May 29, 1923.

1,456,935

T. B. RICHARDSON

CORD HOLDER FOR VACUUM CLEANERS

Filed Dec. 1, 1922

Fig. 4.

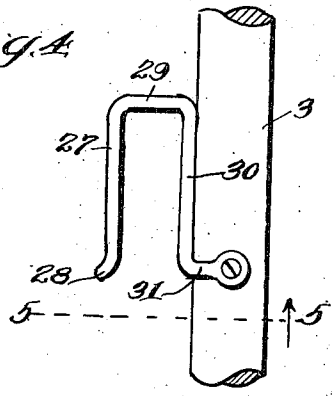
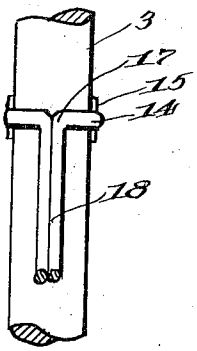


Fig. 1.

Fig. 6.



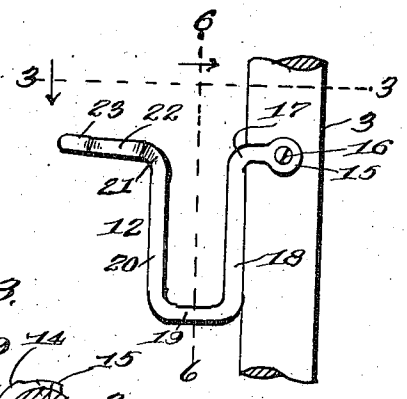


Fig. 5.

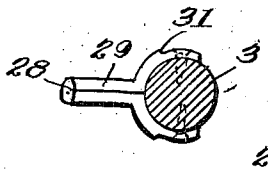


Fig. 3.

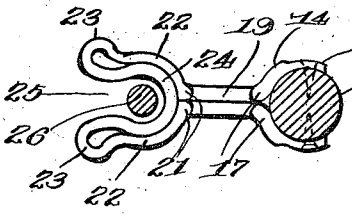


Fig. 2.

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PHOTO-LITHO by SACKETT & WILHELMS CORP. N.Y.

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UNITED STATES PATENT OFFICE.

TILDA B. RICHARDSON, OF SPOKANE, WASHINGTON.

CORD HOLDER FOR VACUUM CLEANERS.

Application filed December 1, 1922. Serial No. 604,229.

To all whom it may concern:

Be it known that I, TILDA B. RICHARDSON, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented new and useful Improvements in Cord Holders for Vacuum Cleaners, of which the following is a specification.

My invention relates to cord holders for the handles of vacuum cleaners and the like.

The flexible connectors with which vacuum cleaners are equipped are provided with a plug. Heretofore, the handle has been provided with spaced holders about which the flexible cord connectors are wound or coiled, the plug end being intertwined about one or more of the coiled lengths of the cord in order to prevent the cord from getting loose and falling off from the holders. However, this, and other expedients, have, so far as I know, failed to securely hold the cord in position.

Now it is one of the features of my invention to provide a pair of spaced holders and to equip one of said holders with novel means for engagement with the plug of the cord so that the latter will be firmly retained in the holders.

It is a further feature to provide holders of a novel form whereby the coiled cord will lie very closely along the handle with the minimum extent of projection.

Thus, my invention, as claimed, resides in the combination of my holders with a handle, and in said holders as articles of manufacture.

My invention will be more fully described in connection with the accompanying drawing, and will be more particularly pointed out in and by the appended claims.

In the drawings:—

Fig. 1 illustrates a vacuum cleaner handle equipped with one form of the device of my invention.

Fig. 2, is a fragmentary portion of the handle on an enlarged scale and showing my plug retaining holder in side elevation.

Fig. 3, is a sectional view on line 3—3 of Fig. 2.

Fig. 4, is a view similar to Fig. 2 showing the cord holder remote from the plug holder.

Fig. 5, is a sectional view on line 5—5 of Fig. 4.

Fig. 6, is a sectional view on line 6—6 of Fig. 3.

Like characters of reference designate similar parts throughout the different figures of the drawing.

A vacuum cleaner of conventional form is shown having a main frame structure 1, with a motor hood 2. A straight handle 3, is provided with a bail 4, which is pivoted at 5, to the structure 1. A connector 6, connected with the motor in hood 2, extends along the handle 3, to a binding post 7, adjacent a switch 8. From point 7, the connector, which is in the form of a flexible cord 9, extends freely, and in sufficient length to reach a socket, the cord end having the usual plug 10, therefor.

