Dec. 30, 1941. H. B. WHITE ET AL 2,268,364

DUSTING TOOL KIT FOR SUCTION CLEANERS

Filed Feb. 20, 1937 2 Sheets-Sheet 1

Fig. 1

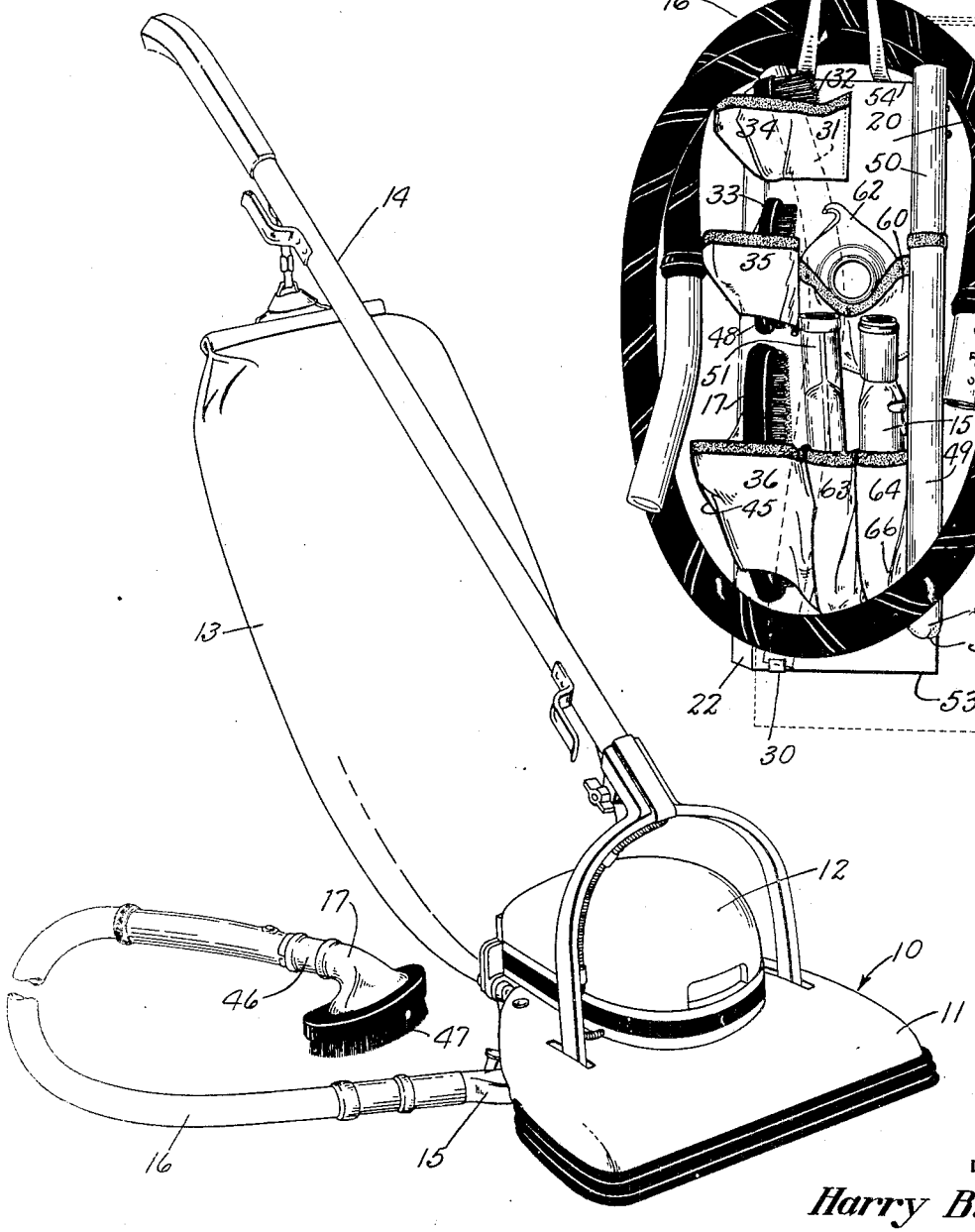


Fig. 2

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Filed Feb. 20, 1937 2 Sheets-Sheet 2

