

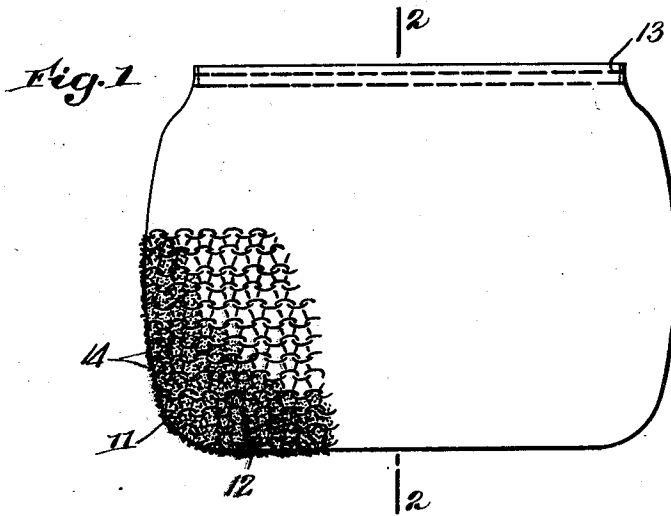
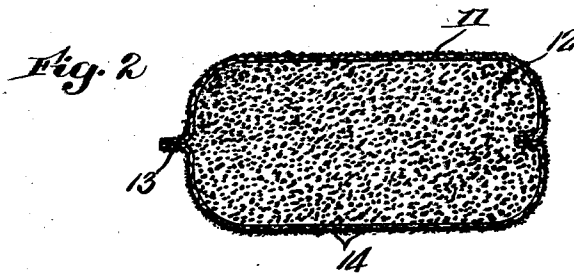
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CLEANING PAD

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CLEANING PAD

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1 Claim. (Cl. 15—219)

This invention relates to cleaning pads for use in removing surface dirt and accumulated soot or film from wall papers, window shades, pictures, paintings, drawings and other firm-surfaced papers or textile sheets; and the principal purpose of the invention is to provide a handy, economical and efficient cleansing agent which will easily and effectively erase surface film without strenuous rubbing action and without wetting, abrading or otherwise injuring or defacing the surface upon which it is used.

A further object of this invention is to provide convenient and practical means for utilizing the peculiar cleansing properties of a solidified sulpho-chlorinated oil such as has heretofore been produced and sold in block form under the trade-name "Artgum" and commonly used as an artists' or draftsmen's eraser, for the purpose of cleaning a variety of paper or textile sheets in the manner hereinafter described. This solidified oil is commonly known as a "gum," although it is not a true or natural gum; and the term "gum" is used in this specification to designate material having the characteristics of "Artgum," a relatively soft, resilient and rubber-like substance which readily crumbles when the block is rubbed lightly on drawing paper.

The gum block itself does not serve as a satisfactory eraser, but broken or crumbled particles of gum, of irregular sizes and shapes, which fray off in rubbing, roll over the surface of the paper and pick up soft pencil marks or smudges, apparently by reason of a surface attraction or affinity for dirt, so that the paper sheet is cleaned or erased after the soiled crumbs are brushed off. I have found that this cleansing action is most effective when the gum particles are relatively small so that the total surface of a large number of small rolling granules will clean a relatively large area with but light rubbing. As the particles are soft and springy, rather than crystalline or abrasive, the gum will not dislodge embedded dirt or deep markings; but the material is remarkably effective in removing dirt, smudges, soot or soil marks which accumulate or are deposited on the surface of wall paper, window shades or other paper or textile sheets or articles.

My improved cleaning pad is accordingly designed to take advantage of the rapid cleaning action of numerous small granules of this gum, and to ensure the desired result without waste of the material and without unnecessarily scattering the soiled particles after they have served their purpose. The pad also constitutes a handy package or container for the granulated particles,

and affords a simple, convenient and sanitary means of applying the gum to the surface to be cleaned.

