Jan. 17, 1956 M. DE J. ORTEGA 2,731,103

VACUUM CLEANING DEVICE

Filed March 23, 1951 3 Sheets-Sheet 1

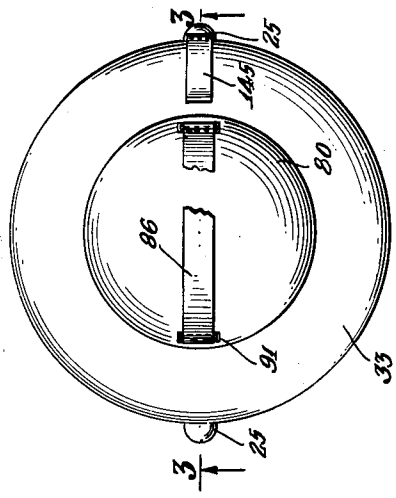

FIG. 2.

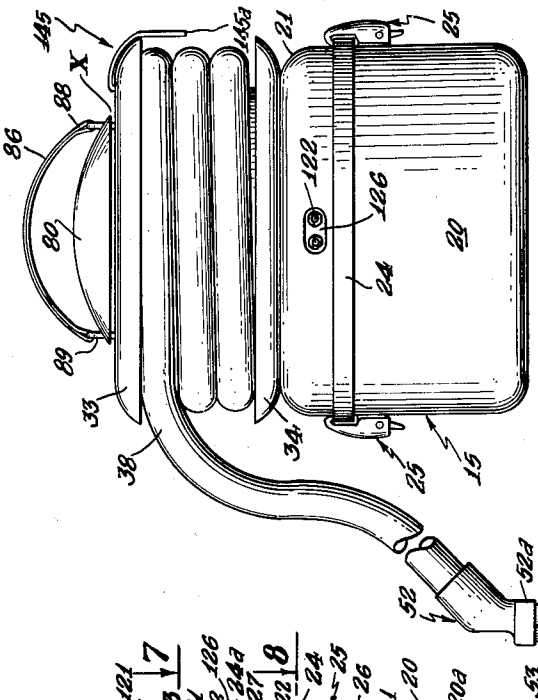

FIG. 1.

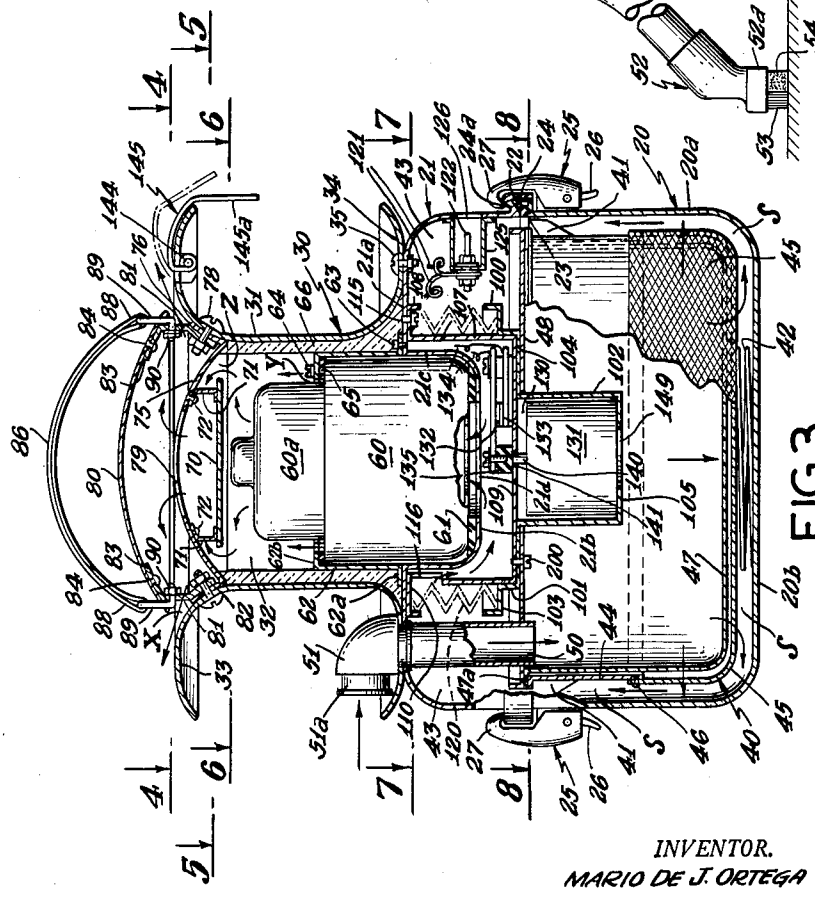

FIG. 3.