Fig. 3

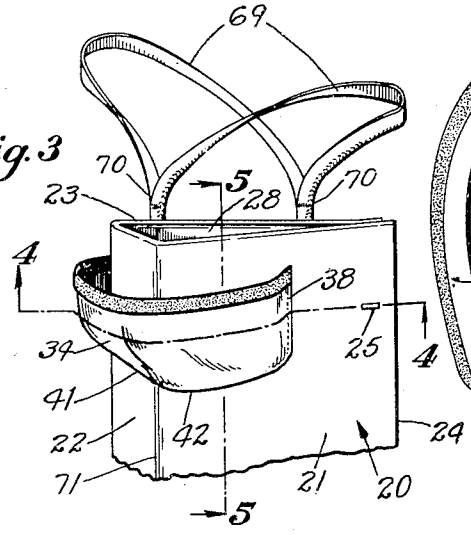


Fig. 4

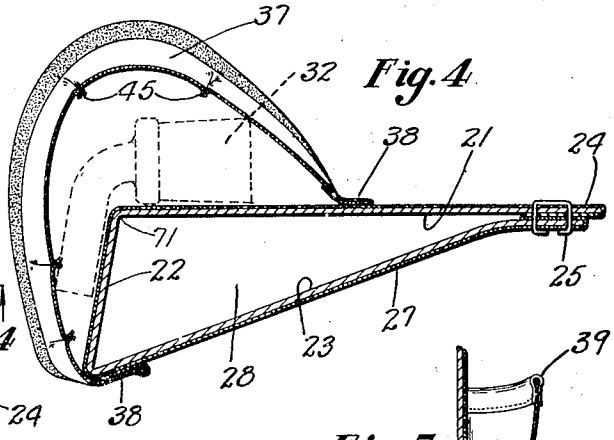


Fig. 5

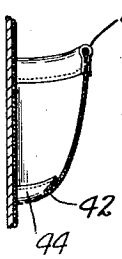


Fig. 6

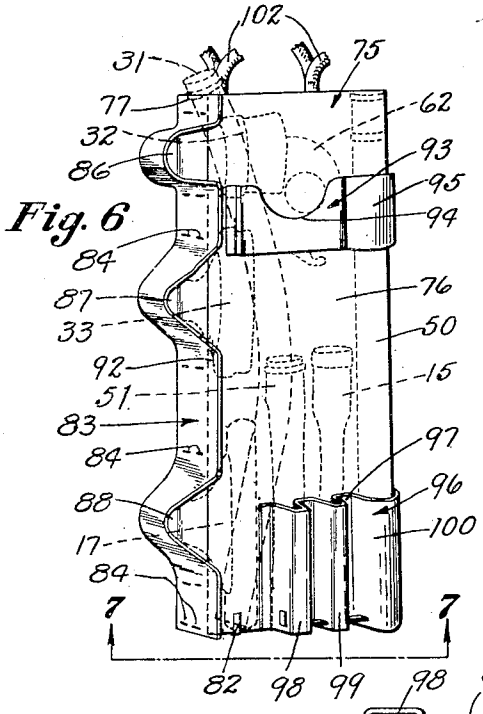


Fig. 8

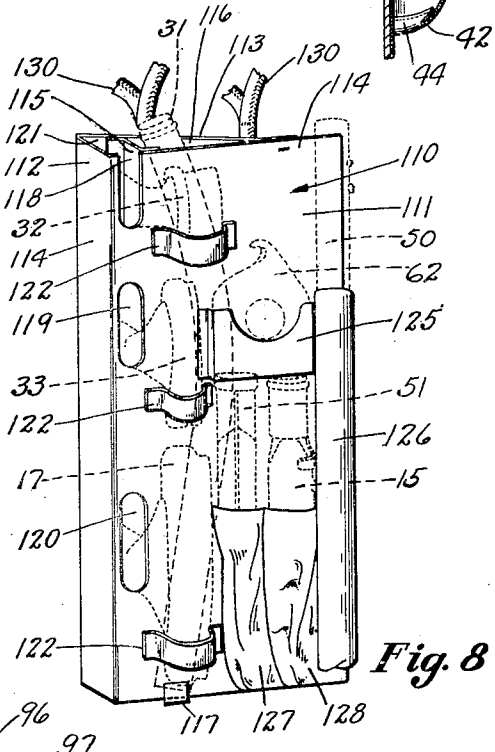
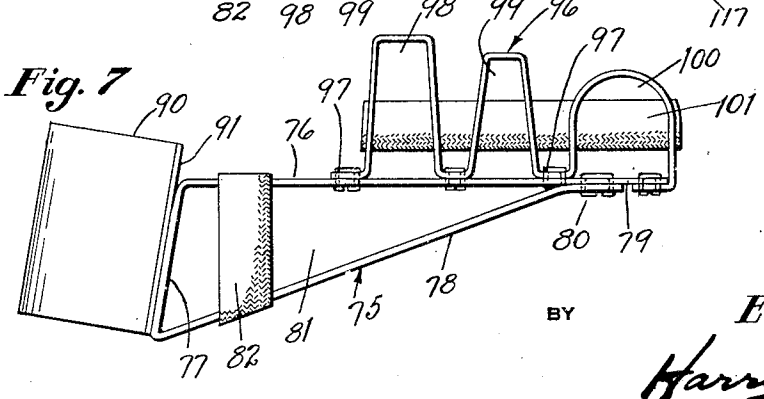


