

UNITED STATES PATENT OFFICE.

HENRY RUNDLE, OF EDWARDSVILLE, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO GEORGE L. WILLIAMS, OF SAME PLACE.

IMPROVEMENT IN PROCESSES OF DEVELOPING PHOTOGRAPHIC PICTURES.

Specification forming part of Letters Patent No. **204,760**, dated June 11, 1878; application filed September 24, 1877.

To all whom it may concern:

Be it known that I, HENRY RUNDLE, of Edwardsville, Illinois, have made a new and useful invention in developing photographs and producing albertype effects upon ferro and other plates, of which the following is a full, clear, and exact description.

It consists in subjecting the photographic surface, after the picture has been developed in the usual way, to a peculiar redeveloping process, more particularly described as follows:

The plate (or glass, as the case may be) is prepared, exposed, developed, washed, "cut off," and (preferably with cyanide of potassium) washed again in the ordinary manner. Then, without drying the plate, I pour over its surface an aqueous solution of sulphate of iron, alum, acetic acid, and corrosive sublimate, and compounded, preferably, in the following proportions: Of water, eight ounces; of sulphate of iron, two drams; of alum, two drams; of acetic acid, one ounce; of corrosive sublimate, one-half ounce. The plate is subjected to the influence of this last-named or redeveloping solution until what are termed the "whites" of the picture assume a white marble appearance. The picture is then washed, and dried over an alcohol lamp, heating the picture more than is customary, and preferably for a period of fifteen minutes. The moisture will then have thoroughly disappeared, and the impression be rendered permanent.

The effect of this treatment is to develop a

photographic picture to a remarkable degree, and much more fully and thoroughly than heretofore has been practicable.

The invention is especially applicable to ferrotypes, imparting to such pictures greater distinctness and more fineness of outline than even is shown in an albertype.

I do not, however, desire to limit the application of the invention to any one kind of photographs, it being useful in connection with all the usual photographic pictures, nor do I wish to be confined to the proportions above named in compounding the redeveloping solution. The amount of acetic acid may be varied from one-half to one and a half ounce; from one and three-fourths to two and a half drams of sulphate of iron may be used; from one to two and a half drams of alum may be used; from one-fourth to three-fourths of an ounce of corrosive sublimate may be used; and all may be dissolved in from six to ten ounces of water.

I claim—

1. The herein-described method of intensifying or redeveloping photographic pictures by treating them with a solution composed of sulphate of iron, alum, acetic acid, and corrosive sublimate, substantially in the proportions named.

2. As a new manufacture, the herein-described albertype picture upon a ferro-plate.

HENRY RUNDLE.

Witnesses:

CHAS. D. MOODY,
FREDK. LEAR.