When the cleaner is not in use, it is a distinct problem to keep this free length of cord 9 in a suitable position and free from loose arrangement on the floor.

Therefore, my invention includes a pair of spaced holders generally designated at 11 and 12, about which the cord 9, may be wound or coiled as shown at 13.

My improved holders are alike in structure and function except for one feature of construction with which holder 12, is equipped, and I will first describe holder 12 in detail.

Said holder 12, in the specific form shown, is formed of a single length of wire which is sufficiently stiff to hold its form when bent to the desired shape. The terminal ends 14 are convexly forked to transversely embrace the handle 3, and the extreme portions of said ends are desirably flattened, as shown at 15. Means such as screws 16, may be employed to secure the flattened ends 15 to said handle 3. At 17, the wire lengths are brought together and bent at an angle, with respect to the ends 14, and the intermediate portion is U-shaped. One limb 18, with the wire lengths in lateral abutting relation, lies in abutting relation against the periphery of handle 3, the bight 19, extending outwardly therefrom. The remaining or outer limb 20, extends upwardly in parallel relation with limb 18, and the construction is proportioned to form a relatively deep elongated hook-like holder, with a minimum of projection outwardly from the handle 3. Throughout the length of this hook-like holder, the wire lengths are in abutting relation up to a right angle bend 21. In other words, from 17 to 21, the wire is doubled, which enables me to obtain a maximum strength with a minimum size wire.

I will next describe my improved plug holder, which, in the present construction, is formed integral with holder 12.

The resulting or outer bight portion or end is bent at right angles to its contiguous limb 20 and is convexly forked, as at 22. The terminal bight ends 23, are looped, and as shown in Fig. 2, are slightly inclined upwardly. The remaining stock is convexly forked, as at 24, in horizontal relation to the outer fork 22. By reference to Fig. 3, it will be seen that this forked plug seat has an open throat 25, through which the plug end 26, of the cord may readily be passed. Thus, the convex portions 22 and 24, form a seat for the bottom of the plug 10, as clearly shown in Fig. 1.

The remaining holder 11, is precisely the same as holder 12, except that the outer limb 27 terminates at 28. The holder 11, opens downwardly and the holder 12, opens upwardly, so that the cord can be wound or coiled as shown in Fig. 1. The bight 29, the inner limb 30, and the ends 31, are in all respects similar to holder 12.

It will be noted that holder 12, cannot move upwardly about screws 16, as an axis, from the position shown in Fig. 3, because the ends 14, bent at 17, in abutting relation, would impinge against the handle 3, and prevent such displacement. Of course, the holder 12, could not be displaced downwardly, from the position shown in Fig. 2, because of the limb 18, abutting against the handle 3. Thus, because of this improved construction, it is not necessary to anchor the holders in addition to screws 16.

When my improved holders are attached to a cleaner handle, they will be spaced apart in general but not necessarily in nice or accurate accordance with the length of the cord. Because the holders are in the form of relatively deep narrow hooks, the convolutions of cord will build up in superimposed relation and it will be readily understood that the last length 32, can either be wound on top of the bights 33, or inserted therebetween so that the last length will be relatively taut, and this will serve to more effectively retain the plug in its seat. However, I have found in practice, that this expedient is not essential as the handle is usually at a slight angle to the vertical and this alone, would prevent the plug from becoming un-seated.

It will also be noted that the shape of the holders disposes the coiled cord in close adjacent relation along the handle with a minimum of projection.

It is believed that the device of my invention will be fully understood from the foregoing description, and while I have herein shown and described one specific form of my invention, I do not wish to be limited thereto except for such limitations as the claims may import.

I claim:—

1. The combination with the handle of an implement provided with a flexible cord having a plug, of a pair of spaced holders on said handle about which said cord may be coiled, and one of said holders having means for engaging the plug of said cord to retain the latter from un-coiling.

2. As an article of manufacture, one of a pair of holders for a plug equipped cord, said holder having an intermediate portion for receiving one bight of the coiled cord, one end portion being adapted for attachment to the handle, and the remaining end portion of said holder being forked to receive the plug end of the cord and form a seat for the plug.

3. As an article of manufacture, one of a pair of holders for a plug equipped cord for a handle, said holder being formed of a single strip of wire with the terminal ends forked to transversely embrace the handle, the intermediate portion being bent U-shaped with the wire in lateral abutting relation to receive one coiled bight of the cord, the remaining bight end being bent at an angle to its contiguous limb of the intermediate portion, and said bight end being bent to form an open fork to receive the plug end of the cord and form a seat for the plug.

In testimony that I claim the foregoing as my own, I hereby affix my signature.

TILDA B. RICHARDSON.