A device for supporting and enabling the manual rotation of a hanging planter. The device comprises an attachment member having a first end capable of attaching the hanging planter to an overhead stationary support. An O-ring connecting member including a central opening capable of receiving a second end of the attachment member thereof and a holding member for holding this attachment member therein. At least one suspending member having a first and second end, the first end of the at least one suspending member capable of being attached to the O-ring connecting member and the second end of the at least one suspending member capable of being attached to a hanging planter wherein the hanging planter is capable of being lifted and freely rotated with respect to the overhead stationary support for even exposure of the plant to sunlight.
MERRY-GROW-ROUND
CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] This application claims priority from Provisional Application Ser. No. 60/687,528 filed Jun. 6, 2005.

FIELD OF THE INVENTION

[0002] The present invention relates, in general, to a device for supporting a hanging planter and, more particularly, to a device for supporting and enabling the manual rotation of a hanging planter to ensure that every side of the plant receives ample light to maintain the health and beauty of the plant.

BACKGROUND OF THE INVENTION

[0003] Plants provide beauty, decoration and even health benefits. Many people enjoy using hanging baskets to display their favorite plants. Unfortunately, hanging plants most often receive more light on one side. This often causes the plant to grow unevenly and more in the direction of the light resulting in the plant becoming unattractive and unhealthy. Most anchoring and mounting devices prevent the rotation of the plant so that it is able to receive an even amount of light on all sides.

[0004] U.S. Pat. Nos. 4,574,521 and 5,546,698 are directed to motorized devices for rotating hanging planters to ensure that sufficient light is received on all sides of the plant. A disadvantage of these devices is that they require the use of an energy source to operate and can be somewhat heavy, increasing the weight of the planter on the overhead support surface.

[0005] U.S. Pat. No. 5,315,784 is directed to a device, which includes a coaxial tension spring that rotates the planter in response to the weight of the plant due to wetness/dryness of the plant. A disadvantage to this device is that its rotation is dependent upon the amount of moisture in the soil of the plant and this moisture level can be affected by temperature, humidity, and the like. Consequently, uneven rotation of the planter may occur.

[0006] U.S. Pat. Nos. 4,373,695 and 5,836,109 show devices for suspending a planter wherein the planter may be manually rotated to ensure the application of light to all sides. The (’695) device includes a sliding arrangement between an internal and an external member, a plurality of teeth arrays, bearing means and restoring means. Upon the application of an upward force to the bottom of the planter, manual rotation of the device can occur. The (’109) device includes a swivel connection between the hook and plant strings which allows for the free rotation of the planter. One disadvantage of these devices as they are not easily retrofitted to existing planters. Another disadvantage is that there are a number of working parts, which may break, or malfunction and which increases the manufacturing cost of the device.

[0007] U.S. Pat. No. 3,957,242 shows a simple rotatable hanging device for suspending a planter comprising a main member having a central bore therethrough which is adapted to receive a screw and a hanging device extending down from this main member. The main member is capable of rotating with respect to the overhead supporting surface, allowing a plant, which is suspended from the hanging device, to also rotate. While the (’242) device is simple in design, it cannot be mounted to an already exiting hanging member in place in the overhead support member. The (’242) device requires one to bore through the overhead support taking care to ensure that sufficient anchoring means is provided. This may cause significant damage to the overhead support.

OBJECTS OF THE INVENTION

[0008] It is therefore an object of the invention to provide a device that allows for the convenient quick and simple manual rotation of a hanging plant to allow for even exposure to sunlight.

[0009] It is yet another object of the invention to provide a device that allows for the rotation of a hanging plant that is simple to assemble.

[0010] It is an even further object of the invention to provide a device that can be easily hung from a standard already installed hanger.

[0011] It is an even further object of the invention to provide a device that can be easily retrofitted to an existing hanging planter.

[0012] It is still yet another object of the invention to provide a device that is lightweight and inexpensive to manufacture.

[0013] It is still yet another object of the invention to provide a device that is simple to assemble and requires no unusual installation.

[0014] In addition to the various objects and advantages of the invention which have been described in some specific detail above, it should be noted that various other objects and advantages of the present invention will become more readily apparent to those persons who are skilled in the relevant art from the following more detailed description, particularly, when such description is taken in conjunction with the attached drawing Figures and with the appended claims.

