

July 21, 1942.

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2,290,336

HANDLE CONSTRUCTION

Filed May 3, 1940

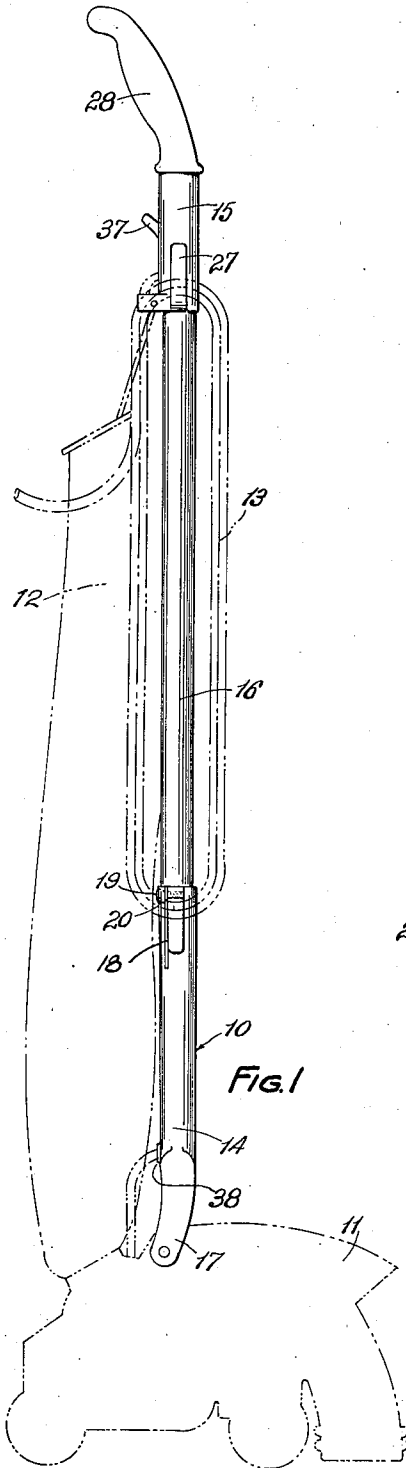


Fig. 1

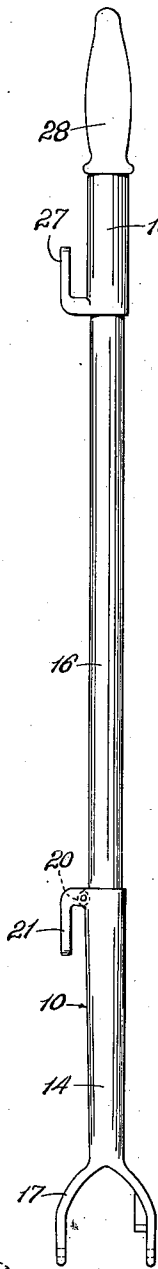


Fig. 2

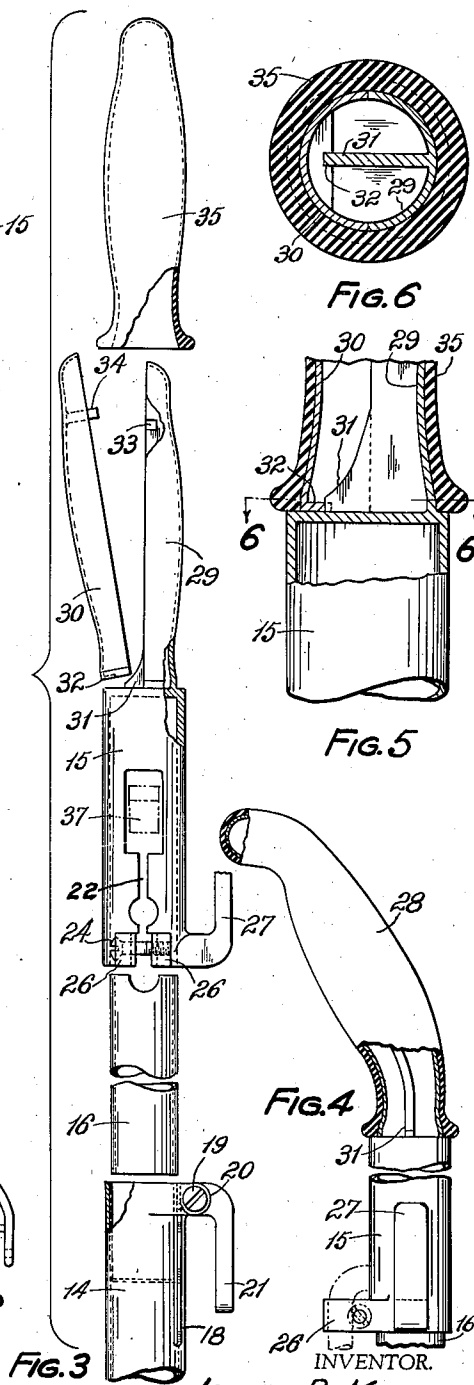


Fig. 3

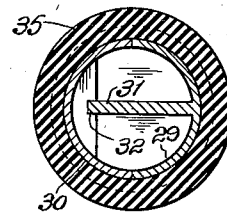


Fig. 4

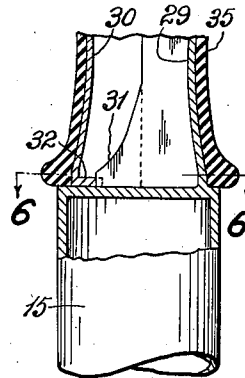


Fig. 5

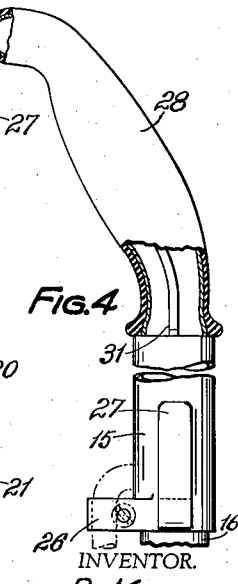


Fig. 6

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2,290,336

HANDLE CONSTRUCTION

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Application May 3, 1940, Serial No. 333,150

4 Claims. (Cl. 15—143)

This invention relates to handle constructions, and more particularly to a new and improved handle for electrically operated floor devices such as suction cleaners and the like.

The construction of operating handles heretofore used with electrical floor appliances, particularly suction cleaners, embodied many undesirable features from a user standpoint. For example, the handles were usually made of many separable parts which, when assembled, presented somewhat of an undesirable appearing disintegrated structure. Such handles were constructed with bracket stampings, riveted or otherwise secured to the intermediate portion of the handle which limited the distance between the cord brackets. In use, the brackets had a tendency to become loosened and separated from the handle, thereby inconveniencing the operator of the device to which the handle was attached. Furthermore, the disintegrated constructions were not able to withstand the severe punishment such devices are occasionally subjected to in service.

By the present invention, there is provided a new and improved handle construction for use with suction cleaners and similar appliances which avoids the aforementioned undesirable features of present types of handles. The handle is economical to manufacture and sturdy of construction and relatively light in weight as compared with prior handles. The elimination of many of the parts without sacrificing any of the advantages of such parts tends toward unity of construction and greatly enhanced appearance.

