Oct. 25, 1932. G. QUATTROCCHI 1,884,218

SPAGHETTI MACHINE

Filed July 13, 1931

Fig. 1

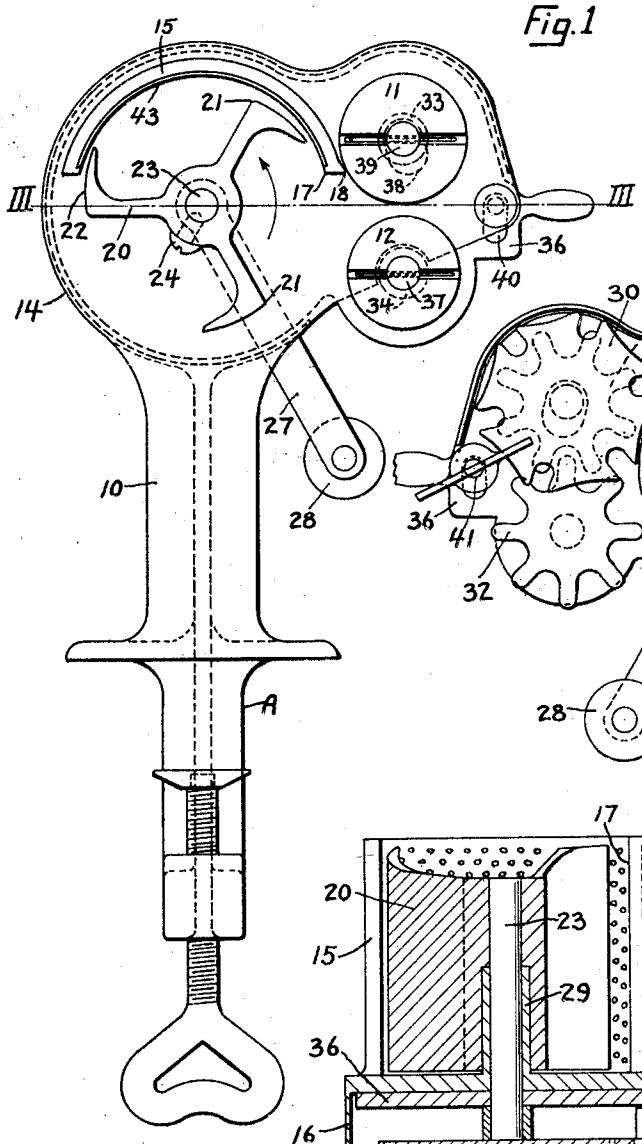


Fig. 2

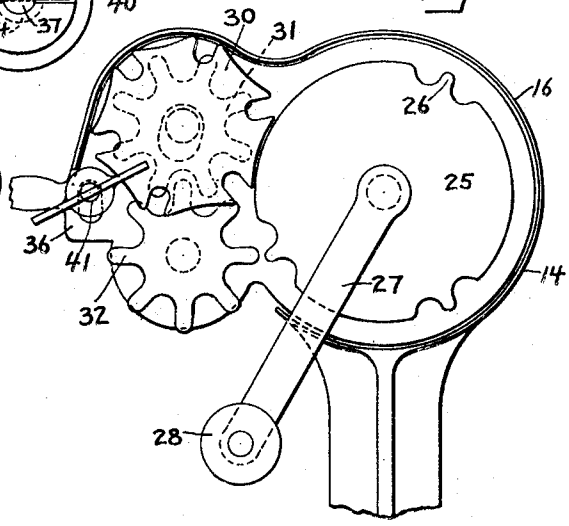
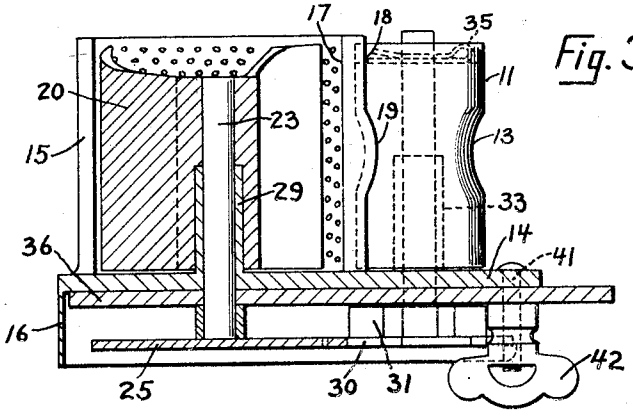


Fig. 3



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SPAGHETTI MACHINE

Application filed July 13, 1931. Serial No. 550,614.

This invention relates to a new and improved means for forming and cutting spaghetti into small portions.

An object of the invention is to provide a machine of this type which is hand operated and which is easily adjustable to different sizes of spaghetti.

A further object of the invention is to provide an improved cutting device whereby the small portions of spaghetti are supported when adjacent to the cutting edges.

A further object of the invention is to provide an improved feeding means which is operated in conjunction with the cutting means.

With these and other objects in view as will hereinafter appear, this invention consists in the construction, arrangement and combination of the various parts of the device whereby the objects contemplated are attained as hereinafter more fully set forth, pointed out in the appended claims and illustrated in the accompanying drawing, in which

Figure 1 is a front elevational view of the device,

Figure 2 is a partial rear elevational view of the device, and

Figure 3 is a cross sectional view with parts in elevation upon the section line III—III of Figure 1.

In the drawing similar reference characters indicate like parts throughout the various views.

Referring to the drawing, A indicates a clamping device of any desired form whereby the mechanism can be clamped to a table or other support. Extending from the clamping device and preferably integral therewith is a standard 10 which supports the operating mechanism.