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Jan. 17, 1956 M. DE J. ORTEGA 2,731,103

VACUUM CLEANING DEVICE

Filed March 23, 1951 3 Sheets-Sheet 2

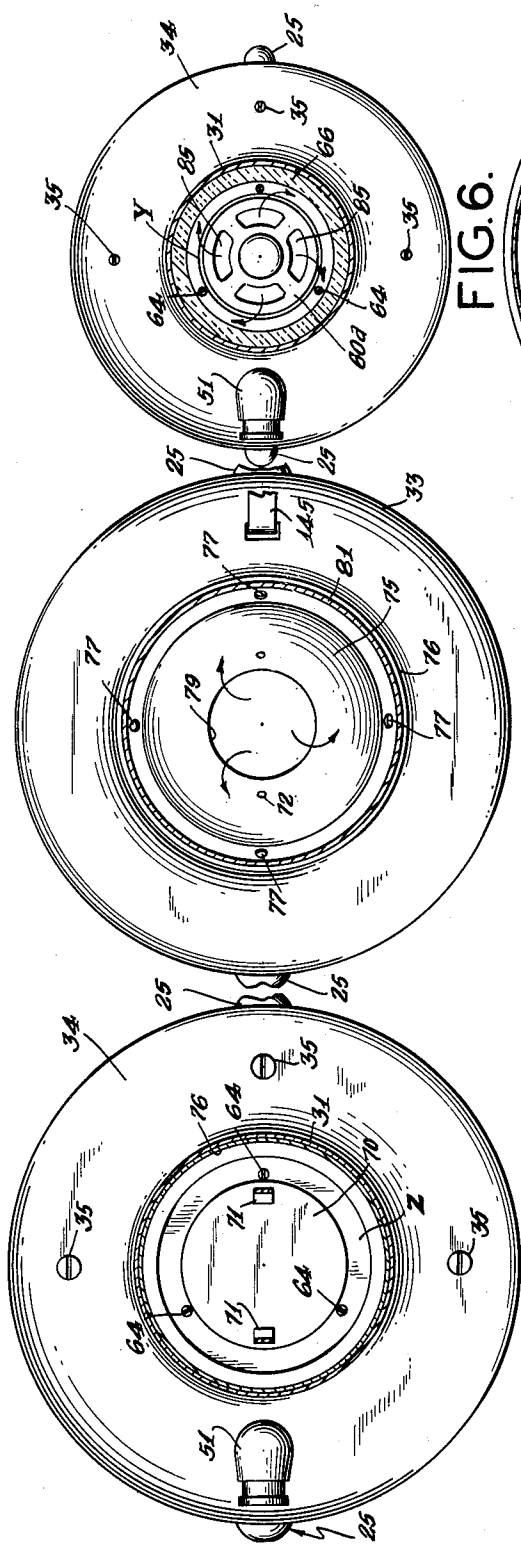

FIG.5.

FIG.4.

FIG.6.

FIG.7.

FIG.9.

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VACUUM CLEANING DEVICE

Filed March 23, 1951 3 Sheets-Sheet 3

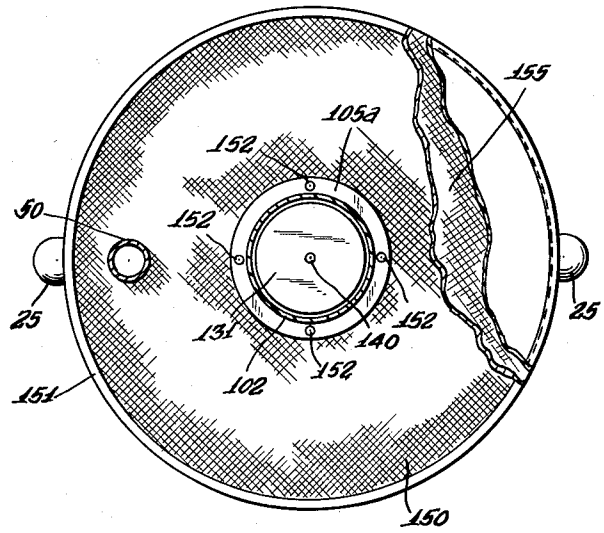

FIG. 10.

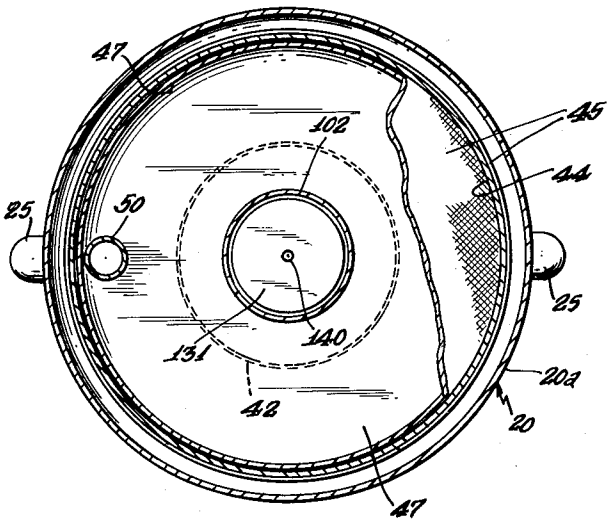

FIG. 8.

