activating the first activation unit (107) and the second activation unit (116) may trigger to power the motor (106), for rotating the tool assembly (103) [thus, the scraper blade (104) rotates] at required speed.

Further referring to **Figure. 2**, the tool assembly (103) may be supported by a resilient member (118), which may be provided between the tool assembly (103) and the activation unit (107). In an illustrated embodiment, the tool assembly (103) (thus, the gear box (105) of the tool assembly (103)) may be defined with a projection (110) [best seen in **Figure. 1**], which may be received by the resilient member (118). In an embodiment, the resilient member (118) may be defined with a predetermined stiffness and be configured to support the tool assembly (103) in the first position [as seen in **Figure. 2**], until a load beyond a threshold is applied on the tool assembly (103). In an embodiment, the first position of the tool assembly (103) corresponds to the projection (110) being away from the first activation unit (107) i.e., the projection (110) non-contacting the first activation unit (107). Further, the resilient member (118) may be configured to deform corresponding to the load applied on the tool assembly (103), beyond the threshold, to facilitate displacement of the tool assembly (103) from the first position to the second position [as seen in **Figure.5**].

In an embodiment, the resilient member (118) may be one of a spring such as but not limiting to a helical spring and a polymeric material such as but not limiting to foam, silicone, and the like, which may regain the original shape upon releasing of load.

In an operational embodiment, to scrape the flesh of the coconut shell (109), as seen in **Figure. 4**, the coconut shell (109) may be positioned within the contour defined in the flexible enclosure (110) of the lid (108). At this instance of positioning the coconut shell (109) within the contour of the lid (108), the lid (108) may be in the open condition, and the electric circuit may be open [as seen in **Figure. 6a**]. Upon, positioning the coconut shell (109) within the lid (108) (thus, the contour), the lid (108) may be operable from the open condition to the closed condition [as seen in **Figure. 5**]. In an embodiment, in the closed condition of the lid (108), the lid (108) may be receivable within the bowl (102) and the retaining element (112) (i.e., the first support member (113) of the retaining element (112)), may contact the inner periphery of the bowl (102). Such contact of the retaining element (112) of the lid (108) with the inner periphery of the bowl (102) results in contacting the second activation unit (116), thus activating the second activation unit

(116). Further, upon positioning the lid (108) into the bowl (102) the user may apply force or load on the lid (108) such that the coconut shell (109) is pressed against the tool assembly (103), to exert load on the tool assembly (103). Once, the load applied on the tool assembly (103) exceeds beyond a threshold (i.e., more than resistive load of the resilient member (118)), the resilient member (118) may deform i.e., the resilient member (118) may undergo compression. Such a deformation (thus, compression) of the resilient member (118) may result in the tool assembly (103) to displace from the first position to the second position. At the second position, the projection (110) defined in the tool assembly (103) may contact the activation unit (107), thus activating the activation unit (107). In an embodiment, activation of the first activation unit (107) and the second activation unit (116) may result in forming a closed electric circuit (as seen in **Figure. 6b**), thus powering the motor (106). Powering the motor (106), results in rotation of the scraper blade (104) to scrape the flesh from the coconut shell (109), where the scraped flesh may be received and stored in bowl (102).

In an embodiment, the user may constantly apply the load onto the lid (108) (i.e., contour of the lid (108)) to press the coconut shell (109) against the tool assembly (103) to maintain power supply to the motor (106) for performing the scraping operation.

During, the scraping operation, the user may support the coconut shell (109) over the scraper blade (104) by holding the contour defined in the flexible enclosure (110) of the lid (108). In an embodiment, during scraping operation, the contour may be moved in required directions with respect to a central axis A-A of the scraper blade (104), and the lid (108) may be rotated in required direction i.e., 360 degrees, relative to the bowl (102), in order to contact different contours of the coconut shell (109) with the scraper blade (104), such that various contours of the coconut shell (109) are effectively scraped. Further, upon completion of scraping of flesh from the coconut shell (109), the user may operate the lid (108) from the closed condition to the open condition (as seen in **Figure. 4**), to remove the coconut shell (109). In the open condition, the lid (108) (thus, the retaining element (112)) may move away from the activation unit (107), thus deactivating the second activation unit (116). Simultaneously, during operation of the lid (108) from the closed condition to the open condition, load applied on the tool assembly (103) is released, causing the tool assembly (103) to displace from the second position to the first position, thus deactivating the first activation unit (107). In an embodiment, deactivation of one of the first activation unit (107)

Claims:

1. A safety mechanism for a coconut scraper (100) having a base (101), a tool assembly (103) detachably coupled to a motor (106) and configured to displace between a first position and a second position corresponding to load applied to the tool assembly (103), a bowl (102) positioned on the base (101) and receiving the tool assembly (103) and a lid (108) receivable by the bowl (102), and operable between an open condition and a closed condition, wherein the lid (108) in the closed condition is configured to enclose the tool assembly (103) and receive load, to displace the tool assembly (103) from the first position to the second position, the safety mechanism comprising:

   a first activation unit (107) and a second activation unit (116), wherein each of the first activation unit (107) and the second activation unit (116) is communicatively coupled to the motor (106);

   a resilient member (118) provided between the tool assembly (103) and the first activation unit (107), wherein the resilient member (118) is configured to support the tool assembly (103) in the first position until the load beyond a threshold is applied to the tool assembly (103);

   a projection (110) defined in the tool assembly (103), wherein the projection (110) is receivable by the resilient member (118) for supporting the tool assembly (103), and the projection (110) is configured to contact the first activation unit (107), in the second position of the tool assembly (103);

   wherein, the lid (108) in the closed condition, is configured to activate the second activation unit (116) and the tool assembly (103) in the second position, is configured to activate the first activation unit (107), wherein activation of the first activation unit (107) and the second activation unit (116) power the motor (106) of the coconut scraper (100).

