

UNITED STATES PATENT OFFICE.

LOUIS DE ROUX, OF BÈGLES, NEAR BORDEAUX, FRANCE.

METHOD OF PRODUCING PHOTO-MECHANICAL PRINTING-PLATES.

SPECIFICATION forming part of Letters Patent No. 322,046, dated July 14, 1885.

Application filed May 12, 1884. (No specimens.)

To all whom it may concern:

Be it known that I, LOUIS DE ROUX, a citizen of the Republic of France, residing at Bègles, near Bordeaux, Department of the Gironde, France, have invented a new and useful Method of Producing Photo-Mechanical Printing Plates, which consists of the following steps:

A photographic negative of any desired object is first taken in the camera in the usual manner. A sheet of carbon paper is then exposed to the light under this negative, having first been submitted to a bath containing a two-per-cent. solution of bichromate of potassium and dried. After the exposure the carbon sheet is attached to a copper plate which serves as a support or backing. It is then submitted to the action of hot water, whereby the photographic image is developed. The plate bearing the developed image is then pressed upon a composition of metal in a state of fusion, said composition being formed of the following ingredients, to wit:

Mercury.....	100	grams.
Lead.....	80	"
Tin.....	120	"
Darcet.....	700	"
Magnesia.....	50	"

1050 "
This composition, which is fusible at a low

temperature, is melted and poured into any convenient receptacle, and after having become sufficiently cooled, but while it is still in a liquid state and capable of receiving an impression, the plate bearing the image, developed as above described, is pressed upon the surface of the metallic composition, where it is retained until the metal has become cold. Upon the removal of the copper plate with the carbon paper attached the photographic image will be found impressed upon the surface of the metal, and from this the subject can be reproduced by the ordinary process of mechanical printing.

Having thus fully described my invention, what I desire to claim, and secure by Letters Patent, is—

The herein-described method of producing a photo-mechanical printing-plate which consists in forming a composition of mercury, lead, tin, darcet, and magnesia in or about the proportion specified, then impressing a plate bearing a photographic image in relief upon the surface of the composition while it is in a liquid and impressible state, substantially as described.

LOUIS DE ROUX.

Witnesses:

A. DE ROUX,
GREGORY PHELAN.