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United States Patent Office 2,731,103 Patented Jan. 17, 1956

2,731,103

VACUUM CLEANING DEVICE

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Application March 23, 1951, Serial No. 217,210

7 Claims. (Cl. 183—37)

This invention relates generally to vacuum type cleaning devices for cleaning and/or removing water from surfaces during the process of cleaning or washing the same.

One of the objects of my invention is to provide a highly improved device of the character described for removing water from floors or other surfaces to be cleaned which shall include a chamber for holding the water which is removed, suction means for drawing the water into the chamber, the said device being so constructed and arranged whereby the water removed from the floor during the washing process will be prevented from interfering with the operation of or damaging the suction means.

Another object of my invention is to provide a device of the character described for removing water from floors or other surfaces to be washed or cleaned including improved suction means for removing the water from the floor during or after the washing process in which novel means are employed for protecting the motor against dust and/or water drawn from the floor.

Still another object of my invention is to provide a device of the character described for removing water from surfaces cleaned or washed by water, which shall include as a part thereof novel suction producing means for drawing in the water removed, and in which improved means are provided for automatically rendering said suction producing means ineffective after a predetermined amount of water has been removed and drawn into the device.

A further object of my invention is to provide a device of the character described for removing water from surfaces cleaned or washed by water, which shall be compact, and relatively light in weight so that it may be easily carried from place to place, which shall comprise relatively few and simple parts, which shall be simple in operation and use and which, at the same time, shall represent an improvement in the art.

A still further object of my invention is to provide a device of the character described for removing water from surfaces cleaned or washed by water, which shall be so constructed and arranged whereby the said device may be readily converted for use for dry suction cleaning.

Other objects of my invention will become apparent from the description of the operation and construction thereof to follow, or will hereinafter be more particularly pointed out.

Certain features described but not claimed in this application are described and claimed in my copending application, Serial No. 173,292 filed July 12, 1950, for Vacuum Cleaning Water Separator now Patent No. 2,649,927.

In the accompanying drawings,

Fig. 1 is an elevational view of a device for removing water from surfaces constructed and arranged in accordance with my invention;

Fig. 2 is a top plan view thereof, with the extending hose portion omitted and with a portion of the handle broken away to disclose the construction underneath;

Fig. 3 is an enlarged cross-sectional view taken substantially along the line 3—3 of Fig. 2;

Fig. 4 is a top plan view as viewed substantially along the line 4—4 of Fig. 3 with the handle and cap removed and omitting all of the casing portions of the device therebelow;

Fig. 5 is a cross-sectional view taken substantially along the line 5—5 of Fig. 3 but with the lower casing portions of the device omitted;

Fig. 6 is a cross-sectional view, taken substantially along the line 6—6 of Fig. 3 and slightly reduced in size;

Fig. 7 is a cross-sectional view taken substantially along the line 7—7 of Fig. 3 and showing the construction of the labyrinth member by itself;

Fig. 8 is a cross-sectional view taken substantially along the line 8—8 of Fig. 3;

Fig. 9 is a fragmentary sectional view, similar to Fig. 3, but being partly in elevation and illustrating a modified form of my invention for the lower portion only of the device illustrated in Fig. 3; and

Fig. 10 is a cross-sectional view taken substantially along the line 10—10 of Fig. 9.

Referring now in detail to the drawings I have shown a device for removing water from floors or other surfaces during and after the washing process, constructed and arranged in accordance with my invention and which comprises a housing 15 formed by a lower receptacle 20 in which water may accumulate and an upper cover member 21. The members 20 and 21 may be of hollow cylindrical shape, as shown, and of light metallic material interfitted to form a closed chamber or container in the following manner.

The lower receptacle 20 may be outwardly turned at its upper edge to provide a flat annular surface 22 for engagement with a suitable gasket member 23 carried by the cover 21. At its lower edge the cover 21 may be provided with a downwardly extending peripherally enlarged portion 24, the interconnecting material 24*a* between the enlarged portion 24 and the main portion of the cover 21 forming a groove sloping downwardly and radially inwardly throughout its entire circumference.

To maintain the cover 21 in locked position on the lower receptacle 20 and at the same time to permit its quick and easy release for purposes which will soon become apparent I provide a pair of toggle catches 25 on opposite sides of the receptacle 20. Each toggle catch member 25 comprises operating levers 26 and hooks 27. The levers 26 are so constructed that when pressed inwardly towards the sides of the receptacle 20 the hooks 27 are brought to bear downwardly on the upper edge of the peripherally enlarged portion 24 of the cover 21. The downward and radially inward slope of the interconnecting material 24*a* provides a suitable surface for engagement with the hooks 27 in such manner that they will not slip off until the operating levers 26 are moved upwardly to release the hooks 27.

