July 22, 1952 R. P. MacFARLAND 2,603,816

STORAGE DEVICE FOR VACUUM CLEANER AND APPURTENANCES

Filed Aug. 3, 1949 2 SHEETS—SHEET 1

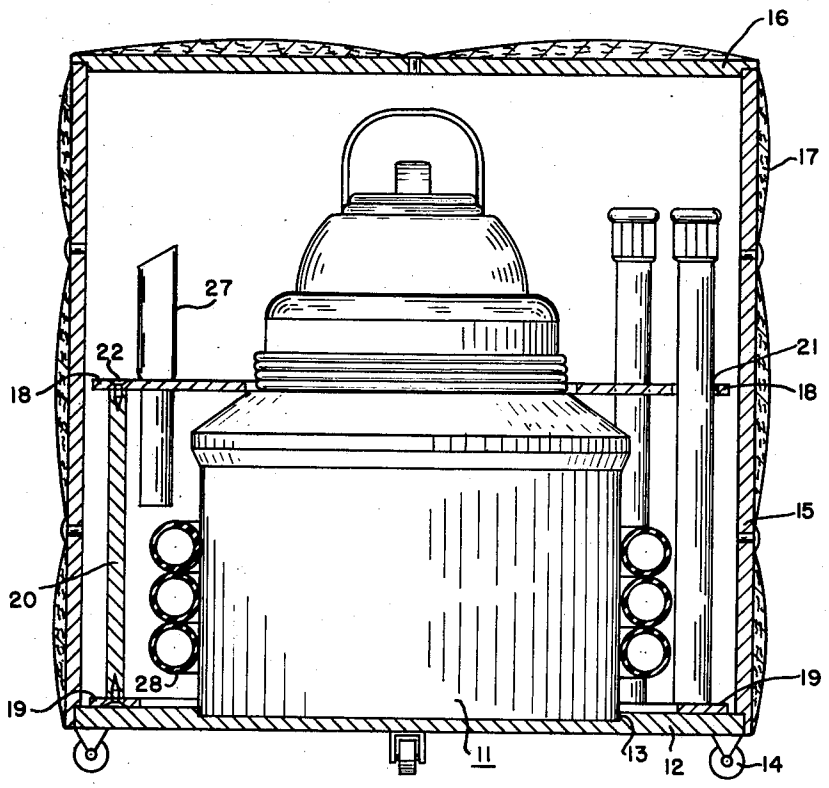


FIG. 1

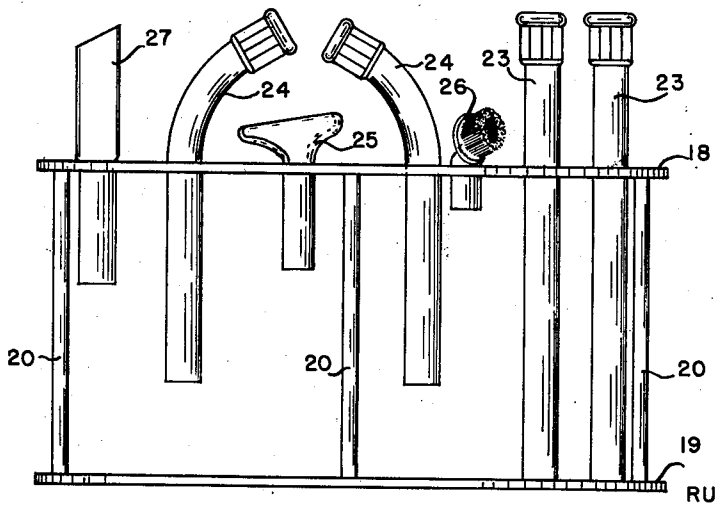


FIG. 2

INVENTOR.
RUTH P. MAC FARLAND
BY Wiselling and Kent,
Attorneys

July 22, 1952 R. P. MacFARLAND 2,603,816

STORAGE DEVICE FOR VACUUM CLEANER AND APPURTENANCES

Filed Aug. 3, 1949 2 SHEETS—SHEET 2

