

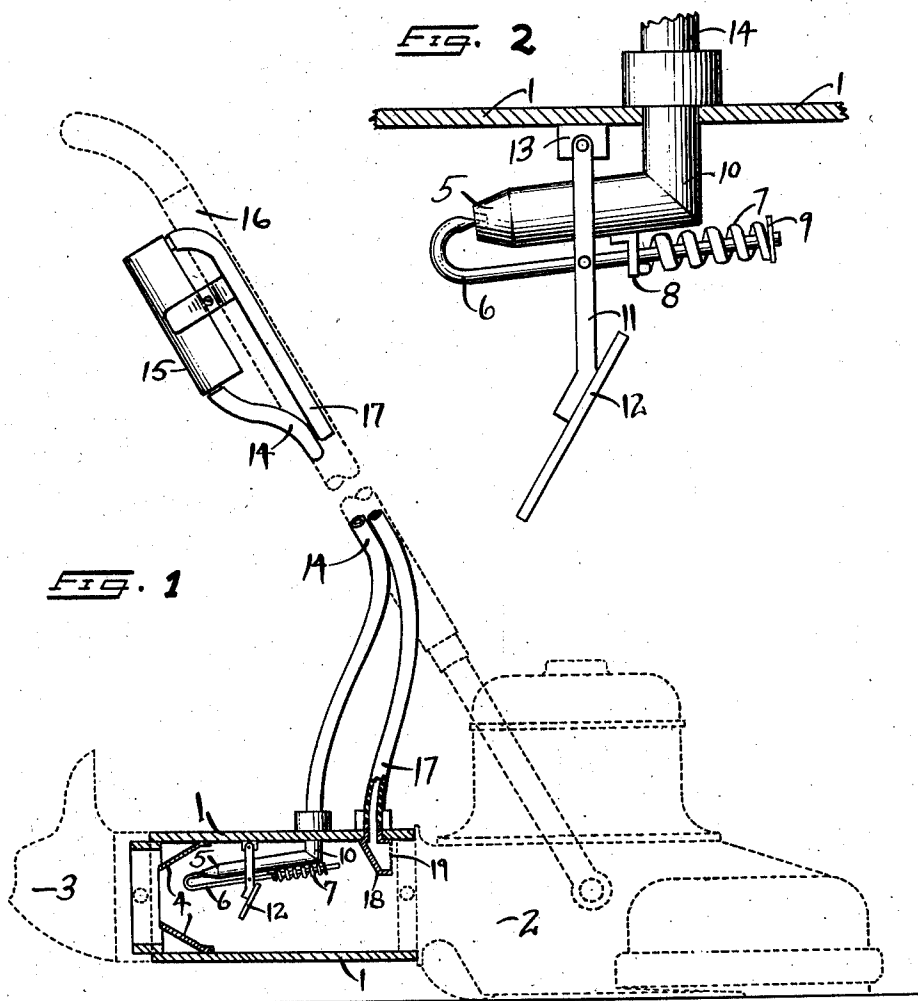
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DUST DAMPENER FOR VACUUM CLEANERS

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DUST DAMPENER FOR VACUUM CLEANERS

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2 Claims. (Cl. 183-10)

This invention relates to a dust damper attachment for a sweeper.

The principal object of this invention is to provide means for dampening the dust being blown into the dust bag of an electric sweeper.

A further object of this invention is to provide a dust dampening attachment that may be readily attached to any electric sweeper.

In this invention I have provided suitable means for dampening the dust entering the dust bag of an electric sweeper through using either oil or water which is provided from a small reservoir positioned on the handle of the sweeper. I have provided a simply operating valve positioned in a cylindrical housing adapted to be attached to an electric sweeper between the sweeper and the dust bag. The air blast from the sweeper opens the valve which allows the water or oil to spray into the dust being forced into the dust bag.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawing, wherein:—

Figure 1 is a view of the device with parts broken away and showing parts in cross section, the entire device being shown positioned upon a sweeper.

Figure 2 is an enlarged detail view of the valve operating and spraying means.

By referring to the drawing it will be seen that there is provided a cylindrical housing 1. This cylindrical housing 1 is adapted for attachment between a sweeper 2 and the dust bag 3. The cylindrical housing 1 has provided within it a reducing flange 4, a spray nozzle 5, and a valve plunger 6, one end of which is adapted to operate within the spray nozzle 5 and the other end having positioned upon it a spring 7. The spring 7 is held in position upon the valve plunger 6 by means of an inverted L-shaped bracket 8 and a collar 9. The bracket 8 is positioned upon a body portion 10 of the spray nozzle 5. The valve plunger 6 is operated by means of an operating arm 11 which has positioned upon its lower end a disk 12. The other end of this

operating arm 11 is pivoted to a bracket 13 on the cylindrical housing 1.

A flexible connecting hose 14 is attached to the upper section of the body portion 10 and leads to a reservoir 15 which is clamped on the handle 16 of the sweeper. An additional flexible connecting hose 17 leads from the top of the reservoir 15 to a funnel shaped member 18 positioned within the cylindrical housing 1. This member 18 is provided with a screen 19.

In operation the device acts as follows:—

The air blast from the sweeper pushes against the disk 12 causing the arm 11 to swing backwardly, thus moving the valve plunger 6 and opening the spray nozzle 5. A fine spray of oil or water is thus projected directly at the opening in the reducing flange 4. At this point the oil or water spray mixes thoroughly with the dust and is forced on into the dust bag 3. The spray is partially caused by the blast of air past the spray nozzle 5 and partially by pressure built up within the reservoir 15 by means of the flexible connecting hose 17 and the funnel shaped member 18 which is positioned within the path of the air blast.

What I claim is:—

1. A dust dampener for vacuum cleaners comprising a cylindrical housing adapted to be positioned between the sweeper and the dust bag, a spray nozzle positioned within said cylindrical housing, an air controlled valve on said spray nozzle adapted to open said spray nozzle when the sweeper is in operation, a reservoir positioned on said sweeper, a flexible hose connecting said spray nozzle to said reservoir, together with a secondary hose connecting said reservoir to an air intake positioned within said cylindrical housing.

2. A dust dampener for vacuum cleaners comprising a cylindrical housing adapted to be positioned on the dust outlet of a vacuum sweeper, a spray nozzle positioned within said cylindrical housing, an air controlled valve on said spray nozzle adapted to open said spray nozzle when the sweeper is in operation, a reducing flange also positioned within said cylindrical housing so as to direct the dust to an area directly in front of said spray nozzle, a reservoir positioned on said sweeper, a flexible hose connecting said spray nozzle to the bottom of said reservoir together with a secondary hose connecting the top of said reservoir to an air intake positioned within said cylindrical housing.

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