Various objects of the invention, not at this time particularly enumerated, will become more apparent as the nature of the invention is better understood from the following detailed description, taken in conjunction with the accompanying drawing, wherein:

Figure 1 is a side elevational view of an embodiment of the new and improved handle construction operatively connected to a suction cleaner illustrated in phantom,

Figure 2 is a front elevational view of the handle,

Figure 3 is an enlarged, fragmentary rear exploded view, partly in section of said embodiment,

Figure 4 is an enlarged, fragmentary view, partly in section, of the upper portion of the handle construction,

Figure 5 is a still further enlarged, fragmentary

view, partly in section, of a portion of the construction shown in Figure 4, and,

Figure 6 is a horizontal sectional view taken substantially on the line 6—6 of Figure 5.

With reference to Figure 1 of the drawing, the numeral 10 designates the new and improved handle construction of the present invention, operatively connected to the suction cleaner 11 which includes the filter bag 12 and electric conductor cord 13. The handle construction generally comprises end sections 14 and 15 and an intermediate tubular member 16. The lower handle section 14 is of generally hollow tubular construction, terminating in any suitable means, for pivotally attaching the handle to a floor operated device, which means in the illustrated embodiment takes the form of an integral yoke or bail 17. The tubular end of the handle section 14 telescopically receives one end of the tubular member 16 and the two parts are secured together by any suitable means. As shown, the tubular end of the handle section 14 is provided with a longitudinally extending slot 18 so that it may be compressed or clamped about the end of the section 16 by means of a screw 19 extending through ears 20 formed on each side of the open end of the slot 18. Integrally formed with and extending parallel to the tubular portion of the handle section 14 is a bracket member 21 of hook-like configuration, with the open end thereof facing the yoke end of handle section 14.