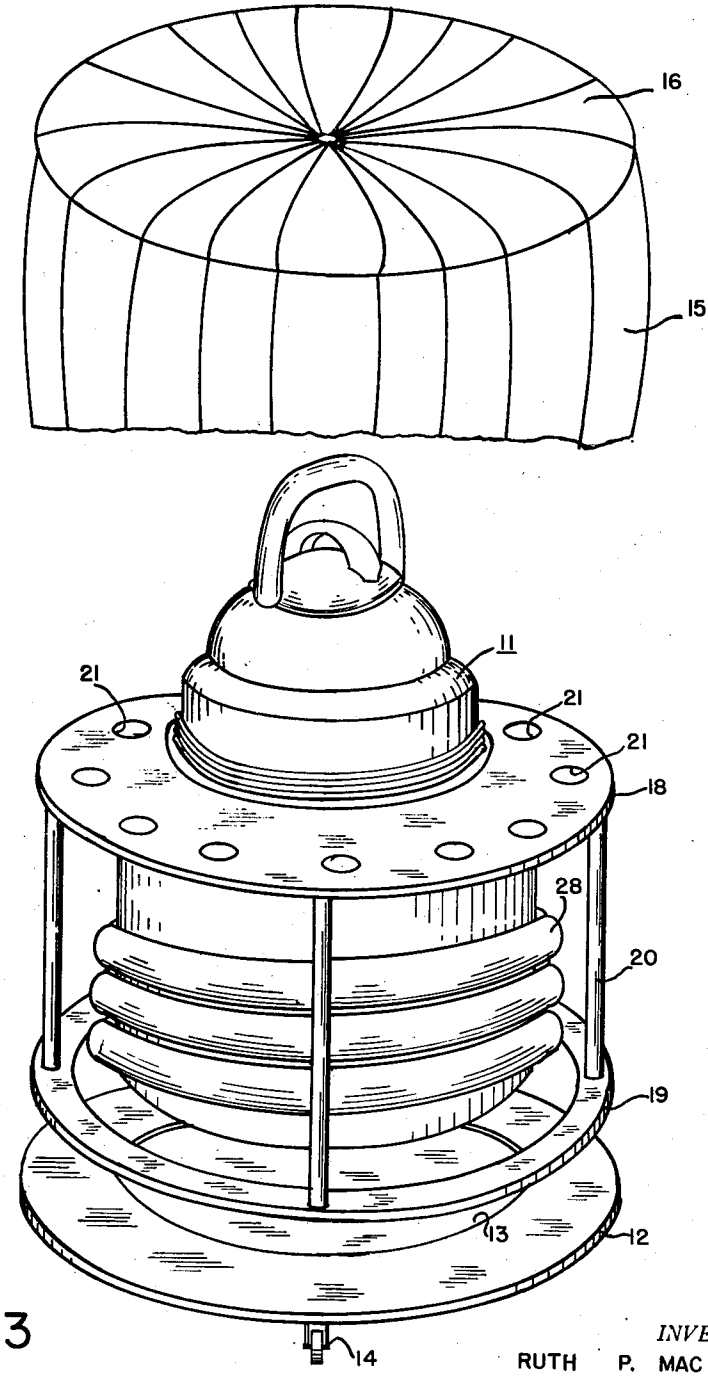


FIG. 3

INVENTOR.
RUTH P. MAC FARLAND

BY
Wheeling and Kent,
Attorneys

Patented July 22, 1952 2,603,816

UNITED STATES PATENT OFFICE

2,603,816

STORAGE DEVICE FOR VACUUM CLEANER AND APPURTENANCES

Ruth P. MacFarland, Rocky River, Ohio

Application August 3, 1949, Serial No. 108,350

4 Claims. (Cl. 15—323)

1

My invention relates to housings and racks for appliances, such as for a vacuum cleaner and its appurtenances.

