

UNITED STATES PATENT OFFICE.

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COMPOSITION FOR USE IN MAKING IMITATION GOLD-LEAF.

1,201,758.

Specification of Letters Patent.

Patented Oct. 17, 1916.

No Drawing.

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To all whom it may concern:

Be it known that I, JUSTUS G. POTTER, a citizen of the United States, and residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Compositions for Use in Making Imitation Gold-Leaf, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to the manufacture of imitation gold leaf and particularly to an improved composition for making such material, and the object of the invention is the production of an improved imitation gold leaf designed particularly for use in the making of signs and decorating books and which may also be used for various other purposes, and which resembles, in all respects, the genuine article, and which is brighter than the genuine gold leaf and more durable than the genuine article and other imitations of its class.

In the practice of my invention I provide a solution of pyroxylin, ethyl chlorid, acetate of potassium, sulfuric ether, kerosene, benzin and gold bronze, said ingredients being combined approximately, in the following proportions:

Pyroxylin	8 oz.
Ethyl chlorid	1 oz.
Acetate of potassium	1 gr.
Sulfuric ether	2 oz.
Kerosene	1 oz.
Benzin	1 oz.
Gold bronze	1½ oz.

All these ingredients are in liquid form, except the gold bronze and in preparing the composition, the said ingredients are mingled in a suitable receptacle and preferably in the order named, and as the mingling of the separate ingredients proceeds, the composition is thoroughly stirred until there is a complete union of the said ingredients, after which the composition is ready for use and may be put up for use, in bottles, jugs, jars or similar receptacles and in the usual way.

In making imitation gold leaf from this composition a certain amount thereof is deposited on a smooth iron surface or iron plate and an iron rod or bar is passed over said surface or plate parallel therewith so as to distribute the composition equally and

evenly over said surface or plate, after which the composition is allowed to dry either at a natural temperature, or an artificial temperature of preferably not over seventy-five degrees Fahrenheit. After the coating thus deposited on the iron plate or surface has dried it may be removed therefrom, or peeled off of said plate or surface, in the form of a thin sheet or leaf resembling in all respects ordinary gold leaf. Instead of proceeding in the manner above described to produce the gold leaf, I may put the composition in a suitable receptacle and take a sheet of tin and place it on the liquid composition and, in this event, a thin coating of the liquid adheres to the sheet of tin and said sheet of tin may then be removed from the liquid, and the said coating allowed to dry thereon, as hereinbefore described, after which the thin sheet of material is detached or pulled off of the sheet of tin and is ready for use. The imitation gold leaf, thus produced, is more durable when in use than the genuine article and is also brighter, and may be used for most of the purposes for which genuine gold leaf is now employed, such as making signs, decorating books, placing the names or titles on books and gilding the edges of the leaves of books and for other purposes.

My invention is not limited to the exact proportions of the separate ingredients herein set out and my invention is also not limited to the use of both of the volatile mineral oil products such as kerosene and benzin as a very good product may be produced by the use of either of these ingredients separately.

Instead of using sulfuric ether other volatile solvents may be employed and the pyroxylin which I employ is a nitrocellulose containing less nitric acid groups, (NO₂) than gun cotton, and is prepared by dipping wool or raw silk into a mixture of fourteen parts of nitric acid (HNO₃) and twenty-two parts of sulfuric acid (H₂SO₄) allowing it to steep for ten hours, or until it is soluble in a mixture of alcohol and ether.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A composition for use in making imitation gold leaf, said composition containing pyroxylin, ethyl chlorid, acetate of potassium, sulfuric ether, kerosene, benzin and gold bronze.

2. A composition for use in making imitation gold leaf, consisting of pyroxylin, ethyl chlorid, acetate of potassium, sulfuric ether, a volatile mineral oil product, and
5 gold bronze.

In testimony that I claim the foregoing as my invention I have signed my name in

presence of the subscribing witnesses this 30th day of September, 1915.

JUSTUS G. POTTER.

Witnesses:

C. MULREANY,
H. C. THOMPSON.