(11) Application No. AU 2008234974 B2 (12) STANDARD PATENT (19) AUSTRALIAN PATENT OFFICE (54)Title **Cutlery Cleaner** International Patent Classification(s) (51) **A47L 17/08** (2006.01) Date of Filing: (21) Application No: 2008234974 (22)2008.10.24 (43)**Publication Date:** 2010.05.13 (43)Publication Journal Date: 2010.05.13 Accepted Journal Date: 2010.11.11 (44)(71)Applicant(s) Paul Lynch (72)Inventor(s) Lynch, Paul Joe Agent / Attorney (74)Fisher Adams Kelly, Level 29 12 Creek Street, Brisbane, QLD, 4000

(56)

Related Art US 4665580 A US 5408718 A CA 2241736 A1 US 3581447 A

ABSTRACT

A cutlery cleaner comprising of scourer pad opened at one end and steel ball scourer insertable inside the scourer sock intended for used in cleaning fork, spoon and knife for use in places such as industrial hospitality, households, restaurants etc. The fork is repeatedly placed into and out of the soft stainless steel pad that is contained in the scourer sock. For a spoon the stainless steel pad is removed and the sock is turned inside out and the spoon is rubbed into and against the inside of the now out turned scourer sock. For a knife the sock is pulled inside out again so the coarse side is facing out, where in a knife is placed on top of the sock and the flip side of the sock now covers the knife for rubbing several times to become a clean knife.

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CUTLERY CLEANER

TECHNICAL FIELD OF THE INVENTION

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The present invention relates to a cutlery cleaning apparatus used for cleaning cutlery such as forks, spoons and knives in places such as household, industrial hospitality, restaurants etc.

BACKGROUND OF THE INVENTION

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Scrubbing pad, steel wool pad, abrasive devices, dishwashing machine are some of the existing and effective means of cleaning and washing kitchen utensils at home, restaurants etc nowadays. Restaurants have been a part of a place where people dined together be it an important meeting or occasion, celebration, birthday party, or family recreation etc. In fact, the problem of improper washing and cleaning utensils particularly cutlery in time bound manner to meet the increasing need of the customers is peculiar in restaurants. Besides, it has become a lifestyle for urban people to use forks, spoon, and knife while having food. It is customary to wash and clean the dishes, spoons, knives and forks so as to serve for next In times of rush hours, these cutteries are washed haphazardly resulting in an improper cleaning of the cutlery.

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Nowadays to meet the requirement of the customers and to save time, all the dishes and cutlery items are washed in dishwashing machine. Sometimes, it happens that the food residues are left over and remain stuck in spoons, knives or forks as only light rinsing and then washing is generally done without scrubbing in dish washing machine. The disadvantage of improper cleaning of cutlery is that fork prongs may get jammed with food residue and the dirt in fork prongs get overlooked and small thin forks are challenging to clean. There is a possibility that a person may share a fork with another person who get infected with bleeding gum either full of

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hepatitis, herpes or HIV. As a result, it can be a means of transmitting diseases. In fact, the question of hygiene arises in addition to hospitality and timely service. The same condition of improper cleaning can be seen in household kitchen too owing to the fact that manual cleaning of cutlery is done haphazardly. Besides, being smaller in sizes and larger in number in addition to supplementary utensils, cleaning of these cutleries thoroughly is overlooked resulting in unhygienic cleaning.

There are many methods and devices of cleaning cutlery. For example, non scratchable scouring sponge pad is a cleaning apparatus for cleaning cooking utensils. It has an antimicrobial sponge inside the pad while the outer layer is doing the action of scrubbing the dirty kitchen utensils. The conventional method of cleaning utensils and cutlery consists of soaking the utensil in soapy water, removing the dirts in the utensils by rubbing with scrubber until the dirts and food residues are cleaned. These conventional methods and even dish washing machine is not able to yield suitable rubbing and cleaning of the cutlery. Subsequently, the utensils are rinsed in plain water to get all the soap off of the cutlery, thus giving an impression that they are cleaned. However, the problem of improper cleaning of the cutlery still prevails in the conventional method.

