March 17, 1953 J. M. KAHENY 2,631,322

SHOE WHITENING APPLICATOR

Filed Feb. 25, 1948

Fig. 1.

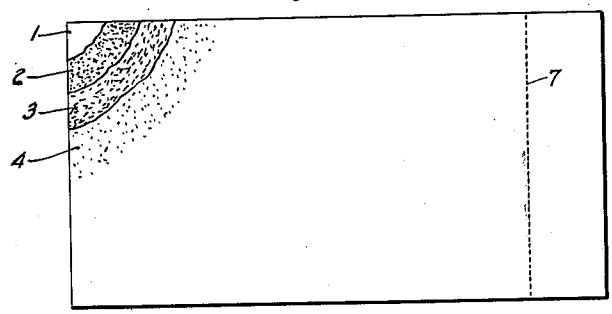


Fig. 2.

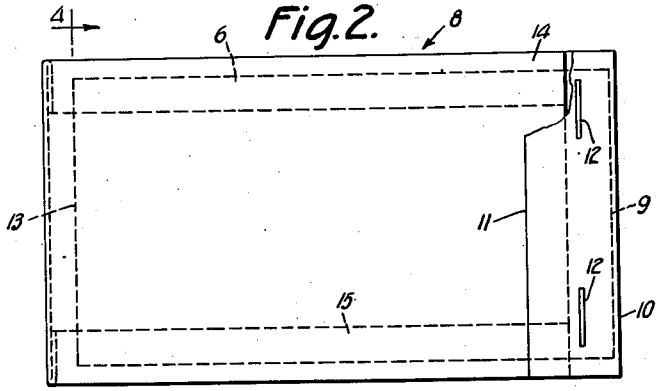


Fig. 3.



Fig. 4.

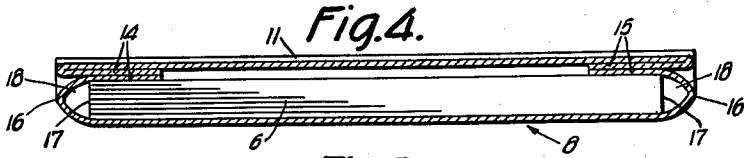
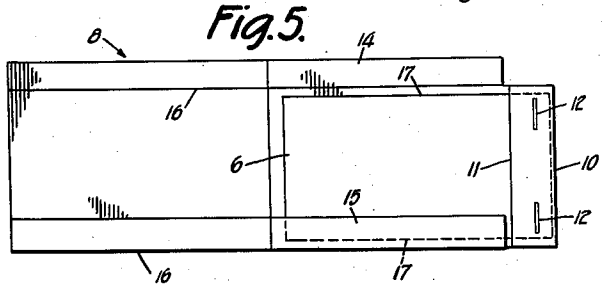


Fig. 5.



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SHOE WHITENING APPLICATOR

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7 Claims. (Cl. 15—209)

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This invention relates to applicators, and more particularly to applicators for whitening shoes and other articles, and to the composition and assembly of such applicators.

An object of the invention is to provide a compact whitening applicator of simple sheet form carrying its own supply of whitening material and adapted for immediate use by simply moistening the sheets.

Another object is to provide an effective whitening compound adapted to be carried on an applicator of the kind referred to.

Another object is to make a suitable low cost applicator sheet for carrying the whitening compound.

According to one feature of the invention an applicator is made in the form of a multiple layer sheet consisting of a flexible supporting sheet of water insoluble material on which is adhered a water insoluble flexible adhesive base coating non-tacky when dried. A water resisting flock coating is secured to the supporting sheet by the base coating, a removable water soluble whitening compound being adhered as a coating on the flock coating. The whitening compound includes a finely powdered white pigment, such as titanium dioxide for example, and a water soluble binder, such as acacia for example, and preferably also includes a detergent, such as soap for example, and a softening agent, such as lanolin for example.

These and other objects and features of the invention will be understood more clearly in connection with the following description and the accompanying drawings in which:

Fig. 1 is a plan view of an applicator sheet illustrative of one form of my invention, and showing one corner partly torn away to expose the different layers;

Fig. 2 is a plan view of an assemblage of applicator sheets with a portion of the cover torn away to show how the openable part of the cover is held in its closed position;

Fig. 3 is a side elevation of the assembly of Fig. 2;

Fig. 4 is a somewhat enlarged cross section of the assemblage taken on line 4—4, Fig. 2; and

Fig. 5 is a plan view of the Fig. 2 assemblage on a reduced scale showing the cover in opened position.

In Fig. 1 the supporting sheet 1 which may be of paper, cellophane, fabric or other suitable flexible water insoluble material, is coated with a layer of varnish 2 or other suitable waterproof adhesive. While still wet or tacky, I apply a

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flock of short film or natural or synthetic fiber to form a suede type of coating 3 secured to the support 1 by the base coating 2, which is then dried to a non-tacky hardened condition, providing a flexible layer 3. I then apply a liquid shoe whitener of heavy body to the suede coating 3, forming a coating of whitening material 4 which is dried, and is then ready for immediate use at any time for whitening shoes or other articles by merely moistening the outer layer 4 of the sheet.

