UNITED STATES PATENT OFFICE.

AUGUSTE GRANDJEAN, OF NEW YORK, N. Y.

IMPROVEMENT IN COMPOSITIONS FOR DYEING THE HAIR.

Specification forming part of Letters Patent No 3,453, dated February 28, 1844.

To all whom it may concern:

Be it known that I, Auguste Grandjean,
of the city of New York, N. Y., have invented
a new, useful, and improved composition of matter for changing the color of hair, which I call "Grandjean's American Brick;" and I do hereby declare that the following is a full and exact description of the manner and process of making or compounding and using the same,

Take of good lime, well slaked and reduced to powder, four parts, by weight. To this add eight parts, by weight, of the oxychloride of bismuth, (known as the "Spanish white" of commerce,) and one part, by weight, of the Venetian red of commerce, in a dry state, and mix these three substances thoroughly. Then take of the fused yellow protoxide of lead, (known as the "litharge" of commerce, eight parts, by weight, and add it gradually, being careful to stir the whole mass rapidly while adding the litharge, in order to prevent a deposition or precipitation of the litharge to the bottom, and make a thoroughly mingled mixture of these substances. This being done, now add a quantity of distilled water, (pure rain-water will answer, however,) in which has been dissolved a small portion of gumarabic or other mucilaginous substance, merely sufficient to make the water very slightly mucilaginous. The quantity of this gum-water to be added to the aforesaid mixture should be enough to convert it into a slightly liquid paste. After this gum-water has been added, stir the paste carefully for several hoursabout six hours. It should then remain in some suitable vessel for about eight days, during which period it should be stirred for about two hours in each day, and until it shall have become nearly dry, which will be the case at about the expiration of that time. To the composition in this state then add one part, by weight, of well-pulverized brick, and again, be it observed, it is requisite to mix this pulverized brick with care. This being done, the composition may be spread or rolled upon a table in proper thickness to suit the intended form or mold, and when it shall have dried sufficiently to take and keep the shape intended without sticking, mold or shape it in the form desired, and let it dry completely. It will then be a solid mass and suitable for use. It may

be used by applying it when wet to the hair, and then covering the hair from the light and air, as other hair-dyes have been used; but the method that I prefer is to dip the "American Brick" into water, and then to rub it upon the hair which it is proposed to change in its color; and when sufficient of the composition shall have been rubbed off to cover each fiber or hair it is to be permitted to remain thereon, care being had whenever the composition on the hair dries to keep it moist by applying a wet sponge or cloth or other appropriate thing to keep it moist until the desired shade or color shall be obtained. The different degrees or shades of color are made according as the period of time during which the composition is kept upon the hair be lengthened or shortened.

Heretofore lime and litharge have been used with perhaps other substances in compound: but I do not know or believe that Venetian red, pulverized brick, and gum-water, or either of them have been used in compound with these substances, and I claim that it is this new combination of substances which makes my composition superior to any ever before made. A knowledge of the chemical effects of these substances or practice will prove that the addition of these substances modify or mitigate the burning or corrosive effect of the others, and consequently it is that my composition does not destroy or injure the texture or fiber of the hair; and I do here state that I do not claim to be able to change all shades of hair to any other mentioned shade; but merely that my American Brick will change a certain shade or color of hair to some shade that shall be darker than the original one—as, for instance, light blonde hair to any darker shade, but not a dark or black shade to a lighter one. A few hours have been required heretofore to produce a dark black, and in so doing the fiber of the hair was burnt or corroded, whereas my American Brick to produce the darkest black requires that the composition be kept upon the hair for about fourteen hours, and when lighter shades are desired a shorter period of time is necessary—as, for instance, a dark chestnut is produced in about six hours, a lighter chestnut in about four hours, a very light brown in about three hours, a deep blonde in about one hour and a half, an infant's blonde in about

half of an hour, and the different shades between these mentioned in proportional periods of time. It is, however, necessary to have the hair well cleansed from grease or oily matter

before the composition be applied.

I do claim as my invention the above-described composition of matter, (which I call "Grandjean's American Brick,") to be made in the manner as herein described, with the substances and in the parts or proportions, by weight, as hereinbefore particularly set forth; but I do not mean to confine myself to the very exact amounts or parts, by weight, as herein stated, for a small difference in the amount of one or another part may not effect any material difference in the result produced; but I have ascertained by experiment that the hereinbefore mentioned parts of the substances specified will, when properly compounded, make a composition which will, when applied with proper care and as I have set forth above, change the color of hair to darker shades of color and produce various beautiful shades without "burning," as it is commonly called, or injuring the texture or fiber of hair, and herein consists, mainly, the advantage of my improved composition—viz., the capacity to produce various darker shades of color in hair, applied in the manner and state as I have above described, without injuring the texture or fiber of hair, together, also, with the improvement in the condition or density of the substance, it being, when prepared for use, in a solid state of about the density of burned brick, and consequently convenient for use and transportation.

It is not intended to be stated that the abovespecified substances can be used or compounded only in the specified or particular parts, and not in other parts or proportions differing in quantity from those I have specified, for no doubt a difference in proportions of said substances may produce very nearly the same

effects; and

I desire to claim as my invention—

The union or compounding of the abovementioned substances in varying proportions, such as experience shall dictate to be the better and will produce similar effects to those hereinbefore stated—viz., to change the color of hair.

AUGUSTE GRANDJEAN.

In presence of— CAMBRIDGE LIVINGSTON, D. Howit.