A search of the prior art did not disclose any patents that read directly on the claims of the present invention. However, the following references were considered related to cutlery cleaning apparatus. They are listed here with applicable patent numbers –

- A. Non-abrasive scrub pad with mesh netting and method of making said scrub pad US 7044560
 - B. Scrubber mat device with dual abrasive surface for sink divider wall US 5577289
- C. Brush with flexible bristles US 5881426
 - D. Combination cleaning pad

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- E. Fork Scrubber US 4004376
- F. Scrubbing pad
- 5 US 4665580
 - G. Kitchen ware cleaning device US 4004376
 - H. Cleaning pad US 3908218
- 10 I. Electric Silver ware brush US 3806980
 - J. Cleaning and scouring pad US 3175331
 - K, Scouring device
- 15 US 3026552
 - L. Silver cleaning device US 2505228
 - М. Scouring device US 1713975
- 20 N. Silverware cleaner US 1376280

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US Patent No. 7044560 describes scrubbing pad with mesh netting for cleaning delicate house ware and the method of manufacturing said scrubbing pad, directed to use in cleaning houseware manufactured from crystals and also for cleaning window appliances fiber glass and other surfaces.

US Patent No. 5577289 describes scrubber mat device for sink divider wall directed to use for cleaning utensils or flat objects.

US Patent No. 5881426 describe brushes and particularly brushes with flexible bristles that flex along their longitudinal axis which is used in US Patent No. 5408718 describes pads comprising a central sponge core having two substantially parallel large surface and a cover permanently connected about the central core, use in washing of dishes and for other domestic and commercial appliances which features at least abrasive region suitable for heavy duty appliances.

US Patent No. 5191670 describes oval cylindrical tube with zigzag bristles used in cleaning forks & like utensils.

US Patent No. 4665580 describes a scrubbing pad having an elongated, flattened body with opposed major surfaces of different textures including an abrasive surface such as steel wool, and reticulated foam. The pad has an interior pocket, accessible through a peripheral opening, which is lined with a netting of plastics material to hold replaceable cleaning material used in cleaning utensils.

US Patent No. 4004376 describes a device which comprise of a molded, thermoplastic, brushing surface which is laminated to a non-woven nylon mat in which soap and abrasives have been incorporated used in cleaning cooking vessels and other utensils used in food preparation.

US Patent No. 3908218 describes a cleansing pad made of a special nylon basket weave type of fabric bag, filled with a resilient pad composed of nylon net used in cleaning dishes silverware or metal pans or dirt or scum from bowls, bath tubs, etc. without scratching.

US Patent No. 3806980 describes a hand carried member contains an electric motor, a driven shaft and means connecting the shaft to the motor whereby the rotary motion of the motor imparts a reciprocating motion to the shaft. First brushing device including a reciprocatable brush can be detachably secured to the shaft whereby the brush will be subjected to the reciprocating motion. Second brushing device including a brush which can be rotated but which cannot display reciprocating motion and means for converting a reciprocating shaft motion to a rotary motion for rotating the rotary brush can be detachably secured to the shaft whereby the brush will

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be rotated used in cleaning silverware or the like.

US Patent No. 3175331 describes cleaning/scouring pad comprising at least non woven, fibrous batt supplying at least side surface of the batt which is used in cleaning kitchen utensils.

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US Patent No. 3026552 describes motor driven scouring device interchangeably employing either wire brush, a steel wool detergent pad or a soft cloth pad as abrading or polishing agent used in cleaning or scouring iron hot plates used for pancakes, hamburgers, eggs and so on. In addition to this cleaning & polishing pots pans, skillets used in cooking, baking, frying or roasting operation. It may be used for polishing silverware, chrome and like.

