UNITED STATES PATENT OFFICE.

EUGENE OUDINOT, OF PARIS, FRANCE.

STAINED-GLASS WINDOW.

SPECIFICATION forming part of Letters Patent No. 266,507, dated October 24, 1882.

Application filed November 18, 1881. (No specimens.) Patented in France July 8, 1880, No. 137,700.

To all whom it may concern:

Be it known that I, EUGENE OUDINOT, of Paris, in the Republic of France, have invented certain new and useful Improvements in Stained Glass and in the Process of Making the Same, of which the following is a specification.

My invention consists in a novel process of coating stained glass with metal, said process 10 consisting in first applying over the whole surface of the stained glass a coating of metallic powder, flux, and adhesive substance, then perfecting the design by removing more or less of the coating from some portions and increas-15 ing the coating on other portions, and in finally firing the glass thus coated, whereby I provide stained glass which, to an observer on the opposite side from that on which the light falls, will present the appearance of ordinary 20 stained glass and show the design in colors, while to an observer on the side on which the light falls the glass will be opaque, and will show the design in gold or the color of the metal employed.

25 The process of coating the stained glass and perfecting the design above described may be repeated on the other side of the glass; and my invention further consists in a new article of manufacture—namely, stained glass having 30 applied to each side a thin vitrified coating of metal, for the purpose hereinafter described.

In carrying out my invention I may employ ordinary stained glass; or, if I desire to produce any particular design, I take plain glass 35 and paint it in the ordinary way with vitrifiable colors—such as are usually employed for the purpose—after which the painted glass is exposed to the action of heat or fired. For my purpose I employ only metals which will 40 bear great heat without being decomposedsuch, for instance, as gold or platinum. The metal I employ in a state of powder, and I mix with it a sufficient quantity of any suitable flux—such as bismuth—to produce a vitrifia-45 ble compound, and gum or other adhesive substance to cause it to adhere to the glass when applied. I first bind a number of pieces of stained glass together with lead to form a panel, and I then coat or cover the whole of

position above described, which I apply with a brush, so as to produce an effect like stippling. After this coating is applied, in order to bring out or make prominent the design, I pick out the portions which are to be lighter by 55 means of a brush or feather, removing more or less of the metallic coating, as may be desired, and I then give vigor to the shades or darker parts of the design by applying with a brush a further quantity of the metallic composition, 60 in lines and by cross-hatching, grading from half-tones to the deepest shades. This done, I subject the panel to the action of heat or fire it.

If the glass thus prepared be used for a window, the metallic coating being on the inside, 65 an occupant of the room will see the design in colors during the day; but at night, when the room is lighted, he will see the design in gold or the color of the metal employed, while an observer on the outside will see the design in 70 colors, the color of the metal not being visible. By applying a single coating to the glass I thus produce what I term a "nocturnal" or "double" effect.

If desired, I may apply a metallic coating 75 to the other side of the glass, also in exactly the manner before described, and again fire it.

If the glass coated with metal on both sides be used for a window, an occupant of the room will see the design in colors during the day 80 and in gold or the color of the metal employed at night, while a person on the outside will see the design in gold or the color of the metal employed during the day when the light falls on the glass from the outside, and will see the 85 design in colors at night when the room is lighted. By thus coating the glass with metal on both sides I produce what I term a "treble effect."

It will be seen that by my invention I en- 90 able very beautiful effects to be produced, for if the glass has a metallic coating on both sides the design is always visible on one side or the other as a picture in gold or the color of the metal employed.

What I claim as my invention, and desire to secure by Letters Patent, is—

stained glass together with lead to form a panel, and I then coat or cover the whole of one side of the panel with the metallic com-

metallic powder, flux, and adhesive substance, then perfecting the design by removing more or less of the coating from some portions and increasing the coating on other portions, and in finally firing the glass thus coated, substantially as and for the purpose described.

2. As a new article of manufacture, stained glass having applied to each side a thin vitri-

fied coating of metal, whereby I produce the triple effect herein described, substantially as 10 set forth.

EUG. OUDINOT.

Witnesses:

GASTON CHANDON DE BRIAILLES, GEORGE WALKER.