April 16, 1957 W. N. KEMNITZ 2,788,541

BLOWER ATTACHMENT FOR VACUUM CLEANER

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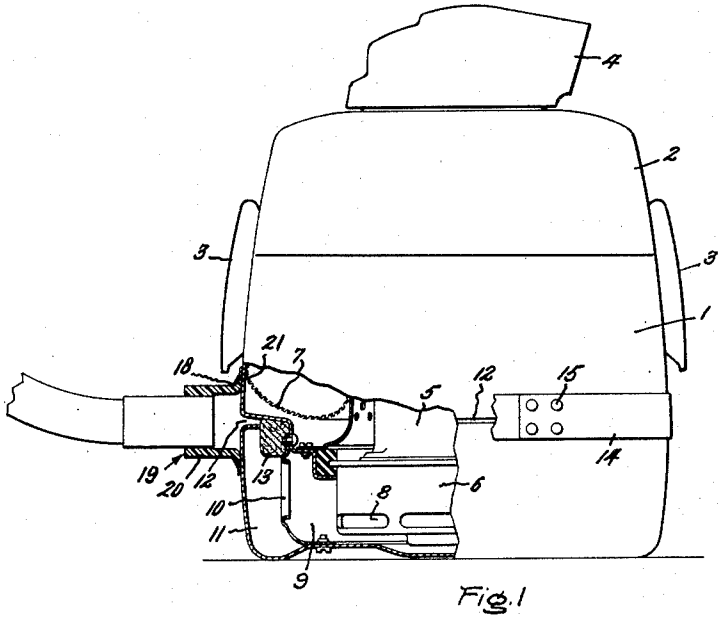

Fig. 1

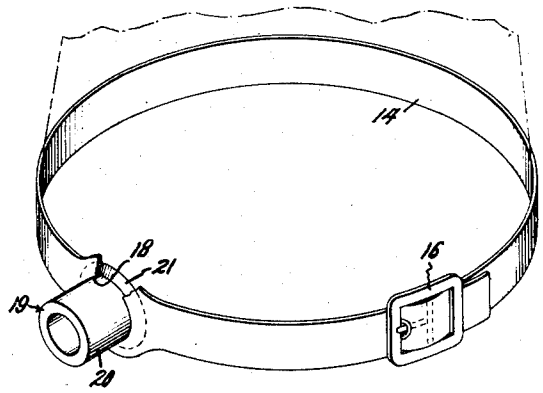

Fig. 2.

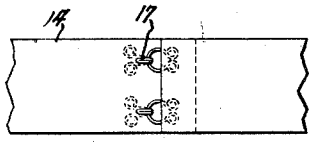

Fig. 3.

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BLOWER ATTACHMENT FOR VACUUM CLEANER

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5 Claims. (Cl. 15—330)

The present invention relates to vacuum cleaners wherein the discharge outlet for air passing through the cleaner is in the form of an elongated slot extending partially or entirely around the body of the cleaner.

In connection with vacuum cleaners it is desired usually to provide means whereby a hose or blower attachment may be connected to the discharge outlet; and the object of the present invention is to provide an improved construction and arrangement of blower attachment for a vacuum cleaner having a discharge outlet of the above referred to character which is simple in structure, easy to use, and capable of being manufactured at low cost.

For a consideration of what I believe to be novel and my invention attention is directed to the following specification and to the claims appended thereto.

According to one form of the invention I provide an air discharge nozzle comprising a short tube to which a length of hose or other device may be connected, the tube having a flange at its inner end adapted to fit against the side of the vacuum cleaner casing at a point over a length of the discharge slot; and in connection with the nozzle I provide a band or strap which extends around the body of the cleaner and functions both to hold the nozzle in position against the cleaner body and to block off the portion of the discharge outlet not covered by the discharge nozzle.

In the drawing wherein I have illustrated my invention as applied to a vacuum cleaner of the so-termed canister type, Fig. 1 is a side elevation of the cleaner, partly broken away, with the blower attachment mounted thereon.

Fig. 2 is a perspective view of the blower attachment shown in Fig. 1 but having a modified form of band or strap fastening means.

Fig. 3 is a detail view of another form of band or strap fastening means.

Referring to the drawing, 1 indicates the body section and 2 the top or cover section of a vacuum cleaner casing, the two sections being fastened together by suitable clamps 3. On top section 2 is an inlet nozzle 4 to which a suction hose may be connected. The vacuum cleaner electric motor is indicated at 5, the suction fan at 6 and the dust bag at 7. Fan 6 discharges air through ports 8 to an annular air chamber 9 from which the air flows through a passage 10 to an annular air discharge chamber 11; and from chamber 11 the air flows to atmosphere through an annular discharge outlet or slot 12, the air on its way to the outlet passing through a filter ring 13 of suitable material.

