

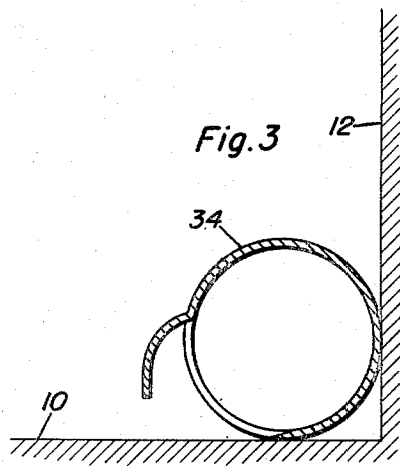
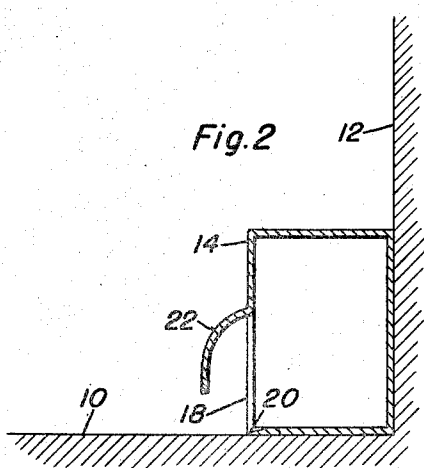
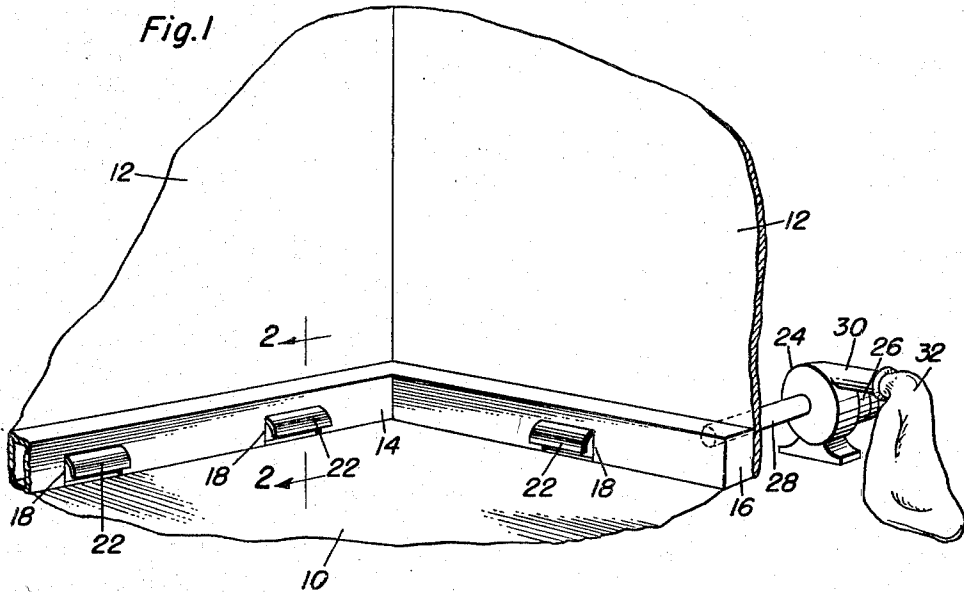
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ROOM VACUUM CLEANING SYSTEM WITH BASEBOARD DUCTS

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ROOM VACUUM CLEANING SYSTEM WITH BASEBOARD DUCTS

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2 Claims. (Cl. 302-27)

1

This invention relates to new and useful improvements and structural refinements in vacuum cleaning systems, and the principal object of the invention is to provide a system of the character herein described, which may be conveniently and effectively employed for the removal of dust, loose hair, or the like, from floors of barber shops, beauty parlors, doctors' offices, hospital rooms, or any other hard-surfaced floors.

