

# UNITED STATES PATENT OFFICE.

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## MANUFACTURE OF OIL-CLOTH.

No. 899,821.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, MAX ABRAHAMS, a citizen of the United States, residing in the city of New York, in the county and State of New York, have invented certain new and useful Improvements in the Manufacture of Oil-Cloths, of which the following is a specification.

Heretofore oil cloths used as floor coverings, &c. have been commonly made by filling in and imposing upon burlaps a sufficient quantity of paints to afford a body to take the wear incident to floor coverings or the other uses to which such oil cloths may be applied, the burlaps practically serving to hold the body of paints so used together, it being intended that the paint body shall take and endure the wear and tear of use, as the fabric so made becomes practically useless upon the wearing-off of the outer coating of paint.

When burlap is used in the manufacture of oil cloths it has to be first sized with glue to give it sufficient stiffness, which treatment makes the burlap very brittle. Next the burlap has to be filled and overlaid with a common paint largely composed of earthy matter, after which this paint coating is ground or rubbed so as to give it a sufficiently smooth surface upon which to lay the desired pattern or ornamentation in oil paints. This earthy paint only increases the brittleness of the fabric, and the result is that so soon as the outer covering of oil paint used in laying on the pattern is worn off the deterioration of the fabric is exceedingly rapid, and it directly becomes useless.

The object of my invention is to produce an oil cloth the body of which is made of paper especially prepared for the purpose, with or without a reinforcement of textile fabric, as hereinafter described, upon which is laid a coating formed entirely of oil paint upon which the desired pattern may be laid, thus obviating expense in manufacture, and greatly reducing the brittleness and destructibility of the completed fabric.

I produce my article of manufacture by first taking a heavy paper which in its manufacture is subjected to strong pressure between rollers and calendered, thus producing a paper of close texture and great density, and smoothly faced on both sides. This paper may be made of any materials commonly used in paper-making, but I prefer that it

should be of a red color. This paper I then pass slowly through boiled linseed oil, enabling the paper to absorb as much of the oil as possible. I then dry the paper in a heat approximating 180° F. for about twelve hours. The paper thus dried, I coat it with a paint composed of boiled linseed oil and dry mineral paint, with which I may or may not mix a proportion of twenty-five per cent. of powdered asbestos; it being understood that I coat the paper on both sides. The color of the paint thus used is preferably the same as that of the body of the paper above mentioned. This paint is applied in two coats on each face of the paper, proper time being given for each coat of paint to dry thoroughly before the next coat is applied. When the outer coat of paint so applied has become thoroughly dry, I apply the desired pattern or ornamentation on one side of the fabric, which is done in oil paint in the manner heretofore in common use in the manufacture of ordinary oil cloth. I then allow the last coat of paint in which the pattern is laid on to become thoroughly dry. This drying process usually consumes about seven days. I then apply on each side of the fabric a coat of elastic gum varnish, such as is in common use with oil cloth makers, and allow the same to become thoroughly dry and hard, when the fabric is complete and ready for use. By the application of the varnish upon both sides of the fabric I insure the protection of the fabric from dampness, &c.

While I find the paper fabric of the kind described to afford a strong, tough, pliable and smooth faced base for an oil cloth, it may be further strengthened without serious loss of pliability or increase in weight, by combining with the paper on its side which is to be left plain a thin but strong textile fabric, such as cheese cloth. I effect such combination of textile fabric with such paper by first drawing the textile fabric through glue in liquid form, and then passing the paper base and the cloth or textile fabric thus wet with glue together between steam heated calender rolls, which press the paper and cloth fabric together and simultaneously dry the glue thereon, thus directly uniting the sheets of paper and cloth fabric into a single and composite sheet forming the base for the oil cloth. The textile fabric thus employed, being composed of fine threads, presents a much smoother face than burlaps, thereby afford-



ing a better surface for the coating of paint which is afterwards applied in the manner above described, while the use of the objectionable earthy paint is obviated. The fabric thus produced always lies flat and even on any level surface upon which it is placed, a thing which oil cloth made with burlaps does not do owing to the wrinkling of the burlaps in the sizing process.

10 Having thus described my invention, I claim:

1. An article of manufacture consisting of a fabric made of a compressed sheet of paper soaked in linseed oil, and covered on both

sides by a heavy oil paint body, and having 15 an external varnish coat on both sides.

2. An article of manufacture consisting of a fabric made of a sheet of heavy compressed paper reinforced with a thin textile fabric glued thereto, a linseed oil filling of said paper, a heavy coat of oil paint on each side of said combined sheets of paper and textile fabric, and an outer covering of elastic varnish on both sides thereof. 20

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Witnesses:

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