Fig. 7



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DUSTING TOOL KIT FOR SUCTION CLEANERS

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Application February 20, 1937, Serial No. 126,770

4 Claims. (Cl. 206—16)

The present invention relates to new and useful improvements in kits for the dusting tools employed with suction cleaners. More specifically the invention comprises means for holding the auxiliary cleaning tools for example, a flexible hose, non-flexible extension tube, brushes and many other parts, all designed for attachment to the suction cleaner to convert the latter for off-the-floor cleaning.

It is an object of the present invention to provide a kit having pockets to accommodate the dusting tools. Another object of the invention is to provide a kit of such configuration and material that it can be set upon a flat surface and will remain in upright position, whereby the operator can easily remove the desired dusting tools. A still further object is the provision of a handle for hanging the kit on a hook or door knob, the handle also acting as a support for a flexible hose forming part of the auxiliary cleaning equipment. These and other more specific objects will appear from a reading of the following specification and claims, and upon consideration of the attached drawings to which they relate.

In the drawings, in which the same reference character refers to like parts throughout the several views:

Figure 1 is a perspective of a suction cleaner with dusting tools attached thereto for off-the-floor cleaning;

Figure 2 is a front elevation of one embodiment of the invention showing the dusting tool kit suspended from a door knob;

Figure 3 is a perspective of a portion of the kit showing the polygonal section of the kit and the arrangement of the pocket around a corner of the kit;

Figure 4 is an enlarged section along the line 4—4 of Figure 3;

Figure 5 is a section along the line 5—5 of Figure 3;

Figure 6 is a front elevation of another embodiment of the invention;

Figure 7 is a view along the line 7—7 of Figure 6; and

Figure 8 is a perspective view of still another embodiment of the invention.

The suction cleaner 10 shown in Figure 1 comprises a main body 11, a motor housing 12, a dust bag 13 and a handle 14. Attached to the main body of the suction cleaner is a connector 15, a flexible hose 16 and a cleaning brush 17, all of which are normally carried by the dusting tool kits in the manner shown in Figures 2, 6 and 8.

One embodiment of the invention is illustrated in Figures 2 through 5 and comprises a body portion 20 having a front wall 21, a side wall 22 at an obtuse angle to the front wall 21, and a rear wall 23 extending at an acute angle from the side wall 22 and which is rigidly secured to the marginal edge 24 of the front wall 21 by suitable fastening means 25. A body portion 20 is composed of material of sufficient rigidity so as to be self-supporting in an upright position, and is herein shown of cardboard covered on its exposed surfaces with a fabric material 27, for example canvas.

The adjacent portions of the front wall 21, side wall 22 and rear wall 23 define a triangularly shaped elongated pocket 28 which extends throughout the longitudinal length of the kit and is adapted to receive a curved extension tool 31 as indicated in broken lines in Figure 2. A fabric strip 30 is arranged across the lower end of the pocket 28 to provide a support for the cleaning tool 31.

A plurality of pockets 34, 35 and 36 are provided for the auxiliary cleaning brushes 32, 33 and 17. Each of these pockets is made of a fabric material which extends along the side wall 22 and front wall 21, and is suitably secured to the rear wall 23 and the front wall 21 by attachment to the canvas covering 27, as indicated at 38. The top of each pocket is held in spaced relation with respect to the body 10 by means of a metal stiffener 39 disposed in a hem at the upper edge of the pocket, and extends along the side wall 22 and front wall 21. The lower edge 41 of each pocket adjacent the side wall 22 is sewed to the fabric covering 27 and the remaining lower portion 42 of each pocket adjacent the front wall 21 is loose from the fabric to provide an opening 44 as shown in Figure 5. Each pocket is tucked in as at 45 to reduce the size thereof.

