May 22, 1928. 1,670,715

J. V. DOHERTY

CORD HOOK FOR VACUUM CLEANERS

Filed May 12, 1926

Fig. 1.

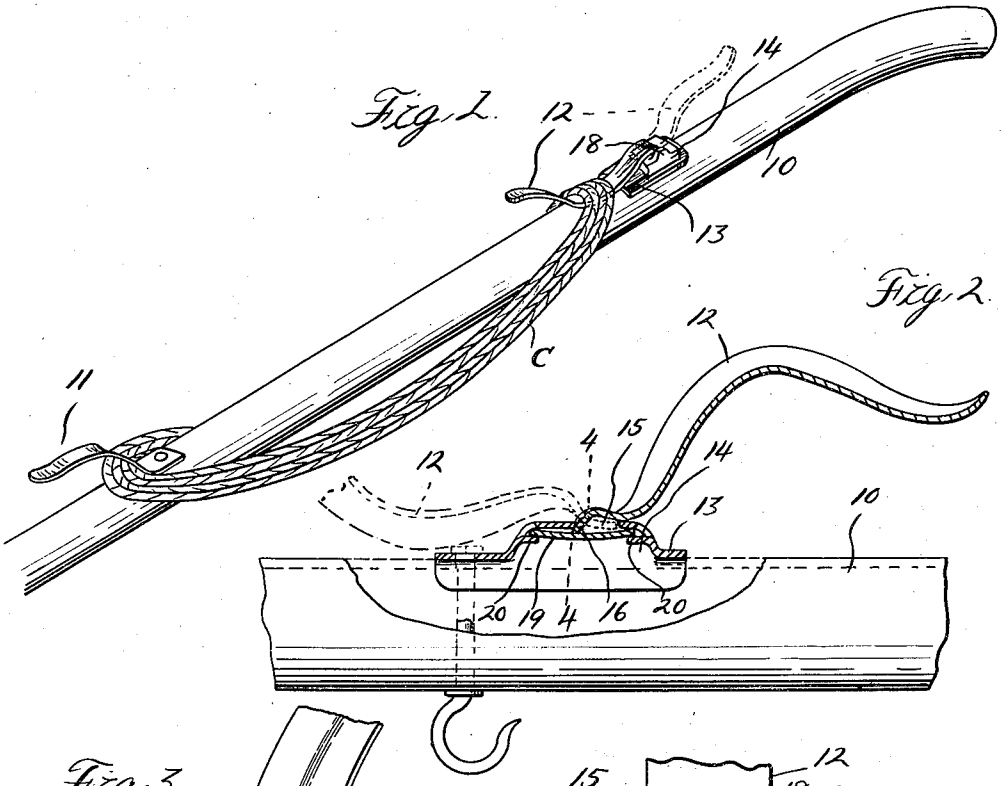
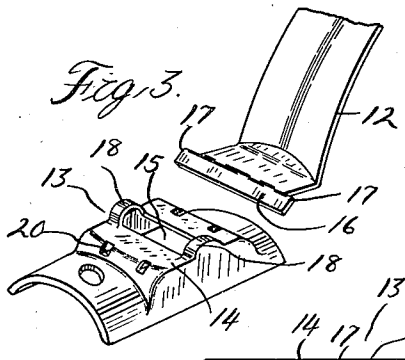


Fig. 2.

Fig. 3.



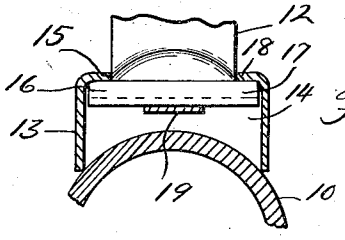


Fig. 4.

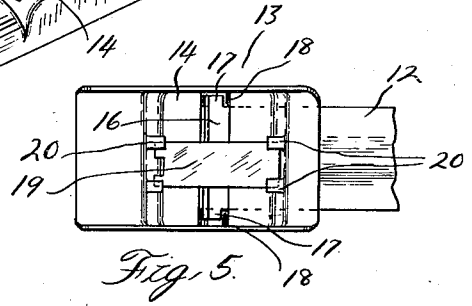


Fig. 5.

Inventor
John Vincent Doherty

By

Whittemore, Hulbert & Whittemore & Belknap.

Attorneys

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UNITED STATES PATENT OFFICE.

