

United States Patent Office.

ANSIL WHORTON MUNROE, OF RAHWAY, NEW JERSEY, AND ISAAC CURTIS
MUNROE, OF BROOKLYN, NEW YORK.

Letters Patent No. 63,553, dated April 2, 1867.

IMPROVED PROCESS OF ENAMELLING HARD RUBBER, GUTTA PERCHA, &c.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, ANSIL WHORTON MUNROE, of Rahway, Union county, State of New Jersey, and ISAAC CURTIS MUNROE, of Brooklyn, Kings county, and State of New York, have discovered a new and useful Process for Enamelling India Rubber or Allied Gums; and we hereby declare that the following is a full, clear, and exact description thereof.

Within a few years vulcanized rubber has come into extensive use for dental purposes, it being light, strong, easily worked into any desired form, susceptible of great smoothness, and therefore peculiarly adapted to plate work, as a base for artificial teeth. But there has always been this objection to its use: None, prior to our discovery, have been able to make it of a gum-flesh color, and therefore the porcelain, of which the artificial teeth are composed, has been necessarily carried high up upon the rubber-base, so that its gum-flesh color should alone be visible. The porcelain being much more expensive than the rubber, the cost is enhanced. It has been diligently sought to so naturally color the rubber-base that it might serve the purpose of the artificial gum; the more that the gum might be continuous, or without break between the several teeth or blocks of teeth—a result not attainable with the ordinary rubber-base without exposing the unnatural color of such rubber-base. Our discovery, although applicable to many uses, is especially designed to meet this universal need in dentistry, and it consists in an enamel capable of receiving all colors and shades, so applied to the rubber-base that it will remain permanent and unchangable.

We accomplish it thus: The teeth being secured to the finished rubber-base, we apply thinly, with a brush, coatings of colored or uncolored collodion, known as gun-cotton collodion, composed of alcohol, gun-cotton, and ether, to all parts of the rubber, to which it will adhere, but not to the teeth, and presently hardening, become solid and fixed. It may be applied cold, or heated from 100° to 400° Fahrenheit. If the collodion is not colored, the desired color is secured by blending such color between the several coats of collodion with a light brush as they harden.

It is obvious that this discovery is applicable to everything made of rubber or its allied gums, which it is desirable to ornament or render useful by variety of colors or peculiarity of shade.

We do not limit our claim to enamelling rubber by the peculiar collodion named as in our present judgment best, but believing ourselves first to successfully enamel rubber, we claim doing it in every way chemically, substantially the same as that herein set forth; and desire to secure by Letters Patent—

Enamelling rubber or its allied gums, substantially as described.

ANSIL WHORTON MUNROE,
ISAAC CURTIS MUNROE.

Witnesses:

S. J. GORDON,
J. E. GAY.