

50,513

## UNITED STATES PATENT OFFICE.

ALFRED TAYLOR, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN THE MANUFACTURE OF COLLARS, CUFFS, &amp;c.

Specification forming part of Letters Patent No. 50,513, dated October 17, 1865.

*To all whom it may concern:*

Be it known that I, ALFRED TAYLOR, of Philadelphia, Pennsylvania, have invented an Improvement in Shirt Collars and Cuffs; and I do hereby declare the following to be a full, clear, and exact description of the same.

My improved shirt collar or cuff consists of muslin, linen, or other textile fabric coated with silicate of soda, combined with oxide of zinc or its equivalent, as described hereinafter, the collar or cuff thus manufactured being white, flexible, and having a smooth surface representing that of starched linen, and capable of being cleansed when soiled.

In order to enable others to make my invention, I will now proceed to describe the manner in which I carry it into effect.

The fabric which I use may be muslin or linen or other textile fabric of coarse or fine texture, according to the quality of the collar or cuff to be produced.

I place in a vessel a quantity of liquid silicate of soda or liquor of flint with which a quantity of oxide of zinc has been intimately mixed, there being about one pound of the oxide of zinc to a gallon of the silicate. Through the composition thus prepared I pass a piece of the textile fabric, so that the latter may be completely coated with the material, which also penetrates the interstices of the fabric. The superfluous material may be removed by passing the saturated fabric between rollers or otherwise. The material may be applied to the fabric by an ordinary brush—a process, however, which is much more tedious than that first alluded to. After the fabric has received one coat it should be permitted to dry, when another coat may be applied, and after this as many other coats as desired may be applied, although in most cases two or three coats will suffice. After the fabric thus prepared is

thoroughly dry it may be calendered by passing it between polished rollers, and the surface may be polished, if desired, with fine sand-paper or other polishing materials.

I have found that the use of oxide of zinc in the silicate renders the collar pliable, and so far water-proof that it can be readily cleansed with a wet sponge or rag. At the same time the zinc produces the desired white and opaque appearance.

Although I have referred to the use of oxide of zinc as a substance to be mixed with the silicate for producing the desired effect, other substances may be used to advantage—such, for instance, as phosphate of lime, carbonate of magnesia, and other equivalent substances, and a body may be imparted to the compound by the addition of a small quantity of starch or other like substance, which also adds to the flexibility of the collar or cuff.

After the piece of fabric has been prepared it may be cut to the desired form of collar, cuff, shirt-bosom, or other article of wearing-apparel which have usually been made of starched linen.

By introducing coloring-matters into the silicate different tints may be imparted to the collar or cuff.

I claim as my invention and desire to secure by Letters Patent—

As a new article of manufacture, a collar, cuff, or shirt-bosom consisting of textile fabric coated with silicate of soda containing oxide of zinc or its equivalent, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALFRED TAYLOR.

Witnesses:

HENRY HOWSON,  
W. J. R. DELANY.