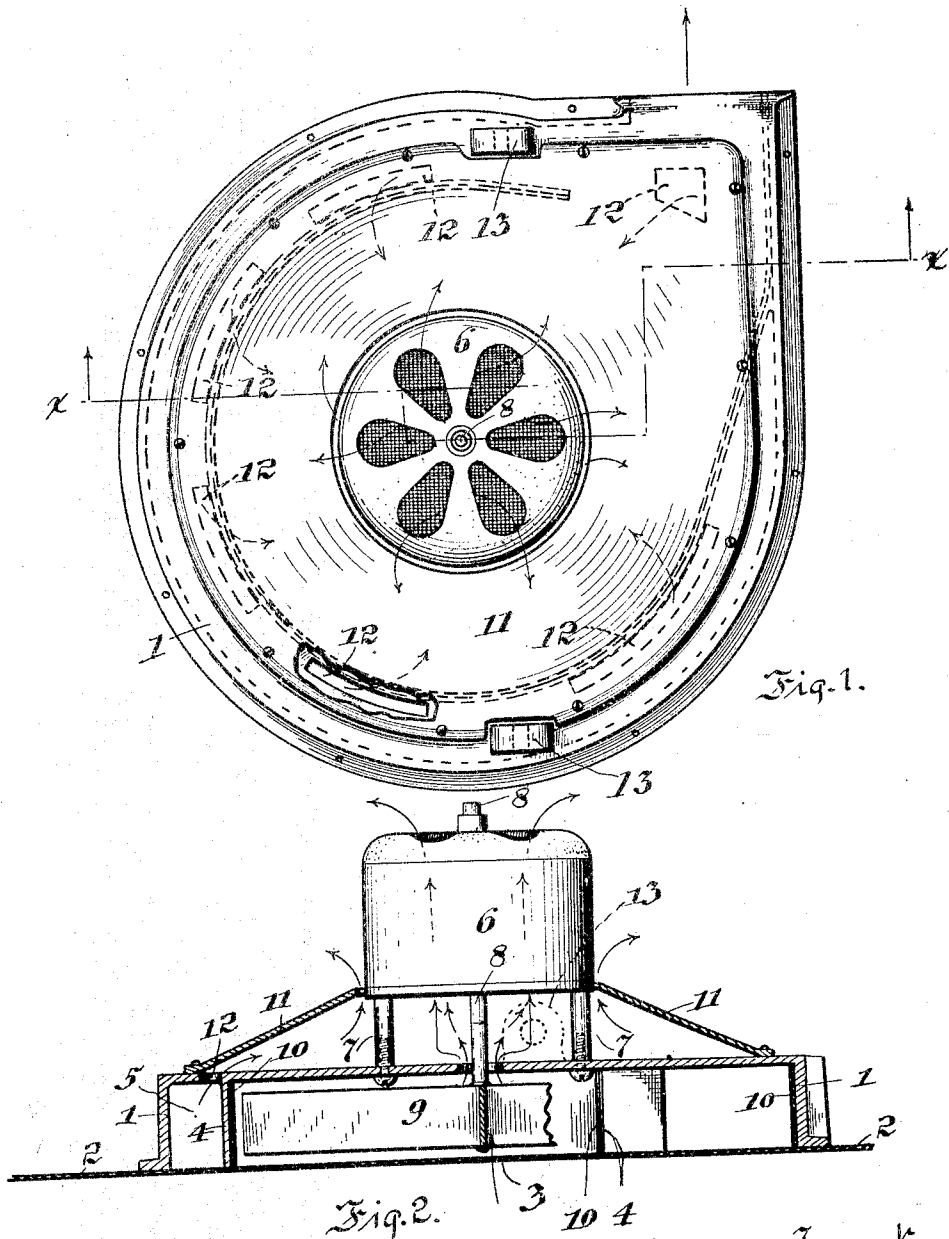


S. S. RUMBERG.
FAN.
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1,035,240.



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UNITED STATES PATENT OFFICE.

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FAN.

1,035,240.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, SVEN S. RUMBERG, a citizen of the United States, and a resident of the city of Batavia, county of Kane, and State of Illinois, have invented certain new and useful Improvements in Fans, of which the following is a specification.

My invention relates to improvements in fans especially adapted for use in conjunction with vacuum cleaners and has for its object the provision of a fan for this purpose which is of improved construction and efficient in operation.

The invention consists in the combinations and arrangements of parts herein-after described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a partial top plan view of a fan embodying my invention, and Fig. 2, a section of the fan taken on line *x-x* of Fig. 1.

The preferred form of construction as illustrated in the drawing comprises a fan casing 1 adapted to be secured to the top of a vacuum cleaner having a central opening 3 leading to said fan casing. A flange 4 depends from the top of casing 1 and forms an annular air chamber 5 adjacent the outside of said casing. An electric motor 6 is secured to the top of casing 1 by means of posts or legs 7 as indicated and the motor shaft 8 is extended into fan casing 1 through a central aperture in the top thereof. A centrifugal fan 9 is mounted upon the lower end of motor shaft 8 in casing 1 and within flange 4, said flange being provided with a fiber lining 10 to deaden the noise of operation. A housing 11 is secured to the top of casing 1 and partially encompasses motor 6 as indicated, openings 12 being provided in the top of casing 1 to establish communication between air chamber 5 and the interior of said housing. Lugs 13 are provided on casing 2 at either side for the attachment of a handle for facilitating the operation of the vacuum cleaner.

In use the air is drawn through the

vacuum cleaner and passes to chamber 1 through opening 3. Air from fan 9 passes into chamber 5 whence it escapes through openings 12 into the interior of housing 11 and passes around motor 6 keeping the same cool.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I therefore do not wish to be limited to the precise details of construction as set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. A device of the class described comprising a fan casing open at the bottom and adapted to be secured to the top of a vacuum cleaner, there being a central opening in the top of said casing; a motor mounted upon the top of said casing with its shaft extending through said opening; a fan on said shaft in said casing; a housing surrounding the lower portion of said motor, there being a space between the upper end of said housing and said motor; and a depending flange in said casing forming an annular air chamber in said casing surrounding said fan, said chamber being closed at one end and open at the other end, there being openings in the top of said casing leading from said air chamber into said housing, substantially as described.

2. A device of the class described comprising a fan casing open at the bottom and adapted to be secured to the top of a vacuum cleaner, there being a central opening in the top of said casing; a motor mounted upon posts on the top of said casing, with its shaft extending through said opening; a fan on said shaft in said casing; a frusto-conical housing surrounding said posts and the lower portion of said motor, there being a space between the upper end of said housing and said motor; and a depending flange in said casing forming an annular air

chamber in said casing surrounding said fan, said chamber being closed at one end and open at the other end, there being openings in the top of said casing leading from said air chamber into said housing, substantially as described.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

SVEN S. RUMBERG.

Witnesses:

CHARLES MICHOLSEN,
CHARLIE ANDO.