

UNITED STATES PATENT OFFICE.

ANTON HAGELE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JOHN MACDONALD, OF SAME PLACE.

FLOOR-CLOTH.

SPECIFICATION forming part of Letters Patent No. 524,021, dated August 7, 1894.

Application filed January 13, 1894. Serial No. 496,792. (No specimens.)

To all whom it may concern:

Be it known that I, ANTON HAGELE, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Floor-Cloths, of which the following is a specification.

My invention relates to the manufacture of floor cloths of the class known as oil cloths; and also to the composition of matter to constitute the filling base or body of such a cloth and of the application of the same to a backing material.

The principal objects of my invention are first, to provide an inexpensive, light, durable and efficient floor cloth; second, to provide a composition for producing a light and compact floor cloth having superior wearing properties; third, to provide a floor cloth made of a compact and homogeneous composition or mass applied to a backing material in such manner as to permit oil or other colors to be stamped or printed thereon in a suitable design, and the structure being such as to produce an attractive and distinctive patterned fabric; and fourth, to provide a composition floor cloth or fabric having the mass composing the same so compacted to the backing material thereof as that in use it will yield, a desirable property, because insuring good wearing thereof; and moreover, a cloth or fabric in which the pattern or design may be stamped or printed far more perfectly than has hitherto been possible on oil cloth or the like, due to the compact and homogeneous nature of the filling base or material formation of the cloth.

My invention consists of the manufacture of a floor cloth having superior wearing and yielding properties; and my invention further consists of a composition for the manufacture of a floor cloth as hereinafter more fully described and claimed.

In order that others skilled in the general art to which my invention to some extent appertains may practice the same, I will now proceed to describe the different materials entering into the composition of such a floor cloth and also point out the method which

may be practiced with most excellent results in carrying my invention into effect.

The deciduous leaves of any trees in general, are gathered and spread out on pans or frames to dry under the influence of the sun or preferably subjected to the influence of heat in a kiln or chamber of a furnace in order to expedite drying of the same or of bringing them to a crisp or brittle condition, when they are removed and are in a fit state to permit of reduction to a powdered or flaky condition. This is effected by means of an engine or mill, such as is employed for grinding drugs or the like. In the practice of my invention, a working formula employed has been to every three pounds of dried and ground deciduous leaves add one quart of linseed or cottonseed oil and one half ounce of rosin and a like quantity of gum arabic thereto. The several materials mentioned are thoroughly agitated in a suitable vessel until the admixture or compound has been brought to the consistency of dough or the like. This thick or sticky mass or composition is spread onto and over the surface of a backing material consisting of a sheet or strip of burlap, canvas or the like. The said backing material with the said composition applied thereto is then passed through pressure rollers to firmly embed the coating into and with the meshes of the same. The article subjected to the foregoing treatment is then permitted to dry or is artificially subjected to a mild heat to effect such a condition thereof. The top surface of the article thus treated is then subjected to the action of a printing or stamping machine adapted to display in oil colors and in suitable designs, the required pattern thereon, and it is then permitted to stand until the colors are set with the particular configuration or design impressed or stamped therein to constitute a floor cloth adapted for subsequent use as an article having superior wearing and other properties over linoleum or the like.

It may be here remarked that the materials of the composition to constitute the cloth of my invention, with the exception of the filling base or body material thereof, which is the dried and ground deciduous leaves in a

powdered, flaky or similar condition, may be varied with respect to such materials and the proportions thereof, without departing from the spirit of my invention and in practice
5 equally good results be obtained.

The dried and ground deciduous leaves constitute the base or body matter of the composition and the linseed or cotton-seed oil, rosin and gum arabic constitute the binder,
10 which gives to the mass its adhering as well as other properties to be hereinafter mentioned. In practice it has been found that the composition compounded as hereinabove explained in its application to a backing material, such as burlap, canvas or the like,
15 gives a product which is sufficiently yielding in character to prevent in use, cracking of the cloth. Moreover, the composition of the materials mentioned and compounded in substantially the manner explained gives to the
20 finished article the qualities of lightness, tenacity, strength and durability.

Such a floor cloth owing to the compactness and homogeneous nature of the composition
25 in application to a backing material enables a much more perfect or distinct design or pattern to be stamped or printed thereon; again such a fabric or cloth can be produced in a most economical manner, and it has most

excellent wearing properties, due to its slightly yielding surface or body; and moreover, its deadening property to sound in treading over the same, is another desirable property thereof.

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A floor cloth provided with a backing material such as burlap, canvas or the like having a composition applied thereto composed of dried and ground leaves and a binder, such as an oil, rosin and gum, substantially as and for the purposes set forth.

2. A composition for the manufacture of floor cloth, composed of dried and ground leaves and a binder, substantially as and for the purposes set forth.

3. A composition for the manufacture of a floor cloth, composed of dried and ground leaves, an oil, rosin and gum arabic, substantially as and for the purposes set forth.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

ANTON HAGELE.

Witnesses:

THOMAS M. SMITH,

RICHARD C. MAXWELL.