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Wallman

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[54] **AGITATING DEVICE**

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[52] **U.S. Cl.** **259/111;** 99/348; 416/65

[51] **Int. Cl.²** **B01F 7/30**

[58] **Field of Search** ..... 259/102, 111, 112, 113, 259/118, 123, 124, 84, 85, 64, 40, 21, 5, DIG. 35; 99/348; 416/64, 65

[56] **References Cited**

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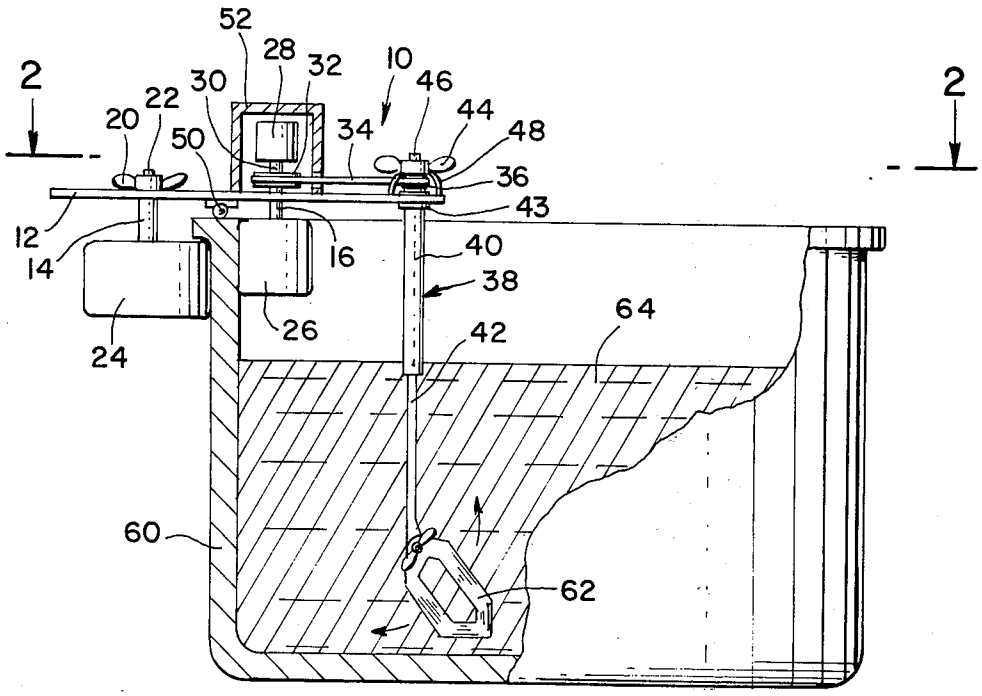
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Primary Examiner—Robert W. Jenkins

[57] **ABSTRACT**

Apparatus for agitating liquids which may include foodstuffs and which includes a generally horizontal member which has depending therefrom a first axis and a second axis each of which is carried for rotation with respect to the generally horizontal member. Rollers are carried for rotation about each axis and for engaging the sides of a kettle. A shaft also depends from the generally horizontal member. Means are provided for selectively rotating the second axis and the second shaft which includes a generally planar member at the end thereof for agitating a fluid within the kettle.