It is thus seen from the above described construction that when the toggle catches 25 are closed, the gasket 23 will be compressed between the receptacle 20 and the cover 21 to provide an effective seal to prevent the surrounding air from entering the closed chamber during the operation of the apparatus. To remove the cover 21 for any desired purpose it is merely necessary to open the toggle catches 25 and disengage the hooks 27 from the peripheral portion 24 by pulling the levers 26 outwardly, and upwardly.

Supported on the cover 21 is a hollow reel member 30, comprising a vertically disposed wall 31 surrounding an

opening 32 and upper and lower curved flanges 33 and 34 respectively. The reel 30 may be fixedly attached to the cover 21 by any suitable means, such as for example the bolt members 35 passing through the top wall 21*a* of the cover 21 and the lower flange 34 of the reel 30. The said reel 30 is designed to serve as a storage device for a desired length of flexible hose 38, the purpose and function of which will be more fully disclosed as the description proceeds.

Mounted on the cover 21 is an inlet pipe 50 which may project through aligned openings in the top wall 21*a* of the cover 21 and the lower flange 34 of the hose reel 30 and which at its lower end communicates directly with the interior chamber of the receptacle 20. An elbow fitting 51 threadedly connected to the pipe 50 at its upper end serves to maintain the said pipe 50 in position and at the same time helps to hold the cover 21 and reel 30 in attachment. One end of the hose 38 is attached to the elbow portion 51*a* and the opposite end of the said hose is designed to receive any suitable floor cleaning device, such as for example the device 52 as best seen in Fig. 1, and consisting of a scrubbing brush portion 53 and a squeegee member or the like 54 fixed to a hollow shank 52*a*, such as, for example the device shown and described in my copending application, Serial No. 199,113, filed Dec. 4, 1950 for Vacuum Squeegee Device.

It is thus seen from the above description that when a suction force is applied to the hollow chamber 43 of the cover 21, a vacuum will be created therein. Since the inner chamber of the receptacle 20 communicates directly with the chamber 43, air from the said receptacle 20 will be drawn into the said chamber 43, creating a vacuum in the receptacle 20. Air, to fill the vacuum in the receptacle 20 will then be drawn in through the tube 50, hose 38, and end fitting 52*a* from the air surrounding the floor and brushes 53 and squeegee 54. The air will draw in with it the surplus water used in cleaning the floor. The water thus drawn in will accumulate in the receptacle 20.

Whereas, in my copending application, Serial No. 173,292, filed July 12, 1950, now U. S. Patent No. 2,649,927, dated August 25, 1953, any household vacuum cleaner could be used as the source of required suction, in accordance with this invention I provide for the suction producing apparatus to be incorporated in and to form a part of the device. To that end I provide an electric suction pump 60 which may be of any standard type such, as for example, the kind employed in vacuum cleaners. The said pump 60 is housed partly within the hose reel 30 and supported by the cover 21 in the following manner:

The top wall 21*a* of the cover 21 is provided with a central opening or depressed portion comprising the bottom or floor 21*b* and a surrounding side wall 21*c*. The pump 60 is place within the said opening or depression and rests on the said floor 21*b*. A layer of resilient material 61 may be interposed between the floor 21*b* and the pump 60 to minimize vibration. The pump 60 is held firmly in position by a metallic ring 62, having an outward lower flange 62*a* resting on the top wall 21*a* and secured thereto by the bolts 63, and an inwardly extending upper flange 62*b* overlying a shoulder of the pump 60 and attached to said pump shoulder by the bolts 64. Resilient packing 65 may be interposed between the pump 60 and the flange 62*b*, similar in purpose and function to the packing 61. The inner surface of the vertical wall 31 of the reel 30 may be lined with suitable soundproof insulating material 66, such as, for example, rock wool. An opening 21*d* is provided in the floor 21*b* communicating with the intake opening of the pump.

Disposed above the motor 60*a* of the pump 60 is a baffle plate 70 which is smaller in diameter than the reel opening 32, leaving a space Z therebetween (see Fig. 5). The said plate is fixed to an upper plate 75 by suitable angle brackets 71 weldedly attached to the plate 70 and riveted to the upper plate 75 by the rivets 72. The upper plate 75 is provided with a circumferential flange 76 angularly disposed to conform to the contour of the adjacent top flange 33 of the reel 30, and contactively overlying the said reel flange 33. Circumferentially spaced openings 77 are provided in the flange 76 which are in alignment with openings in the said reel flange 33 and bolts 78 passing through the said aligned openings hold the upper plate 75 in position, as shown in Figs. 3 and 4. The upper plate 75 is provided with a relatively large central opening 79 (Fig. 4).

A cap plate 80 is provided which may be arched as shown and is supported on the flange 33 in the following manner so that there will be a space X between the said flange 33 and said plate 80.