A recommended embodiment of the invention is shown for the purpose of illustration in the accompanying drawing, but it will be understood that the size, shape and structural details of the pad may be varied to suit particular purposes without departing from the essence of this invention as set forth in the appended claim. In the drawing,

Fig. 1 is a side view of the improved cleaning pad, with a portion thereof detailed to indicate the texture of the bag and the relative size of the gum granules contained therein; and

Fig. 2 is a transverse section of the pad, taken on line 2—2 of Fig. 1.

The bag or pouch 11 which constitutes the sheath or covering of the pad, is preferably made of knitted, mercerized cotton of a texture equivalent to the knitted fabric known as jersey; but other knitted textile filaments or fabrics may be employed for this purpose, and the size of the mesh will depend upon the size of the gum particles contained in the bag.

The granulated gum filler 12 consists of a packed mass of particles of the sulpho-chlorinated oil, ground or broken to a fineness approximating that of coarse sand. The material may be prepared by adding about five percent (by weight) of calcium hydroxide to a predetermined quantity of vegetable or animal oil or fat, mixing these ingredients thoroughly, and then adding from twenty to thirty percent (by weight) of sulphur chloride, stirring the mixture to produce a solidified gum mass, and finally grinding or breaking the mass into granulated particles of the desired size.

When the bag is filled with the granulated gum, and closed as at the end 13, it will be found that the particles press together and clog the pores or meshes of the knitted bag, so that the material does not freely leak or sift through the openings even when they are, as recommended, substantially larger than the individual particles. Such fine particles as do squeeze through the porous bag almost invariably adhere to the exterior thereof as a granular coating such as indicated at 14 in Fig. 2; and the cleaning pad is preferably placed in a protective wrapper or casing of Cellophane or other suitable material, when not in use, so that this coating will not be rubbed off.

When the pad is lightly compressed by the hand and applied to the surface to be cleaned,

more of the granulated gum is squeezed through the resiliently yielding meshes of the knitted bag, and deposited on the surface; and a light manipulation of the pad will cause the granules to roll over the soiled surface and gather up the surface dirt or film. The particles themselves then become soiled or dirty and, in that state, they do not adhere so readily to the bag or to each other, and may therefore be wiped or brushed away without rubbing the granules into the surface of the sheet material.

As the gum contains no gritty or abrasive substances and is not moistened it will not mar or harm the surface of the cloth or paper sheet to which the pad is applied, and will not alter the color or tint of such sheets. The granules are, as aforesaid, compressible and springy. Hence, after the pad has been used to such an extent that the meshes of the bag become loose and flexible, it is not necessary to squeeze the pad continuously in order to expel the particles through the bag, for when pressure is applied and then released, the granules tend to expand and work their way through the meshes of the knitted fabric which yields to permit their passage. Manual exertion is thus reduced to a minimum; and it is evident that the action of my cleaning pad is entirely different from the common practice of dusting or sifting a cleansing powder onto a surface and vigorously scrubbing the powder (whether wet or dry) over the material being cleansed.

A cleaning pad comprising a jersey knit bag and a filler of granulated gum particles of the size of coarse sand, as above described, has been found most satisfactory for cleaning wall paper, window shades, and artists' or draftsmen's drawings; but it will be evident that granules of greater or less fineness may be used provided the mesh of the bag or pouch is in proper proportion to the size of the particles. It will also be understood that other materials for example soft rubber, having characteristics equivalent to those of the granules of sulpho-chlorinated oil, may be used as the filler of the pad; and that other flexible and porous fabrics, having the resilient properties of knitted cotton, may be employed as the bag or pouch.

I claim:

A cleaning pad of the character described, comprising a bag of knitted jersey fabric, and a filler of soft and springy particles of ground sulpho-chlorinated oil, said particles having a fineness of coarse sand, some of said particles adhering to the exterior of the bag, and others being compressed together and lodged in the meshes of the bag until the pad is squeezed, the loops of the knitted fabric resiliently yielding under compression of the pad and cooperating with the springy particles to exude more of said particles during useful application of the cleaning pad.

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