

May 23, 1950

B. F. RUSSELL
UTENSIL CLEANING DEVICE

2,508,541

Filed May 16, 1946

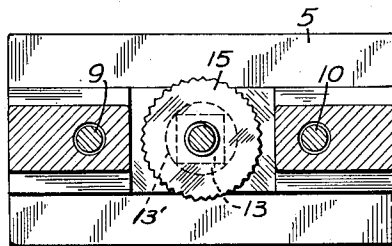
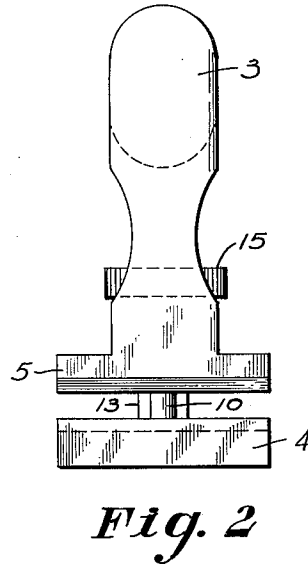
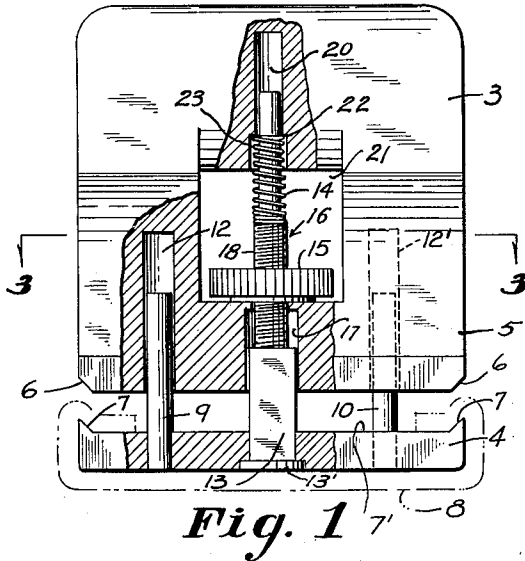


Fig. 3

INVENTOR.
Benjamin F. Russell
BY
C. H. Stratton
ATTORNEY

UNITED STATES PATENT OFFICE

2,508,541

UTENSIL CLEANING DEVICE

Benjamin F. Russell, Los Angeles, Calif.

Application May 16, 1946, Serial No. 670,181

7 Claims. (Cl. 15—231)

1

This invention relates to a means for cleaning surfaces, such as, of kitchen utensils, and it has particular reference to a means for holding a pad, cloth, scouring or abrading material, which is adapted for use in removing coatings or other deposits from surfaces or in cleaning or otherwise treating the same.

An object of the invention is to provide a light and simple implement which may be readily manipulated for movement over a surface to be operated upon and which may be provided with suitable materials for effecting a desired end.

Another object of the invention is to provide a holder in which the pad or other material may be firmly supported therein for operation, and easily detached therefrom when worn or replacement is desired.

My invention also has for its objects to provide such means that are positive in operation, convenient in use, easily installed in a working position and easily disconnected therefrom, economical of manufacture, relatively simple, and of general superiority and serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, the drawing merely shows and the following description merely describes one embodiment of the present invention, which is given by way of illustration or example only.

In the drawing, like reference characters designate similar parts in the several views.

Fig. 1 is a front elevational view, partly in section.

Fig. 2 is an end view.

Fig. 3 is a section on line 3—3 of Fig. 1.

Referring to the drawing, my invention is shown as comprising a handle 3, with which is preferably integrally united a head 5, the exterior lateral edges of which are beveled, as indicated at 6. The head 5 may be regarded as a stationary jaw. Cooperating with said jaw 5 is a movable jaw 4 having a dished face 7', the bordering lateral edges of which are beveled at 7 to conform to the beveled edges 6 of the head, to which the dished face 7' is opposed. A body 8 of suitable material is arranged to cover the outside face of and to extend over the beveled edges 7 of the movable jaw 4, by which it is adapted to be held clamped to said head 5. The movable jaw or clamp 4 is provided with upstanding pins 9 and 10 which slide freely in recesses 12 and 12' in the head 5 and maintain the jaw 4 in parallel alignment with the face of the head. Centrally of and disposed within the head 5 is a

2

member 16 having a substantially squared end 13, which extends into the central portion of said jaw 4 and is provided with an annular flange 13' adapted to be countersunk in the face of said jaw and to be flush therewith. Said squared end 13 is disposed to travel in a socket 17 in the body or head 5 and prevents rotation thereof. The member 16 is provided with threads 18 intermediate the length thereof to form a reduced cylindrical end operably disposed in a recess 20 in the handle 3. Engaging the threads 18 is a knurled nut 15 positioned in an opening 21 in the head 5 and preferably projecting beyond the sides thereof to facilitate manual rotation. The terminus of the threads provides an abutment surface for one end of a spring 14, coiled about said cylindrical end, while the other end of said spring abuts a shoulder 22 formed by an enlargement 23 of the recess 20 in which said spring is accommodated. The bottom of the opening 21 forms a thrust bearing for the knurled nut 15 when operated in either direction, to raise or lower said member 16 and the clamp 4 to clamping or releasing position, and the nut 15 is held in engagement with the bottom of said opening at all times by the spring 14. It will be obvious, however, that the nut 15 may be disengaged from said bottom when pressure is applied to the jaw 4 to move it toward the head 5. In such an event, the member will be moved against the tension of the spring 14, carrying with it the nut, which upon removal of the pressure, under the tension of the spring, re-engages the bottom of the opening. This is of advantage where the jaw 4 is pressed into close clamping position by a force other than the nut, which may then be easily manipulated to secure the jaw in such position.

