

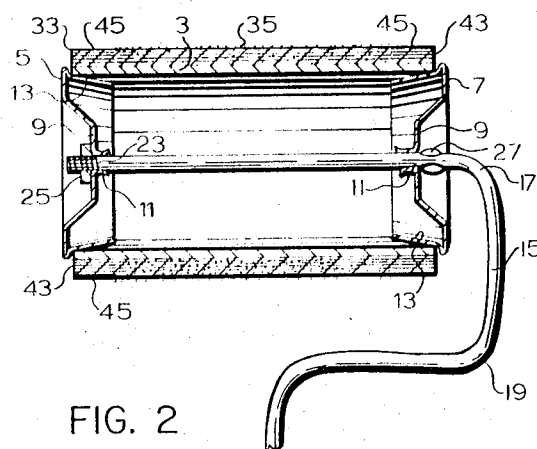
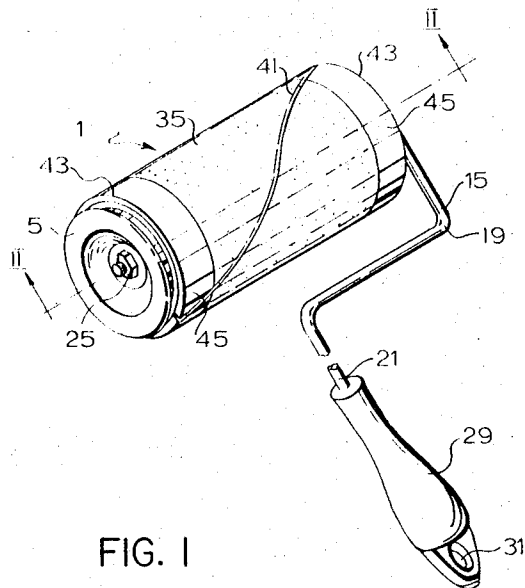
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LINT REMOVER

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LINT REMOVER

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This invention relates to a lint remover, and in particular to a roller device for cleaning fabric.

Generally, clothing manufactured of such materials as wool and synthetic fibers has a strong affinity to picking up small particles such as tobacco ash, paper and dust, all of which will be referred to hereinafter as lint. There are various devices presently commercially available, for removing lint from articles of clothing. Such devices include hollow rollers having a slot therein and a roll of pressure sensitive adhesive tape within the roller, which tape extends through the slot and is around the roller so that its tacky surface faces outwardly. The roller is also provided with a handle which can be used to move the roller over an article of clothing in order to permit the removal of lint by the tape.

It has been found that such fabric cleaning devices are often difficult to use since, once the exposed surface of the tape has been used, it is difficult to renew the surface. For example, when renewing the surface of the tape, the exposed end of the tape must be located and gripped to permit further unrolling of the tape and this can be somewhat difficult if the tape is wound tightly around the roll. Furthermore, when removing a layer of tape, considerable force must be applied since in effect, the outer layer of tape is held by each of the remaining layers of tape.

The object of the present invention is to overcome the above-mentioned difficulties by providing a lint remover in which the outer layer of tape is easily removed.

Accordingly, the present invention relates to a lint remover comprising a roller; a handle on which said roller is rotatably mounted; a strip of pressure sensitive adhesive material, wound around said roller, having an exposed tacky surface; the exposed surface of said material being non-adhesive adjacent the marginal side edges thereof to facilitate the gripping of the outer layer of said material thereby permitting relatively easy unwinding of said outer layer.

The invention is illustrated, by way of example, in the accompanying drawings in which:

FIGURE 1 is a perspective view of a lint remover constructed in accordance with the present invention;

FIGURE 2 is a cross-section view taken along line II—II of FIGURE 1.

With reference to the accompanying drawings, the lint remover generally indicated at 1 includes a hollow cylindrical roller 3 of fibre board, plastic or the like having end plates 5 and 7 mounted therein. Each of the plates 5 and 7, as best shown in FIGURE 2, are generally disc shaped having a central depression 9 with an aperture 11 formed therein. The plates 5 and 7 are each provided with a tapering annular flange 13 for insertion into the roller 3 thereby permitting a friction engagement between the plates 5 and 7 and the roller 3.

A wire handle 15 extends through the apertures 11 in the plates 5 and 7, and is bent at an angle of approximately 90° at 17 and 19 so that the end 21 of the handle remote from the roller 3 is perpendicular to the roller 3 and spaced therefrom. The end 23 of the handle 15 adjacent the plate 5 is threaded to receive a nut 25, the lugs 27 are provided adjacent the remaining plate 7. Thus the end 23 of the handle 15 can be inserted through

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the plate 7, roller 3 and plate 5 and secured in position by the nut 25 with the plates 5 and 7 and consequently the roller 3 being rotatable on the handle. The end 21 of the handle remote from the roller is provided with a wooden or plastic sleeve 29 which facilitates easy manual use of the lint remover.