By arranging the pockets along the front and side walls, angularly shaped receptacles are provided so as to accommodate the angular contour of the cleaning brushes. That is, the shank portion 46 of each brush is supported along the side wall 22, and the bristle portion 47, which is substantially at right angles to the shank 46, is supported along the front wall 21, the extending end 48 of the bristle portion projecting through the opening 44 of each pocket. Arranged along the marginal edge 24 of the front wall 21 is an elongated pocket 49 adapted to accommodate a

cylindrical cleaning tool 50. This pocket is formed by attaching a fabric material to the covering 27 and extends from the lower end 53 of the body 20 to a point short of the top edge 54 of the body 20. The lower end 55 of the elongated pocket 49 may be partially closed by providing tucks in the pocket, as indicated at 56.

Another pocket 60 is arranged between the pocket 36 and the elongated pocket 49 and is composed of fabric material secured to the covering 27. This pocket is also open along its lower edge, and the fabric is tucked in to accommodate the contour of the blower attachment 62 supported in the pocket 60.

Disposed between the pocket 36 and the marginal pocket 49 is a pair of pockets 63 and 64 arranged side by side and composed of fabric material sewed to the covering 27. The lower ends of these pockets are also reduced in size by gathering the fabric as indicated at 66 to prevent the cleaning tools 51 and 15 from sliding therethrough.

In order to suspend the dusting tool kit from a door knob 67, or other type of hanger, a handle 68 is provided and is secured to the rear wall 21. The handle is comprised of two strips 69 as shown in Figure 3, and are of flexible material joined together at 70. When the handle 68 is looped about the door knob 67 to suspend the kit, it also functions as a support for the flexible hose 16 by arranging the latter between the two strips 69 of the handle as shown in Figure 2.

The kit is assembled by sewing the pockets to the canvas covering 27, and the latter is then arranged about the triangularly shaped body portion 20 so as to dispose the brush pockets around the corner 71 formed by the walls 21 and 22, and the remaining pockets along the front wall 21. The cover 27 may be attached to the body portion 20 by the same means 25 employed to fasten the front and rear walls together.

Another embodiment of the invention is illustrated in Figures 6 and 7, and comprises a body 75 provided with a front wall 76, a side wall 77 at an obtuse angle to the front wall, and a rear wall 78 extending at an acute angle from the side wall 77 and which is secured to the marginal edge 79 of the front wall by suitable fastening means 80. The body portion 75 is composed of relatively rigid material, for example cardboard, so as to be self supporting in an upright position.

The adjacent portions of the walls define a triangularly shaped pocket 81 which extends throughout the length of the kit and is adapted to receive the curved extension tool 31 as indicated in broken lines in Figure 6. A fabric strip 82 is secured to the front and rear walls and is arranged across the lower end of the pocket 81 to prevent the cleaning tool 31 from sliding therethrough.

Pockets for the brushes 32, 33 and 17 are formed by means of a strip of cardboard 83 arranged along the side wall 77 and has portions secured tightly against the latter as indicated at 84 and other sections spaced from the side wall so as to provide pockets 86, 87 and 88. The brushes are supported in the kit by inserting the shank portion of each brush into the pockets provided along the side wall 77, and the bristle portion of each brush lies adjacent to the front wall 76 as indicated in broken lines in Figure 6.

In order to prevent the bristle portion of each brush from swinging in its pocket, the pocket-forming strip 83 is provided with a marginal edge 90 projecting outwardly beyond the front wall 76 as indicated at 91. The projecting portion 91 engages the brush as shown at 92 and prevents the brush from rotating in its pocket.

Arranged between the side wall 77 and the marginal edge 79 of the front wall 76 is another strip of cardboard 93 secured to the front wall 76 and is so spaced from the latter as to provide the open ended pockets 94 and 95. The pocket 94 is adapted to hold the tool 62 as shown in broken lines in Figure 6.

Disposed along the lower edge of the front wall 76 is another strip of relatively rigid material 96 having portions 97 bearing against and secured to the front wall 76 and other portions spaced from the front wall to define open ended pockets 98, 99 and 100. The pockets 98 and 99 are respectively adapted to support the cleaning tools 51 and 15, and the aligned pockets 95 and 100 cooperate to carry the cleaning tool 50. A closure member 101 extends across the lower pockets to prevent the cleaning tools from sliding therethrough.

A handle 102, not completely shown, similar in all respects to the handle 68 is attached to the rear wall 78 and is adapted to support the hose 16 when suspended from a hanger, in the manner already described.

Figure 8 illustrates another type of kit and comprises a body portion 110 of polygonal cross section provided with a front wall 111, a side wall 112 at an obtuse angle to the front wall, and a rear wall 113 which extends at an acute angle from the side wall 112 and is secured to the marginal edge 114 of the front wall 111. The body portion 110 is composed of relatively rigid material so as to be self supporting in an upright position.