In order to provide a convenient supply of applicator sheets, I preferably assemble a plurality of sheets 1 in a pack 6 in which each of the sheets 1 is provided with a weakened severance line 7, the lines being in superposed relation in the pack 6. A cover sheet 8 of flexible but relatively stiff card material, paper, plastic or other suitable material extends under the pack 6, and is folded upwardly and over the binder edge 9 of the pack at the fold 10, a terminal edge 11 above the pack being positioned close to and parallel to the binder edge 9 of the pack. Staples 12 or other suitable fastening means are provided for securing the sheets of the pack and the cover above and below the pack between the terminal edge of the cover 11 and the binder edge 9 of the pack. The free portion of the cover 8 below the pack extends beyond the end 13, and far enough beyond the end 13 to permit of folding upwardly and over the pack and to permit insertion of the extreme end 14 under the terminal edge 11 to lock the openable part of the cover, so that the cover completely encircles the pack 6.

The cover 8 is provided with the flaps 14 and 15 extending laterally therefrom, the flaps having a fold line 16 formed therein for folding the portion of the flaps extending from the cover under the pack 6 upwardly and inwardly over the longitudinal edges 17 of the pack, Fig. 4, and forming pockets 18 for retaining particles disengaged from the pack. The portions of the flaps 14 and 15 extending from the upper portion of the cover above the pack 6 are bent inwardly as shown in Fig. 4 to provide a stiffening reinforcement for the openable part of the cover 8 above the pack.

Fig. 5 shows the flap 14 folded outwardly to show its relation with the main body of the cover while flap 15 is shown folded inwardly as in Fig. 4. It will be seen that when the free end 14 of the cover is inserted under the terminal edge 11 that the flaps 14 and 15 are locked in position as shown in Figs. 3 and 4 to protect the pack 6 and to prevent the whitening material of

the pack from marking or soiling objects outside the pack.

The adhesive for securing the flock to the support 1 is preferably composed of a water insoluble adhesive substance such, for example, as an oil modified glycerol phthalate resin having the following composition:

	Percent
Phthalic anhydride	30
Glycerol	20
Oil acids	50

the combined liquids having a specific gravity of 1.08. A white pigment such as titanium oxide preferably, or lithopone whitening or zinc oxide, for example, is preferably ground in to the resin liquid, to which there is then added a sufficient amount of mineral or other thinner to permit of efficiently coating the support 1. A sufficient amount of siccative is added to the liquid resin to facilitate hardening of the resin. In making up the adhesive, I have found that the composition preferably includes 100 grams of titanium dioxide or other white pigment in combination with 163 grams of the resin. By employing a white pigment in the adhesive, the resulting color imparted to the flock and support 1 readily indicates when the applicator is clean and displays any colored material picked up from a shoe being whitened, which might undesirably mark up a shoe if not detected on the applicator. Instead of employing the resin just described as an adhesive, any other suitable water insoluble adhesive substance such as shellac, varnish, lacquer, drying oils, etc., may be employed to secure the flock coating 3 to the support 1.

The flock may consist of wool, cotton, rayon, nylon or other synthetic or natural fibers such as hair or bristle, and is preferably approximately of one millimeter long.

The whitening composition preferably consists of the following ingredients, in approximately the parts by weight indicated:

142 grams of finely powdered titanium dioxide, or other white pigment such as lithopone, whiting, or zinc oxide, for example.

10 grams of soap flakes such as sodium stearate or some other detergent of the so-called synthetic type such as neutral sulfated monoglyceride, for example.

5 grams of lanolin or other emollient of the type employed for softening and preserving leather such as castor oil, mineral oil, petroleum jelly, for example.

30 grams of acacia or other water soluble adhesive or binder material such as casein, or tragacanth, for example.

0.5 gram of phenol or other preservative, such as sodium benzoate, or pentochlorophenol, for example.

It will be seen that the above parts by weight of the ingredients in the whitening composition correspond approximately with the following:

28 parts of white pigment
2 parts of soap
1 part of softening agent
6 parts of binder material
0.1 part of preservative

Various modifications of the present invention will be apparent to those skilled in the art without departing from the invention as set forth in the following claims.

I claim:

1. An applicator for shoes or other articles, including a support of water insoluble flexible sheet material, a water insoluble flexible adhesive base coating non-tacky when dried adhered to a surface of the support, a water resisting flock coating secured to the support by said base coating, and a removable coating including a finely powdered pigment and a water soluble binder adhered to said flock coating.

2. An applicator according to claim 1 in which said water insoluble base coating includes a pigment.

3. An applicator according to claim 1 in which the flock in said flock coating consists of filaments approximately 1 mm. long.

4. An applicator according to claim 1 in which the removable coating includes a detergent.

5. An applicator according to claim 1 in which the removable coating includes a softening agent.

6. An applicator according to claim 5 in which the softening agent is lanolin.

7. An applicator according to claim 1 in which the removable coating includes phenol as a preservative.

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