Oct. 30, 1951 C. K. BROWN, JR 2,573,091

COMBINED VACUUM CLEANER AND TOOL CASING

Filed March 29, 1946

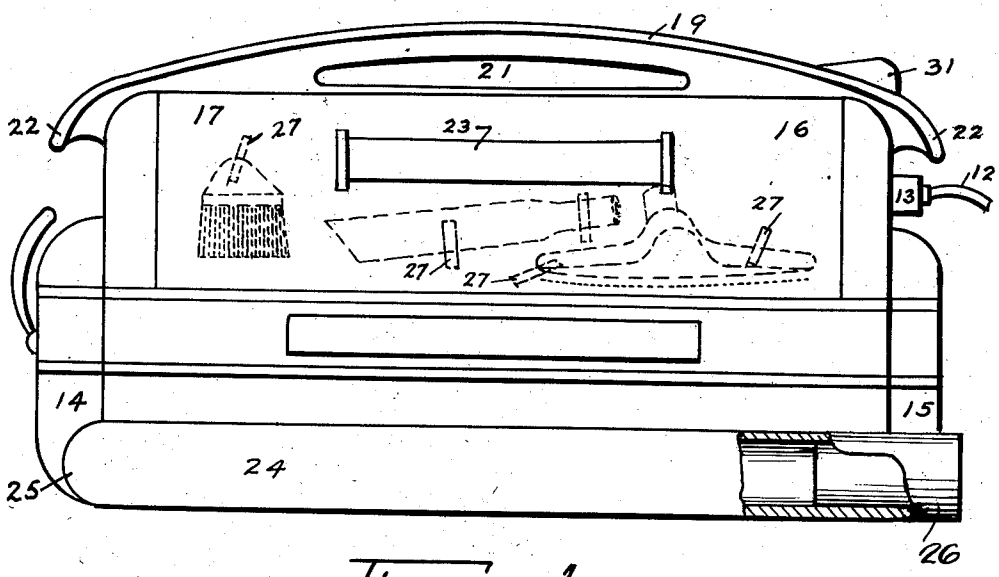


FIG. 1.

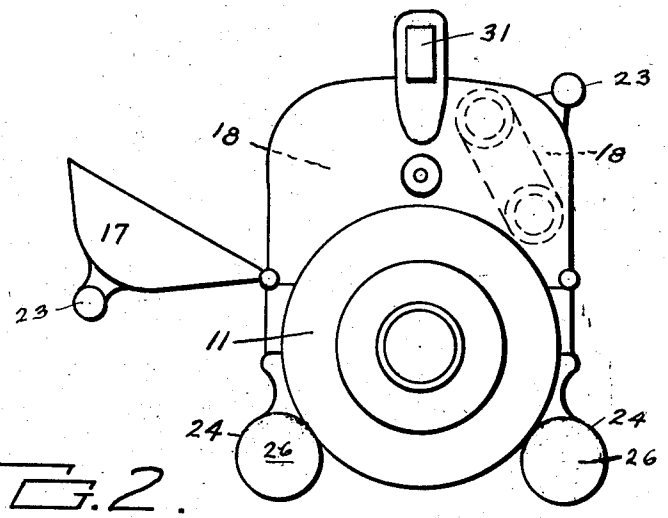


FIG. 2.

Inventor

CHARLES KEPLER BROWN, JR.

By Howard J. Whelan.

Attorney

Patented Oct. 30, 1951 2,573,091

UNITED STATES PATENT OFFICE

2,573,091

COMBINED VACUUM CLEANER AND TOOL CASING

Charles Kepler Brown, Jr., Fairmont, W. Va.

Application March 29, 1946, Serial No. 658,112

2 Claims. (Cl. 15—323)

1

This invention relates to vacuum cleaners of the domestic type and more particularly to the housing thereof.

In the present forms of vacuum cleaners used for residences and relatively small installations, the housing is made as light and compact as possible with the implements used in connection therewith packed separately when not attached. While this feature has some apparent advantages when superficially considered, it also has the disadvantage of making it easy to lose the parts when not attached and subjects them to incidental damage, and at the same time requires more space to store same. It is also inconvenient when assembling the unit for work as the parts have to be individually unpacked and brought to the machine for attachment, while those parts unused for a particular duty are left strewn about the room or floor, in a very objectionable manner.

It is an object of the present invention to provide a new and improved vacuum cleaner that will avoid one or more of the disadvantages and limitations of the prior art.

Another object of the present invention is to provide a new and improved vacuum cleaner that will have its housing arranged to receive and store the various detachable parts thereof when not in use in a compact and convenient manner.

A further object of this invention is to provide a new and improved vacuum cleaner that will have its housing designed to facilitate the practical operation of the device and at the same time improve its general appearance.

For a better understanding of the invention and for objects thereof reference is made to the appended drawings and following description, outlining a particular form by way of example, while the scope of the invention is particularly pointed out in the claims.

In the drawings:

Figure 1 is a side elevation of a vacuum cleaner embodying this invention, and

Figure 2 is an end view of Figure 1 with one of the compartment doors open and with parts shown in dotted outline.

Similar reference characters refer to similar parts throughout the drawings.