2. The safety mechanism as claimed in claim 1, wherein the tool assembly (103) comprises a scraper blade (104) and a gear box (105) detachably connected to the scraper blade (104).

.

3. The safety mechanism as claimed in claim 3, wherein the resilient member (118) is configured to deform corresponding to the load applied on the tool assembly (103) beyond the threshold, to facilitate displacement of the tool assembly (103) between the first position and the second position.

4. The safety mechanism as claimed in claim 1, wherein the tool assembly (103) is configured to displace between the first position and the second position along at least one of a longitudinal axis A-A of the tool assembly (103) and at an inclined axis with respect to the longitudinal axis A-A of the tool assembly (103).

5. The safety mechanism as claimed in claim 1, wherein the first activation unit (107) and the second activation unit (116) are at least one of a micro switch, a contact sensor and a non-contact sensor.

6. The safety mechanism as claimed in claim 1, wherein the lid (108) comprises:

a flexible enclosure (110) defined with a contour to receive a coconut shell (109), and a flange portion (111) extending along a periphery of the contour; and

a retaining element (112) coupled to the flange portion (111) of the flexible enclosure (110), wherein the retaining element (112) is receivable by the bowl (102) of the coconut scraper (100) in the closed condition of the lid (108).

7. The safety mechanism as claimed in claim 9, wherein the retaining element (112) comprises a first support member (113) and a second support member (114), wherein the first support member (113) and the second support member (114) are configured to abut either side of the flange portion (111) for supporting the flange portion (111).

8. The safety mechanism as claimed in claim 10, wherein the first support member (113) is defined with a profile corresponding to the profile of the bowl (102) of the coconut scraper (100), such that the first support member (113) is receivable by the bowl (102) and configured to activate the second activation unit (116).

9. The safety mechanism as claimed in claim 9, wherein the lid (108) is movable in the closed condition, to facilitate scraping various contours of the coconut shell (109).

10. A coconut scraper (100), comprising:

a base (101), accommodating a motor (106);

a bowl (102) supported by the base (101);

a tool assembly (103) receivable by the bowl (102) and detachably coupled to the motor (106), wherein the tool assembly (103) is configured to displace between a first position and a second position corresponding to load applied on the tool assembly (103);

a lid (108) receivable by the bowl (102), wherein the lid (108) is operable between an open condition and a closed condition, wherein the lid (108) in the closed condition is configured to enclose the tool assembly (103) and receive the load to displace the tool assembly (103) from the first position to the second position; and

a safety mechanism, comprising:

a first activation unit (107) and a second activation unit (116), wherein each of the first activation unit (107) and the second activation unit (116) is communicatively coupled to the motor (106);

a resilient member (118) provided between the tool assembly (103) and the first activation unit (107), wherein the resilient member (118) is configured to support the tool assembly (103) in the first position until the load beyond a threshold is applied to the tool assembly (103);

a projection (110) defined in the tool assembly (103), wherein the projection (110) is receivable by the resilient member (118) for supporting the tool assembly (103), and the projection (110) is configured to contact the first activation unit (107), in the second position of the tool assembly (103);

wherein, the lid (108) in the closed condition, is configured to activate the second activation unit (116) and the tool assembly (103) in the second position, is configured to activate the first activation unit (107) and,

wherein the first activation unit (107) and the second activation unit (116), powers the motor (106) of the coconut scraper (100).

11. The coconut scraper (100) as claimed in claim 13, wherein the first activation unit (107) is positioned in the base (101) and the second activation unit (116) is positioned in a bracket (120) defined on an outer surface of the bowl (102).

12. The coconut scraper (100) as claimed in claim 13, wherein the tool assembly (103) comprises a scraper blade (104) and a gear box (105) detachably connected to the scraper blade (104).

13. The coconut scraper (100) as claimed in claim 13, comprises a resilient member (118) provided between the tool assembly (103) and the first activation unit (107), the resilient member (118) is configured to support the tool assembly (103) in the first position until the load beyond a threshold is applied on the tool assembly (103).

14. The coconut scraper (100) as claimed in claim 13, wherein the lid (108) comprises:

a flexible enclosure (110) defined with a contour to receive and support a coconut shell (109), and a flange portion (111) extending along a periphery of the contour; and

a retaining element (112), coupled to the flange portion (111) of the flexible enclosure (110), wherein the retaining element (112) is receivable by the bowl (102) of the coconut scraper (100) in the closed condition of the lid (108).

15. The coconut scraper (100) as claimed in claim 17, wherein the retaining element (112) comprises a first support member (113) and a second support member (114), wherein the first support member (113) and the second support member (114) are configured to abut the flange portion (111) for supporting the flange portion (111).