The sleeve 29 is provided with a small hole 31 so that the lint remover can be hung on a nail, or the like, when it is not in use.

A strip of pressure sensitive adhesive material 33 is wound on the roller 3 with the tacky surface 35 of the material 33 facing outwardly. When the lint remover is rolled over a wool fabric, or the like, the tacky surface 35 of the material 33 will pick up lint normally adhering to the fabric.

It will be appreciated that since the strip of pressure sensitive adhesive material 33 is wound upon itself with the tacky surface 35 facing outwardly, all of the layers, except the top layer, will normally adhere to the non-adhesive back of the adjacent layer of material. Thus it is normally difficult to remove the outer, used layer of material to expose the layer of material underneath. In order to alleviate this situation a slit 41 is made through substantially all of the layers of the pressure sensitive adhesive material 33 so that one layer of material can be removed without disturbing the next layer of material. The slit 41 is angulated with respect to the marginal side edges 43 of the material 33 and is preferably at an angle of 10 to 70° to the longitudinal axis of the roller 3. Furthermore, the marginal side edges 43 of the material 33 on a tacky side 35 are made non-adhesive by removing the adhesive, or by coating the adhesive to provide a pair of substantially parallel non-adhesive portions 45 on the tacky surface 35. Alternatively, when applying the adhesive to the material 33 two portions 45 can be left free of adhesive. The provision of non-adhesive portions 45 on the tacky side 35 of the material 33 makes it relatively easy to unwind the outer layer of material 33 without disturbing the lower layers of material.

The combination of the slit 41 and the non-adhesive portions 45 on the tacky surface 35 facilitates the removal of the top layer of material 33 without disturbing the remaining layers of material.

In operation, the lint remover is grasped by the handle portion 29 of the handle 15 and rolled over the material to be cleaned. When the outer tacky layer 35 of the pressure sensitive material 33 is thoroughly coated with lint adhering to the tacky surface 35 then this layer is removed by lifting the layer at one marginal side edge 43 adjacent the slit 41 and pulling. The removal of the outer layer of tape by lifting at a marginal side edge adjacent the slit 41 prevents the tape from tearing.

When all of the layers of pressure sensitive material 33 have been used then the roller 3 having a fresh strip of material 33 is replaced. In order to replace the roller 3 the nut 25 is removed and the end 23 of the handle 15 is drawn through the plates 5 and 7. The plates 5 and 7 are removed from the roller and inserted in the ends of a new roller. The end 23 of the handle 15 is reinserted through the plates 5 and 7 and secured in position by the nut 25.

It will be appreciated from the foregoing description that only the roller having a strip of pressure sensitive adhesive material wound thereon need be replaced each time the strip of pressure sensitive material 33 is used up.

It will further be appreciated that the non-adhesive portions adjacent the marginal side edges of the tape may be formed by omitting the adhesive from the side portions during manufacture of the tape, or by applying a coating of a non-adhesive release coating to the side portions to render the adhesive non-tacky, or a very thin non-

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adhesive material could be layed over the tacky surface to produce the same effect. Furthermore, only one non-adhesive portion need be provided adjacent one of the marginal side edges of the material in order to facilitate the gripping of the outer layer of the material.

It will also be appreciated that the materials used in the construction of the roller 3, the handle 21, and the pressure sensitive material 33 can be varied without departing from the basic concept of the invention.

There has thus been provided a lint remover which is easy to use and has few replaceable parts.

I claim:

1. A lint remover comprising a roller having a strip of pressure sensitive adhesive material wound thereabout and a handle on which said roller is rotatably mounted, said strip of pressure sensitive adhesive material having an exposed tacky surface, the other surface being essentially adhesive-free, said strip being wound upon itself to provide a plurality of layers of said material of predetermined depth so that the said adhesive-free backing surface of each of said layers is in adhesive engagement with the tacky surface of the next adjacent layer, said tacky surface of each of said layers having an adhesive-free portion at at least one marginal side edge thereof and said plurality of layers having a slit of a depth substantially equal to said predetermined depth, said slit extending from one marginal edge to the other marginal edge of said layers and being angulated with re-

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spect to the marginal side edges thereof to facilitate the gripping and unwinding of each layer of said material so that the tacky surface of each underlying layer is exposed for service.

2. The lint remover of claim 1 wherein said tacky surface of each of said layers has an adhesive-free portion at both marginal side edges thereof.

3. The lint remover of claim 1 wherein said slit extends substantially at an angle of between 10° and 70° to the longitudinal axis of said roller.

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