The storage and handling of vacuum cleaners and appurtenances therefor is an ever-present problem and particularly in apartments and where storage space is limited. Also, the storage of an appliance, such as a vacuum cleaner and its appurtenances, at a location where it is readily and quickly available for use is a problem familiar to many persons using such appliances. My invention has as one of its objects the solution of these problems by the provision of a unique and ingenious arrangement for the storage and handling of such appliances. Because a most important use of my device is for the storage and handling of an upright tank-type vacuum cleaner and its appurtenances, the drawing and description are here directed to the use of my device in connection with such a cleaner and its appurtenances.

An object of my invention is to provide a combination piece of furniture and storage space for a vacuum cleaner.

Another object of my invention is the provision of a combined base member for supporting a tank-type vacuum cleaner, a rack member for holding the appurtenances of the cleaner, and a housing for enclosing the cleaner and the rack member carrying the appurtenances, the housing being supported on the base member.

Another object is the provision of a compact and readily accessible storage device adapted to contain a tank-type vacuum cleaner and its appurtenances in a convenient location and position for ready access and use.

Another object is the provision of a device for storing the usual appurtenances of a tank-type vacuum cleaner in juxtaposition to the cleaner and for enclosing the cleaner and appurtenances in a furniture-type housing, all adapted to be assembled and disassembled as required.

Another object is the provision of a readily movable base for supporting a cleaner and for supporting a rack member holding the cleaner appurtenances and also for supporting a housing enclosing the cleaner and appurtenances.

Another object is the provision for convenient storage of, ready access to, and a disguised housing for, a vacuum cleaner and its appurtenances.

Another object is to provide a storage device for a vacuum cleaner and its appurtenances, which device is economical in construction, attractive in appearance, efficient in use, and capable of providing a convenience not heretofore obtainable.

2

Other objects and a fuller understanding of my invention may be had by referring to the following description and claims, taken in conjunction with the accompanying drawing, in which:

Figure 1 is a vertical cross-sectional view of my device showing therein an upright tank-type vacuum cleaner and its associated appurtenances;

Figure 2 is a side view of the rack member of my device shown removed from the assembly of Figure 1 and carrying the appurtenances of the vacuum cleaner; and

Figure 3 is an exploded view showing the base member, rack member, and a portion of the housing in spaced relationship and with the vacuum cleaner disposed within the open space of the rack member.

In the views of the drawing, the example vacuum cleaner illustrated as used in my device is denoted generally by the reference character 11. This cleaner is of the tank-type and sets upright on its lower end. In the example shown, the cleaner has a lower cylindrical portion and an upper cylindrical portion, the upper cylindrical portion being of smaller diameter than the lower cylindrical portion. There is also an arcuate top and a handle extending upwardly from the upper end of the cleaner. In storage, an electric cord or conduit used for placing the cleaner in electrical communication to the source of electrical energy is wound around the upper cylindrical portion of the cleaner. A flexible rubber hose, denoted by the reference character 28, is encircled around the lower cylindrical portion of the cleaner when out of use. One end of the hose 28 is joined to a swivel connection leading to the vacuum generator of the cleaner. The free end of the hose is adapted to be connected to rigid conduits which, together, form a handle to be manipulated by the user. The hose and conduits and tools joined to and communicating therewith are thus in communication with the vacuum generator during use of the cleaner. During storage, the hose 28 remains connected to the cleaner and is merely wrapped around the cleaner as indicated in the drawing.

My device includes a base member 12, which is of round form and disposed in a horizontal plane. At a central location of the base member 12 there is a well or sunken portion 13 in which the lower end of the cleaner sets. The peripheral arcuate wall of the well 13 forms a limiting or stop means to prevent sideward movement of the cleaner relative to the base member 12 and acts to confine the cleaner in the position shown

in Figure 1. A plurality, such as four, of casters 14 are secured to the bottom of the base member 12 to provide ready mobility of the base member and its burden. By pulling on the hose 28, when extended out from the cleaner, the base member and the cleaner together may be rolled across a floor, the weight of the cleaner in the well 13 permitting the cleaner and base member to move across the floor as a unit.