The nut 15 being held in contact with the bottom of the opening 21, by the spring 14, the member 16 will be moved by the rotation of said nut either inwardly to cause the jaw 4 to clamp the material laid over the edge thereof, or outwardly to move the jaw to unclamping position.

While I have illustrated and described what I now regard as the preferred embodiment of my invention, the construction is, of course, subject to modifications without departing from the spirit and scope of my invention. I, therefore, do not wish to restrict myself to the particular form of construction illustrated and described, but desire to avail myself of all modifications that may fall within the scope of the appended claims.

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

1. A cleaning device comprising a head having

3

a transverse opening having opposed walls, a clamp face on said head, a clamp cooperating with said face for clamping the intumed ends of a cleaning material laid over the face of the clamp, a shank extending into said opening centrally through said head and provided with a substantially squared portion to which said clamp is connected, said head having a substantially squared socket to receive said squared portion and prevent rotation thereof, said shank being threaded intermediate the length thereof, a member engaging the threads of said shank and in abutment with one wall of said opening to move said shank and the clamp to closing or opening position, and tension means on said shank and engaged with the other wall of said opening to maintain said member in engagement with said first mentioned wall of the opening in said head.

2. A cleaning device comprising a head having a transverse opening having opposed walls, a clamp face on said head, a clamp cooperating with said face for clamping the intumed ends of a cleaning material laid over the face of the clamp, a threaded shank extending into said opening centrally through said head and provided with a squared end to which said clamp is connected, said head having a socket to receive said squared end and prevent rotation of said shank, a rotatable means in said opening and having threads engaging said shank and operable to move same and the clamp relative to the face of said head, and means abutting one wall of said opening for exerting tension on said shank to maintain said rotatable member in engagement with the other wall of said opening.

3. A cleaning implement comprising a head having a transverse opening having opposed walls, a clamping face on said head, a clamp cooperating with said face for clamping the intumed ends of a cleaning material laid over the face thereof, said clamp provided with upstanding guide pins and said head having recesses slidably to receive said pins, a threaded shank extending into said opening and to the end of which said clamp is connected, rotatable means in said opening threadedly engaged on the shank and to move said shank and the clamp relatively to the face thereof, and means abutting one wall of the opening to tension said shank and thereby maintain said rotatable means in engagement with the other wall of said opening.

4. A cleaning implement comprising a head having a transverse opening having opposed walls, a clamping face on said head, a dished clamp cooperating with said face for clamping the intumed ends of a cleaning material laid over the face thereof, said clamp provided with guide pins and said head having recesses slidably to receive said pins, a threaded shank extending in said opening and disposed centrally of said head and having a squared end to which said clamp is connected, said head having a socket slidably to receive said squared end and prevent rotation of

4

said shank, rotatable means threadedly engaged on the shank and in said opening operable to move said shank and the clamp relatively to the face thereof, and tension means abutting one wall of the opening to maintain said rotatable means in engagement with the other wall of said opening in the head.

5. A cleaning implement comprising a head having a transverse opening having opposed walls, a clamping face on said head, a clamp cooperating with said face to clamp a cleaning material against the face of said head, said clamp and head having cooperating means for maintaining them in parallel relation, a bolt to the end of which said clamp is connected extending centrally and freely through said head and the opening therein, a nut on said bolt extending beyond the sides of said opening and operable to move said clamp to closing or opening position, and resilient means engaged with one wall of the opening and operable against said bolt to maintain said nut in engagement with the other wall of said opening.

6. A cleaning device comprising a head having a transverse opening having opposed walls, a beveled clamping face on said head, a dished clamp cooperating with said face and adapted to clamp the ends of a cleaning material against said face, a threaded shank extending centrally of and into the opening in said head, said clamp being connected to the end of said shank, a member threadedly engaged with the shank and extending into said opening to move said shank and clamp relatively to the face of said head, and spring means on said shank abutting one wall of the opening to maintain said member in engagement with the other wall of said opening.

7. A cleaning device comprising a transversely apertured head having a clamping face, the aperture having opposed walls, a clamp member cooperating with said face for clamping the intumed ends of a cleaning material laid over the face of said clamp, a threaded member connected with said clamp and extending into the aperture in the head, nut means on said threaded member disposed in said aperture in abutment with one aperture wall to move the clamp member to a clamping position, and spring means on the threaded member having abutment with the other wall of the aperture and disposed to maintain the nut means engaged with said first mentioned aperture wall.

BENJAMIN F. RUSSELL.

REFERENCES CITED

55 The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
60 798,134	Kelley	Aug. 29, 1905
2,014,109	Lawlor	Sept. 10, 1935
2,196,365	Schulman	Apr. 9, 1940
2,364,319	Schimmel	Dec. 5, 1944