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US Patent No. 2505228 describes pair of metallic plates separated by insulating medium which closes the space between them to preclude the likelihood of short-circuiting by the articles to be cleaned, used in cleaning silverware electrolitically.

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US Patent No. 1376280 describes two elastic cleaning laws for cleaning purpose, relates to improvement in silverware cleaner particularly knives, forks and spoons.

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The present invention is provided to solve the problems discussed above and other problems, and to provide advantage and aspects not provided by the prior arts. The present invention is a cutlery cleaner which cleans forks, spoon and knives due to the combined and multiple action of an opened scourer pad (scourer polymer sock) and a kitchen stainless steel ball scourer. The outer layer of the scourer polymer sock is designed for the scrubbing action and the sock is uniquely manufactured for the purpose of fitting the large soft stainless steel ball scourer inside. An important feature of the kitchen stainless steel ball scourer is that it is large but light, soft and stretchable. In terms of discussion, none of the associated patents clean cutlery such as forks, spoons and knives in such a novel way the present invention of the cutlery cleaner do. A fork is cleaned by the scrubbing action of the steel ball scourer inside the scourer sock on the fork tines.

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Also a spoon is thoroughly cleaned due to the surface friction between the scourer sock and a spoon. Also a knife is thoroughly cleaned due to the surface friction of the scourer sock on the knife surface. The problem of hygiene is overcome by the present invention to such a great extent that the washers find psychological satisfaction and healthy environment.

A full discussion of the features and advantages of the present invention is deferred to the following detailed description, which proceeds with reference to the accompanying drawings.

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BRIEF SUMMARY OF THE INVENTION

It is the object of the present invention to form cutlery cleaner tool comprising of a polymer scouring pad opened at one end to hold a large, light and soft steel ball scourer inside. The tool is an inexpensive, reliable undiscovered and new apparatus designed to remove residue such as accumulated food, unwanted body products such as dead or alive saliva and blood and germs left over from people use of principally forks, spoons and to a lesser extent knives.

It is the further object of the invention to provide methods for cleaning cutlery with the tool. Firstly, the method of cleaning the cutlery cleaner apparatus is a hand held friction when used in a fork. After immersing in soapy water, the fork is repeatedly placed into and out of the soft stainless steel pad that is contained in the scourer sock. For a spoon, the stainless steel pad is removed and the sock is turned inside out and the spoon is rubbed into and against the inside of the now out turned scourer sock. For a knife the sock is pulled inside out again so the coarse side is facing out, where in a knife is placed on top of the sock and the flip side of the sock now covers the knife for rubbing several times to become a clean knife. These processes are followed by rinsing in water until satisfied they are cleaned. The need for clean cutlery is extremely beneficial when considering the removal of unwanted germs and virus to a greater extent.

In one aspect the invention provides, a cutlery cleaner apparatus for

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cleaning cutlery such as forks, spoons and/or knives, the cutlery cleaner apparatus comprising:

a scourer pad comprising a coarse and rough outer layer wherein the scourer pad is opened at one end; and a stainless steel ball scourer insertable inside said scourer pad.

According to the first aspect the scourer pad may be uniquely designed for fitting the steel ball scourer and the coarse and rough outer layer may be manufactured for a scrubbing action and may be primarily used for cleaning spoons and knives; and

the soft steel ball scourer inside the scourer sock may mainly serve the purpose for cleaning forks.

According to the first aspect the scourer pad may comprise a polymer scourer pad.

According to the first aspect the scourer pad may be rectangular.

According to the first aspect the stainless steel ball scourer may be cylindrical.

According to the first aspect the stainless steel ball scourer may comprise a rounded body at both ends.

According to the first aspect the stainless steel ball scourer may be light and/or soft.

According to the first aspect the stainless steel ball scourer may be stretchable.

According to the first aspect the scourer pad may comprise a sock for 25 receiving the scourer pad.