A pair of brackets 81 are provided, each having upper and lower flanges 83 and 82 respectively. The upper flange 83 is fixed to the cap 80 by rivets 84 and the lower flange 82 overlies the flange 76 of the plate 75 and is provided with apertures in alignment with the openings 77 so that the same bolt members 78 will serve to hold the brackets 81 in position. As noted in Figs. 3 and 6, the top wall of the motor 60*a* is provided with air vents 85 and an air space Y is provided between the flange 62*b* and the motor 60*a*.

It is thus seen from the above described construction that when the pump 60 is in operation to draw in the mixture of air and water through the hose 38, as hereinbefore described, the air thus taken in through the pump will pass out upwardly through the space Y, the openings 85 and striking the baffle plate 70 will be deflected around the edges thereof and upwardly through the space Z, thence through the opening 79 in the upper plate 75 and out to the surrounding atmosphere through the space X surrounding the cap 80. The exhaust of the air filtered of its moisture and drawn in will serve to cool the motor and pump.

As noted in Figs. 1, 2 and 3, a carrying handle 86 may be provided for the convenience of the user. The said handle 86 may be of any suitable material, such as leather, or plastic material, and may be formed with loops 88 at opposite ends. Handle brackets 89 fixed to the bracket 81 by means of nuts 90, passing upwardly through the cap 80, and having transverse bars 91 received in the loops 88 serve to fasten the handle to the reel 30.

As a further safeguard against the possibility that moisture might be drawn into the pump 60 during its operation, I provide a labyrinth device, now to be described, which is interposed between the interior of the receptacle 20 and the opening 21*d* in the floor 21*b*, leading to the pump inlet.

As best seen in Figs. 3 and 7 the labyrinth device comprises an outer cylindrical member and an inner cylindrical member. The outer cylindrical member is of stepped construction comprising the vertical wall portions 100, 101 and 102, interconnected by the integral horizontal wall portions 103, 104 and 105. The vertical wall 102 depends downwardly through an opening in the plate 48 and the said outer labyrinth member is held in position by the horizontal wall 104 resting upon the upper surface of the disc 48. The inner labyrinth member comprises the vertical walls 107 and 108 interconnected by the integral horizontal walls 109 and 110. The said horizontal wall 109 overlies and is attached to wall 104 of the outer labyrinth member and the wall 110 contactively overlies the undersurface of the top wall 21*a* of the cover 21. Suitable bolt members 115 fasten the said wall 110 to the said top wall 21*a*. Horizontal walls 48 and 104 contactively overlie the undersurface of the bottom wall 109 of the inner labyrinth member from which they are supported by suitable bolts 200 as shown in Fig. 3.

It is noted from the drawings that the outer labyrinth member, as above described, is in direct communication with the interior of the cover 21, which in turn communi-

cates with receptacle **20**. However, there is no communication between the outer labyrinth member and the interior of the inner labyrinth member except for an inlet port on opening **116** in the wall **107** of the said inner member. It is thus seen that air drawn into the outer labyrinth member will travel around the same to the opening **116** to enter the interior of the inner labyrinth member which is in direct communication with the opening **21***d* in the floor **21***b* which in turn is in direct communication with the intake opening of the pump **60**. By the above described construction it is noted that any moisture remaining in the air drawn into the pump will be substantially freed of such moisture by having to pass through the labyrinth device. If desired, to insure further against moisture entering the pump, any suitable moisture absorbing or catching member **120** of any suitable material and shape best suited for the purpose such as, for example absorbent paper or other material, may be placed in the outer labyrinth member, in the path of the air drawn therein.

By virtue of this arrangement, the pump **60**, passing into the opening or depression in the cover, is brought into proximity with the interior of the container and is housed within the inner labyrinth member. The inner extremity of the pump is protectively isolated from water or moisture by the inner labyrinth which prevents communication between the interior of the container and the intake opening of the pump, except through the port **116** in the wall of the inner labyrinth. It is to be noted that this port is disposed intermediate the inner extremity of the pump **60** and the opening-defining portions of the cover, into which the pump extends, thus impeding the entrance of moisture and liquid which might otherwise gain admission to the interior of the inner labyrinth.

The motor **60***a* is connected by suitable electrical conductor wires **121** (see Fig. 3) to a standard prong electrical connector **122** housed in a casing **125** attached to the inner surface of the wall of the cover **21**. An opening **126** in the said cover **21** in registry with the casing **125** permits the insertion therethrough of a prong receiving socket of a standard cord set adapted to be connected to a source of current supply.

In accordance with my invention, I provide the following means for automatically stopping the operation of the pump to shut off the source of suction whenever the accumulated water in the receptacle **20** reaches a predetermined level to thereby prevent the possibility that water might be drawn into the motor to damage the same.