In the structure shown in the drawings, a particular form of domestic type of vacuum cleaner is indicated, the general mechanical features for performing its cleaning functions being of conventional form and not a part of this invention. The details of such mechanisms which are internally within the inner compartments of the

2

housing, are therefore not included in this description, because they are well known to those skilled in the art. These mechanisms are distinct from the various tools used at or near the spout of the wand for cleaning purposes. The housing 11 of the cleaner is built around the mechanism so as to provide suitable space for its operation in an effective manner and for general purposes the housing may be assumed to be co-extensive therewith. An electric attachment cord 12 with plug 13 and switch 31 are coupled to the motor within the housing for operating same from a source of electrical energy. The housing in this invention is preferably rounded exteriorly along its longitudinal surfaces as indicated, with the front and back end plates 14 and 15, respectively serving to form a closed housing. An overlapping arcuate shell 16 is formed and positioned on the housing 11 to form storage compartments 18 for holding various tools to be used with the unit. Such tools being the conventional narrow space cleaner, vaporizer, dusting brush, upholstery cleaner, rug cleaner and floor and wall brush usually furnished with the cleaner when purchased.

Doors 17 are hingedly arranged in the shell to permit access to the compartments 18 and be automatically closed when released. A handle 19 is formed across the whole length of the top of the shell 16 having a peripheral curved contour above and straight line underneath. An opening 21 is provided in it to allow for the insertion of the fingers of the user for carrying purposes, without materially affecting its strength. The handle 19 aligns longitudinally with hooked elements 22 which are mounted on the arcuate shell 16 and are used for holding the attachment cord 12 in place close to the housing and out of the way. Supplemental hook elements 23 are mounted and aligned on the sides of the shell 16 to supplement the elements 22, and also provide additional means for lifting the cleaner when desired, or they may be used to open the doors 17. The cord 12 however can be wound on the shell without engaging in the elements 23 if desired. The housing is extended downward beyond the bottom of the conventional base line to form a pair of hollow cylindrical tubular compartments 24 on each side of the housing 11. These compartments 24 eliminate the customary wire guard runners used on the sides of older forms of cleaner housings. The runners were objectionable because of their tendency to cut rugs and hook on chair legs or other protruding parts met with in vacuum cleaning. The compartments 24 extend

the whole length of the cleaner and form a very substantial supporting base for the latter. They are of such size as to receive within them the sections or lengths of tubing forming the sweeping wand of the cleaner, when they are separated from each other. One end 25 of each compartment 24 is closed in and permanently rounded over to prevent the tube units from sliding out of the end. A plug closure 26 is slipped into the opposite ends for closing the compartments and holding the wand tubing therein. The end plates 14 and 15 are held rigidly in place in any suitable conventional manner such as by friction or the like. Various spring clips or holders 27 are positioned within the compartments 18 for holding the balance of the tools not used with the vacuum cleaner at the moment to hold them in place to prevent their rattling when the cleaner is moved around.

While the compartments 24 will take the present lengths of tubular wands used, it is also anticipated that they will take long wands which are of a telescoping nature.

The housing developed in this invention provides several features that distinguish it from other older forms employed for vacuum cleaner housings. The handle 19 extends across the whole cleaner and reinforces it as well as enables the handle opening to be placed where the center of gravity lines up and where it will be most convenient to carry. The cord 12 is easily wound and unwound as required. When wound up it is out of way, yet most accessible for the first operation desirable when the equipment is to be used, that is, for plugging in a service socket. The tools are accessible for use by reason of their storage within the unit where they can be conveniently reached. They are also out of the way when not in use. The arrangement is very compact. The user always has the assurance that the tools and parts are available and are packed up in the housing. Even the long wands are appropriately taken care of within the housing instead of being strewn around in the room. The housing is stable and reduces the liability of upsetting the machine in use with consequent trouble. Since the housing can be readily stamped out with a minimum amount of manual labor to finish it, it is subject to more economical manufacture than types using the side supporting rails which are displaced by the tubular compartments 24 and are considerably more convenient to use, and keep clean. At the same time, its appearance from an aesthetic point of view, is greatly improved, while the additional shell portion provides an extra arrangement for protecting the operative parts of the whole unit.

While but one general form of the invention is shown in the drawings and described in the specifications, it is not desired to limit this application for patent to this particular form, as it is appreciated that other forms of construction could be made that would use the same principles and come within the scope of the appended claims.

Having thus described the invention, what is claimed is:

1. In combination, a vacuum cleaner having a cylindrical casing, a housing encompassing said vacuum cleaner and having a space above said cleaner for stowing accessories for said cleaner, an arcuate handle, extending above and longitudinally of said housing, said handle terminating in hook portions to retain the coils of the customary electric cord wound around said handle, a pair of tubular runners extending longitudinally of the housing disposed at the lower end thereof to guide the housing on the surface to be cleaned, said runners being adapted to receive for storage the customary wands for said vacuum cleaner, and a removable end closure for each of said runners.

2. The combination set forth in claim 1, said housing having a door hinged to said housing on each side of the longitudinal axis thereof and allowing access to the stowed accessories.

CHARLES KEPLER BROWN, JR.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
844,481	Stewart	Feb. 19, 1907
1,884,866	Replogle	Oct. 25, 1932
2,042,387	Cobb	May 26, 1936
2,248,585	Ross	July 8, 1941
2,321,222	Lofgren	June 8, 1943
2,337,364	Ashbaugh	Dec. 21, 1943
2,355,034	Scott	Aug. 1, 1944
2,394,271	Taylor	Feb. 5, 1946

FOREIGN PATENTS

Number	Country	Date
621,813	France	Feb. 14, 1927
634,049	Germany	Aug. 14, 1936
61,996	Denmark	Mar. 6, 1944
63,065	Denmark	Jan. 2, 1945