Spaced from and extending parallel throughout the length of the side wall 112 is a partition 115 which cooperates with the front wall 111 and rear wall 113 to define a triangularly shaped pocket 116 adapted to support the curved cleaning tool 31 as indicated in broken lines in Figure 8. A strip 117 is arranged across the lower edge of the pocket 116 to prevent the tool 31 from sliding therethrough.

Pockets for the brushes 32, 33 and 17 are provided by forming slots 118, 119 and 120 in the front wall 111. The lower defining edges of these slots are adapted to support the shanks of each brush, and each brush shank is concealed within the space 121 defined between the partition 115 and the walls of the body portion. The bristle portion of each brush is held in place by means of a fabric strip 122 attached to the front wall 111. The remaining pockets 125, 126, 127 and 128 are also formed by securing fabric material to the front wall 111 and are adapted to support the cleaning tools 62, 50, 51 and 15.

A handle 130 not completely shown is secured to the rear wall 113 and is alike in all respects to the handle 68 herein before described, and functions to hold the hose 16 in place when the kit is suspended by the handle 130.

It will be evident that the kit herein disclosed provides pockets particularly adapted to accommodate angularly shaped tools since the pockets are arranged around a corner formed by two adjacent walls of the kit and are disposed at an angle substantially equal to the angular contour of brushes. Furthermore the handle provides means for supporting the flexible hose when the handle is looped about a hanger to suspend the kit.

We claim:

1. A kit for a suction cleaner tool of the type

having a shank and an operating portion disposed at an angle to each other, said kit comprising a body having adjacent front and side walls arranged at an angle to each other substantially equal to the angle between the shank and operating portion of the tool, and a supporting member attached exteriorly to said body, said member extending around said angle between said adjacent walls and along said front and side walls, a portion of the lower marginal edge of said member being secured to one of said body walls and another portion of said lower marginal edge spaced from another of said body walls to provide an opening, the upper marginal edge of said member being spaced from said body walls to cooperate therewith in defining a tool pocket, said pocket supporting the shank of said tool along one of said body walls and the operating portion along said another body wall whereby said operating portion projects through said lower marginal opening and said tool is supported around said angle between said adjacent walls.

2. A kit for suction cleaner dusting tools of the type having a shank and an operating portion disposed at an angle to each other, said kit comprising an elongated body having a front and side wall disposed at an angle to each other, an elongated member extending along and secured to the exterior of said side wall and having portions spaced from said side wall and other portions in contact with said side wall, each of said spaced portions of said member cooperating with said side wall to define a pocket having a tool opening transversely of said side wall in the plane of said front wall, said contacting portions of said member having a projecting marginal portion adjacent each of said pockets extending forwardly of said front wall, whereby said pockets support the shanks of said dusting tools and said projecting marginal portions of said member engage the operating portions of said dusting tools to prevent the latter from rotating in said pockets.

3. A kit for suction cleaner dusting tools, comprising an elongated body having a front, a side and a rear wall secured together at an angle to each other and forming an elongated opening having a cross-section of an obtuse triangle, a partition spaced from said side wall and secured to and between said front and rear walls and extending substantially throughout the longitudinal length thereof, said partition and portions of said front and rear walls defining an elongated triangular pocket for the reception of an arcuate dusting tool, said front and rear walls converging toward the apex of said triangularly shaped pocket and operating to engage the arcuate portion of said tool to prevent lateral movement of the latter, and said partition engaging the opposite ends of said arcuate tool to position the latter in said triangular pocket, said front wall having an opening between said side wall and partition to receive and support another dusting tool.

4. A kit for suction cleaner dusting tools, comprising an elongated body formed of a front, side and rear wall secured together at an angle to each other and forming an elongated pocket having a cross-section substantially in the shape of an obtuse triangle, one end or normally the upper end of said pocket being unobstructed for removable insertion of an arcuate dusting tool, the front and rear walls converging toward the apex of said triangularly shaped pocket operating to engage the arcuate portion of said tool to prevent lateral movement thereof, said side wall engaging the opposite ends of said arcuate tool to position the latter in the apex of said triangular pocket, a member spanning the other or normally lower end of said pocket to support the lower end of said arcuate tool, and a pair of bails for suspending said body from a hanger, said bails each having its opposite ends attached to the rear wall of said body, said bails being disposed side by side throughout their lengths and separable intermediate their fixed ends on said body rear wall to receive a dusting tool hose therebetween, said bails supporting the hose above said rear wall of said body without obstructing said top opening to said pocket, whereby said body may be suspended from a hanger by said bails and said hose supported between said bails without obstructing said pocket opening for removable insertion of said arcuate tool in said pocket.

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