6 Claims, 2 Drawing Figures



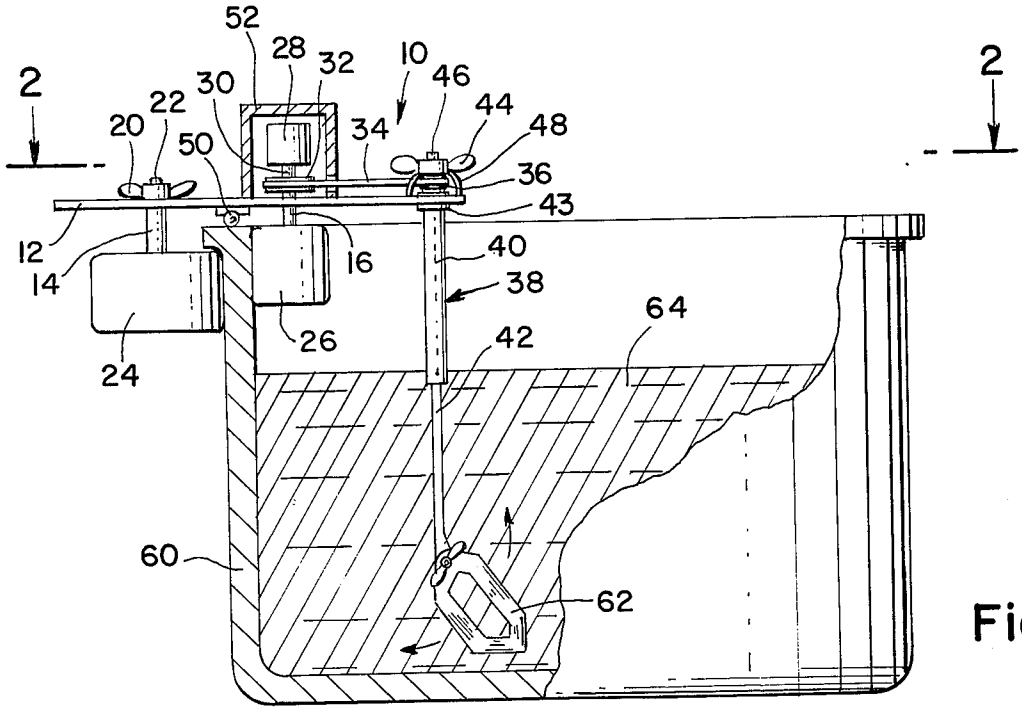

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Fig. 1

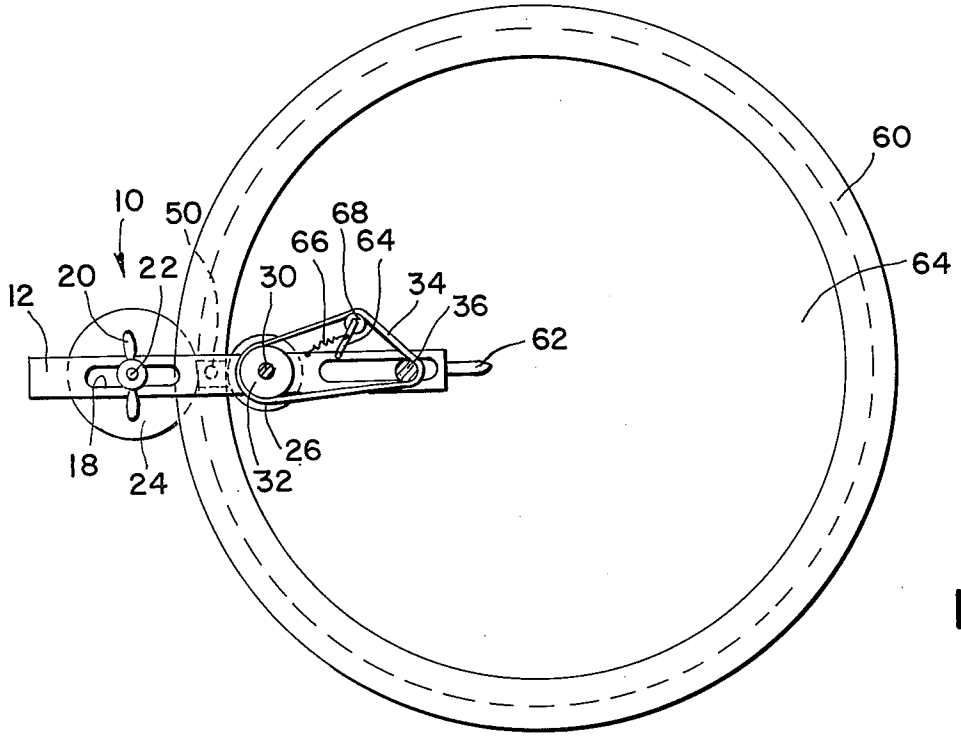

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Fig. 2

AGITATING DEVICE

BACKGROUND OF THE INVENTION

The invention relates to apparatus for agitating a liquid and particularly to apparatus which is suitable for use with a variety of containers having varying diameters and heights. The prior art includes a variety of blenders and other mechanisms which are intended to agitate a fluid and particularly a liquid within a container. Such apparatus is particularly suitable for many applications but is not suited for cooking applications which require a slow movement of a liquid and which typically must be accomplished while the liquid is being heated on the stove.

Accordingly, it is a primary object of the invention to provide apparatus for agitating a liquid which may be fastened on the side of a wide range of kettle sizes.

Still another object of the invention is to provide apparatus which is particularly suited for stirring pasta and which will however have application to a variety of other stirring applications which in general require a relatively slow movement of a liquid.

Still another object of the invention is to provide apparatus which is particularly suited for use on a kettle which is disposed on a stove.

SUMMARY OF THE INVENTION

It has now been found that these and other objects of the invention may be satisfied by: agitating apparatus which includes an elongated generally horizontal member which has depending therefrom a first axis and a second axis, each being carried by the generally horizontal member for rotation. Means are provided for selectively securing the first axis throughout a range of axially aligned positions on the generally horizontal elongated member. Rollers are carried on each axis and the roller on said first axis is mounted for rotation about from the generally horizontal member and is carried for rotation on that member about the axis thereof, a shaft also depends from the generally horizontal member and is carried for rotation about the axis thereof. The shaft has a generally planar member disposed on the end thereof most remote from the generally horizontal member. Drive means are provided for rotating the second roller and the shaft selectively.