According to the first aspect the scourer pad may be turned inside out so that the coarse and rough outer layer is on the inside of the pad.

According to the first aspect the scourer pad may be approximately 13 cm long and 10 cm wide.

In a second aspect the invention provides a method of using a cutlery cleaning apparatus to clean a fork, the method including:

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grasping a coarse and rough outer layer of a scourer pad of said cutlery cleaner apparatus, the scourer pad being opened at one end; immersing and splashing said cutlery cleaner in soapy water; and shoving the fork in and out of a stainless steel ball scourer inserted inside said scourer pad until the fork is clean.

In a third aspect the invention provides a method of using a cutlery cleaning apparatus to clean a spoon, the method including: removing a stainless steel ball scourer from inside a scourer pad; turning the scourer pad inside out so that the coarse and rough side is on the inside of the scourer pad; putting the spoon end inside the inside out scourer pad; and rubbing the spoon until clean.

In a fourth aspect the invention provides a method of using a cutlery cleaning apparatus to clean a knife, the method including:

removing a stainless steel ball scourer from inside a scourer pad; placing a dirty part of the knife on top of a coarse and rough outer layer of the scourer pad;

folding polymer scourer pad over the knife; and rubbing together until clean.

The method of the second, third and fourth aspects may further include the step of dipping said cutlery cleaner in soapy water after every utensil is washed.

In a fifth aspect the invention provides a method of using the cutlery cleaning apparatus of the first aspect to clean a fork, the method including the steps of:

grasping the coarse and rough outer layer of the scourer pad; immersing and splashing said cutlery cleaner in soapy water; and shoving the fork in and out of a stainless steel ball scourer until the fork is clean.

In a sixth aspect the invention provides a method of using the cutlery cleaner apparatus of the first aspect to clean a spoon, the method including

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the steps of:

removing the stainless steel ball scourer from inside the scourer pad; turning the scourer pad inside out so that the coarse and rough side is on the inside of the scourer pad;

5 putting the spoon end inside the inside out scourer pad; and rubbing the spoon until clean.

In a seventh aspect the invention provides a method of using the cutlery cleaner apparatus of the first aspect to clean a knife, the method including the steps of:

10 removing the stainless steel ball scourer from inside the scourer pad; placing the knife on top of the coarse and rough outer layer of the scourer sock;

folding the scourer sock over the knife; and rubbing together until the knife is clean.

In an eighth aspect the invention provides a cutlery cleaning kit comprising:

a scourer pad comprising a coarse and rough outer layer and wherein the scourer pad is opened at one end; and

a stainless steel ball scourer insertable inside said scourer pad.

In a ninth aspect the invention provides a cutlery cleaner apparatus substantially as herein described herein with reference to the accompanying figures.

BRIEF DESCRIPTION OF DRAWINGS

For a more complete understanding of the present invention and its features and advantages, reference is now made to the following description, taken in conjunction with the accompanying drawings, in which:

FIG 1 is the perspective view of the embodiment of the invention showing an opened scouring pad with sponge removed referred to as scourer sock herein.

FIG 2 is an elevational top view of the opened scourer pad of Fig I showing

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the opened top end and its interior.

FIG 3 is the perspective view of the prior art showing a light steel ball scourer.

FIG 4 is the perspective view of another embodiment of the invention showing the scourer sock with the steel scouring ball inserted therein.

FIG 5 is a perspective view of the embodiment of cutlery cleaner showing the method of cleaning fork.

FIG 6 is a perspective view of the embodiment of the cutlery cleaner showing the method of cleaning spoon.

FIG 7(a) and FIG 7(b) are a perspective view of the embodiment of the invention showing the method of cleaning knife.

DETAILED DESCRIPTION OF INVENTION

The drawings and specifications show in detail a preferred embodiment of the invention which is provided to enable any person skilled in the art to make and use the invention.

