

UNITED STATES PATENT OFFICE.

RICARDO ARAMBURO, OF SEVILLE, SPAIN.

METHOD OF PRODUCING PHOTO-MECHANICAL PRINTING-PLATES.

SPECIFICATION forming part of Letters Patent No. 437,170, dated September 23, 1890.

Application filed October 26, 1889. Serial No. 328,335. (No specimens.)

To all whom it may concern:

Be it known that I, RICARDO ARAMBURO, a citizen of Spain, and a resident of Seville, Spain, have invented new and useful Improvements in the Method of Producing a Photo-Mechanical Printing-Plate, of which the following is a specification.

I take a glass plate and pour on and coat it with a mixture of chromic salt and any mucilaginous substance two or more millimeters thick and dry the same in a dark airy room. After drying said plate I interpose a photographic plate, either positive or negative, and expose it a few seconds to the sun's rays and then dip the plate thus prepared into warm water, which immediately produces the picture thereon in bas-relief. From this plate I then make a mold of chalk and finely-powdered glass or emery and any suitable adhesive substance, and finish the same by striking it softly with a very fine silk cloth, which, when the mold is dry, gives the surface a fine grain essential to the purpose. From the mold thus produced I make rubber, metal, or other plates for stamps or other devices for printing the pictures in the usual way.

The chalk may be incorporated with a mold not having the chalk as an element of the mixture of which it is made by dusting the chalk on its surface and similarly striking the dusted surface with the cloth.

I claim as my invention—

1. The process of producing a photo-mechanical printing-plate, which consists, first, in making a photographic picture in bas-relief; second, making a mold therefrom of fine

powdered glass and chalk; third, producing a grain on the surface of the mold by striking it with a fine silk cloth preparatory to drying the same, and, fourth, producing by casting in the same mold a photographic printing-plate, substantially as set forth.

2. In the process of transferring photographic pictures, first coating a glass plate with a mixture of chromic salt and any mucilaginous substance and drying the same in a dark room; second, interposing a photographic plate and exposing them to the sun's rays; third, dipping the prepared plate into warm water, thus making a photographic picture in bas relief; fourth, making a mold therefrom of finely-powdered glass and chalk; fifth, producing a grain on the surface of the mold by striking it with a fine silk cloth preparatory to drying the same, and, sixth, producing by casting in the said mold a photographic-printing plate, substantially as described.

3. The improved mold for the transfer of photographic pictures, consisting of finely-powdered glass or emery and chalk and having the surface grained, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 5th day of October, 1889.

RICARDO ARAMBURO.

Witnesses:

WILFRED B. EARLL,
W. J. MORGAN.