

UNITED STATES PATENT OFFICE.

GEORGE R. MEITZLER, OF CINCINNATI, OHIO.

SILVER CLEANING AND POLISHING COMPOUND.

SPECIFICATION forming part of Letters Patent No. 503,612, dated August 22, 1893.

Application filed June 13, 1892. Serial No. 436,544. (No specimens.)

To all whom it may concern:

Be it known that I, GEORGE R. MEITZLER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Silver Cleaning and Polishing Compound; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a compound for cleaning and polishing silver in some of the various forms in which it is used, as for instance in jewelry, plate, table-ware, &c., and the object is to produce an agent, which while cleaning and polishing this metal thoroughly, does such without injury to the latter.

This compound is composed of precipitated whiting, ammonia, powered soap-bark, oil of sassafras and carmine. The first ingredient is used on account of its scouring properties whereby coarser impurities are mechanically removed. The second is used as a cleanser and dissolvent and whereby the action of the first ingredient is materially assisted. It also saponifies fats and fatty impurities and changes them into an emulsion which is very readily removed and then carries such fats with it. The third ingredient produces during use a foamy paste, which surrounds and envelops the particles of whiting and in this form prevents them from scratching the silver, while at the same time giving the compound its polishing qualities. This form further prevents the whiting adhering to, settling into, or filling up crevices, corners, &c., of ornamental work on which the mixture may be used. The fourth ingredient is used mainly as a perfume to counteract the smell of the ammonia. The carmine is used as a coloring medium, to give the compound a loud color which prevents the presence of any part of it in obscure portions of the object to be cleaned, from being overlooked, and facilitates its complete removal after cleaning.

By experiments I have found that the following proportions produce the best effects while slight variations from said proportions give still acceptable results. Parts by weight:

precipitated whiting, twenty-four parts; ammonia, eight parts; powdered soap-bark, three parts; oil of sassafras, one part; carmine, one part.

The mixture so produced is of a pasty consistency and for commerce and use I prefer to put it up in collapsible tubes of one and one half ounce capacity, the tubes being of the well known form used for holding moist colors and similar substances. In this shape it is sold, each tube carrying the necessary directions which inform the user that if the contents of the whole tube are to be used at once, such contents should be dissolved in one pint of water. If less is needed the quantity of water should be proportionately lessened.

The compound so diluted is now ready for use and is best applied by a sponge with which the object to be cleaned and polished is rubbed, after which the same is wiped dry with a chamois-skin or cloth and all particles of the mixture are removed, its red color readily showing their presence.

This compound may also be used on diamonds, Roman-gold jewelry, plated ware in general and cut-glass.

I am aware that similar compounds, containing either one or two of my ingredients have been used, but none contain the exact combination which I have, nor do they use an ingredient like ammonia for instance, which has saponifying properties combined with a sufficiently low degree of volatility not possessed by alcoholic substances and which gives the saponifying properties time to fully develop their effective action in softening hardened or incrustrated impurities before the liquid is evaporated. By this extended action fatty impurities, especially after having become incrustrated, are changed into a fatty emulsion, which is readily removed and which quality makes my compound especially preferable to others.

Having described my invention, I claim as new—

A compound of the kind described containing precipitated whiting, powered soap-bark, oil of sassafras and carmine, when combined with an ingredient possessing saponifying

properties and being of lower degree of volatility than alcoholic substances, like ammonia for instance, which remains moist a sufficient length of time to act upon incrustated impurities before the applied compound becomes
5 dry, all parts in the proportions stated, substantially as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE R. MEITZLER.

Witnesses:

ALFRED N. DAVIS,
CHAS. SPENGEL.