As best seen in Fig. 3, the walls **102** and **105** of the outer labyrinth member and the wall **109** of the inner labyrinth member form a closed chamber **130** which is independent of the interior of the inner labyrinth. Into this chamber **130** there is placed a float **131**. Mounted within the interior of the inner labyrinth is a pair of electrical contact members **132** and **133** which are suitably connected by the conductor wires **134** in the same circuit interconnecting the motor with the prong connector **122**. The contact members **132** and **133** are normally closed, as shown in the drawing, so that when the prong receiving socket is inserted in the casing **125**, a suitable switch closed, the pump will begin operation. Attached to the contact member **132** is a block **135** of electrical insulation material, normally freely resting on the wall **109** of the inner labyrinth member. Attached to the upper surface of the float **131** is a projecting pin **140** adapted to move freely upwardly through an opening **141** in the side wall **109**.

It is thus seen from the above described construction that when the float **131** is caused to rise in the chamber **130**, the pin **140** will push the block **135** upwardly to move the contact member **132** away from the contact member **133** to thereby break the circuit to the motor and thus automatically stop the operation of the pump.

As clearly seen in Fig. 3, the bottom wall **105** is provided with an opening **149** communicating directly with the chamber **130**. It is therefore seen that when the water accumulated in the receptacle **20**, reaches a height above the bottom wall **105** of the chamber **130**, the water will enter the chamber **130** through the opening **149** to cause the float to rise and thereby automatically shut off the pump after which no more water will be drawn in. The cover **21** may then be removed by releasing the catches **25** and the water from the receptacle **20** emptied out. Operation of the device may then be resumed with safety.

As best seen in Figs. 1, 2 and 3, I provide a hose retaining member **145**, suitably pivotally mounted at one end thereof to the upper flange **33** of the hose reel by the pivot **144** and having a depending portion **145***a* designed to be in the path of one or two of the uppermost convolutions of the hose **38** to prevent spreading and displacement thereof.

In accordance with my invention the following simple and novel means may be employed whenever desired for converting the device as above described for use for dry suction cleaning.

Disposed within the lower receptacle **20** is an inner receptacle **40** conforming generally to the shape of the receptacle **20**, but of smaller size so as to provide an annular space S between the inner receptacle **40** and the outer receptacle **20**. Circumferentially spaced abutment members **41** carried by the inner receptacle **40** serve to maintain the inner receptacle **40** against displacement with respect to the surrounding side wall **20***a* of the receptacle **20**. A coil spring member **42** interposed between the bottom wall **20***b* of the receptacle **20** and the bottom wall of the inner receptacle **40** maintains the said inner receptacle spaced from the said bottom wall **20***b*. It is noted that the space S communicates directly with the hollow area **43** in the cover **21**. The significance and function of this arrangement will be more fully described hereinafter.

The inner receptacle **40** is composed of an upper imperforate part **44** and a lower perforated part **45** suitably joined by the rivets **46** as best seen in Fig. 3. A filter liner **47** of paper or other suitable filtering material is placed adjacent the inner surface of the receptacle **40**. The said filter liner **47** is held in position by turning the upper edge **47***a* thereof over the upper free edge of the receptacle part **44** and held in position by the upward pressure of the spring **42** against a clamping cover disc **48**. In order to remove and replace the filter liner **47** it is merely necessary to remove the cover **21** to which the ring **48** is attached and raise the ring **48**. The property of the filter **47** is such that it will filter air therethrough but not dust.

It is thus seen from the above described construction and arrangement that when the pump **60** is set in operation to produce a suction force in the hollow chamber **43** of the cover **21** and a vacuum created therein, as hereinbefore described, air from within the inner receptacle **40** will be drawn out through the filter **47** and the perforated part **45** to enter the space S, from where it will be drawn into the hollow chamber **43** and exhausted as previously described. Therefore any dust drawn into the inner receptacle **40** through the pipe **50** will be captively accumulated and held therein because of the filter **47** thus leaving the space S free of any dust, and as a consequence the dust will not be drawn into the pump.

To reconvert the device to its originally described use to remove water from surfaces it is merely necessary to remove the cover **21**, and lift out the inner receptacle **40** and with it the filter **47**.

In Figs. 9 and 10, I have shown a modified form of my invention directed to the dual purposes above described, namely means for accumulating the water drawn into the receptacle and for filtering the dust when the device is used in the dry vacuum cleaning of surfaces.

As seen in the drawings, the device comprises the

lower outer receptacle **20** and the cover **21** interconnected by the latch members **25**. The construction of all the parts are the same as that shown in Fig. 3, except that instead of the inner receptacle **40** and the filter liner **47** I provide a frusto-conical or dish shaped member **150** preferably made of perforated or mesh material, the upper edge of which is retained in a clamping rubber ring **151** seated on the shoulder formed by the vertical wall **20A** of the receptacle **20** and held tightly between said shoulder and the cover **21**. At the bottom thereof the member **150** is fastened to a flange **105***a* which extends laterally from the bottom wall **105** of the float chamber **130**, by the screws **152**. The bottom portion **150***a* of the member **150** is provided with an opening **153** in alignment with the opening **149** in the wall **105**. Overlying the outer surface of the strainer member **150** is a filter member **155** similar in function to that of the filter member **47**, the said member **155** being held in position by clamping its upper edge between the clamping rubber ring **151** and the upper edge of the wall **20***a* of the receptacle **20**. The pipe **50** passes through openings the filter **155** and the strainer member **150** and communicates directly with the interior of the receptacle **20**.