The structure so far described is a known one and forms no part of the present invention. It is to be taken as tpical of any suitable vacuum cleaner having a discharge outlet in the form of a circumferentially extending elongated slot such as the slot 12. While a continuous slot is illustrated for the discharge outlet, it will be apparent as this description proceeds that my invention is equally applicable to vacuum cleaners in which the discharge outlet comprises a plurality of openings circumferentially arranged.

My improved blower attachment comprises a unitary band or strap 14 of suitable flexible material which may be fastened around the body of the vacuum cleaner over the outlet slot 12, the band or strap being provided with suitable means at its ends, such as the snaps 15 shown in Fig. 1, the buckle 16 shown in Fig. 2, or the hooks 17 shown in Fig. 3 for fastening it in place. In the band or strap is an opening 18 to receive a blower nozzle 19. Nozzle 19 is made preferably of a flexible material such as rubber and comprises a short tube 20 having a flange 21 adapted to fit against the vacuum cleaner casing over a portion of discharge outlet slot 12, the flange being located between the band or strap 14 and the vacuum cleaner casing whereby the band or strap serves to hold the nozzle in position.

The band or strap 14 and the nozzle 19 are supplied as a vacuum cleaner accessory. When it is desired to use the vacuum cleaner as a blower, tube 20 is passed through band opening 18 from the inside of the band to bring flange 21 to a position against the inner surface of the band after which the band with the nozzle thereon is fastened around the cleaner casing over slot 12. The band, by means of flange 21, serves to clamp the nozzle in position over a portion of slot 12 and to block off the remainder of the slot whereby the air flowing from the cleaner is discharged through nozzle 19. A suitable hose or other device may be attached to nozzle 19 so that the air may be used for any desired purpose.

By my invention I provide a blower attachment for a vacuum cleaner having a circumferentially extending air discharge slot which is very simple in structure, comprising only two parts, the band and the nozzle; which is simple and easy to use, and which can be provided at low cost. Also, the blower attachment has the advantage that it may be folded into compact form for storing along with the other vacuum cleaner attachments so that it takes up but little space in the vacuum cleaner attachment package. This is a consideration of importance since with vacuum cleaners of this type there are a number of attachments including hose, wand tubes, and floor and wall tools, and it is desirable to keep the total bulk to a minimum for packaging and storing purposes.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. The combination with a vacuum cleaner having a casing and walls which define a circumferentially extending air discharge slot in the casing, of a blower attachment comprising a unitary, flexible band adapted to extend around the casing over the discharge slot, means for fastening the band in place around the casing, and a nozzle separate from and carried by the band and clamped in position over a portion of the slot by the band whereby the slot is covered by said band except for the portion of the slot adjacent to said nozzle.

2. A blower attachment for use with a vacuum cleaner of the type having walls which form a circumferentially extending air discharge slot comprising a unitary band, means for clamping the band around such a vacuum cleaner casing in a position to block off the slot, and a nozzle carried by the band adapted to be clamped by the band over a portion of such an air discharge slot, said nozzle being separate from said band but being adapted to be assembled therewith when the attachment is mounted on a vacuum cleaner.

3. A blower attachment for a vacuum cleaner of the type having walls which form a circumferentially extending air discharge slot comprising a band having fastening means at its ends and an opening at a point between its ends, and a nozzle having a tube positioned in said opening and a flage at its inner end, the band being adapted to be fastened around a vacuum cleaner casing in a position to cover said slot and to clamp said flange

against the casing with the nozzle over a portion of such slot whereby the band, flange and casing are in a sealed relationship and thereby restrict the flow of air from the slot to passing through the tube.

4. A blower attachment for a vacuum cleaner of the type having walls which form a circumferentially extending air discharge slot, comprising a band of flexible material having fastening means at its ends and an opening at a point between its ends, and a nozzle separate from said band and having a tube positioned in said opening and a flange at its inner end, the band being adapted to be fastened around a vacuum cleaner casing in a position to cover said slot and to clamp said flange against the casing with the nozzle over a portion of said slot, whereby the band, flange and casing are in a sealed relationship and thereby restrict the flow of air from the slot to passing through the tube.

5. The combination with a vacuum cleaner having a casing and walls which define a circumferentially extending air discharge slot in the casing, of a blower attachment comprising a band adapted to extend around the

casing over the discharge slot, means for fastening the band in place around the casing, and a nozzle carried by the band and clamped in position over a portion of the slot by the band, whereby the slot is covered by said band except for the portion of the slot adjacent to said nozzle, said band having an opening and said nozzle comprising a tube which extends through said opening and has a flange at its inner end clamped against the casing by the band, whereby the band, flange and casing are in sealed relationship and thereby restrict the flow of air from the slot to passing through the tube.

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