UNITED STATES PATENT OFFICE.

JAMES A. ROSS, OF BOSTON, MASSACHUSETTS.

PROCESS OF MAKING MOISTURE-RESISTANT WALL-PAPER.

1,218,474. Specification of Letters Patent. Patented Mar. 6, 1917.

No Drawing. Application filed March 29, 1915. Serial No. 17,694.

To all whom it may concern:

Be it known that I, JAMES A. Ross, a subject of the King of Great Britain, resident of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Processes of Making Moisture-Resistant Wall-Paper, of which the following is a specification.

This invention relates to the treatment of paper for the purpose of rendering it suitable for the covering of walls, and has particular reference to the production of such material by coating one side of the paper with materials or ingredients that will afford a good printing surface.

The object of my invention is to provide wall paper that will not be expensive and which will have a surface that is either waterproof or so nearly so as to be suitable for bath rooms the walls of which are frequently spattered and still more frequently receive a deposit of condensed steam or vapor.

With these objects in view, my invention consists in the process of coating and treating paper substantially as hereinafter described and claimed.

The paper itself is or may be of any suitable kind, and the application of the coating presently described may be according to any well known or preferred practice, such coating serving as a filler for the paper and also for tinting it when desired. My improved coating consists of clay, an adhesive such as glue, gelatin or casein, and a suitable fatty emulsion, wax or hard soap. Also, of course, any coloring matter that may be desired to produce the tint wanted.

One way to practise my invention is to take

79 parts clay,
18 parts glue, gelatin or casein,
3 parts wax or hard soap or suitable fatty emulsion

and

Coloring, or tinting matter in quantity and proportions according to results desired as to tint.

This compound is mixed with water in approximately the proportions of 10 parts of compound to 90 parts water, and then the paper is coated with it by any well known or preferred coating machinery or according to any well known or preferred method.

After the coating is dry, a superposed coating of shellac or other gum more or less insoluble in water, is applied, after which the sheets or the web may be calendered. The result is the production of paper having a porcelain-like finish which is admirably adapted to be printed with designs so that when applied to the wall of a room, such wall will have the appearance of a tiled wall. The printing may be done before or after the calendering operation.

Having now described my invention, I claim:—

1. The method of making moisture-resistant paper, consisting in coating it with clay, an adhesive, and a fatty emulsion in solution or suspension, drying the same, then coating it with a gum, and then calendering.

2. The method of making moisture-resistant paper, consisting in coating it with a mixture containing approximately 79 parts clay, 18 parts glue or its equivalent, and a fatty emulsion, then drying the same, then applying a coating of shellac or its equivalent, and then calendering.

In testimony whereof I have affixed my signature, in presence of two witnesses.

JAMES A. ROSS.

Witnesses:
GEORGE CRANDALL CARTER,
HARRY I. CUMMINGS.