UNITED STATES PATENT OFFICE.

CHARLES T. KEMMER, OF CLEVELAND, OHIO.

WATER-PROOF PAPER-HANGING.

SPECIFICATION forming part of Letters Patent No. 256,705, dated April 18, 1882.

Application filed October 8, 1881. (Specimens.)

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 5 and useful Improvement in Water-Proof Paper-Hangings; and I do hereby declare that the following is a full, clear, and complete description thereof.

The nature of my improvement relates to a 10 mode of preparing water-proof paper; and it consists in coating paper with a water-proof composition, which paper is designed to be hung upon walls, ceilings, &c., enabling them to resist the influence of water and moisture 15 and presenting a more durable covering than the ordinary paper-hangings, which cannot be well cleaned when soiled.

With my improvement the hangings may be cleaned from time to time with soap and wa-20 ter, as they will not become brittle or cracked, as in the ordinary mode of preparing waterproof paper-hangings. I take rolled paper or other suitable paper designed to be prepared according to my im-25 proved mode, and "size" it over with a coating consisting of sixteen parts of glue or gelatine and one part glycerine, by measure, (or about these proportions,) which are intimately mixed by stirring the ingredients together. The gela-30 tine is first prepared with water to about the consistency of ordinary cream, to which the glycerine is added. The paper is then first coated over with one or more coats of this size, depending upon the character or nature of the 35 said material. This sizing or covering will strengthen the paper and prepare it for the coating of water-proof compound, which may be applied as soon as the coating of size is dry. The compound is composed of the following 40 ingredients, by measure: turpentine or naphtha, one-half part; india-rubber, first dissolved in naphtha or other distillate of petroleum to about the consistency of linseed-oil, one fourth part; linseed-oil or other suitable vegetable 45 oil, one-eighth part; rosin or beeswax, first dissolved in turpentine to about the same con-

sistency of linseed-oil, one-eighth part. These ingredients are combined by intimately stirring and mixing together.

For coloring the said compound, oxide of 50 zinc, clay, or whiting in equal proportions, or any other full-color pigment, may be used for decorating purposes. This second coating is made about the consistency of ordinary mixed paint, and is laid on the paper with a brush, 55 the paper being stretched or spread out to receive the water-proof coating. This coating will not be in direct contact with the paper, owing to the first covering or sizing of the paper, which will intercept the passage of the 60 oil or water-proof composition to the paper. This will admit of the paper being hung upon the walls by ordinary pasting.

Paper prepared in this way is susceptible of more or less ornamentation without departing 65 from the nature of my improvement, and when thus prepared will acquire strength, tenacity, and durability of color not known in the ordinary mode of preparing paper-hangings. The action of glycerine is to render the glue or 70 gelatine tough and the paper flexible, while the glue or gelatine or other equivalent viscous material will arrest the absorption of the oily coating by the paper and retain it upon the surface, where it is needed. 75 What I claim as my invention, and desire to secure by Letters Patent, is— A wall-paper rendered water-proof by treating the paper with a composition of viscous material and glycerine as a preparatory ground 80 for the application thereto of a coating of a compound consisting of the ingredients herein formularized, or their equivalents, in about the proportions specified, and in the order and by the process substantially as described, and 85 for the purpose set forth. In testimony whereof I affix my signature in presence of two witnesses. CHARLES T. KEMMER. Witnesses: W. H. BURRIDGE,

J. H. BURRIDGE.