A housing is provided by upright cylindrical walls 15 and a top wall 16. The top wall 16 extends across the upper end of the side walls 15 and rests upon the upper edges thereof to form a top closure for the housing. There is a press fit between the stepped peripheral edge of the top member 16 and the upper edge of the wall member 15. This fit is such that in most cases, the top member is firmly secured to the wall member. However, when it is desired to replace the top member 16 with another top member, then the press fit may be disengaged and a new top member substituted. In the embodiment shown, the housing has upholstery 17 tacked or secured to both the side wall 15 and the top wall 16. The form of the housing and the upholstery added thereto provide a useful piece of furniture in the form of hassock, and thus may support a person thereon. In the event that it is desired to change the device to some other type of furniture, the upholstery may be eliminated and a table top may be substituted for the top member 16, so that there is produced a piece of furniture similar to a coffee table or the like. In any case, the housing is adapted to be used as a piece of furniture and may provide a useful purpose in a room. The housing provides a cover and disguise for the contents so that one viewing the housing is not apprised of the storage purpose of the device.

Vacuum cleaners of the general class referred to, that is, the tank-type vacuum cleaner, have associated with them for their complete use a number of appurtenances. These appurtenances include sectional tubular members joinable to the flexible hose or conduit and together forming a wand or hollow handle. The appurtenances also include curved tubular conduits which may be joined to and made a part of the wand or hollow handle and of the nozzles and cleaning tools adapted to be joined to the lower or working end of the wand. The storage of these various appurtenances is also included as a feature of my invention. To provide for the storage and convenient use of the several appurtenances, I provide a rack member. This rack member is made up of an upper portion 18 and a lower portion 19, positioned below and spaced from the upper portion 18. A plurality, such as four, of connecting bars or rods 20 extend between and connect the upper portion 18 and the lower portion 19. Suitable screws 22 secure the ends of the bars 20 to the spaced portions 18 and 19. The upper and lower portions of the rack member are annular in form so as to accommodate the cleaner in the central open space extending through these portions. The open space in the lower portion 19 is of greater diameter than the open space in the upper portion 18. The open space around which the lower portion 19 extends is of sufficient size to freely accommodate or allow for the over-all diameter of the cleaner and the rubber hose or conduit wrapped around it, and thus to allow for the upward movement of the rack member relative to the cleaner and the hose around it. The open space around which the annular upper portion 18 extends is of sufficient diameter to clear or allow for the upper cylindrical portion of the cleaner and the electric cord wrapped therearound. Because of the difference in diameters of the open space in the upper and lower portions, the inner edge of the upper portion 18 overhangs to some extent the larger cylindrical portion of the cleaner. While the dimension and form of the rack member is such as to freely accommodate the cleaner and rubber hose or conduit, it also provides that the rack member to some extent is steadied by or braced by the cleaner when necessary. The cleaner, rack member and housing are concentrically disposed relative to each other and they are in axial alignment with the round base member 12, as indicated in the drawing.

The upper annular portion 18 of the rack member has extending therethrough a series of apertures or open spaces 21 spaced at intervals around the annular extent of the upper portion 18. These apertures 18 are adapted to accommodate the several appurtenances associated with the cleaner. For example, the apertures 21 permit the necks or smallest diameter portions of the appurtenances to be inserted therethrough. In Figures 1 and 2, there are shown several of these appurtenances mounted on the rack member. The two straight wand portions 23 extend through the respective apertures 21 of the upper portion 18 and the lower ends thereof are supported upon the top surface of the lower portion 19. The curved wand sections 24 are also inserted in respective apertures 21 and are supported on the upper portion 18 by the curved configuration of the wand sections. A wide-mouth nozzle 25 a brush-type nozzle 26 are also carried on the rack member by inserting their small ends in apertures 21 as shown. Similarly, a crevice type nozzle 27 is carried on the upper portion 18 in an upright manner by inserting its throat or neck portion in aperture 21. The appurtenances shown and any and all other special tools or appliances used with or associated with the cleaner may be carried in secure position by the rack member. The several apertures 21 are all proportioned and arranged to accommodate various types and sizes of tools, nozzles and long sections. It is thus apparent that the various appurtenances are positioned at intervals around and in juxtaposition to the cleaner. They are also positioned so as to be housed within the hollow cavity of the housing covering the cleaner.

