May 5, 1931. D. G. SMELLIE 1,803,921

DUSTING TOOL

Filed Nov. 4, 1927

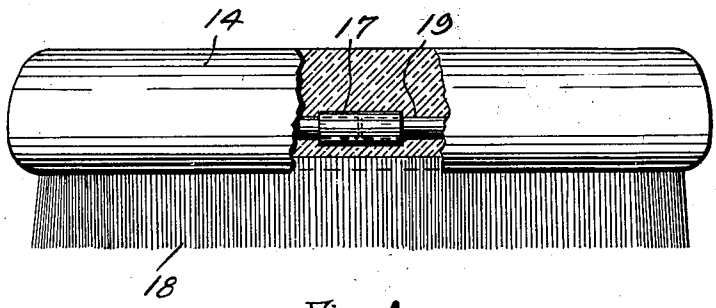


Fig. 1

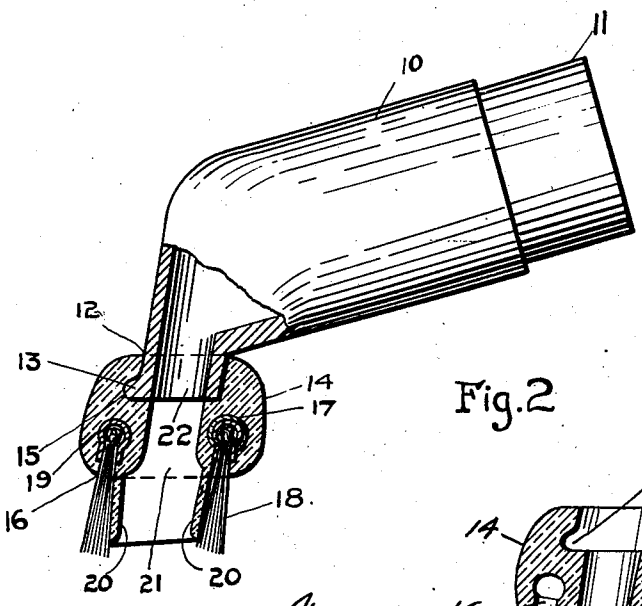


Fig. 2

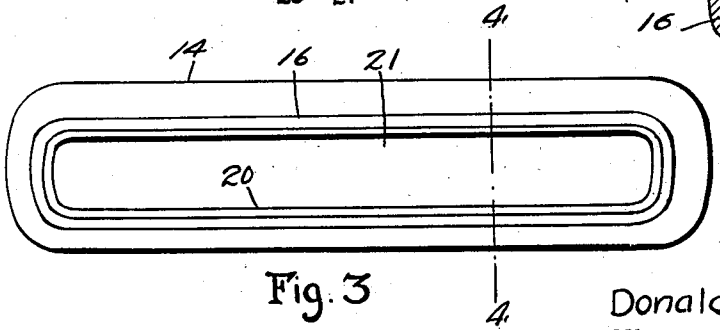


Fig. 3

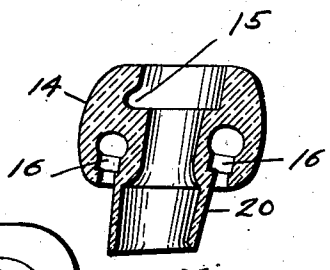


Fig. 4

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UNITED STATES PATENT OFFICE

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DUSTING TOOL

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In connection with suction cleaners, it is customary to provide means for use in connection with a hose adapted to be attached to the cleaner whereby auxiliary dust tools may be employed for cleaning furniture, draperies and the like.

The dusting tool usually comprises a nozzle member of some form which is connected through the intermediary of a hose to a cleaner, and it is the object of this invention to improve the cleaning action of this nozzle member by providing a member attachable thereto which member is so constructed as to increase the cleaning effectiveness of the dusting tool.

This member to be attached to the dusting tool comprises a brush agitator which serves to loosen the dust and dirt from the article being cleaned in order that the air stream flowing into the cleaning tool may readily carry such dirt away from the surface being cleaned.

The particular object of this invention is to provide a member for connection to the dusting tool, which serves as a furniture guard, as the means for mounting the brush, as the means for securing the brush member to the dusting tool, and as a dust deflector or air deflector to direct the stream entering the tool to accomplish its greatest cleaning effect.

The invention is shown in the drawings accompanying the specification in which;

Figure 1 discloses the dusting tool in front elevation.

Figure 2 discloses the tool in side elevation with a part broken away.

Figure 3 is a bottom plan view of the brush mounting element shown in Figure 1.

Figure 4 is a vertical sectional view upon the line 4—4 of Figure 3.

