

UNITED STATES PATENT OFFICE.

THOMAS POTTER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN OIL-PAINTS FOR COATING OIL-CLOTH.

Specification forming part of Letters Patent No. **110,999**, dated January 17, 1871.

To all whom it may concern:

Be it known that I, THOMAS POTTER, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Composition of Matter; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to practice my invention.

My invention consists in an oil-paint compounded of the ingredients hereinafter mentioned, and is intended to be applied as a coating to the surface of oil-cloths.

To about seventy-five (75) pounds of pure white lead, which has previously been ground in oil, in the usual manner, I add one hundred and ten (110) pounds of linseed-oil boiled to the consistency known as "daub," and mix them thoroughly, so as to produce a smooth paint. I also mix therewith such coloring matters as are needed to produce the color that may be desired. For example, to produce a buff, I add French ocher; to produce a green, chrome-green; to produce a drab, ultramarine blue and Indian red. In short, I use any of the substances ordinarily employed to produce the colors of which white lead forms the base; but this being merely for the purpose of coloring the paint in the usual manner, I do not claim the addition of these substances as part of my invention.

I also mix in another vessel twenty-five (25) pounds of pure white zinc, previously ground in oil, in the usual manner, and ten (10) pounds of spirits of turpentine. When these ingredients have been thoroughly mixed I add them to the former mixture of lead and daub, and beat the mixtures well together. By this addition of the zinc to the lead paint I produce a composition of peculiar thickness or stiffness, which cannot be brushed on the cloth, but is spread thereon by the knife of the mill, or by some equivalent mechanical contrivance.

When it is desired to give the oil-cloth a white or marble surface, I substitute pale copal-varnish for the daub, and in order that the mass may have the proper consistency I em-

ploy boiled linseed-oil instead of spirits of turpentine as the solvent for the zinc. The proportions in this case will be seventy-two (72) pounds of white lead, ninety-two (92) pounds copal-varnish, sixteen (16) pounds linseed-oil, and twenty (20) pounds white zinc.

In either case it is better not to add the zinc mixture to the lead mixture until the composition is to be used, though the mixtures may be each separately prepared several hours before. If, however, the mass is to be kept some hours before using, a little turpentine should be added from time to time, so as to preserve the requisite degree of fluidity.

The composition thus produced is not only a substitute for varnish, but is found to wear better, since the latter is applied upon the printing and exterior thereto, while the surface formed by this composition is underneath the printing; and it forms a more reliable and uniform coating than any varnish with which I am acquainted.

In stating the proportions of the several ingredients, I have given those which I have generally found most advantageous in practice. I do not, however, confine myself precisely to them, as they may under some circumstances be varied with advantage. In a warm or moist atmosphere, for instance, it will be necessary to increase the proportion of zinc, seldom, however, adding more than two or three pounds to the mass, whether copal-varnish or daub be used, unless the zinc should happen to be of inferior quality, in which case as much as ten pounds more than the quantities stated may be necessary to give the paint the required thickness.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

The above-described composition of matter, made of the ingredients and in the manner specified.

THOMAS POTTER.

Witnesses:

C. H. SHERMAN,
JAS. F. HOPE.