When in stored position, the cleaner is mounted on the base member 12 12, the rack member is positioned around the cleaner with the several appurtenances supported thereon, and the housing is inverted so that its open end is disposed downwardly and its lower edges supported on the outer peripheral edges of the base member. The fit of the lower edges of the side walls of the housing on the base member is such that the housing may be readily and easily removed by merely lifting it directly upward away from the base member. Upon moving the housing upwardly, it may be set over on the floor and used as a separate piece of furniture, if desired. This exposes the cleaner on the base member and the appurtenances carried by the rack member around the cleaner. The rack member may be then raised directly upward to clear the cleaner and placed over on the floor at a convenient location. This presents a rack member with all of the appurtenances in position for immediate withdrawal and use, such as shown in Figure 2.

The annular lower portion 19 sets upon the floor and supports the rack member and its burden of appurtenances in an upright position. With the rack and the appurtenances removed, the cleaner may then be connected to a source of electrical energy for driving the cleaner motor. This is done by unwrapping the electric cord from the cleaner and plugging in to a convenient electrical socket. The rubber hose 28 may be quickly unwound from around the cleaner by pulling on its free end. Since the cleaner readily moves upon the base 12, the cleaner may readily revolve or move to facilitate this unwinding. The desired wand sections are then removed from the rack member, joined together and joined to the free end of the rubber hose. The desired tools or nozzles are connected to the free end of the jointed wand and the device is ready for use. As cleaning over an area proceeds, the pull on the rubber conduit causes the cleaner on the base member to roll along on the casters 14. Thus, the whole cleaner may be readily moved from place to place as the cleaning operation takes place. After the cleaning is finished, the wand sections, tools and nozzles are disconnected and replaced in the rack member. The rubber conduit is again wrapped around the lower portion of the cleaner and the electrical cord is wrapped around the upper portion of the cleaner. The rack member with the several appurtenances mounted thereon is then placed downwardly over the cleaner to embrace the same. Thereafter the housing is placed with its lower open end downward over the assembled cleaner, rack member and base member in the original position shown in Figure 1. In this position, the cleaner and its appurtenances are disguised in the housing and at the same time they are in a convenient location for immediate use.

By the arrangement shown, a compact and convenient storage facility is provided and a useful piece of furniture is created. Use of the device demonstrates its practicability and the inherent advantages to be found therein.

The present disclosure includes the description contained in the appended claims, which are incorporated in this description by reference herein.

Although my invention has been described in its preferred form with a certain degree of particularity, it is understood that the present disclosure of the preferred form has been made only by way of example and that numerous changes in the details of construction and the combination and arrangement of parts may be resorted to without departing from the spirit and the scope of the invention as hereinafter claimed.

What is claimed is:

1. A support for an upright tank-type vacuum cleaner and appurtenances therefor, said cleaner having a lower cylindrical portion and upper cylindrical portion, the lower portion having a greater diameter than the upper portion, said support comprising a round base member for supporting said cleaner, said base member having a recess for accommodating said bottom portion of the cleaner, said base member having an annular shelf extending around said recess, said shelf being adapted to engage and support a cylindrical covering member inverted over said cleaner, a rack member for holding said appurtenances and positioned on said base member to surround a cleaner in said recess, said rack member having an annular lower portion engaging said shelf around said recess and having an annular upper portion spaced upwardly therefrom, said upper portion having a central opening for accommodating the upper cylindrical portion of the cleaner, said central opening having a diameter less than the diameter of the lower cylindrical portion of the cleaner, said upper portion of the rack member overhanging said recess to extend over the lower portion of a cleaner on said base member, said upper portion having a plurality of open spaces for accommodating the respective appurtenances for said cleaner, said upper portion being adapted to hold said appurtenances upright and around said cleaner, the combination of base member and rack member providing for a compact unit supporting and embracing said cleaner and the convenient storage of the said appurtenances around said cleaner in accommodation to the shape and disposition of the cleaner.

