

UNITED STATES PATENT OFFICE.

JAMES S. MUNROE, OF LEXINGTON, ASSIGNOR TO CHARLES FAIRCHILD, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN WALL-PAPER.

Specification forming part of Letters Patent No. **204,446**, dated June 4, 1878; application filed June 19, 1877.

To all whom it may concern:

Be it known that I, JAMES S. MUNROE, of Lexington, in the county of Middlesex and State of Massachusetts, have invented an Improved Wall-Paper, of which the following is a specification:

This invention relates to the production of a new article of wall-paper composed of wool and cotton rags previously dyed, the paper being sized to properly prepare it to receive paste or equivalent by which the paper is retained upon the wall.

The cotton and woolen rags from which the paper is made, selected according to the color of the paper to be produced, are mixed and reduced to pulp, which is formed into paper in any of the usual machines. Sizing to toughen the paper and prepare it for application to a wall by paste is added to the pulp in the pulp-holding box. The paper produced from these mixed and colored rags is thicker than usual wall-paper, is stronger and more durable, is water-repellent, and may be washed when on the wall without injury. Being water-repellent, it will prevent the passage of moisture from the wall into the apartment, and being composed, in part, of woolen rags, it acts, in a great measure, to prevent the passage of heat or cold through the walls. This paper presents to the eye a soft appearance, and many prefer it to the elaborate or showy figures commonly found on wall-paper. It can be made as cheaply as the ordinary cheap grades of wall-paper. Being thicker and softer than ordinary wall-paper, should the wall crack, as is frequently the case, the paper will yield to the cracks and not break.

The body of the paper, being thicker and less dense than ordinary wall-paper, enables it to receive and retain more size, which gives it such qualities that it may be washed without injury to the colors, which are ingrain, instead of simply upon the prepared face of the paper, as are the colors of ordinary wall-paper.

By dyeing the rags before the paper is made I am enabled to produce paper having red, blue, green, and other desired colors, which will not act injuriously upon the health of the occupants of rooms papered with such colored paper, as is common when ordinary wall-paper colored by mixtures applied to the surface is used.

The paper is of such thickness that when applied its edges are abutted together, making a uniformly-level surface.

I am aware that paper has been made of mixed woolen and cotton rags; and I am also aware that it is not new to reduce rags for paper-making to half-stuff and dye such half-stuff before making it into full-stuff or pulp; and therefore I do not claim, broadly, a paper made from woolen and cotton rags, except when made as and possessing the characteristics specifically set forth in the claim, whereby said paper is adapted for wall-paper.

I claim—

The improved wall-paper described, consisting of mixed cotton and woolen rags dyed before pulping, and possessing the following distinctive characteristics, viz: first, increased thickness, to add to its strength, and permit its application to walls by abutting instead of overlapping its edges; second, ingrain instead of surface color, whereby it may be washed without marring or destroying its color; third, water-repellency, so as to prevent the passage of moisture through the wall; and, fourth, toughness, so as to yield and not break with cracking of the wall, substantially as specified.

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

JAMES S. MUNROE.

Witnesses:

G. W. GREGORY,
S. B. KIDDER.