In one form the means for selectively securing the first axis comprises a slot in the generally horizontal member and a threaded fastener which engages the axis and the slot of the generally horizontal member. The means for driving may comprise a motor having a shaft which is axially aligned with the second axis and a belt drive may be provided to rotate the shaft. The generally planar member carried on the shaft may be offset from the axis of the shaft to provide the desired agitation of liquid. The shaft ordinarily will comprise concentric sections which may be selectively positioned with the varying axial portions thereof in nesting relationship to vary the effective length of the shaft.

BRIEF DESCRIPTION OF THE DRAWING

The invention will be better understood by reference to the accompanying drawing in which:

FIG. 1 is a side elevational view in partial section of the apparatus in accordance with the invention; and

FIG. 2 is a sectional view through the line 2—2 of FIG. 1.

DESCRIPTION OF A PREFERRED EMBODIMENT

Referring now to FIGS. **1** and **2** the apparatus **10** in accordance with the invention includes a generally horizontal member **12** which has depending therefrom a first axis **14** and a second axis **16.** The first axis may be moved axially with respect to the elongated generally horizontal member **12** by means of a slot **18** which is dimensioned and configured for engagement by a wing nut **20** and a stud **22** which extended from the end of the first axis **14.** Carried for rotation about the other end of axis **14** is a roller **24** which in one form of the invention will be manufactured of rubber. A second roller **26** is fixed to the second shaft **16** so that no relative angular motion occurs therebetween. The second shaft **16** in one form of the invention is driven by means of a motor **28** which has a drive shaft **30** which has a center line which is in aligned relationship to the center line of the second axis **16.** In other forms of the invention a single shaft will be utilized and it will be understood that in the form described hereinbefore that the shafts **30** and **16** are in abutting aligned relationship and secured to each other so that no angular movement therebetween is possible. A sheave **32** is fixed to the second axis **16** and engages a belt **34** which in turn engages a second sheave **36** carried on an adjustable shaft assembly **38.** The shaft assembly **38** comprises concentric portions **40** and **42** which may be selectively positioned with axial portions thereof in nesting relationship. The shaft assembly **38** is carried by means of a bearing **42** for rotation with respect to the generally horizontal member **12.** A wing nut **44** and stud **46** are provided together with a yoke member **48** to prevent axial movement of the shaft assembly **38.** The generally horizontal member **12** is provided with a bearing **50** which in form shown comprises a ball carried on a base. In other forms of the invention suitable for use with other kettles not having generally planar upper surface for engagement with a fall it will be desirable to use a different type of bearing and more particularly a bearing manufactured in a generally planar form. The material may be the product sold commercially under the trademark of the DuPont Company "Teflon".

In operation it will be seen that the motor which is covered by a housing **52** drives the roller **26** and the shaft **38.** Accordingly the tire agitating apparatus **10** is urged about the periphery of the kettle **60.** Simultaneously the shaft assembly **38** is rotated and accordingly therewith a generally planar stirring member **62** agitates the liquid **64** carried within the kettle **60.** The selective drive of the generally planar stirring member **62** is controlled by means of a clutch mechanism which includes an arm **64,** springs **66** and a roller **68.** The member **62** may be offset from the axis about which it turns.

Having thus described my invention, I claim:

1. Agitating apparatus which comprises: an elongated generally horizontal member, a first axis and a second axis each being elongated and depending from said generally horizontal member, means for selectively securing said first axis to said generally horizontal member throughout a range of axially aligned positions, a first roller carried on said first axis for rotation thereabout and a second roller fixed to said second axis, a shaft depending from said generally horizontal elongated member for rotation about the axis thereof, said shaft having a generally planar disposed at the end

thereof most remote from said generally horizontal member, and means for rotating said second roller and said shaft.

2. The apparatus as described in claim **1** wherein said means for selectively securing said first axis comprises a slot disposed in said generally horizontal planar member and a threaded fastener for securing said first axis.

3. The apparatus as described in claim **1** wherein said means for driving comprises a motor having a drive shaft which is disposed with the axis thereof in aligned relationship to said second axis and which is fixed thereto.

4. The apparatus as described in claim **3** wherein said means for driving further comprises a belt drive for rotating said shaft.

5. The apparatus as described in claim **4** wherein said generally planar member is offset radially from the axis of rotation of said shaft.

6. The apparatus as described in claim **5** wherein said shaft comprises concentric sections selectively adjustable to vary the length thereof.

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