2. A supporting device for an upright tank-type cleaner and appurtenances therefor in a compact and convenient arrangement, said cleaner having a reduced upper portion centrally aligned with a lower tank portion, comprising the combination of a longitudinally disposed base member having a recess centrally disposed therein for accommodating, and securing against lateral displacement thereon, the lower tank portion of said cleaner, said base member having an edge portion extending around said recess and providing a support for a rack member for holding said appurtenances and providing a support for a cover inverted over said cleaner and rack member, a rack member having a lower portion engaging said edge portion of the base member and an upper portion spaced upwardly from the lower portion, said upper portion extending horizontally and inwardly over said recess to provide a ledge adapted to overhang the lower tank portion of a said cleaner positioned in said recess on the base member, said upper portion being cut away to provide for holding said appurtenances substantially upright and around said cleaner, the arrangement of the base member and rack member providing for the nesting of the rack member around the cleaner carried by the base member and the lateral support of the rack member by a cleaner on said base member.

3. A device for accommodating an upright tank-type vacuum cleaner and appurtenances therefor in a supported, clustered and conveniently accessible position, comprising a base member having a central depression for receiving the bottom end portion of the cleaner and holding the cleaner centrally disposed on the base member during lateral movement of the base member, said base member having a horizontally disposed portion on opposite sides of said depression, a rack member supported on said horizontally disposed portion of the base member, said rack member having an apertured horizontal portion spaced from said base member and surrounding an open space adapted to accommodate therein a said cleaner supported on said base member, said apertured horizontal portion being arranged to be disposed in close juxtaposition to said cleaner to limit its lateral displacement relative to said cleaner, said apertured horizontal portion being adapted to hold said appurtenances substantially upright and in positions around said cleaner, said base member also having an outer edge portion adapted to engage and support a cover for said rack member and cleaner.

4. A storage device for a tank-type vacuum cleaner and its appurtenances, said cleaner hav-

ing a cylindrical lower portion and a cylindrical upper portion of lesser diameter than the cylindrical lower portion and being adapted to be supported in upright position on its lower end, said device comprising a round base member adapted to support said cleaner at a central location of the base member, said central location being defined by a stop portion for confining the cleaner to said central location, casters mounted to said base member for facilitating rolling of said base member, a rack member of annular form adapted to rest on said base member outwardly of said central location, said rack member having an upper part and a lower part and connecting members connecting said upper and lower parts in spaced relationship, said lower part having a central opening for accommodating the cylindrical lower portion of the cleaner and said upper part having a central opening for accommodating the cylindrical upper portion of the cleaner, the diameter of the central opening in said upper part being smaller than the diameter of the central opening in said lower part to provide an edge portion of said upper part adapted to overhang the cylindrical lower portion of the cleaner, said upper part having open spaces provided therein for receiving respective appurtenances of

said cleaner, and a housing having cylindrical side walls, a closed top and an open bottom, said housing being adapted to be inverted to position said side walls at said open bottom on said base member outwardly of said central location and outwardly of said rack member, said housing and base member being adapted to form an enclosure for said cleaner, rack member and appurtenances, the housing being readily removable from said base member to provide access to said cleaner and rack member, and said rack member being readily removable from said base member to provide for use of said cleaner and rack member independently of each other.

RUTH P. MACFARLAND.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
118,451	Harris	Aug. 29, 1871
1,352,490	Wilkins	Sept. 14, 1920
1,541,672	Tulay	June 9, 1925
2,313,423	Dodd	Mar. 9, 1943