

UNITED STATES PATENT OFFICE.

CHARLES T. KEMMER, OF CLEVELAND, OHIO.

IMPROVEMENT IN COATING AND DECORATING WALLS, CEILINGS, &c.

Specification forming part of Letters Patent No. **111,459**, dated January 31, 1871.

To all whom it may concern:

Be it known that I, CHARLES T. KEMMER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Process for Covering Walls, Ceilings, &c., with Oleaginous Coating, of which the following is a full and complete description:

The nature of my invention relates to the process of preparing and covering walls, ceilings, and other surfaces with an oleaginous coating, said coating being either plain or ornamented in colors, figures, and gildings, and which is rendered water-proof, as hereinafter described.

The first step in the process is to dip ordinary strong sheeting in a light solution of soap and water, (common yellow soap, one pound; water, nine gallons,) after which it is stretched upon a frame, and when dry size it over once or more with a glutinous moss or its equivalent, dissolved in water to about the consistency of common flour-paste or a little thinner, (or gelatine, one pound; common yellow soap, one-eighth of a pound, to about three gallons water.) When this is dry a good coat of oil-paint is then laid on with a brush in the ordinary way. This paint should be composed of boiled linseed-oil, (the pigments of any desirable color may be used,) oxide of zinc, carbonate of lead or its equivalent, to give body to it. There may be used in said paint a small portion of india-rubber dissolved in benzine or naphtha, with a small portion of glue. When the coating of this preparation of paint is dry upon the sheeting or fabric, it is ready to receive any design which may be painted or printed thereon. This last or finishing coat of paint, if desired to be entirely flat, like water or tempera colors, as are used for wall-paper, is made of rubbing-varnish, one-half pint; boiled oil, one pint; yellow bees-wax, one pound; turpentine, one quart. In this pigments are mixed. When the design on this last coat is finished and dry, take a light solution of glutinous moss, dissolved in water to about the consistency of milk, and size over the surface of the painted or printed subject with it. While the size is wet, put on it open-woven sheeting, which will admit the design or ornament to be plainly seen through the meshes of the fabric. This fabric adheres to

the painted surface and design by the adhesion of the moss-size or other glutinous equivalents. The painting or design is now between two pieces of cloth or sheeting. The opposite side of the sheeting or fabric first used is made wet with water, which side is the reverse of that painted. This moistening with water will, in a few minutes, dissolve the coating of size between the cloth and coating of paint, so that the open-woven sheeting may be removed, leaving the entire coating of paint, with the design upon it, intact in one sheet. It is now ready to be cut or divided and put upon the walls or surfaces designed.

In case the surface be an interior wall, it is best, but not always necessary, to first size the plastering with a weak solution of glue and water, to which some boiled linseed-oil is added. The proportions of said last-named size are, one pound of glue to one-half pint of boiled linseed-oil to two gallons water. The glue is first boiled in water to a paste, then the oil is added and well mixed, and is then thinned with the water. If the wall has been whitewashed or calcimined, more oil should be added to the size, or if the wall is damp a coat of alum, dissolved in water, should first be applied before the glue-and-oil size is put on. This sizing of the wall with glue and oil, as described, is for the purpose that the paste which is to be put on the paint, being also largely composed of glue, will combine with the glue-and-oil size which has penetrated the wall, and make it a solid body of paint, as durable and perfect as if painted directly on the wall. The paste now to be put on the painted surface which is to be applied to the wall is composed of glue, resin, and turpentine in the following proportions: Glue, four parts; resin, one part; turpentine, one and a half part. The glue is first boiled in water; then the resin and turpentine, being melted, are added; the whole thinned with water, to be easily applied; but for all common purposes a paste of rye-flour, to which a little thick turpentine is added, will answer.

When the coating of paint is required to be thick or heavy for making a smooth surface on rough walls, it is made while the first coat of oil-paint on the sheeting is wet. The fibers of cotton, wool, hemp, or wood are put on. These substances are ground fine, and, while

the paint is wet, sifted on, and, when nearly dry, pressed smooth by rolling or otherwise. When it is entirely dry the desired painting or printing is put on.

The substances, as cotton, hemp, wool, or wood, when ground fine, can also be mixed in the first coating of paint, and painted on instead of sifted, to give body and strength to the coat. After the described materials are pasted and dried on the wall, the sheeting which still covers the painting is now easily taken off by commencing at the top and pulling it downward. By this process the fine colors can be produced, such as are now used for interior decorative painting, or as those that are on fine wall-paper; also, the important materials for decorative purposes, such as gold, bronze, &c., can in this way be used, and not in the least lose their brilliancy of effect, and yet can be washed with soap and water.

Another important object is that, where the walls or ceilings of a large church, hall, or parlor are to be decorated, the whole design and painting will be done on one piece of sheeting, sewed together, as though it was done immediately on the wall, and when taken off the sheeting on which it is painted will be cut in such pieces as will suit the purpose of applying it to the wall. It having all been in one piece will again so closely match that no seam or place where it is pasted together can be seen.

By this process nothing is wasted. The cloth or sheeting can be used a great many times for the same purpose of painting or printing thereon.

It is evident that certain modifications and manipulations in this process may be made. The relative proportion of the ingredients may be altered or their equivalents substituted without changing the nature of the invention.

For purposes of wall-decoration, however, the paint needs a cover of open-woven sheeting only where pieces of great strength are wanted, as for covering ceilings. With large pieces it is better to have the cover of sheeting on the painted or printed side till the paint is applied to the surface.

Claims.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The herein-described process of preparing oily coatings for walls, ceilings, &c., substantially as set forth.

2. The process of treating or preparing sheeting or other textile fabric for the purpose of forming painted or printed sheets of paint with plain or ornamented surfaces, and which may be transferred to walls, ceilings, &c., substantially as herein set forth.

3. The combination of the sheeting, prepared as described with size and the oily coating, with a plain or ornamented surface, substantially as set forth.

4. The composition, as described, of making a water-proof flat painted surface.

5. The oily water-proof sheets or coatings, either plain or ornamented, prepared in the manner substantially as set forth, and for the purpose described.

6. The fibers of cotton, wool, wood, or their equivalents, in combination with pigments, for the purpose of giving body and strength to the described coating, substantially as set forth.

7. Sheets of paint composed of the within-stated ingredients, ready for applying to walls or other surfaces, substantially as described.

CHARLES T. KEMMER.

Witnesses:

W. H. BURRIDGE,
J. H. BURRIDGE.