

UNITED STATES PATENT OFFICE.

SAMUEL C. EATON, OF PIERMONT, NEW YORK.

IMPROVEMENT IN PREPARING PAPER AND OTHER FABRICS AND MATERIALS FOR PROTECTING METALS.

Specification forming part of Letters Patent No. **213,100**, dated March 11, 1879; application filed August 15, 1878.

To all whom it may concern:

Be it known that I, SAMUEL C. EATON, a citizen of the United States, and resident of Piermont, in the county of Rockland and State of New York, have invented certain new and useful Improvements in Preparing Paper and other Fabrics and Materials for Preserving Silver and other Metals from Tarnishing; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to treat paper, cloth, or other fabric or material with such chemicals as will give the fabric or material treated the property of removing from the air such gases as would tarnish silver and other bright metals; and it consists in making a saturated solution of either chloride of zinc, chloride of ammonium, chloride of potassium, hypochlorate of lime, or bleaching-powder, diluting the same to any desired degree of strength, and then filling the pores of paper, cloth, or wood with this solution, so that this paper, cloth or wood may be put around silver-ware, or other metals of any description, and protect the same from tarnishing by reason of the gases always more or less present in the atmosphere.

Ordinary unsized paper, unmanufactured or manufactured into boxes; cotton cloths, unmanufactured or manufactured into bags, &c.; unmanufactured wood, or wood manufactured into suitable boxes, may be soaked in this solution, which I generally dilute to one-quarter of its original strength, until the pores of the paper, cloth, or wood are well filled; then, when dried, the paper bag or box is finished and ready to wrap or receive the silver or other metal which it is designed to protect from the discoloring action of the atmosphere or gases contained therein.

It is well known that there are at all times

mingled with the atmosphere various gases, mainly sulphureted hydrogen, which, coming in contact with silver, tarnishes its surface.

The object of this invention is to interpose between the silver and the atmosphere some substance which will neutralize such deleterious gas or gases, and render it inert, so far as its action on silver or other metals is concerned. This I have accomplished with the solutions named, and in the manner herein set forth.

The substances I use in preference to the others are chloride of zinc and chloride of ammonium; and I aim to impregnate the paper, cloth, or wood, so that the paper, cloth, or wood shall hold as much of the substance as it can contain without attracting too much moisture. If it contains too great a quantity, the paper, cloth, or wood will not dry. They will dry and retain enough of the neutralizing substance, however, to neutralize all the gases that will penetrate the pores of the paper, cloth, or wood.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The method herein described for preparing paper, or other fabric or material, so as to render the same suitable for protecting metals against tarnishing, consisting in impregnating the fabric or material with a metallic chloride or equivalent compound, as set forth.

2. As a new article of manufacture, paper or other fabric impregnated with chemicals, substantially such as described, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

SAMUEL C. EATON.

Witnesses:

STANSBURY A. JESSUP,
GEORGE R. COMINGS.