CLAIMS

1. A cleaning tool control mechanism (100) comprising:

a crank rocker assembly (102) to control displacement of one or more cleaning tools; wherein the crank rocker assembly (102) comprises: a crank (3), a connecting arm (5) comprising a resilient member (10), and a rocker (7) interconnected with each other using a plurality of pinned joints (6, 8, 9); and

wherein when the crank (3) is rotated in a first direction,

the resilient member (10) is variably compressed to control a downward force applied to the rocker (7) while actuating a secondary cleaning tool mechanism (106); and wherein one of the one or more cleaning tools is attached to the rocker (7).

2. The cleaning tool control mechanism according to claim 1, wherein the crank rocker assembly (102) further comprises a lever (12) actuated by a cam surface of the crank (3) while rotating in the first direction to actuate the secondary cleaning tool mechanism (106).

3. The cleaning tool control mechanism according to claim 1, wherein when the crank (3) is rotated in a second direction,

the resilient member (10) is variably compressed to control the downward force applied to the rocker (7) without actuating the secondary cleaning tool mechanism (106).

4. The cleaning tool control mechanism according to claim 1, wherein the secondary cleaning tool mechanism (106) comprises a control arm (14) and a bowden cable (17), wherein a movement of the control arm (14) actuates the bowden cable (17) to displace one of the one or more cleaning tools.

5. The cleaning tool control mechanism according to claim 1, wherein the resilient member (10) is a compression spring (10).

6. The cleaning tool control mechanism according to claim 1, wherein the plurality of pinned joints (6, 8, 9) provides an angular displacement of the connecting arm (5) and the rocker (7).

7. The cleaning tool control mechanism according to claim 1, wherein the connecting arm (5) further comprises a slot (15) integrally formed and extending along a portion of the connecting arm (5).

8. The cleaning tool control mechanism according to claim 1, wherein the resilient member (10) is attached between at least one pinned joint (9) and a ledge (5a) on the connecting arm (5).

9. The cleaning tool control mechanism according to claim 7 or 8, wherein the resilient member (10) urges the at least one pinned joint (9) to laterally displace the at least one pinned joint (9) within the slot (15) enabling the rocker (7) to move relative to the connecting arm (5).

10. A cleaning machine comprising:

a chassis (200);

a primary cleaning tool (104);

a secondary cleaning tool; and

a cleaning tool control mechanism (100) attached to the chassis (200); wherein the cleaning tool control mechanism (100) comprises:

a motor (1); and

a crank rocker assembly (102) comprising a crank (3) to displace the primary cleaning tool (104) and the secondary cleaning tool based on a rotation of the crank (3) by the motor (1) in one of a clockwise direction or a counterclockwise direction.

11. The cleaning machine according to claim 10, wherein the primary cleaning tool (104) is attached to and supported by a rocker (7).

12. The cleaning machine according to claim 10, wherein the primary cleaning tool (104) is displaced by a compression of a resilient member (10) actuated by the crank (3).

13. The cleaning machine according to claim 10, wherein the secondary cleaning tool is displaced by rotation of a lever (12) actuated by a cam surface provided on the crank (3).

14. The cleaning machine according to claim 11 or 12, wherein the compression of the resilient member (10) applies a downward force to the rocker (7).

15. The cleaning machine according to claim 11 or 12, wherein the resilient member (10) is in a pushing connection with the rocker (7) to maintain contact between the primary cleaning tool (104) with a floor.