The feeding means comprises the rollers 11 and 12 which are each provided with an arcuate central groove 13. A casing member 14 preferably integral with the standard 10 extends upwardly therefrom and has upon one side thereof a laterally extending shield member 15 and extending laterally in the other direction therefrom, a gear enclosing shield 16. The shield member 15 is provided with a cutting edge 17 and also with a stripping edge 18 having an arcuate tongue 19 extending into the groove 13 upon the feed roller 11.

The shield 15 encloses the cutting member 20 which in the preferred embodiment shown in this application is provided with three arms.

Each of the arms is provided with a cutting edge 21 and with a spaghetti supporting face 22. The cutting element 20 is secured to the main shaft 23 by means of the set screw 24, or by any other desired means. The shaft 23 has integrally secured thereto a drive wheel 25 of peculiar formation shown particularly in Figure 2, and is provided with spaced teeth 26. A crank 27 is secured to the drive wheel for rotating the same and the crank is provided with the usual laterally extending pivoted handle 28.

A collar 29 preferably integral with the frame 14 supports the shaft 23.

The teeth 26 are adapted to mesh with the Geneva gear 30 secured to the shaft of the roller 11 and fixedly mounted upon the same shaft is a spur gear 31 designed to mesh with spur gear 32 which is fixed to the shaft of the roller 12 for rotating the same in unison with the roller 11.

Feed rollers 11 and 12 are also mounted upon supporting collars 33 and 34 respectively. The feed rollers 11 and 12 are provided with shoulders cooperating with the supporting collars 33 and 34 so as to prevent the rollers 11 and 12 contacting with the frame 14. In order to rotate the rollers 11 and 12 with the rotation of their respective shafts, these rollers are slotted and a cotter pin 35 is seated in said slots extending through apertures provided in the respective shafts.

The means for securing an adjustment in the size of the feed opening between the rollers 11 and 12 will now be described. This means consists essentially of a plate 36 pivoted upon shaft 23 which carries shaft 37 of feed roller 12 and which is provided with a slot 38 accommodating the shaft 39 of the roller 11 and is also provided with a slot 40 through which extends a threaded lug 41. A wing-nut 42 is adapted to be threaded upon

the lug 41 and thereby clamp the plate 36 immovable with relation to the frame 14.

The operation of the device is as follows. Spaghetti is fed through the registering arcuate slots 13 provided in the rollers 11 and 12 in accordance with the motion given thereto by means of the drive wheel 25 meshing with the Geneva gear 30 and rotating the spur gears 31 and 32. Due to the relation between the teeth 26 and the teeth of the Geneva gear, a certain ratio of movement is maintained in the feed rollers 11 and 12 so as to feed substantially a small strip of spaghetti in position to be cut off by the cutting edges 21 provided upon the member 20. The stripping edge 18 prevents any spaghetti from adhering to the feed roller 11, while due to the motion of the cutter in the direction of the arrow shown in Figure 1, there is very small probability of any spaghetti adhering to the roller 12. As the spaghetti emerges from the feed rollers the supporting faces 22 first come in contact therewith and carry the spaghetti towards the cutting edge 17 provided upon the shield 15. The shield 15 is preferably provided upon the interior with a removable face 43. Due to the cutting mechanism projecting away from the standard 14, there is sufficient room to place a dish or other receptacle thereunder so as to catch the cut spaghetti. The cut spaghetti is carried around by two adjacent arms and discharged from the end of the cutter remote from the feed rollers.

Some changes may be made in the construction and arrangement of the invention above set forth, without departing from the real purpose and spirit thereof, and it is the intention to cover by the following claims any modified forms of structure or use of equivalents, which may be reasonably included within their scope.

I claim:

1. In a device of the class described, adjustable feed rollers having oppositely disposed arcuate central portions, a cutting member, a shield enclosing said cutting member and having a cutting edge upon one end thereof cooperating with said cutting member and stripping means upon said shield cooperating with said rollers.

2. A machine of the class described comprising a rotary cutting member, a shield enclosing said cutting member and having a cutting edge cooperating with said cutting member, feed rollers rotated intermittently cooperating with said cutting member and a stripping edge upon said shield designed to strip material from said feed rollers.

3. A machine of the class described comprising a rotary cutting member, means for rotating said member, a shield partly enclosing said member and having a cutting edge cooperating therewith, feed rollers cooperating with said cutting member, means upon said shield for cooperating with said feed rollers for stripping purposes, and said feed rollers being driven intermittently by said means for operating said rotary cutter.

4. A machine of the class described comprising a frame, a rotatable shaft upon said frame, a cutter mounted upon said shaft, feed rollers also mounted upon said frame, shafts upon said feed rollers and one of said feed roller shafts being pivotally mounted from said first mentioned shaft so as to provide means for adjusting the distance between said feed rollers.

5. A machine of the class described comprising a frame, a cutting device mounted upon a rotatable shaft carried in said frame, a drive wheel also mounted upon said shaft having spaced teeth therein, feed rollers stripping means upon said frame cooperating with said feed rollers, shafts for said feed rollers, one of said shafts having a Geneva gear fixed thereon adapted to cooperate with said spaced teeth upon said drive wheel, spur gears fixed upon said feed roller shafts for operating said feed rollers in unison and means for adjusting said feed rollers by pivotally mounting one of said feed roller shafts from the rotatable shaft.

In testimony whereof I have signed my name this 11th day of July, 1931.

GUISEPPE QUATTROCCHI.