SUMMARY OF THE INVENTION

[0015] Briefly, and in accordance with the foregoing objects, the invention comprises a device for supporting and enabling the manual rotation of a hanging planter. The device comprises an attachment means having a first and second end. The first end of the attachment means capable of attaching the hanging planter to an overhead stationary support. An O-ring connecting means including a first central opening having a first predetermined diameter and capable of receiving the second end of the attachment means therethrough and a frame portion surrounding the first central opening. A holding means attached to an end portion of the second end of the attachment means for holding the second end of the attachment means within the central opening of the O-ring connecting means. At least one suspending member having a first and second end, the first end of the at least one suspending member capable of being attached to the frame portion of the O-ring connecting means and the second end of the at least one suspending member capable of being attached to a hanging planter to
allow for the manual free rotation of the hanging planter with respect to the overhead stationary support.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] FIG. 1 shows the device of the invention attached with a pot for holding a hanging plant.
[0017] FIG. 2 shows a partial side view of the device of the invention.
[0018] FIG. 3 shows a top view of the device of the invention.
[0019] FIG. 4 shows a front view of the attachment means of the invention for attaching to an overhead support.
[0020] FIG. 5 shows a side view of the attachment means of FIG. 4.
[0021] FIG. 6 shows a top view of the O-ring connecting means of the invention for connecting the attachment means with the suspending member.
[0022] FIG. 7 shows a side view of the suspending member for attaching a standard pot to the hanging device of the invention.

DETAILED DESCRIPTION OF THE INVENTION

[0023] Before describing the invention in detail, the reader is advised that, for the sake of clarity and understanding, identical components having identical functions have been marked where possible with the same reference numerals in each of the Figures provided in this document.

[0024] Now reference is made to FIG. 1, which shows the device, generally indicated as 10, for supporting and enabling the manual rotation of a hanging planter 12. The device comprises an attachment means 14, as shown in detail in FIGS. 1, 4 and 5, having a first 16 and second 18 end. The first end 16 of the attachment means 14 is capable of attaching the hanging planter to an overhead stationary support (not shown). Preferably, this first end 16 of the attachment means 14 comprises a hook 20 or any other well-known attaching means which is capable of being hung from a standard already installed hanger (not shown). This already installed hanger can be one of a hook, bar, and/or loop extending from the overhead stationary support.

[0025] The device further includes an O-ring connecting means 22, as shown in detail in FIG. 6, which includes a first central opening 24 having a first predetermined diameter and capable of receiving the second end 18 of the attachment means therethrough. The O-ring 22 further includes a frame portion 26 surrounding the first central opening 24.

[0026] A holding means 30 is attached to an end portion 32 of the second end 18 of the attachment means 14 for holding the second end 18 of the attachment means 14 within the first central opening 24 of the O-ring connecting means 22. At least a portion of the holding means 30 is positioned adjacent a bottom surface 34 of the O-ring connecting means 22 and the first end 16 of the attachment means 14 extends above a top surface 36 of the O-ring connecting means 22. Preferably, as shown in FIGS. 1-2 and 4-5, this holding means 30 comprises a ball shaped member having a diameter greater than the first predetermined diameter of the first central opening 24 within the O-ring connecting means 22.

[0027] At least one suspending member 38, as shown in detail in FIG. 7, is provided which has a first 40 and second 42 end. The first end 40 of the at least one suspending member 38 is capable of being attached to the frame portion 26 of the O-ring connecting means 22 and the second end 42 of the at least one suspending member 38 is capable of being attached to a hanging planter/pot 12.

[0028] The first end 40 of the at least one suspending member 38 can be attached to the frame portion of the O-ring connecting means 22 by any well known means. For example, the at least one suspending member may be integrally attached onto the bottom surface 34 of the O-ring connecting means or it may be attached by means of fusing or gluing to this bottom surface 34.

[0029] An alternative technique for attaching the at least one suspending member 38 to the O-ring connecting means 22 is to provide at least one second opening 28 having a second predetermined diameter in the frame portion 26 of the O-ring connecting means 22. In this embodiment, the first end 40 of the at least one suspending member 38 is capable of extending through the at least one second opening 28 to attach the suspending member 38 to the O-ring connecting means 22. The at least one second opening 28 includes an elongated portion 48 extending outward from a rounded center portion 50 having the second predetermined diameter. A ball shaped holding member 44 is provided which has a diameter greater than the second predetermined diameter of the at least one second opening 28 in the frame portion 26 of the O-ring connecting means 22. This ball shaped holding member 44 is positioned adjacent a top surface 36 of the O-ring connecting means 22. The at least one suspending member 38 includes anti-rocking tabs 46 attached thereto which are positioned adjacent the bottom surface 34 of the O-ring connecting means 22.

[0030] The second end 42 of the at least one suspending member 38 includes one of a hook, a clip, or any other well-known attaching means 43 for attaching to the suspending member 38 to the hanging planter 12.