The handle section 15 is of generally hollow tubular construction and telescopically receives the other end of intermediate member 16 which is secured therein by any suitable means. As illustrated, the tubular end of the handle section 15 is slotted as at 22 so that the end may be compressed and clamped about the end of the member 16 by means of a screw 24 extending through the apertured lugs 26 formed on each side of the open end of the slot.

Integrally formed with the handle section 15 is a bracket member 27 similar to bracket member 21. The member 27 is aligned with and extends in an opposite direction to the bracket member 21 to form therewith a reel for retaining the electric conductor cord 13 upon the handle 10.

On the free end of the handle section 15 is formed the hand-grip 28 which comprises an angulated extension 29 cast integrally with the handle section 15 and so formed as to constitute a part of the hand-grip. A separable member 30 complementary to the extension 29 forms there-

with the shell of the hand grip. A rib 31 and a socket 33 on the extension 29 cooperating respectively with the slot 32 and pin 34 formed on the separable member 30 serve to maintain the complementary parts in proper registry during the assembly of the hand-grip. A flexible member is employed to encase the members 29 and 30 to complete the hand grip portion of the handle and hold the parts thereof together.

In the present embodiment, the handle section 15 retains a switch member 37. That portion of the conductor cord extending from the switch to the source of current supply mounted on the handle by means of brackets 21 and 27 when not in use. The other end of the cord 13 extending from the switch to the motor passes through the center of the handle and outwardly therefrom through a bushing 38 in the handle section 14 and thence to the motor of the suction cleaner.

As heretofore pointed out, the end handle sections 14 and 15 are supported relative to each other by the intermediate tubular member 16 and the bracket members 21 and 27 being formed integrally with the sections 14 and 15 are disposed apart a greater distance than heretofore wherein the brackets have been universally mounted on the intermediate section. The present invention enables the user to perform the looping operations with the conductor cord with less turns so that the bulk is substantially reduced and facilitating the use of relatively smaller bracket members holding the cord more closely to the handle, tending towards a neater and more presentable appearing construction. Furthermore, the assembly of the sections constituting the handle is greatly facilitated, and aided by the peculiar formation and flexibility of the hand grip parts a more durable, convenient, more controllable handle is produced, which is easily manipulated and less destructive to surrounding objects.

It will be apparent to those skilled in the art that the embodiment herein described may be variously changed and modified, without departing from the spirit of the invention, and that the

invention is capable of uses and has advantages not herein specifically described; hence it will be appreciated that the herein disclosed embodiment is illustrative only, and that my invention is not limited except by the scope of the appended claims.

I claim:

1. A handle construction for an on-the-floor appliance comprising a pivotal section, a hand grip section and an intermediate tubular member, said hand grip section having a substantially hollow grip portion made of complementary members one of which is formed integrally therewith and an elastic sheath adapted to encase the said complementary members to secure them together and complete the hand grip section.

2. In an appliance handle, a handle section comprising a tubular portion and a hand-grip portion, said hand-grip portion being formed of complementary sections one of which is formed integrally with said tubular portion, and an elastic sheath adapted to encase the said complementary sections for securing them together and completing said hand grip portion.

3. In an appliance handle, a handle section comprising a tubular portion and a hand-grip portion, said hand-grip portion being formed of complementary sections one of which is formed integrally with said tubular portion, inter-engaging members formed on said complementary sections for relatively positioning the sections, and an elastic sheath adapted to encase the said complementary sections for securing them together and completing said hand-grip portion.

4. In an appliance handle, a handle section comprising a tubular portion and a hand-grip portion, an electric switch mounted in said tubular portion, said hand-grip portion being formed of complementary sections one of which is formed integrally with said tubular portion, interengaging members on said complementary sections for relatively positioning the sections, and an elastic sheath adapted to encase the said complementary sections for securing them together and completing said hand-grip portion.

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