Referring to Fig 1, there is a perspective view of an embodiment of the present invention showing an opened scouring sponge pad (1) in the form of a sock referred to as scourer sock herein, which is used in cleaning kitchen utensils. The outer layer of the scourer polymer sock (5) is designed for the scrubbing action and the sock is uniquely manufactured for the purpose of fitting the large soft stainless steel ball scourer inside. The outer layer is a coarse region which does the action of scrubbing the dirty cutlery utensils such as fork, spoons and knives. The scrubber sock is approximately 13 cm long and 10 cm wide. FIG 2 shows the embodiment of the opened scrubber sock at elevational top view.

FIG 3 shows a large, light and soft kitchen stainless steel ball scourer (6) which is cylindrical in shape with rounded body at both the ends approximately the same dimension as that of the scourer pad. The purpose of choosing the size of the steel ball scourer is that it is insertable in and out of the scourer pad when opened.

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Another preferred embodiment of the invention is the combination of two individual items - the scourer sock made of polymer and the stainless steel ball scourer as shown in FIG 4. The cylindrical stainless steel scourer, for use inside the scrubber sock has a size of 10 cm long, 5 cm width and 5 cm thickness which is made stretchable by the manufacturer.

Method of using the cutlery cleaner with a fork

In this method, the cutlery cleaning apparatus comprising the scourer sock with the steel ball scourer inside it, is used largely for cleaning fork (8). FIG 5 shows the cleaning method of fork with the cutlery cleaner. The cutlery cleaner is grasped with one hand and it is immersed and splashed in soapy water. In the next step, the fork on the other hand is shoven in and out of the ball scourer inside the scourer sock until the washer satisfies it is cleaned. By doing so, the inner edges of the fork tines and slots where food remnants and other undesired matter adhered, is cleaned by the scrubbing action of the soft steel ball scourer. Further, it facilitates in cleaning the root at the base of fork tines. Thus, the present invention provides a simple, inexpensive and reliable tool for cleaning the fork ranging from thin forks such as fondue fork, oyster fork, fish fork to common forks or similar utensils. The fork is splashed and immersed in soapy water after it is shoven in and out of the cutlery cleaner about seven times. The cutlery cleaner is immersed in the water ready for next fork.

Method of using cutlery cleaner with a spoon

In this method for cleaning dirty spoon (9), the steel ball scourer is removed from the scourer sock. Next, the inside of the scourer sock is pulled outside so that the outer coarse and rough surface now remains inside which is intended for doing scrubbing action, a preferred embodiment as being shown in FIG 6. It is now ready for cleaning the dirty spoons. The spoon end is put inside the inside out of the scourer sock. With fingers of either or both hands, the spoon is rubbed vigorously inside the sock until

satisfied it is cleaned. Water is splashed over the spoon and the sock is ready for the next utensil.

Method of using cutlery cleaner with a knife

unwanted germs and virus through its use.

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As previously done with the spoon, the soft steel ball scourer is removed from the scourer sock. The dirty part of the knife (9) is placed on the top of the scourer sock as shown in FIG 7(A). In the next step, the flip side of the scourer sock is folded over the knife and rub together until satisfied it is clean as shown in FIG 7(B). It is then immersed and splashed with water. The cutlery cleaner is dip in soapy water after every utensil is cleaned. These procedures are followed by rinsing in water to get all the soap off of the cutlery.

It is apparent from the foregoing discussion that the cutlery cleaner

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according to any of the embodiment of the present invention satisfy the need of the user to clean the forks, spoon and knife thoroughly in an easy and convenient way. For the obvious reason that it is psychologically beneficial to know the cutlery is clean giving satisfaction to the user and a peace of mind to the especially uncertain and unsavory guests. Moreover, the tool is inexpensive and can be afforded by every household and restaurants. Considering these facts, it can be assumed that it will have great market potential around the world. This is to be noted that restaurants should use the tool at the end of the shift or with every batch of unsatisfied cutlery in the cycle of a kitchen hand shift. People in private homes could make a point of regularly cleaning the cutlery with this product. Thus, the present invention also satisfies the need to live in a healthy environment by keeping away

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CLAIMS

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5 What is claimed is:

insertable inside said scourer pad.