JOHN VINCENT DOHERTY, OF NEW YORK, N. Y., ASSIGNOR TO EUREKA VACUUM CLEANER COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

CORD HOOK FOR VACUUM CLEANERS.

Application filed May 12, 1926. Serial No. 108,569.

The invention relates to cord hooks for vacuum cleaners and the like and more particularly to improvements in devices of this character.

In vacuum cleaners or sweepers or other similar types of electrically driven apparatus it is customary to provide means upon the handle of the cleaner for supporting the electric conductor or cord when the apparatus is not in use. Heretofore this cord supporting means consisted essentially of a pair of spaced hooks or similar shaped members around which the cord was wound or looped. When using the cleaner it was necessary to disengage the cord by unwinding the same from the hooks in order to free the same and render the entire length of the cord available. This was found to be slightly objectionable because of the time and trouble involved.

It is therefore one of the primary objects of this invention to provide a cord supporting means wherein at least one of the supporting hooks is so connected to the cleaner handle that it may be quickly and easily shifted to an operative position wherein the loops of the cord are freed therefrom thereby permitting of a ready disengagement of the cord from the hooks.

Other objects, advantages and novel details of the invention will be made more apparent as this description proceeds, especially when considered in connection with the accompanying drawings wherein,

Figure 1 is a fragmentary perspective view of a vacuum cleaner handle provided with supporting hooks constructed in accordance with this invention.

Figure 2 is an enlarged fragmentary view partly in section and partly in elevation through one of the supporting hooks.

Figure 3 is a separated fragmentary detail perspective view of the supporting hook.

Figure 4 is a detail sectional view taken substantially on the plane indicated by line 4—4 in Figure 2 and

Figure 5 is a plan view of the hook supporting bracket.

Referring now particularly to the drawing wherein like reference characters indicate like parts it will be noted that there is fragmentarily illustrated the handle 10 of the cleaner which obviously may be of any desired type or character employing an electric motor or other similar electrically operated propelling means requiring the use of a conductor cord C.

This cord is adapted to be supported upon the handle 10 by being looped or wound about a pair of supporting members herein illustrated as consisting of spaced hook-like members 11 and 12. The objects of the present invention may be attained by mounting one of the hook-like members for instance the hook member 11, rigidly upon the handle and by mounting the other hook member herein indicated at 12, so as to permit the same to be moved from an operative to an inoperative position. Thus as suggested in Figure 1, wherein the hook 12 is shown in released position in full lines, the cord C may, in this position of the parts, be readily moved from engagement with the supporting elements.

In the illustrative embodiment of the invention as herein shown and described the hook 12 is pivotally or hingedly connected to the handle 10. This connection includes a bracket 13 for connection to the handle 10, this bracket being provided with an upwardly extending depression 14 cut away centrally thereof as indicated at 15. This recessed portion 15 of the bracket is adapted to receive and accommodate the flanged end 16 of the handle 12, the flange 16 being extended laterally to provide a pair of extensions 17 which engage under semi-circular upwardly extending depressions 18 of the bracket 13. Mounted for engagement with the end of the handle 16 is a flat spring or resilient member 19 which may be rigidly connected to the bracket at its ends by engagement under lugs 20 struck out from the body of the bracket.

For convenience in assembling the device the hook 12 will be inserted through the opening 15 from the under side of the bracket and drawn therethrough until the extensions 17 engage under the semi-circular retaining portions 18 whereupon the resilient element 19 will be inserted under the lugs 20 and secured in place by bending these lugs thereagainst in gripping relation. In swinging the hook 12 from for instance the dotted line position shown in Figure 1 of the drawings to the full line position shown in the same figure, the flange 16 will be moved past the vertical or perpendicular

center with reference to the spring element 19 and in so moving will flex the element 19. It is obvious therefore that inasmuch as the resilient or spring element 19 bears against the edge of the flange 16 in either of the positions of the hook, the hook will be retained in either its operative or inoperative position but may be readily moved or swung from either of these positions to the other.

Thus when the hook 12 is in the dotted line position illustrated in Figure 1, the cord C may be wound or looped about the hooks 11 and 12 in the customary manner. However, when it is desired to release the cord C from its supporting elements then the hook 12 will be swung to its inoperative position, past the perpendicular center, to the full line position shown in Figure 1 whereupon the loops of the cord C may be readily freed therefrom.

