No. 877,351.

PATENTED JAN. 21, 1908.

A. & L. LUMIERE.

SENSITIVE PLATE FOR COLOR PHOTOGRAPHY.

APPLICATION FILED MAY 9, 1906.

FIGI

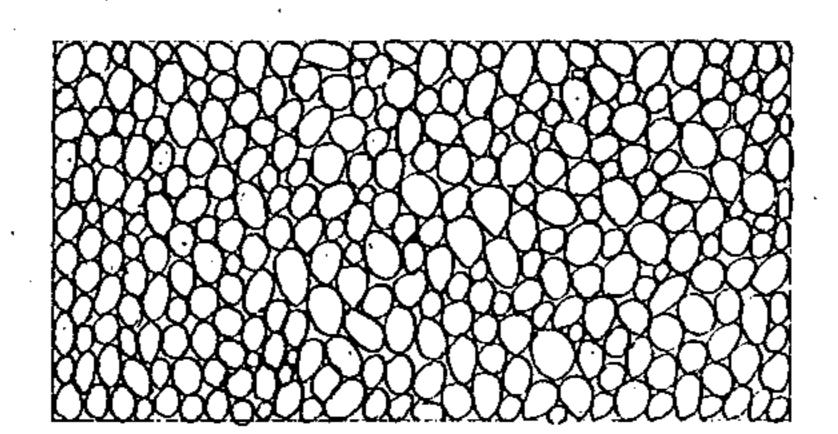
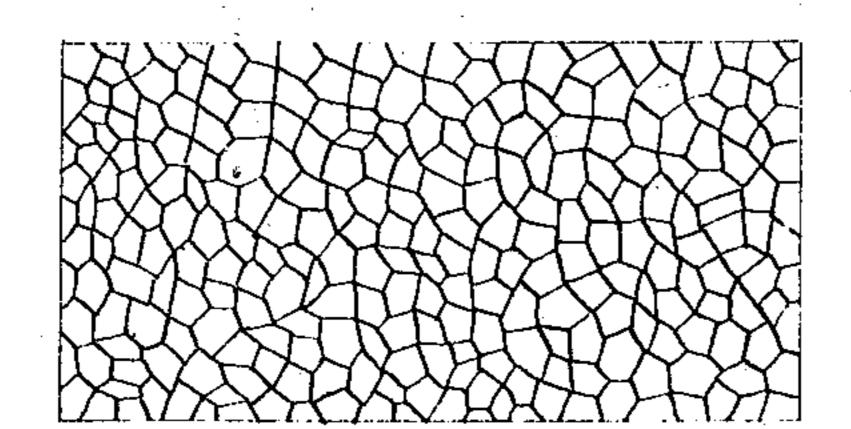


FIG. 2



WITNESSES

W. Burke

Luguste Lurriere Louis Lurriere By Richardson 1774'S

## UNITED STATES PATENT OFFICE.

AUGUSTE LUMIERE AND LOUIS LUMIERE, OF LYON, FRANCE.

## SENSITIVE PLATE FOR COLOR PHOTOGRAPHY.

No. 877,351.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed May 9, 1906. Serial No. 316.011.

To all whom it may concern:

Be it known that we, Auguste Lumiere and Louis Lumiere, citizens of France, residing at Lyon, (Rhône,) France, have invented new and useful Improvements in Sensitive Plates for Color Photography, of which the following is a specification.

The invention relates to the process of manufacture of sensitive plates for color photography, such process consisting in the interposition between the sensitive coating and its support of a layer of colored particles. In said process the continuity of the screen layer interposed between the sensitive coating and its support is obtained by filling the interstices remaining between the colored particles with black powder. This filling is avoided by the method hereinafter described and illustrated in the accompanying drawing.

Figure 1 shows, on a greatly enlarged scale, the arrangement of the colored particles after their application to the support. Fig. 2 shows these same particles after the complementary operation for rendering the

After having spread on the transparent support, which may be glass, film, paper, etc., a layer of pitchy material, there is spread a layer, as uniform as possible, of colored particles, in which layer the grains touch each other without being superposed on each other, as shown at Fig. 1. These grains, composed of fecula, starch, or other analo-

gous matter, are then brought to a suitable hygrometric condition in order to acquire the 35 necessary plasticity for the next operation. In this state the colored coating is submitted, at the same time as its support, to a direct pressure or to a rolling, which crushes the suitably softened colored grains and causes 40 them to fill the spaces so as to form, as shown at Fig. 2, a mosaic covering the support at all parts.

This method has, over that of filling with black powder, the advantage of producing 45 more luminous plates and of regularizing the thickness of the coating in such manner as to avoid as much as possible the diffusion of light. The colored coating thus obtained is, as before, covered with a transparent varsible, above which is spread the sensitive coating, and the plates are utilized as before.

What we claim as our invention and desire to secure by Patent is:—

A sensitive plate for color photography 55 comprising a sensitive coating and a layer of crushed colored particles interposed between the sensitive coating and the support.

In testimony whereof we have signed our names to this specification in the presence of 60 two subscribing witnesses.

AUGUSTE LUMIERE. LOUIS LUMIERE.

Witnesses:

GASTON JEAUNIANO, MARIN VACHON.