- A cutlery cleaner apparatus for cleaning cutlery such as forks, spoons 1. and/or knives, the cutlery cleaner apparatus comprising: a scourer pad comprising a coarse and rough outer layer wherein the scourer pad is opened at one end; and a stainless steel ball scourer
- 2. The cutlery cleaner apparatus of claim 1, wherein the scourer pad is uniquely designed for fitting the steel ball scourer and the 15 coarse and rough outer layer is manufactured for a scrubbing action and is primarily used for cleaning spoons and knives; and the soft steel ball scourer inside the scourer sock mainly serves the purpose for cleaning forks.
- 20 3. The cutlery cleaner apparatus of claim 1 or claim 2 wherein the scourer pad comprises a polymer scourer pad.
 - 4. The cutlery cleaner apparatus of any preceding claim wherein the scourer pad is rectangular.
 - 5. The cutlery cleaner apparatus of any preceding claim wherein the stainless steel ball scourer is cylindrical.
- 6. The cutlery cleaner apparatus of any preceding claim wherein the 30 stainless steel ball scourer comprises a rounded body at both ends.

- 7. The cutlery cleaner apparatus of any preceding claim wherein the stainless steel ball scourer is light and/or soft.
- 8. The cutlery cleaner apparatus of any preceding claim wherein the stainless steel ball scourer is stretchable. 5
 - 9. The cutlery cleaner apparatus of any preceding claim wherein the scourer pad comprises a sock for receiving the scourer pad.
- 10 10. The cutlery cleaner apparatus of any preceding claim wherein the scourer pad may be turned inside out so that the coarse and rough outer layer is on the inside of the pad.
- 11. The cutlery cleaner apparatus of any preceding claim wherein the 15 scourer pad is approximately 13 cm long and 10 cm wide.
 - 12. A method of using a cutlery cleaning apparatus to clean a fork, the method including:
- grasping a coarse and rough outer layer of a scourer pad of said cutlery 20 cleaner apparatus, the scourer pad being opened at one end; immersing and splashing said cutlery cleaner in soapy water; and shoving the fork in and out of a stainless steel ball scourer inserted inside said scourer pad until the fork is clean.
- 25 13. A method of using a cutlery cleaning apparatus to clean a spoon, the method including: removing a stainless steel ball scourer from inside a scourer pad; turning the scourer pad inside out so that the coarse and rough side is on the inside of the scourer pad:
- 30 putting the spoon end inside the inside out scourer pad; and rubbing the spoon until clean.

- 14. A method of using a cutlery cleaning apparatus to clean a knife, the method including:
- removing a stainless steel ball scourer from inside a scourer pad;
- 5 placing a dirty part of the knife on top of a coarse and rough outer laver of the scourer pad; folding polymer scourer pad over the knife; and
- 10 15. The method of claims 12-14 further including dipping said cutlery cleaner in soapy water after every utensil is washed.

rubbing together until clean.

- 16. A method of using the cutlery cleaning apparatus of any one of claims 1 to 11 to clean a fork, the method including the steps of:
- 15 grasping the coarse and rough outer layer of the scourer pad; immersing and splashing said cutlery cleaner in soapy water; and shoving the fork in and out of a stainless steel ball scourer until the fork is clean.
- 20 17. A method of using the cutlery cleaner apparatus of any one of claims 1 to 11 to clean a spoon, the method including the steps of: removing the stainless steel ball scourer from inside the scourer pad; turning the scourer pad inside out so that the coarse and rough side is on the inside of the scourer pad;
- 25 putting the spoon end inside the inside out scourer pad; and rubbing the spoon until clean.
 - 18. A method of using the cutlery cleaner apparatus of any one of claims 1 to 11 to clean a knife, the method including the steps of:
- 30 removing the stainless steel ball scourer from inside the scourer pad: placing the knife on top of the coarse and rough outer layer of the scourer

sock;

folding the scourer sock over the knife; and rubbing together until the knife is clean.