It is now seen that by the above described modified construction, when the pump is operated to create a suction and it is desired to use the device for aspirating water, the said suction will draw the air and water mixture in through the pipe **50**, the water will accumulate in the receptacle **20** and the air will be drawn upwardly to pass through the filter **155**, strainer **150**, and the labyrinth. When the device is used for dry vacuum cleaning the air drawn in to the receptacle **20** will be filtered of its dust by the filter **155**, and will pass freely through the mesh member **150**, leaving the dust to accumulate in the receptacle **20**. Openings **153** and **149** being in alignment will permit water which accumulates in the receptacle **20**, when it reaches above the height of the floor **105** of the float chamber, to raise the float **131** and automatically shut off the pump, as described in connection with the Figs. 1 through 8 form of my invention.

In accordance with the provisions of the patent statutes, I have herein described the principle and operation of my invention, together with the construction which I now consider to represent the best embodiment thereof, but I desire to have it understood that the construction shown is only illustrative and that the invention can be carried out by other means. Also, while it is designed to use the various features and elements in the combinations and relations described, some of these may be altered and others omitted without interfering with the more general results outlined, and the invention extends to such use.

I claim:

1. A cleaning device of the character described for removing water from floors or other surfaces comprising a main receptacle adapted to accumulate the removed water therein, a hollow removable cover member for said receptacle forming a closed chamber therewith, portions of said cover member providing a depressed area, electrical suction producing means having an intake opening supported by said cover member, a portion of said electrical suction producing means being received in said depressed area of said cover member, a tubular member, means for attaching said tubular member to said cover member, and a portion of said suction producing means projecting above said depressed area and into said tubular member, said tubular member being provided with upper and lower outwardly extending flanges, inlet means communicating with said closed chamber, said inlet means comprising a hose receiving member disposed in said lower flange, a hose member connected at one end to said hose receiving member and adapted to be wound around said tubular member and between said flanges, a labyrinth member comprising an outer cylindrical member and an inner cylindrical member nested in said outer cylindrical member, an opening in said outer cylindrical member communicating directly with said cover member, said inner cylindrical member communicating directly with the intake opening of said suction producing means and an opening in said inner cylindrical member communicating only with said outer cylindrical member, whereby when said suction producing means is rendered effective a mixture of air and water will be drawn into said closed chamber through said inlet, the water accumulating in said receptacle and the air being drawn through said labyrinth to be further relieved of its moisture, and means for rendering said suction producing means effective, means for automatically rendering said suction producing means ineffective when a predetermined amount of water has been accumulated in said receptacle, said last named automatic means comprising a float chamber communicating with the interior of said receptacle, a float member in said float chamber, and means whereby the raising of said float member in said chamber will automatically render said suction producing means ineffective.

2. A cleaning device of the character described for removing water, dust and dirt from floors or other surfaces comprising a main receptacle adapted to accumulate the removed water therein, a hollow removable cover member for said receptacle forming a closed chamber therewith, said cover having portions defining an opening; electrical suction producing means having an intake opening supported by said cover member, inlet means communicating with said closed chamber; a labyrinth member comprising an outer cylindrical member and an inner cylindrical member nested in said outer cylindrical member, an opening in said outer cylindrical member communicating directly with said cover member, said inner cylindrical member communicating directly with the intake opening of said suction producing means, and an opening in said inner cylindrical member communicating only with said outer cylindrical member, said suction producing means extending into said opening in said cover member towards the water accumulating portion of said main receptacle and the interior of said inner cylindrical member, the opening in said inner cylindrical member being disposed outwardly of the inwardly extending extremity of said suction producing means, whereby said suction producing means when rendered effective is operative to draw a mixture of air and water into said closed chamber through said inlet, the water accumulating in said receptacle and the air being drawn through said labyrinth to be further relieved of its moisture; means for rendering said suction producing means effective; an intermediate foraminous casing, means for supporting said intermediate foraminous casing within said main receptacle and in a position interposed between said main receptacle and said labyrinth member, said intermediate foraminous casing comprising a perforated angularly disposed wall comprising a perforated portion and a filter member overlying the outer surface of said perforated wall portion, said filter member being adapted to permit air to pass therethrough from said main receptacle to said labyrinth member and to prevent dust from passing therethrough; whereby said cleaning device may also be used for dry vacuum cleaning purposes as well as for removing water or a mixture of water and dust from floor surfaces.

3. A cleaning device according to claim 2, wherein a float member is disposed within said foraminous casing and is operatively connected to said means for rendering said suction producing means effective, said float member being adapted to rise with the liquid level within the receptacle and being effective to automatically render said suction producing means ineffective when a predetermined amount of liquid has been accumulated in said receptacle.

