Sept. 10, 1929. T. O. ADAMS 1,727,921

DUST BAG CONNECTION FOR VACUUM CLEANERS

Filed Oct. 9, 1922 2 Sheets-Sheet 1

Fig. 1

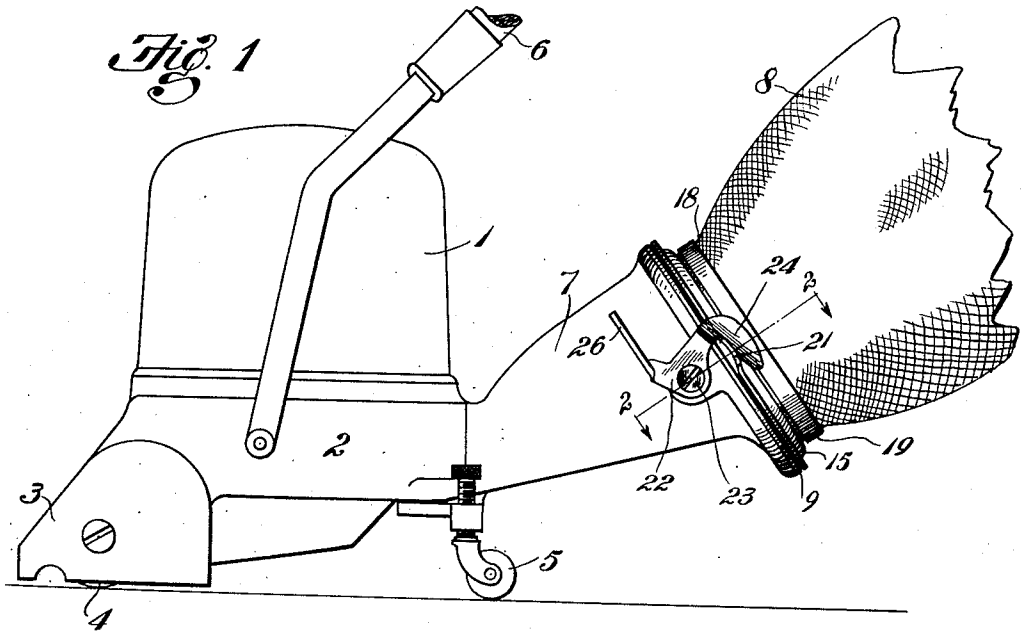


Fig. 3

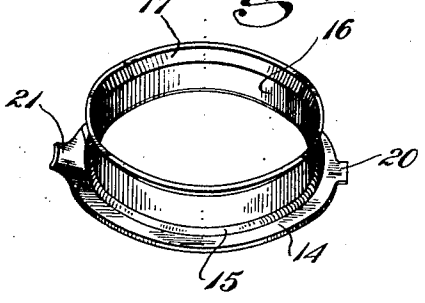


Fig. 5

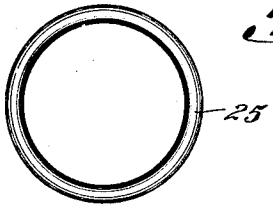


Fig. 7

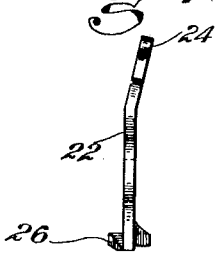


Fig. 6

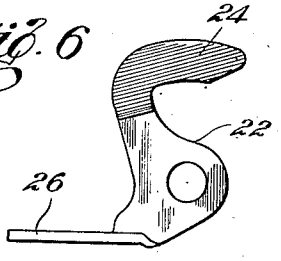
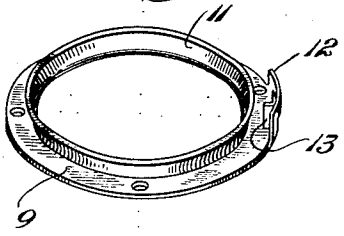