- 5 19. A cutlery cleaning kit comprising: a scourer pad comprising a coarse and rough outer layer and wherein the scourer pad is opened at one end; and a stainless steel ball scourer insertable inside said scourer pad.
- A cutlery cleaner apparatus substantially as hereinbefore described 10 20. herein with reference to the accompanying figures.

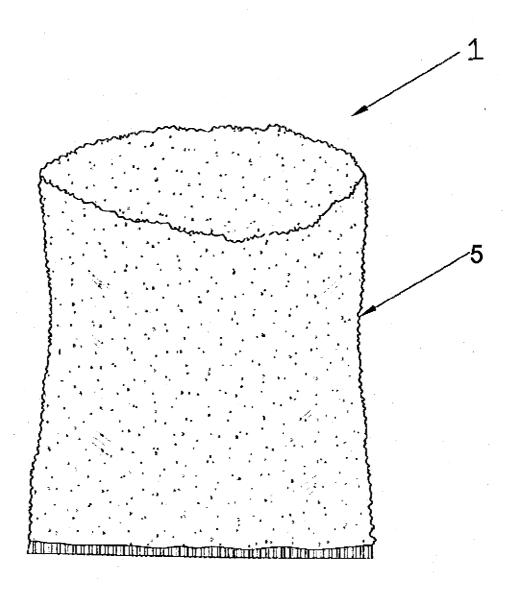