4. A cleaning device for removing matter from floors or other surfaces comprising, in combination, a main receptacle adapted to accumulate matter within the interior thereof; a removable cover for said receptacle and adapted to form a closed container therewith; inlet means communicating with the interior of said container for delivering matter thereto; said cover having surface portions defining an opening; a hollow labyrinth member disposed within and supported by portions of said container, one extremity of said labyrinth member being disposed adjacent to said opening in said cover in sealed engagement with said container, the opposite extremity of said labyrinth member extending inwardly from said cover and towards said receptacle; a closure for the inwardly extending extremity of said hollow labyrinth member whereby direct communication between the interior of said container and the interior of said hollow labyrinth member through said inwardly extending extremity thereof is prevented; suction producing means supported by said container and having portions defining an intake opening, one extremity of said suction producing means extending into the opening in said cover and confined within the interior of said hollow labyrinth member; portions of said hollow labyrinth member defining an inlet port, said port providing the sole means of communication between the interior of said container and the intake opening of said suction producing means, said port being disposed intermediate the opening defining surface portions of said cover and the inwardly extending extremity of said suction producing means; energization of said suction producing means being operative to cause a mixture of air and matter to be drawn through said inlet means into the interior of said container, the matter accumulating in said container and the air being drawn through the port of said labyrinth into the intake opening of said suction producing means; a foraminous casing having an interior surface and an exterior surface; said casing being removably supported within said container and disposed in the path of flow of said matter between said inlet means and said inlet port; and filter means associated with one of said surfaces of said casing, said inlet means being operative to introduce air-entrained matter to only one surface of said casing, whereby air entering said container under action of said suction producing means is operative to penetrate both said casing and said associated filter means while dirt and dust particles are prevented from passing therethrough and are retained within said container; said inlet means being effective to deliver matter only to the exterior of said casing, whereby entrained dust particles are excluded from the interior of said casing by said filter means while air is permitted to pass through both said casing and filter means and through said inlet port under action of said suction producing means.

5. A cleaning device as set forth in claim 4, wherein said foraminous casing is supported a substantial distance above the bottom of said receptacle, said inlet means communicating directly with the space defined by said receptacle and said foraminous casing for delivering said matter to said defined space; whereby liquid may be accumulated in said space while said foraminous casing remains within said container and spaced from the liquid so accumulated.

6. A cleaning device of the character described for removing water, dust and dirt from floors or other surfaces comprising, a main receptacle adapted to accumulate the removed water therein; a removable hollow cover member for said receptacle forming a closed chamber therewith, said cover having portions defining an opening; electrical suction producing means having an intake opening and supported by said cover member; a labyrinth member comprising an outer cylindrical member and an inner cylindrical member sealing said suction producing means from communication with the interior of said chamber, an opening in said outer cylindrical member providing communication between the interior of said outer cylindrical member and the interior of said cover member, an opening in said inner cylindrical member providing sole direct communication between the intake opening of said suction producing means and the interior of said outer cylindrical member; said suction producing means extending vertically downwardly into said opening in said cover member towards the water accumulating portion of said main receptacle and the interior of said inner cylindrical member, the opening in said inner cylindrical member being disposed above the downwardly extended extremity of said suction producing means; an inlet associated with said closed chamber providing communication between the interior of said closed chamber and atmosphere; said device being operative to draw a mixture of air and water into said closed chamber through said inlet under action of said suction producing means, whereby the water is accumulated in said receptacle and the air is drawn through said labyrinth to be further relieved of its moisture.

7. A cleaning device for removing matter from floors or other surfaces comprising, in combination, a main receptacle adapted to accumulate matter within the interior thereof; a removable cover for said receptacle and adapted to form a closed container therewith; inlet means communicating with the interior of said container for delivering matter thereto; said cover having surface portions defining an opening; a hollow open-ended cylindrical labyrinth member disposed within said container, one open end of said labyrinth member being disposed adjacent to said opening in said cover in sealed engagement with said container, the opposite open end of said labyrinth member extending inwardly from said cover and towards said receptacle; a closure for the inwardly extending open end of said hollow labyrinth member whereby direct communication between the interior of said container and the interior of said hollow labyrinth member through said inwardly extending open end thereof is prevented; suction producing means supported by said container and having portions defining an intake opening, a portion of said suction producing means extending into the opening in said cover and confined within the interior of said hollow labyrinth member; surface portions between the ends of said hollow labyrinth member defining an inlet port, said port providing the sole means of communication between the interior of said container and the intake opening of said suction producing means, said port being disposed intermediate the opening defining surface portions of said cover and the inwardly extending portion of said suction producing means; energization of said suction producing means being operative to cause a mixture of air and matter to be drawn through said inlet means into the interior of said container, the matter accumulating in said container and the air being drawn through the port of said labyrinth into the intake opening of said suction producing means.

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