Fig. 4



Inventor

T. O. Adams

By Fraser and Bond

Attorneys

Sept. 10, 1929. T. O. ADAMS 1,727,921

DUST BAG CONNECTION FOR VACUUM CLEANERS

Filed Oct. 9, 1922 2 Sheets-Sheet 2

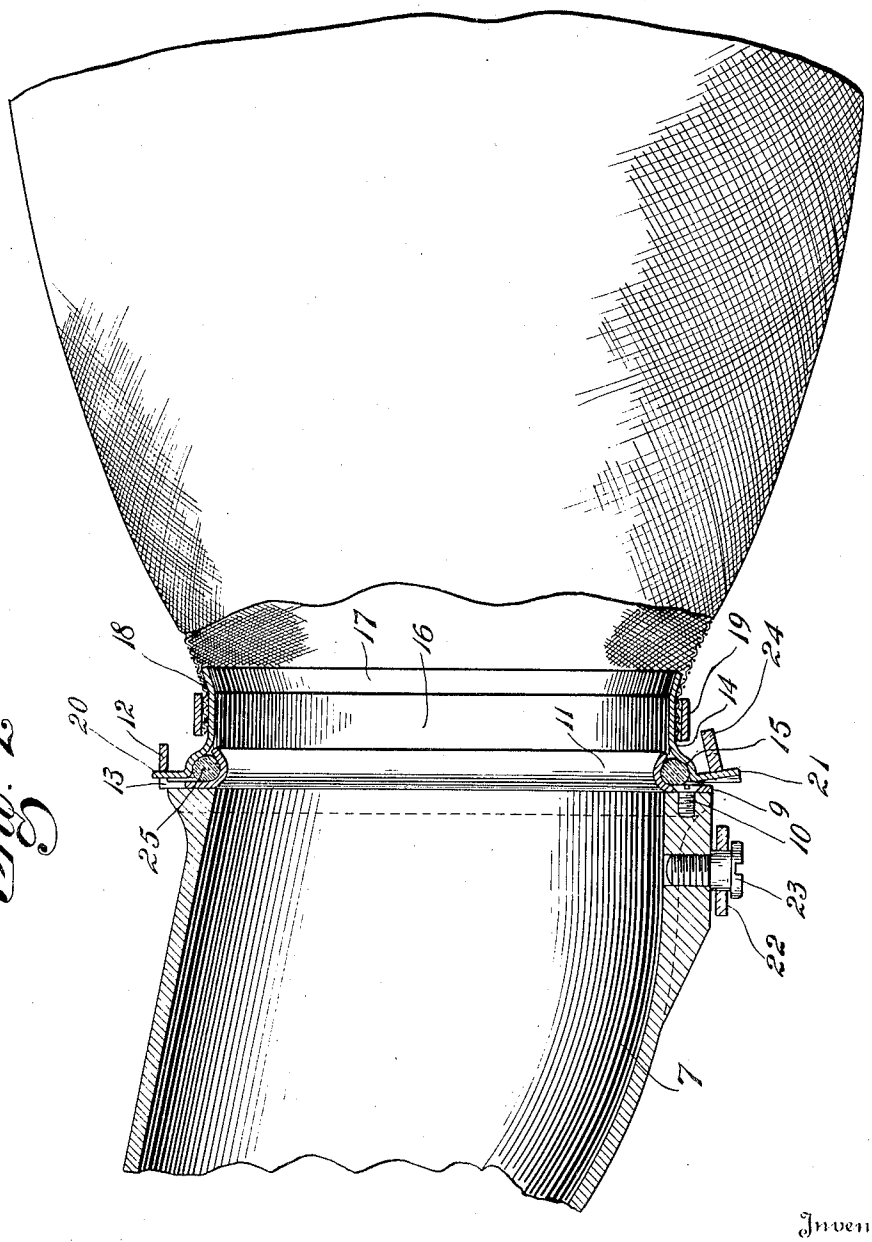


Fig. 2

Inventor

T. O. Adams

By Grosvenor & Bond Attorneys

Patented Sept. 10, 1929. 1,727,921

UNITED STATES PATENT OFFICE.

THOMAS O. ADAMS, OF NEW PHILADELPHIA, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO WISE-McCLUNG CORPORATION, OF NEW PHILADELPHIA, OHIO, A CORPORATION OF OHIO.

DUST-BAG CONNECTION FOR VACUUM CLEANERS.

Application filed October 9, 1922. Serial No. 593,243.

