Aug. 23, 1955 T. M. COLES 2,715,742

COMBINED BRUSH AND ADHESIVE DEVICE FOR REMOVING LINT AND DUST FROM FABRICS

Filed April 10, 1950

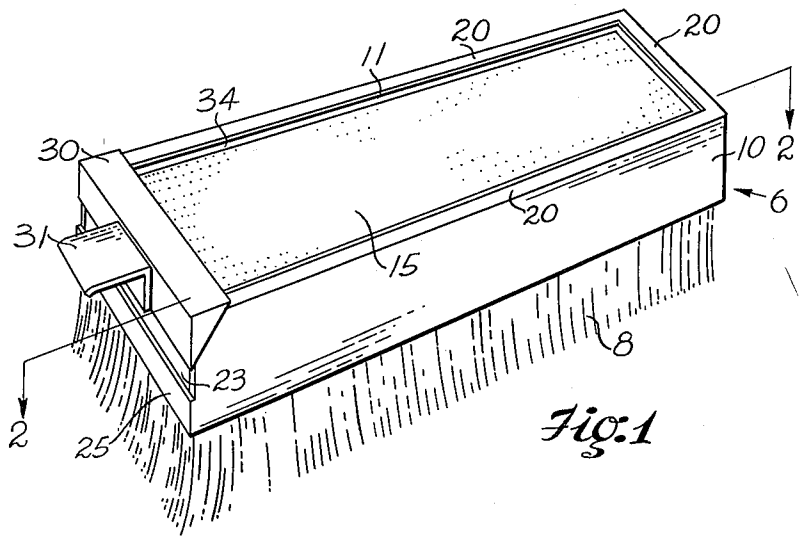


Fig. 1

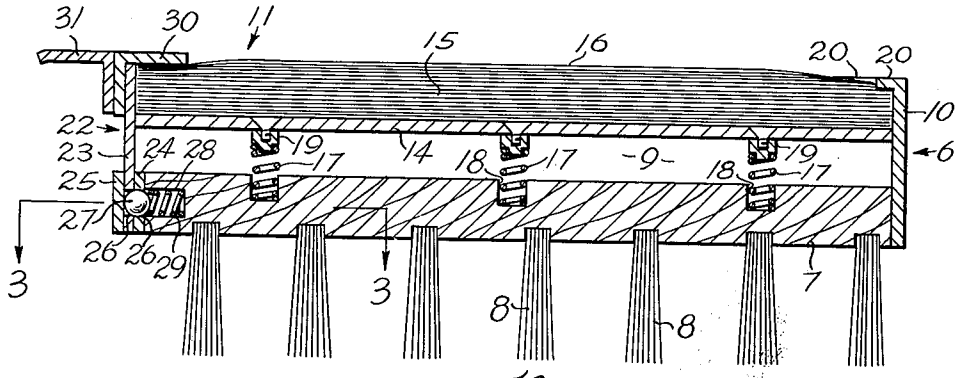


Fig. 2

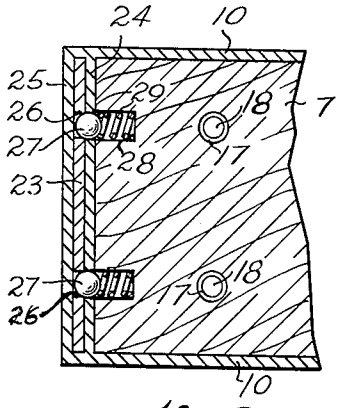


Fig. 3

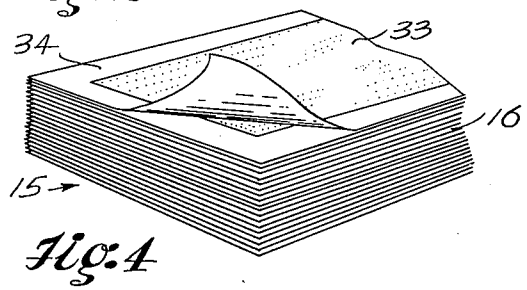


Fig. 4

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United States Patent Office 2,715,742 Patented Aug. 23, 1955

2,715,742

COMBINED BRUSH AND ADHESIVE DEVICE FOR REMOVING LINT AND DUST FROM FABRICS

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Application April 10, 1950, Serial No. 154,977

2 Claims. (Cl. 15—105)

This invention relates to a device for cleaning clothes, partaking of the nature of a clothes-brush, and has as an object the provision of a clothes-cleaner capable of removing lint and other particles which have a tendency to cling to the nap of cloth and are difficult to remove by ordinary brushing.

