especial attention to the location of the cutter 38, exterior to the plate 22. By reason of said location all of the material is cut and none of the same is left inside of the chopper, as is the case when the cutter is located interiorly of the apertured plate.

40 designates a lug projecting from or cast on the side of the casing or body 2 and adapted to support the cutters 41, 42, and 43 when not in use.

It will be apparent that the rotation of the forcer 16 will force the material to be chopped through the openings 23 in the stationary plate 22 and that said material will be cut by the contiguous cutting edges of the cutter 38 during the revolution thereof.

When it is desired to clean the apparatus, (seen in Figs. 1 to 3, inclusive,) it is only necessary to lift the dog 28 and turn the plate 22, whereupon the forcer 16, the parts 14 and 15, as well as the stationary plate 22, and the rotary cutter 38 can be readily withdrawn in assembled position or as in one piece from the body 2, while the bearing 19 of the handle remains within the casing, thus producing a two-part chopper, as it were, which is readily accessible at all times and not liable to get out of order. The cutter 38 can be readily removed after taking off the thumb-screw 35, and the plate 22 can also be readily disconnected from the forcer 16, as will be evident.

In assembling the parts it is immaterial whether the recess 31 or the recess 34 is uppermost, as the nose of the dog 28 can engage either one with equal facility.

I desire to call especial attention to the fact that the contiguous faces of the cutter 38 and the apertured plate 22 are flat, whereby the same can be easily sharpened when desired by simply rubbing said contiguous faces upon a flat piece of emery-cloth or similar material, so that the sharpening of the device can be much more readily effected than it can where the contiguous faces, as of the plate 22 and cutter 38, are conical or arc-shaped.

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

1. In a food-chopper, a casing, a forcer rotatably mounted therein, an extension on said forcer, an apertured plate mounted on the discharge end of said casing, a cutter mounted upon an extension of said forcer and exterior to said plate, a slotted lug carried by said plate, a lug on said casing adapted to be engaged by said slotted lug, whereby said plate is held stationary during the action of the forcer, the latter having a bearing in said plate, a dog pivotally mounted on the first-mentioned lug and located in proximity to said plate and fastening devices common to said cutter and forcer.

2. In a food-chopper, a casing, a forcer therein, a plate mounted upon the discharge end of said casing and provided with a slotted lug, a lug attached to said casing and adapted to interlock with the slotted lug of said plate, a recess in said plate, a dog pivotally mounted on the lug attached to said casing and adapted to engage said recess, the said dog projecting beyond said plate and serving as a wiper, a cutter contiguous to said plate and fastening devices common to said cutter and forcer.

3. In a food-chopper, a casing, a plate mounted on the discharge end thereof, interlocking devices common to said plate and casing embodying a lug projecting from the casing to engage a notch in said plate and extended beyond said plate through said notch whereby rotation of said plate is prevented, a forcer, a cutter carried by said forcer and adapted to rotate in unison therewith and means for holding said plate stationary during the action of the forcer, said cutter and forcer having flat or plain contiguous surfaces, a handle having its bearings rotatably mounted in said casing, means for preventing said handle from longitudinal disconnection with said casing, and means for permitting the withdrawal of the forcer, plate and cutter in assembled condition from said casing without necessitating the disconnection of said handle from said casing, whereby a two-part chopper is formed.

4. In a food-chopper, a casing, a handle provided with a bearing rotatably mounted in said casing, means for preventing said bearing and handle from longitudinal disconnection from said casing, a forcer located in alinement with the bearing for said handle and detachably connected therewith, a plate, a cutter mounted on an extension of the forcer exterior to and located in proximity to said plate, said plate having a notched flange embracing the casing, and a pivoted member to engage in a recess in said flange, and means for permitting the withdrawal of the forcer, plate and cutter in assembled position without disconnection of the handle from its casing, whereby a two-part chopper is formed.

5. In a food-chopper, a casing, a forcer therein, an apertured plate mounted on the discharge end of said forcer, locking devices common to said plate and to said casing and embodying a lug projecting from the casing to engage a notch in said plate and extended beyond said plate through said notch, a cutter secured to an extension of said forcer exterior to said plate and adapted to rotate in unison with said forcer, a handle having a portion rotatably mounted in said casing but prevented from longitudinal disconnection therewith, and means for permitting the withdrawal of the forcer, plate and cutter in assembled condition without disconnection of said handle from said casing, whereby a two-part chopper is formed.

6. In a food-chopper, a forcer, a casing

therefor, a handle rotatably mounted within said casing, means for preventing the disconnection of said handle in a longitudinal direction from said casing, interlocking devices common to said forcer and handle, an apertured plate mounted upon the discharge end of said casing, means for preventing rotation of said plate with respect to said casing and embodying a lug projecting from the casing to engage a notch in said plate and extended beyond said plate through said notch, a cutter connected to said forcer and fastening devices common to said cutter and forcer.

7. In a food-chopper, a casing, a handle provided with a bearing rotatably mounted therein, a washer contacting with the contiguous portion of said casing and having an opening therein through which the bearing of said handle passes, a retaining device common to said washer and bearing whereby rotation of the handle is permitted, but the longitudinal disconnection thereof from said casing is prevented, a forcer detachably connected to said handle, cutting devices adapted to coact with said forcer and means for permitting the withdrawal of said forcer and cutting devices in assembled position without disconnection of the handle from its casing, whereby a two-part chopper is formed.

8. In a food-chopper, a casing, a handle having a bearing in its upper portion rotatably mounted in said casing, a washer located within said casing through which the bearing for said handle passes, a retaining device adjacent to said bearing, whereby rotation of said handle is permitted but longitudinal disconnection thereof from its casing is prevented, a polygonal opening in the bearing of said handle, a forcer mounted in said casing and having a polygonal extension engaging said opening, cutting devices coacting with said forcer and means for permitting the withdrawal of said forcer and cutting devices in assembled position from said casing and handle without disconnection of said handle from said casing.

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