This invention relates to an improvement in dust bag connection for vacuum cleaners and has for its objects to provide means whereby the bag may be easily and readily attached to or detached from the casing of the cleaner, and which will hold the bag firmly in place upon the outlet neck of the casing and form an air tight seal between the mounth of the bag and the mouth of the outlet neck when the connection is located thereon.

The above and other objects may be attained by contructing the connection as illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a suction cleaner provided with the improved dust bag connection embodying the invention;

Fig. 2, a section on an enlarged scale on the line 2—2, Fig. 1;

Fig. 3, a detached, perspective view of the dust bag ring;

Fig. 4, a similar view of the outlet neck ring;

Fig. 5, a detail view of the gasket;

Fig. 6, a side elevation of the locking hook; and

Fig. 7, an edge elevation of the same.

Similar numerals refer to similar parts throughout the drawings.

The cleaner comprises the usual motor casing 1, fan casing 2 and nozzle 3 which are mounted upon the front and rear wheels 4 and 5 respectively, and provided with a handle 6 by means of which the cleaner may be manuipulated to and fro upon the floor. The fan chamber is provided with the usual outlet neck 7 to which a dust collector bag 8 of usual construction is attached to receive the dust and dirt removed from the carpet and ejected from the fan chamber.

A ring 9 is attached to the extremity of the outlet neck 7 as by screws 10 and is provided with the annular flange 11 preferably concaved in cross section, as illustrated in Figs. 2 and 4. The ring 9 is provided upon one side with an outturned flange 12 having the slot 13 therein.

A ring 14 is provided for connection with the dust bag and has the annular, concaved portion 15 and the annular, inturned flange 16 terminating in the flared edge portion 17. The mouth of the bag, as indicated at 18, receives the flange 16, a band 19 clamping the mouth portion of the bag upon said flange, as best shown in Fig. 2.

The ring 14 is provided with the radial lug 20 arranged to be received within the slot 13 of the flange 12, and diametrically opposite to the lug 20, a curved lug 21 is provided. A locking hook 22 is pivoted as at 23 upon the end portion of the outlet neck 7, the hook portion 24 thereof being inwardly inclined, as shown in Figs. 2 and 7 to engage the curved lug 21 upon the ring 14.

In attaching the bag to the outlet neck of the fan casing, the gasket 25 is located around the concaved, annular flange 11 and the lug 20 is first inserted into the slot 13, the opposite side of the ring 14 being tilted slightly away from the ring 9.

The ring 14 is then tilted toward the ring 9 and the hook 22 is operated to engage the curved lug 21 upon the ring 14, drawing said ring toward the ring 9 and compressing the gasket 25 between the concaved portions 11 and 15 of the rings, forming an air-tight connection between the outlet neck and the dust collecting bag, and locking the mouth of the bag firmly upon the outlet neck.

When it is desired to remove the dust bag for the purpose of cleaning the same, it is only necessary to swing the locking hook out of engagement with the curved lug 21, after which the adjacent edge of the ring 14 may be tilted sufficiently to disengage the lug 20 thereon from the slot 13, when the mouth of the dust bag may be easily disconnected from the outlet neck of the cleaner casing.

It will be evident from the above, that the dust bag connection described herein is simple in construction and provides for easily and readily attaching the dust collecting bag to the outlet neck of the cleaner casing and removing the same therefrom, and is arranged to securely fasten the bag to the cleaner casing and provide an air-tight joint.

It will be seen that the angular handle 26 of the locking hook may be operated by the

foot in disconnecting the bag from the outlet neck or connecting the same thereto. Thus it will be obvious that the bag may be disconnected without the necessity of the operator stooping to disconnect the same by hand.

I claim:—

A fastener for suction cleaners or the like having a neck, a ring formed of sheet metal secured to the end portion of the neck, a concaved outwardly flared annular flange upon the ring, a gasket surrounding and retained by said flange, a slotted flange at the periphery of the ring, a second ring arranged to be received over said concaved flange, a concaved portion in said second ring arranged to receive the gasket, a lug upon one side of the second ring arranged to be received in said slotted flange, a lug upon the other side of the second ring, and a locking hook lying substantially flat against the neck for engaging the last named lug to clamp the second ring upon the neck.

THOMAS O. ADAMS.