 UNITED STATES PATENT OFFICE.

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DUST-COLLECTING SCREEN.

1,056,722.


To all whom it may concern:

Be it known that I, JACOB ADLER, a citizen of the United States, residing at Ridgefield Park, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Dust-Collecting Screens; and I do hereby declare the following to be full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to window screens and more particularly to that class wherein particles of dust in a current of air passing therethrough are collected by the screen.

An object of my invention is to provide a screen to collect the dust in a current of air passing therethrough, said screen having a provision for easily cleaning the dust therefrom.

A further object of my invention is a screen intended for the purpose above described and having a removable portion which may be cleaned and replaced.

A further object of my invention is a screen having a dust collecting member which member is adapted to be saturated with a non-evaporating liquid.

Further objects will be apparent from the following specification, appended claims and drawings in which,

Figure 1 is an elevation of a screen constructed in accordance with my invention, Fig. 2 is a vertical sectional view thereof through as on the line 2—2 of Fig. 1, Fig. 3 is an elevation of the dust collecting member, Fig. 4 is an enlarged detailed view of a portion of the dust collecting member, and, Fig. 5 is a sectional view through a modified form of my invention.

Referring more specifically to the drawings there is shown a frame comprising the side bars 10, lower cross bar 11 and upper cross bar 12, the upper cross bar 12 being slotted as at 13 to receive a removable frame 14 which frame comprises a strand of metal or the like formed in the desired shape to slide through the slot 13 and a ply of coarse woven fabric 15 is secured to the frame 14.

As shown in Fig. 4 of the drawings a fabric 13 is formed of strands of coarse and linty textile which fabric is adapted to be saturated with a non-evaporating liquid such as oil. The weave of the fabric 15 permits a current of air to pass through the openings between the strands of textile and the lint extending from said strands collects the particles of dust thereon, owing to the light particles of dust adhering to the moistened lint.

The side bars 10 of the frame may be provided with guides 16 to receive the frame 14 and secured to the opposite faces of the members comprising the frame that is the side bars 10, the lower and upper bars 11 and 12 respectively, is secured the screening 17 which screening may be of the usual type but it is held spaced from the screening 15 so that the oil or other non-evaporating liquid carried by the screening 15 cannot damage articles contacting with the screening 17.

The screen is supposed to be placed in an open passage way and after the same has been in use sufficiently long as to cause an undesired coating of dust upon the screening 15, the frame and screening 15 may be removed and with an oiled brush of any type, the dust may be removed from said screen and at the same time a new supply of non-evaporating liquid applied thereto after which said screen may be replaced for further usage.

The modified form shown in Fig. 5 comprises a frame 18 to which two plies of screening 19 are attached and between which a movable brush or roller 20 is adapted to pass, which brush normally rests within a reservoir 21 which reservoir is adapted to contain a non-evaporating liquid. The brush 20 has a cord or chain 22 secured thereto and as said brush is moved across the screening, dust collected by said screening is removed and a fresh coating of lubricant applied thereto.

I am aware that various modifications may be made within the scope of my invention and I do not restrict myself to the identical forms shown as they are submitted for illustrative purposes only, and

Having thus described my invention, I claim:

1. In a dust collecting screen, a frame, screening secured thereto, a vertically movable frame in said first mentioned frame, a coarse textile screening secured to said second mentioned frame, said coarse textile screening having linty surfaces so as to have strands of lint to partly cover the mesh of said screening, said textile screening being saturated with a non-evaporating liquid.

2. In a dust collecting screen, a frame,
screening secured thereto, a second frame vertically sliding in said first mentioned frame, a screening of coarse linty textile carried by said second frame and spaced from the screening secured to said first mentioned frame, said screening secured to said vertically slideable screen being saturated with a non-evaporating liquid and said vertically slideable screen being removable from said first mentioned screen for cleaning.

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

JACOB ADLER.

Witnesses:

HUGO MOCK,

GEORGE L. THOM.