According to this invention there is provided a dusting tool comprising an attachment member 10 including a cylindrical portion 11 adapted to connect to a hose or other member, which in turn connects to a suction cleaner.

The forward portion of this dusting tool comprises a nozzle portion 12 which is relatively long and narrow as can be seen from an inspection of the drawing. The nozzle portion 12 is provided along its front edge with a bead 13 which serves a function as will be apparent as the structure is further described.

A molded one piece member 14 formed of rubber, of such shape as to correspond to the shape of the suction nozzle 12, is mounted on said nozzle and forms a part of the dusting tool. Molded in the soft rubber brush carrying member 14 is a recess 15 corresponding to the bead 13 on the nozzle lip and thus when the member 14 is mounted on the nozzle 12, through the coaction of the bead 13 and recess 15, the brush carrying member is retained thereon.

The lower face of member 14 is molded with a channel 16 having substantially parallel walls said channel extending up into the member 14 an appreciable distance and terminating in a rounded base or seat of greater diameter than the width of said channel. Positioned in channel 16 is a brush comprising bristles 18 and a back 19, the ends of which are joined by a connecting sleeve 17. The construction of the brush need not be specifically described since the particular construction thereof is not of the essence of the invention, it being sufficient for the purpose of the present description to point out that the cross-section of the back 19 is of such size and shape that when positioned in channel 16 and so within the rounded seat formed at the top thereof the walls of member 14 which form the channel 16 resiliently secure it in place. By mounting brush carrier 14 with the brush secured in place on the nozzle 12 as previously described, the dusting tool will be complete with a brushing portion.

In addition to the portion of the brush-carrying member 14 previously described is a depending portion 20 formed integrally therewith which extends completely around the opening 21 through the brush carrying member 14 which registers with opening 22 in the nozzle 12. The depending portion 20 extends down from the main portion 14 of the brush carrying member almost the entire length of the bristle tufts and serves to prevent air entering into space 21 close to

the base of the bristle tufts by causing it to pass around under the extreme outer edge of the lip 20 so that the air entering the opening 21 must pass substantially through the tip of the bristle tufts. By this construction the air current flowing into the opening 21 will flow over and through that portion of the object being cleaned with which the outer ends of the bristle tufts are in contact.

The brush-carrying member 14 is made, as aforedescribed, of soft rubber and serves amply as a furniture guard or as means to prevent the metallic parts of the dusting tool from scarring furniture while cleaning since that metallic portion of the tool which is most likely to come into contact with the finished surfaces of the furniture is well protected by the member 14.

It will be seen that there has been provided for use in a dusting tool construction a soft rubber member which has a plurality of functions. The brush retaining member not only serves as a brush mounting but it in addition serves as means for securing the brush portion to the suction nozzle; in addition it serves as an air deflector to cause the air entering the intake of the tool to pass around the lower or outer ends of the bristles in order to obtain the most effective cleaning action; the member further serves as a furniture guard.

I claim:

1. A brush mounting for a suction cleaner dusting tool comprising a body of resilient material having a passageway therethrough, said body formed with a recess opening into said passageway adapted to engage a dusting tool nozzle and with a channel encircling said passageway forming a brush-receiving seat, parallelly extending spaced walls in said body defining said seat, and a brush positioned in said seat.

2. A brush mounting for a suction cleaner dusting tool comprising a body of resilient material having a passageway therethrough, said body formed with a recess opening into said passageway adapted to engage a dusting tool nozzle and with a channel at the side of said passageway, inner and outer parallelly extending spaced walls defining said channel and forming a brush-receiving seat therebetween, said inner wall being of greater height than said outer wall and a brush positioned in said seat and extending slightly beyond said inner wall.

3. A brush mounting for a suction cleaner dusting tool comprising a body of resilient material having a passageway therethrough, said body formed with a recess opening into said passageway adapted to engage a dusting tool nozzle, an agitating brush carried by said mounting and means to restrict the flow of air entering said nozzle to the proximity of the point of contact of the agitating brush.

4. In a dusting tool, a suction nozzle, an agitating brush, resilient means connecting said agitating brush to said suction nozzle and means formed integrally with said connecting means to restrict the flow of air into the suction nozzle to the proximity of the point of agitation of the agitating brush.

5. In a dusting tool, a suction nozzle, an agitating brush, resilient means connecting said agitating brush to said suction nozzle and means formed integrally with said connecting means to restrict the flow of air into the suction nozzle to the proximity of the point of agitation of the agitating brush, said means comprising a relatively thin flexible wall extending parallel to said agitating brush.

Signed at New York city in the county of New York, and State of New York, this 26th day of October, A. D., 1927.

DONALD G. SMELLIE.