[0031] Preferably, the frame portion 26 includes at least three second openings 28 and at least three suspending members 38 extending down from the O-ring connecting means 22. This allows for an even suspension of the planter 12 from the O-ring connecting means 22.

[0032] In operation, the O-ring connecting means 22 is capable of moving a predetermined distance in a vertical direction with respect to the holding means 30 upon the application of a lifting action to the hanging planter 12. Upon lifting of the planter 12, the downward gravitational weight of the planter 12 is removed and the O-ring connecting means 22 is separated from the holding means 30. This enables the O-ring connecting means 22 to freely rotate with respect to the attachment means 14 and thus one is able to manually rotate the hanging planter 12.

[0033] The attachment means 14 includes at least one tab, preferably two or more tabs 52, extending in an outward direction with respect to the attachment means 14 for limiting the predetermined distance of vertical movement of the O-ring connecting means 22. These tabs 52 prevent the O-ring connecting means 22 from moving too far above the holding means 30 which could result in the tilting or spilling of the contents of the planter 12.
The present invention provides a user with a quick, simple and convenient device for manually rotating hanging planters to ensure that a plant receives even exposure to sunlight.

The invention has been described in such full, clear, concise, and exact terms so as to enable any person skilled in the art to which it pertains to make and use the same. It should be understood that variations, modifications, equivalents and substitutions for components of the specifically described embodiments of the invention may be made by those skilled in the art without departing from the spirit and scope of the invention as set forth in the appended claims. Persons who possess such skill will also recognize that the foregoing description is merely illustrative and not intended to limit any of the ensuing claims to any particular narrow interpretation.

We claim:

1. A device for supporting and enabling the manual rotation of a hanging planter, said device comprising:
   (a) an attachment means having a first and second end, said first end capable of attaching such hanging planter to an overhead stationary support;
   (b) an O-ring connecting means including a first central opening having a first predetermined diameter and a frame portion surrounding said first central opening, said first central opening capable of receiving said second end of said attachment means therethrough;
   (c) holding means attached to an end portion of said second end of said attachment means for holding said second end of said attachment means within said central opening of said O-ring connecting means;
   (d) at least one suspending member having a first and second end, said first end of said at least one suspending member capable of attaching to said frame portion of said O-ring connecting means and said second end of said at least one suspending member capable of attaching to said hanging planter, to allow for the manual free rotation of such hanging planter with respect to such overhead stationary support.

2. A device as recited in claim 1 wherein said frame portion of said O-ring connecting means includes at least one second opening having a second predetermined diameter and said first end of said at least one suspending member is capable of extending through said at least one second opening to attach said suspending member to said O-ring connecting means.

3. A device as recited in claim 1 wherein said first end of said attachment means comprises a hook.

4. A device as recited in claim 3 wherein said hook is capable of attaching to one of a hook, bar, and loop extending from such overhead stationary support.

5. A device as recited in claim 1 wherein at least a portion of said holding means is positioned adjacent a bottom surface of said O-ring connecting means and said first end of said attachment means extends above a top surface of said O-ring connecting means.

6. A device as recited in claim 5 wherein said holding means comprises a ball shaped member having a diameter greater than said first predetermined diameter of said first central opening within said O-ring connecting means.

7. A device as recited in claim 1 wherein said O-ring connecting means is capable of moving in a predetermined distance in a vertical direction with respect to said holding means upon the application of a lifting action to such hanging planter to enable manual rotation of such planter.

8. A device as recited in claim 7 wherein said attachment means includes at least one tab extending in an outward direction with respect to said attachment means for limiting said predetermined distance of vertical movement of said O-ring connecting means.

9. A device as recited in claim 8 including wherein said at least one tab includes a plurality of tabs extending in an outward direction with respect to said attachment means.

10. A device as recited in claim 1 wherein said first end of said at least one suspending member includes a ball shaped holding member having a diameter greater than said second predetermined diameter of said at least one second opening in said frame portion of said O-ring connecting means, said ball shaped holding member being positioned adjacent a top surface of said O-ring connecting means.

11. A device as recited in claim 10 at least one suspending member includes anti-rolling tabs located thereon and positioned adjacent a bottom surface of said O-ring connecting means.

12. A device as recited in claim 10 wherein said second end of said at least one suspending member includes one of a hook and a clip for attaching to such hanging planter.

13. A device as recited in claim 2 wherein said at least one second opening extending through said frame portion of said O-ring connecting means comprises a plurality of openings.

14. A device as recited in claim 13 wherein said at least one suspending member comprises a plurality of suspending members.

15. A device as recited in claim 2 wherein said at least one second opening extending through said frame portion of said O-ring connecting means includes an elongated portion extending outward from a rounded center portion having said second predetermined diameter.

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