

R. GOBER.
VACUUM CLEANER DUST ARRESTER.
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1,007,555.

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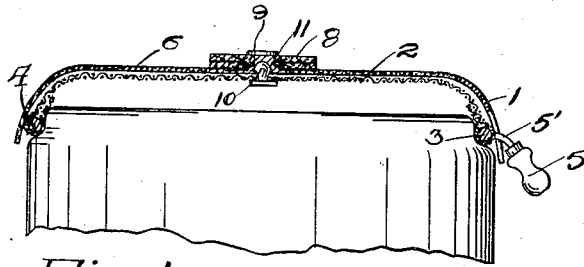


Fig. 1.

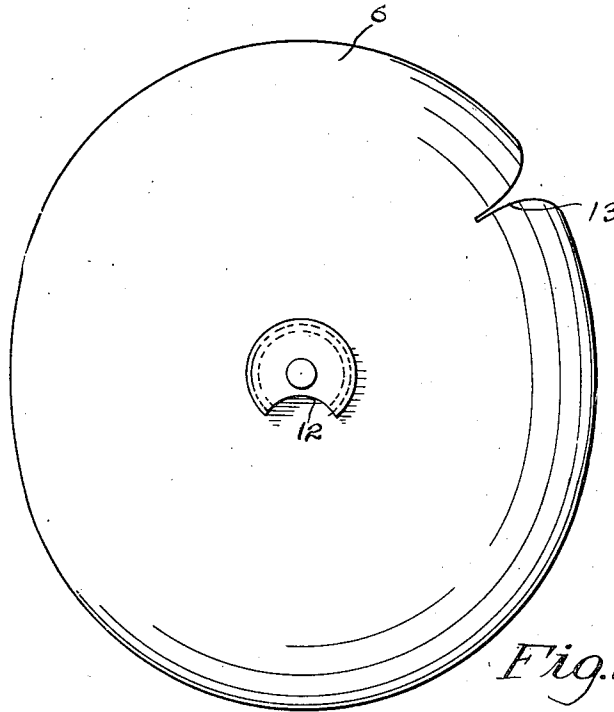
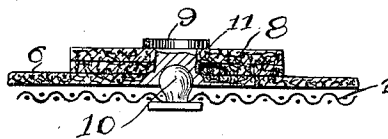


Fig. 2.

Fig. 3.



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Witnesses

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UNITED STATES PATENT OFFICE.

RICHARD GOBER, OF ALAMEDA, CALIFORNIA.

VACUUM-CLEANER DUST-ARRESTER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RICHARD GOBER, a citizen of the United States, residing at Alameda, in the county of Alameda and State of California, have invented certain new and useful Improvements in Vacuum-Cleaner Dust-Arresters, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to vacuum cleaners which are employed to remove and collect dust from carpets, floors, and floor coverings, and has special reference to that class of vacuum cleaners by means of which dust is drawn up by vacuum in the cleaner from carpets or other floor covering over which the cleaner is moved, and is carried to and deposited in a dust collecting chamber.

The object of this invention is to provide means whereby the very fine dust which ordinarily filters through the screen or fabric through which the air escapes from the cleaner will be caught and prevented from escaping from the cleaner.

Referring to the accompanying drawing:—Figure 1 is a view of the upper end of the dust collector of a vacuum cleaner and the fabric secured over the opening in the end of said dust collector with a second fabric extending over said fabric for retaining fine dust passing through the first named fabric, said fabric being shown in cross section. Fig. 2 is a plan view of the dust collecting fabric which is mounted over the inner fabric shown in Fig. 1. Fig. 3 is a view in cross section of the central portion of the device shown in Fig. 2.

1 indicates the upper end of the dust collector of a vacuum cleaner, and 2 the fabric which is secured to and extends over the open end of the dust collector and serves for the passage of air passing through the same from the dust collector. The fabric 2 is secured to the frame of the dust collector in any suitable manner, and as here shown preferably by means of a wire hoop 3 over which is folded the edge of the fabric 2, the wire hoop 3 of the folded edge of the fabric being seated in a groove 4 in the neck of the dust collector 1. In order to remove the fabric 2 suitable means may be provided, as for example, a handle 5 having a stem 5' which is secured to the hoop 3. Extending over the fabric 2 is a second fabric 6, preferably of felt or other moisture retaining material and

which will not permit the passage of dust through the same, having its edge 7 projecting beyond the hoop 3, the fabric 6 resting against said hoop and being slightly raised from the fabric 2. The central portion of the fabric 6 is provided with a thickened part 8 which is preferably formed of a number of layers of felt secured together by a rivet 9. Centrally secured to the fabric 2 is a knob 10 which projects into a recess 11 in the thickened portion 8, and holds the fabrics 2 and 6 slightly apart. The thickened part 8 is formed at one side with a cutaway recessed portion 12 which is adapted to receive the end of a finger whereby the fabric 6 may be lifted off of the fabric 2 and out of engagement with the knob 10.

The device hereinbefore described operates as follows:—The fabric 6 being thoroughly wet is placed over the regular fabric 2. The air passing from the dust collector passes through the fabric 2, and by its pressure slightly raises the fabric 6 thereby giving air free passage between the fabrics 2 and 6 out between the edges thereof. The fine dust which is carried by the air through the fabric 2 impinges against the moistened fabric 6 and is retained thereon. The fabric 6 is formed in its edge with a notch 13 through which is adapted to extend the stem 5' of the handle 5 when the fabric 6 is located over the fabric 2.

What I claim is:—

1. In a vacuum cleaner, a dust collector having an opening, a fabric secured over said opening for the passage of air through said fabric, and a fabric impervious to the passage of dust extending over said first named fabric, and separable therefrom by the air passing through the first mentioned fabric to permit the escape of air laterally between said fabrics.

2. In a vacuum cleaner, a dust collector having an opening for the passage of air, a fabric mounted over said opening for the passage of air through the same, a second fabric impervious to the passage of dust extending over and centrally secured and loosely mounted upon said first named fabric and slightly spaced therefrom at their edges for the escape of air, and adapted to be moistened and retain the moisture and serving to retain fine dust carried through said first named fabric by the passage of air.

3. In a vacuum cleaner, a dust collector

having an opening for the passage of air, a fabric over said opening for the passage of air to said fabric, and having a central knob and a second fabric extending over and centrally secured and loosely mounted upon said first named fabric and slightly spaced apart from the same at their edges for the escape of air, and engaging said knob, and adapted to be moistened to retain fine dust and to permit the passage of air between said fabrics and out between their edges.

4. In a vacuum cleaner, a dust collector having an opening for the passage of air, a fabric mounted over said opening, and adapted to have air passing through the same, and provided with a central knob, a second fabric extending over and centrally secured and loosely mounted upon said first mentioned fabric, and having a central fixed portion with a recess engaging said knob, and means for seizing said thickened portion to remove said fabric, said fabrics being slightly spaced apart from each other at their edges for the escape of air, and the upper fabric being adapted to be raised from

the other fabric by the passage of air to permit the escape of the same.

5. In a vacuum cleaner, a dust collector having an opening for the passage of air, a fabric having its edge provided with a hoop detachably secured to said dust collector about its opening, said fabric extending over said opening and adapted to permit the passage of air through the same, said hoop having a handle with a stem engaging said hoop, and a second fabric extending over and centrally secured and loosely mounted upon and slightly spaced from said first fabric at their edges for the escape of air, and adapted to retain dust and separable from said first named fabric by the passage of air between said fabrics, and out between their edges.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

RICHARD GOBER.

Witnesses:

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