

UNITED STATES PATENT OFFICE.

JOSEPH S. SIMONDS, OF DETROIT, MICHIGAN.

PROCESS OF PREPARING PAPER FOR SUN-PICTURES.

SPECIFICATION forming part of Letters Patent No. 347,527, dated August 17, 1886.

Application filed September 10, 1885. Serial No. 176,753. (No specimens.)

To all whom it may concern:

Be it known that I, JOSEPH S. SIMONDS, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful
5 Improvements in the Process of Preparing Sun-Pictures; and I do hereby declare that the following is a full, clear, and exact description thereof.

This invention relates to a new process for
10 preparing paper for sun-pictures, whereby pictures are taken upon the paper without the necessity of a negative from which such pictures are printed.

The invention consists in the peculiar process of preparing such paper, as more fully
15 hereinafter described.

I take any suitable colored paper, using a variety of colors, so that any color which is designed to be most prominent in the completed picture may be used. The papers used
20 are preferably such as are known as "cover-papers," as the color in such papers is uniform and the papers themselves have the requisite body. These papers I cut into any of the
25 sizes required, and immerse the same in a solution having about the consistency of cream, made by dissolving india-rubber in 63 gravity naphtha. Then the paper is placed on a smooth and nearly-inflexible material of the
30 same size as the paper, or thereabout, such material being of glass, pasteboard, &c., sufficiently stiff to hold the paper in position when placed in the camera without buckling or wrinkling, after which the surface is rubbed
35 down smoothly, tissue-paper or other suitable material being placed over it to prevent injury by rubbing. If pasteboard or anything that will be attacked by acids is employed for the backing to the paper, the back edges of
40 such backing must be protected from such chemical action by a coating of asphalt on the exposed surfaces. After drying, remove the solution of rubber from the exposed face of the paper, which can be done by a little fric-

tion created by hand, leaving the paper stuck 45 to its backing by the rubber solution upon the opposite side. After this solution or film has been rubbed off from the face of the paper, I coat the exposed face thereof with a solution of about the thickness of cream, made by dissolving a certain quantity of pure rubber 50 in 63 gravity naphtha and a like quantity of pure gutta-percha dissolved in pure benzole. After this surface of film is dried I albumenize such surface with the pure white 55 of an egg, or any such albumen which will adhere to the surface, gelatine itself not having such affinity to the solution as to make it adhere. After this film of albumen has been applied, I surface the same with pure gelatine 60 and chrome-alum, in the usual way. Now the paper is ready to be sensitized for photographing by any of the known dry or wet processes, the picture being taken directly upon the paper without the intervention of a negative. 65

If a sitter has auburn hair and a dress of a corresponding color, which it is desired to reproduce in the picture, I select for use that color of prepared paper that is nearest the shade of the hair and dress. The picture, when 70 completed, will be sharp and clear, and will give the color of the hair and dress with great accuracy and success.

What I claim as my invention is—

The process herein described of preparing 75 paper for photographic purposes by removing the solution of rubber from the exposed face thereof, and coating the same with a film composed of rubber dissolved in naphtha and gutta-percha dissolved in benzole, albumenizing such surface with pure white of egg, and 80 then applying to such surface pure gelatine and chrome-alum, substantially as and for the purposes set forth.

JOSEPH S. SIMONDS.

Witnesses:

H. S. SPRAGUE,
EDMOND I. SCULLY.