It is another object of the invention to provide a clothes-cleaner in which a pad or stack of lint-removing laminae is combined in an expendable and replaceable manner with a brush of more or less conventional form, in order that the brush may form a permanent toilet article and a holder for the lint-removing laminae, and the latter may be removed and discarded in individual sheets when their functional capacity has been exhausted.

The invention possesses other objects and useful advantages which will be pointed out as the following description of a preferred embodiment proceeds or will be apparent from that description considered in connection with the accompanying drawing illustrative of that embodiment, in which:

Figure 1 is a perspective view of my improved clothes-cleaner;

Figure 2 is a vertical longitudinal sectional view on the plane of section indicated by the line 2—2 of Figure 1;

Figure 3 is a fragmentary horizontal sectional view on the plane of section indicated by the line 3—3 of Figure 2; and

Figure 4 is a fragmentary perspective view of a pad of laminae, showing a preferred application of lint-removing surface-coating thereto.

Broadly described, the preferred embodiment of my invention may comprise a clothes brush having an elongated back serving as a handle, on one side of which are the usual bristles and on the other side of which is a pad or stack of tacky sheets, arranged to have the top sheet removed and discarded when it has been used to capacity. The stack is held in a recess in the brush-back in a resilient manner which maintains the top sheet substantially in the outer plane of the brush-back, and the margins of the individual sheets are preferably left free of tacky material so that they may be held by the margins of the recess and yet be easily released to remove a sheet.

Having reference now to the details of the drawing, I have shown a brush body 6, which in the conventional manner includes a back 7 in which are set bristles 8. The brush body 6 may be of any convenient shape but preferably is of the conventional elongated form of a clothes brush. The body 6 also includes a box-like frame 10 which may be integral with the back 7, for example, being left as upstanding walls by hollowing out the back 7, but which preferably for economy in manufacture is made separate and is suitably secured to the back 7. The walls of the frame 10 form a recess 9, opening as shown at 11 oppositely to the bristles 8. The frame 10 and back 7 jointly form a handle by which the brush may be grasped and manipulated.

Within the recess 9 is a plate 14 which serves as a backing or support for a stack 15 of tacky sheets 16. The

backing plate 14 is resiliently supported on springs 17 set in suitable sockets 18 in the back 7 and guided by and on plugs 19 secured to the plate 12. The springs 17 are selected to be capable of lifting the plate 14 to the upper limits of the recess 9 with some reserve tension, and yet to be compressible within the sockets 18 so that substantially the full depth of the recess is available above the plate 14 as storage space for the stack 15. Narrow flanges 20 extending inwardly from the frame 10 define the opening 11 and hold the stack 15 from being ejected therefrom by the springs 17.

An end wall of the recess 9 has an opening 22 provided with a gate 23 through which the stack may be inserted into and withdrawn from the recess. Parallel and spaced strips 24 and 25, on the end of the brush-back 7, receive and guide the lower edge of the gate 23 which is arranged to slide between them. The gate 23 and the inner strip 24 are provided with holes 26 which are aligned when the gate is closed. Ball-latches 27 mounted in sockets 28 in the end of the brush-back 7, and urged outwardly by springs 29, engage the holes 26 in the gate 23 when the gate is closed, to hold the gate, and yield to permit opening of the gate. The upper margin of the gate is provided with an angle-bar 30 which encloses the adjacent corners of the frame 10 to reinforce the frame and supports a handle 31 for manipulating the gate.