FIG 1

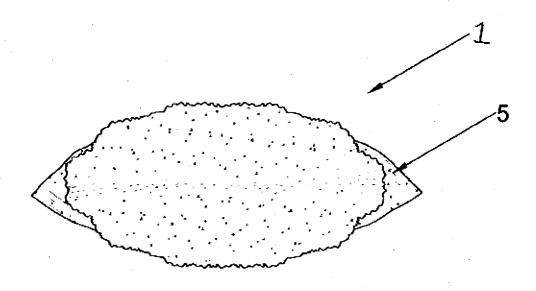


FIG 2

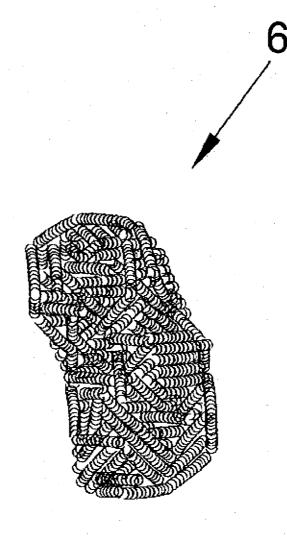


FIG 3

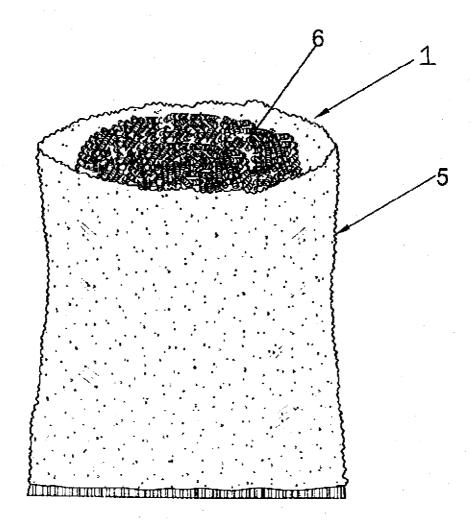


FIG 4

FIG 5

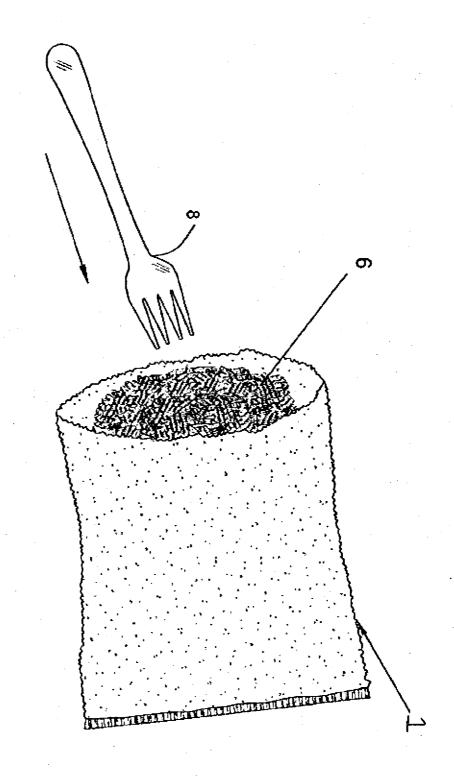
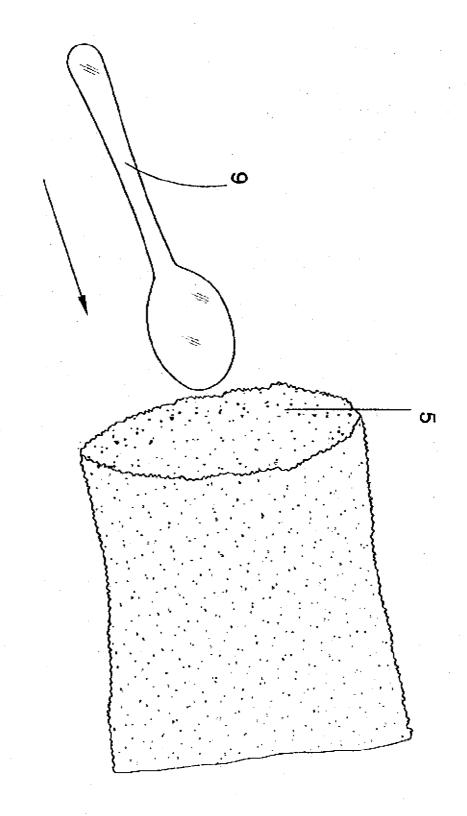


FIG 6



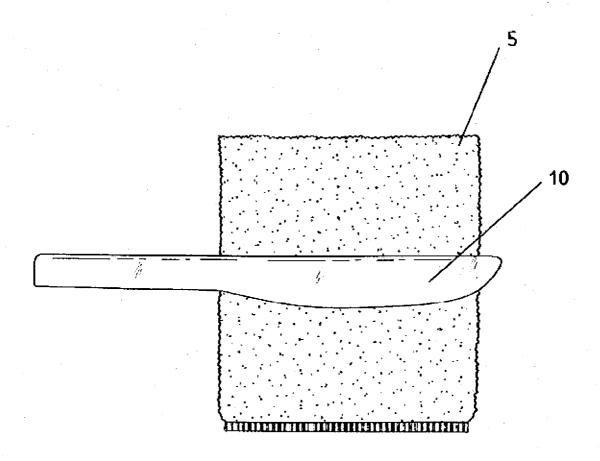


FIG 7(A)

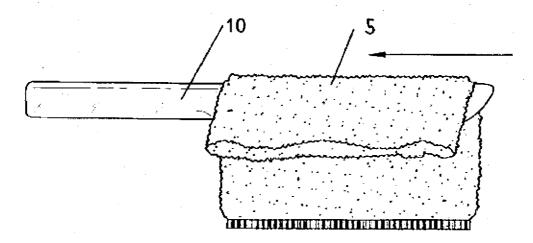


FIG 7(B)