UNITED STATES PATENT OFFICE.

JAMES F. SULLIVAN, OF CAMDEN, NEW JERSEY, ASSIGNOR TO SULLIVAN MANUFACTURING CO., OF CAMDEN, NEW JERSEY, A CORPORATION OF NEW JERSEY.

CLEANING-POWDER.

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No Drawing. Application filed March 29, 1915. Serial No. 17,685.

To all whom it may concern:

Be it known that I, JAMES F. SULLIVAN, a citizen of the United States, and a resident of Camden, Camden county, New Jersey, have invented an Improved Cleaning-Powder, of which the following is a specification.

My invention relates to compositions of matter in the form of cleaning powders, and the object of my invention is to provide a cleaning powder particularly adapted for cleansing, dressing and waterproofing white fabrics, white leather and other similar surfaces, which powder is also adapted for the cleaning of feathers, furs, and the like.

In the use of white leather or white leather footwear, belts, pocketbooks, harness and the like, they are constantly becoming soiled and unsightly. This is particularly true of various forms of white footwear commonly worn in the summer time or in tropical climes, whether such white footwear is of canvas, leather or other material. The main object of my invention therefore is to provide a white dressing and cleansing powder for leather, fabrics, &c., that will, in addition to its cleansing and whitening properties, render surface treated objects waterproof.

The improved cleaning powder forming the subject of my invention may also be employed for cleaning feathers, furs, fur rugs, fur garments, and the like. In such use the powder is thoroughly sifted or shaken into the feathers, furs, &c., and left there for a period of twenty-four to thirty-six hours, absorbing the grease and dirt present therein. The cleaning powder may then be removed by thoroughly shaking, brushing or beating the feathers and fur.

My improved composition of matter consists of a mixture of metallic bodies in powdered form, suitably incorporated; the resultant body being a relatively heavy white powder which may be directly applied, preferably by means of a dry applicator, a cloth or the like, to the surface to be cleaned and whitened.

Specifically, my improved composition of matter consists of a mixture of zinc oxid and a metallic salt of a fatty acid, such as zinc stearate; the two ingredients being combined substantially in the proportions of one part of zinc stearate, to approximately eight, nine or ten parts of zinc oxid; the two ingredients being thoroughly incorporated by the use of a suitable mixing machine.

Stearate of zinc in its normal state is in the form of a very fluffy impalpable powder, having no stability. Zinc oxid on the other hand is a relatively stable material, much heavier, bulk for bulk than the zinc stearate and the latter may be readily incorporated with the oxid. Upon mixing these two ingredients together a material change in both of the same takes place. The stearate loses its fluffiness, while the oxid loses its heavy character, and the resultant mixture is a relatively dry powdery product having larger grains than either of the ingredients separately and having the curious property of apparently increasing in bulk; that is to say, the apparent bulk of the mixture will be greater than the original bulk of the two ingredients composing the same. This is probably due to a greater or less amount of air incorporated during the mixing operation, but from whatever cause, it is present and is not objectionable in any sense.

Care should be taken that no water or moisture is present during the mixing of the ingredients and that no heat is generated, and they should be kept at all times in a dry condition and free from contact with moisture, and the powdery composition resulting from their mixture should also be kept in the same dry condition.

In the operation of dressing or cleaning white fabrics, leathers and the like, they should be entirely dry, and the powder constituting my improved composition of matter may be applied by means of a dry applicator preferably a small piece of canton flannel, and it may be rubbed into the surface of the object to which it is applied by the hand. The initial application of my improved dressing effects a cleansing of the surface to which it is applied; that is to say, it does not act as a mere covering for such dirt or soil, but effects the actual removal of the same, and subsequent applications will insure proper and thorough whitening of the surface, restoring it to its original character and state of whiteness.

Thorough application of my improved composition of matter as a dressing for fabrics, shoes, leather of various descrip-

tions, &c., renders the surface entirely waterproof, a highly desirable factor when the material is employed as a dressing for shoes. Upon the subsequent dressing of shoes with my improved material it may be desirable to wash off any excess of superposed dirt before further application of the cleaning powder is made, but care must be taken to insure that the washed surface becomes thoroughly dry before the cleansing and dressing powder constituting my invention is applied thereto.

In all instances, the use of my improved powder as a surface dressing effects a cleansing of the surface to which it is applied, restores the original whiteness thereof and renders such surface absolutely waterproof. This latter condition insures that the dressing will last much longer than ordinary dressings. When employed to clean feathers, furs, and the like, the powder is simply dusted into the same; permitted to remain for a day or two and then thoroughly brushed out.

If desired my improved composition of matter may be given light shades or tones of buff or gray should it be desirable to dress leathers or fabrics of such tone; it being understood, of course, that only the light tones can be used. Suitable coloring matter in the form of powder may be employed for the production of these tones.

I claim:

1. A cleaning powder or the like, comprising a mixture of zinc oxid and zinc stearate in which the zinc oxid is materially in excess of the zinc stearate.

2. A cleaning powder or the like, comprising a mixture of zinc oxid and zinc stearate in the proportions, approximately, of nine parts zinc oxid to one part zinc stearate.

JAMES F. SULLIVAN.