Obviously supporting elements other than hooks may be employed although heretofore hooks or hook-like elements have been practically universally adopted as the cord supporting elements. It will also be readily apparent that the objects of this invention may also be attained with other forms of releasable elements. For instance, the equivalent of the hook member 12 in the illustrative embodiment of the invention, instead of being hingedly or swingingly mounted upon the handle 10, may be pivoted for a rotary movement, may be slidably mounted or may be connected to the handle in any one of various ways whereby it may be moved from an operative to an inoperative position.

Therefore while a cord supporting means constructed as above described has been found to give remarkably good results in practice, it is evident from the above consideration that the specific design herein before described is only typical of the various forms in which the invention may be embodied and reservation is therefore made to make such changes in the details of construction as may come within the purview of the accompanying claims.

What I claim as my invention is:

1. The combination with a handle or the like, of a fixed cord supporting element, a movable releasable cord supporting element and instantaneously releasable means for retaining said movable element in cord supporting position.

2. The combination with a handle, of spaced cord supporting elements, means for mounting one of said elements for movement from a supporting to a releasing position and resilient means for initially impeding movement of said last-mentioned element from either of said positions.

3. The combination with a handle of cord supporting means including a fixed hook-like element and a spaced hook-like element pivotally connected to said handle and movable to and from and automatically securable in cord supporting or cord releasing position.

4. The combination with a handle, of cord supporting means including a fixed hook-like element and a spaced hook-like element hingedly connected to said handle for movement about an axis tranverse to the longitudinal axis of the handle and in a plane intersecting the longitudinal axis of the handle from a cord supporting to a cord releasing position.

5. The combination with a handle, of a cord supporting element thereon, the said cord supporting element being movable to cord supporting and cord releasing positions, and means for yieldably retaining the said cord supporting element in either of the two said positions.

6. The combination with a handle, of a cord supporting hook on said handle, the said cord supporting hook being selectively movable to operative and inoperative positions, and resilient means for retaining the said hook in either of the said positions.

7. The combination with a handle, of a cord supporting element thereon, the said cord supporting element being movable to cord supporting or cord releasing positions, and a spring for retaining the said cord supporting element in either of the said positions.

8. The combination with a handle, of a fixed cord supporting element, a releasable cord supporting element, and means for yieldably retaining the releasable cord supporting element in cord supporting position.

9. The combination with a handle, of a fixed cord supporting element, a movable cord supporting element spaced from said fixed cord supporting element, means for mounting the movable cord supporting element to permit movement of the same toward and away from the fixed cord supporting element, and means for yieldably preventing movement of the movable cord supporting element.

10. The combination with a handle, of a cord supporting element thereon, and means for mounting said element for movement radially of the longitudinal axis of said handle from a cord supporting to a cord releasing position.

11. The combination with a handle, of a cord supporting element thereon, the said cord supporting element being movable to cord supporting and cord releasing positions, and automatically operable means for retaining the said cord supporting element in either of the two said positions.

12. The combination with a handle, of a cord supporting element thereon, means for mounting the said element for movement radially of the longitudinal axis of said handle from a cord supporting to a cord re-

leasing position, and means engageable with the said element for automatically retaining the same in either of the two said positions.

13. In combination with a handle, a fixed cord supporting element and a movable cord supporting element, a bracket for said last named element fast to the handle and a pivot carried by said bracket for said last named element.

14. In combination with a handle, a fixed cord supporting element and a movable cord supporting element, and means for mounting the last named element for pivotal movement in a plane intersecting the said handle, whereby the said element may be moved about its pivot toward the fixed cord supporting element to release the cord and away from the fixed cord supporting element to support the cord.

15. In combination with a handle, a fixed cord supporting element and a movable cord supporting element, a bracket for said last named element fast to the handle, a pivot mounted on the end of said element engageable with the bracket and means formed on the bracket for maintaining the pivot therein.

16. In combination with a handle, a fixed cord supporting element and a movable cord supporting element, a bracket for said last named element fast to the handle, a pivot mounted on the end of said element engageable with the bracket, means formed on the bracket for maintaining the pivot therein, and a spring located within the bracket and beneath the pivot to frictionally engage the same.

In testimony whereof I affix my signature.

JOHN VINCENT DOHERTY.