The stack 15 of sheets 16 may be either discrete sheets or may be a pad of bound sheets, the sheets in either case being separable. The sheets 16 may be impregnated with any suitable tacky substance, for example, such as is used to impregnate adhesive tape, but preferably with a substance giving the sheets the quality of masking tape, by which it will be understood that the sheets will adhere to a surface against which they are pressed, but lightly so as to readily disengage from such surface. It will be obvious that a high degree of stickiness, as that of Scotch tape, is not requisite or desirable, as the function of the sheets is merely to lift lint and like particles and not to adhere to or raise the nap of cloth. The tacky substance is preferably applied only to the central portion of the sheets 16, as shown at 33 in Figure 4, leaving a marginal strip 34 around each sheet free of tacky coating. The marginal strip 34 is of such width that the flanges 20 bear thereon and not on the tacky coated central portion 33. The sheets 16 are collectively soft enough to be slightly compressible so that expansive tension of the springs 17 will cause the margins of the stack 15 to be compressed against the flanges 20, the central portion of the stack then relatively puffing outwardly so as to be disposed at or beyond the outward plane of the flanges 20, as shown in Figure 2. The flanges 20 may be made relatively considerably thinner than shown in Figure 2 for purposes of clear illustration, in order to allow the outer sheet 16 to be substantially flush with the outer plane of the flanges when only a few sheets remain in the stack and the compressibility of the stack is correspondingly reduced. The plate 14 prevents the springs 17 from pushing the stack outwardly in an uneven or excessive manner.

The method of operating my improved clothes cleaner is so obvious as not to require detailed description, either the brush bristles 8 or the outer sheet of the stack 16 being applied to the cloth to be cleaned, as circumstances require. No particular method of grasping the brush-body 6 is necessary, nor any particular method of manipulation, although long light sweeping strokes will be found advantageous when the sheets 16 are used to remove lint.

When an outer sheet 16 has been used to its capacity, it may be removed from the stack, to expose a successive fresh sheet. To remove a single sheet from the stack, the gate 23 is pulled from its engagement with the ball-latches 27 and removed from the end of the frame 10. The stack 15 is then pushed down to free the margins 34

of the outer sheet **16** from the flanges **20**. The end of a finger may then be passed through the opening **22** and inserted between the end margins **34** of the outer sheet and the next sheet, thus providing a finger grip by which the outer sheet may easily be lifted and removed from the stack. A new stack of sheets **16** may be inserted in the same way through the opening **22**, pressure being applied first to the plate **14** and then to the new stack to allow the new stack to enter the recess **9** below the flanges **20**.

I wish it understood that the foregoing description and the drawing illustrative thereof are submitted by way of example, and that the spirit and scope of the invention is to be interpreted as being limited only by the appended claims.

I claim:

1. In a device for removing lint and like particles from fabric surfaces: a stack of separable flexible fibrous sheets having their central portions coated with tacky material and having uncoated marginal portions; a rigid backing for said stack; a brush, inclusive of a handle backing the bristles of said brush, said handle having a recess opening oppositely to said bristles for receiving said stack and said rigid backing; flanges on said handle marginally diminishing the area of the open side of said recess for engaging the uncoated marginal portions of said sheets while leaving the coated central portions of said sheets exposed; means reactant between said handle and said backing for resiliently holding said stack in contact with said flange means; and a gate at one end of said recess for admitting said stack to said recess.

2. In a device for removing lint and like particles from fabric surfaces, the combination of: a brush, a body for said brush having a recess opening oppositely to the bristles of said brush and open at one end of said body; a stack of separable tacky sheets adapted to be inserted in said recess through said one open end; flanges on the margins of said recess extending convergently in the plane of the opening of said recess, said flanges being narrow so as to engage only the margins of the top sheet of a stack of sheets held in said recess; and resilient means urging said stack outwardly from said recess oppositely to said bristles said stack being collectively compressible so as to yield centrally to said resilient means when held marginally by said flanges, whereby the central portion of said stack may be puffed outwardly beyond the plane of said flanges.

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