The above object is achieved by the provision of a duct on the floor at lower edges of side walls of a room which is to be maintained in a clean, sanitary condition, the duct having a plurality of intake openings and being connected to the inlet of a motor driven blower, so that air is continually exhausted from the duct and dust or other foreign matter is drawn into the duct from the room, particularly from the floor of the room, by atmospheric pressure.

Some of the advantages of the invention reside in its extreme simplicity of construction, in its efficient and dependable operation, and in its adaptability for installation in rooms of different sizes and types.

With the above more important objects and features in view and such other objects and features as may become apparent as this specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a fragmentary perspective view showing a corner portion of a room having the invention installed therein,

Figure 2 is a fragmentary sectional detail, taken substantially in the plane of the line 2-2 in Figure 1, and

Figure 3 is a fragmentary sectional detail, similar to that shown in Figure 2, but illustrating a modified embodiment of the invention.

Like characters of reference are employed to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, in Figure 1 there is shown a room having a floor 10 and a plurality of side walls 12, the invention residing in the provision of a vacuum cleaning system which comprises a duct 14 extending on the floor 10 at the lower edges of the side walls 12, as shown.

The duct 14 may extend perimetrically around the room or may be of a comparatively shorter length, in which event the ends of the duct are closed by suitable caps, as indicated at 16.

In either event, the duct 14 is provided at lon-

2

gitudinally spaced points with a plurality of horizontally elongated intake openings 18 which are disposed as close as possible to the floor 10 so as to facilitate entry of dust, loose hair, etc., into the duct. If desired, portions of the duct at lower edges of the openings 18 may be tapered downwardly to the surface of the floor, this being illustrated at 20 in Figure 2. Moreover, to concentrate the "suction" effect on the floor, arcuate shields 22 may extend downwardly from upper edges of the openings 18 in the duct, the lower edges of the shields 22 being spaced outwardly from the duct and upwardly from the floor, as shown.

A conventional blower 24, driven by an electric motor 26, may be installed in any suitable location outside the room and has an inlet 28 extending through one of the side walls 12 so as to communicate with the duct 14. The outlet 30 of the blower 24 communicates with a dust bag or receptacle 32, of any suitable type.

When the invention is in operation, the blower 24 will continually exhaust air from the duct 14, so that atmospheric pressure existing in the room defined by the floor 10 and the walls 12 will force dust, loose hair, etc., through the intake openings 18 into the duct 14 and then through the blower 24 into the receptacle 32 for subsequent disposal.

In the embodiment of the invention shown in Figures 1 and 2, the duct 14 is substantially rectangular in cross section, but in the modified embodiment shown in Figure 3, the duct 34 is substantially circular in cross section, being constructed of tubular members, if such construction is preferable.

It is believed that the advantages and use of the invention will be clearly understood from the foregoing disclosure and accordingly, further description thereof at this point is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that minor changes in the details of construction and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

Having described the invention, what is claimed as new is:

1. A vacuum cleaning duct including a bottom wall and a front wall provided with a rectangular inlet opening having its lower edge continuous with the front edge of said bottom wall, the bottom wall being provided with a forwardly and downwardly tapered front edge portion, and an

3

arcuate shield disposed exteriorly of said duct, said shield being connected to said front wall at the upper edge of said opening and extending downwardly and forwardly therefrom.

2. In combination with side walls and a floor defining a room, a vacuum cleaning system comprising a duct positioned on said floor at lower edges of said side walls, said duct including a bottom wall and a front wall provided with rectangular inlet openings having their lower edges continuous with the front edge of said bottom wall, the bottom wall being provided with forwardly and downwardly tapered front edge portions, and arcuate shields disposed exteriorly of said duct, said shields being connected to said front wall at the upper edge of said openings and extending downwardly and forwardly therefrom, a motor driven blower being connected to said duct whereby to exhaust air therefrom and draw dust therein through said openings by

4

virtue of atmospheric pressure in said room, and a dust receptacle provided on the outlet of said blower.

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