UNITED STATES PATHNT OFFICE.

HENRY R. GREGORY, OF NEW YORK, N. Y., ASSIGNOR TO WALTER A. KER, OF BROOKLYN, NEW YORK.

THIN LEAF OR FABRIC.

No. 848,301.

Specification of Letters Patent.

Patented March 26, 1907.

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To all whom it may concern:

Be it known that I, HENRY R. GREGORY, a citizen of the United States, and a resident of the borough of Brooklyn, in the city and 5 State of New York, have invented a new and useful Thin Leaf or Fabric, of which the following is a specification.

My invention consists in providing a thin leaf or fabric which is made to imitate metal to leaf—such, for instance, as gold leaf, silver leaf and the like—which thin leaf or fabric is suitable for use in embossing and decorative purposes generally, it being extremely tenacious and capable of being more easily han-15 dled than the gold or other metal leaf itself.

The thin leaf or fabric comprises a fiber which acts as a binder—such, for instance, as soluble cotton—and a coloring-matter—such for instance, as bronze. The thin leaf or 20 fabric is formed as follows: I combine a volatile solvent, a fiber which acts as a binder, and a coloring-matter and pour the same onto a liquid heavier than the volatile solvent and permit the volatile solvent to evaporate, 25 thus leaving a leaf composed of the fiber, which acts as a binder, and the coloring-matter, the volatile solvent having entirely disappeared.

The substances which I have found suit-30 able for use and the proportions of the same are substantially as follows: I dissolve onequarter of a pound of what is commonly known in the art as "soluble" cotton in one gallon of what is commonly known in the art 35 as "amyl" oil. To this solution I add a coloring-matter—such, for instance, as bronze, (if it is desired to form an imitation-gold leaf)—and then thoroughly mix the same, the proportions being substantially four 40 parts of the solution of cotton and amyl oil

to one part of the bronze. This mixture is poured onto water confined in a vessel. A thin leaf or fabric is rapidly formed on the surface of the water by the evaporation of the amyl oil, thus leaving the cotton fiber 45 impregnated with the coloring-matter. The formation of the leaf occurs in a very short time—viz., within a few minutes. The leaf may then be removed from the surface of the water and cut up into the desired sizes.

What I claim is—

1. A thin leaf or fabric formed by combining a volatile solvent, a fiber which acts as a binder, and a coloring-matter and pouring the same onto a liquid heavier than the vola- 55 tile solvent.

2. A thin leaf or fabric composed entirely of soluble cotton and a coloring-matter incorporated therein.

3. A thin leaf or fabric formed by dissolv- 60 ing soluble cotton in a volatile solvent, adding a coloring-matter thereto and pouring the same onto a liquid heavier than the volatile solvent.

4. A thin leaf or fabric formed by dissolv- 65 ing soluble cotton in a volatile oil, adding a coloring-matter thereto and pouring the same onto a liquid heavier than the oil.

5. A thin leaf or fabric formed by dissolving soluble cotton in amyl oil, adding a color- 70 ing-matter thereto and pouring the same onto a liquid heavier than the amyl oil.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 15th day of 75 May, 1906.

HENRY R. GREGORY.

Witnesses:

FRED. HAYNES,