United States Patent Office.

V. M. GRISWOLD, OF LANCASTER, OHIO.

BITUMINOUS GROUND FOR PHOTOGRAPHIC PICTURES.

Specification forming part of Letters Patent No. 15,924, dated October 21, 1856.

To all whom it may concern:

Be it known that I, VICTOR M. GRISWOLD, of Lancaster, in the county of Fairfield, State of Ohio, have invented a new and valuable Process for Sensitizing Bitumen for Taking Photogenic Pictures on Paper or other Material; and I do hereby declare that the following is a full and exact description thereof.

The nature of my improvement consists in the preparation of bitumen by the following processes: Dilute asphaltum - varnish (which has been prepared by boiling one-half gallon linseed-oil, one pint Japan varnish, and five or six ounces asphaltum to such a consistency that it will, when cool, roll into a hard ball) to a proper consistency with spirits of turpentine. Add to eight ounces turpentine one-half ounce bromine and one ounce iodine-a small quantity at a time—as they unite with great heat and must be managed with care. When thoroughly united this is bromoiodized turpentine, which, added to a half-gallon bath of the prepared bitumen, forms what I call "bromoiodized bitumen;" or I take finely-pulverized bromide of potassium one hundred and fifty grains, to which add one hundred and fifty grains crystallized nitrate of silver dissolved in four ounces distilled or pure soft

water; wash the precipitate through nine or ten changes of water, filter dry in a dark place, put the dry powder (bromide of silver) into a long eight-ounce vial containing four to six ounces turpentine, and add to it one and a half ounce iodide potassium very finely pulverized. This will form the bromoiodide of potassium and silver in turpentine, which add to the halfgallon of bitumen prepared as above.

Bitumen sensitized as above will give impressions without the aid of collodion, and renders a collodion film more sensitive, and gives a more sharply-defined image than by any other process, and may be used for taking pictures on paper or any other smooth hard substance.

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

A sensitized bitumen for taking photogenic pictures on paper or other substance prepared by the above-described or other similar process substantially the same, and producing the desired effect.

V. M. GRISWOLD.

Witnesses:

P. B. EWING,

G. STEINMAN.