

UNITED STATES PATENT OFFICE.

FREDERICK W. COONS, OF ST. LOUIS, MISSOURI.

PROCESS OF ENGRAVING MARBLE AND GRANITE.

SPECIFICATION forming part of Letters Patent No. 300,049, dated June 10, 1884.

Application filed March 3, 1884. (No specimens.)

To all whom it may concern:

Be it known that I, FREDERICK W. COONS, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful
5 Process of Engraving Marble and Granite, of which the following is a full, clear, and exact description.

The stone is first faced off. It is then coated with a mixture composed of white dammar
10 varnish, two parts, and spirits of turpentine, one part. When the mixture becomes so dry as not to adhere to the fingers, the whole surface to be engraved is covered with lead-foil that is pressed down upon the varnish. Then
15 draw the design on the lead and cut out, with a needle previously placed in a holder, the parts of the lead-foil over the parts of the stone to be recessed. After having removed the foil where the face is to be etched the edges
20 of the foil are rubbed down. Then the whole face is cleaned with spirits of turpentine, to remove all the varnish from the places from

which the lead-foil has been removed. The turpentine is then cleaned off with fine sawdust, and next all oil or other grease is removed with a brush and whiting. The face
25 to be engraved being horizontal a sufficient quantity of chemically-pure nitric acid is poured on to cover the whole surface and let it remain on a shorter or longer time, according to the depth it is desired to eat into
30 the stone. Then drain off the acid, wash with clean water, remove the foil, and clean off all the varnish with spirits of turpentine and then dry with sawdust.

I claim as my invention—

The described process of engraving marble and granite by the use of varnish, lead-foil, and nitric acid, as set forth.

FREDERICK W. COONS.

Witnesses:

SAML. KNIGHT,
GEO. H. KNIGHT.