

# UNITED STATES PATENT OFFICE.

SAMUEL M. ADAMS, OF NEW YORK, N. Y., ASSIGNOR OF ONE-THIRD HIS  
RIGHT TO JOHN JOHNSTON, OF SAME PLACE.

## IMPROVEMENT IN THE PROCESSES OF ORNAMENTING GLASS.

Specification forming part of Letters Patent No. **141,305**, dated July 29, 1873; application filed  
June 2, 1870.

*To all whom it may concern:*

Be it known that I, SAMUEL M. ADAMS, of the city and county of New York, State of New York, have invented a new and useful Improvement in the Art of Ornamenting Glass: and I do hereby declare that the following is a full and correct description thereof.

The object of my invention is to facilitate the art of ornamenting glass by acid etching, and to enable the process to be conducted by those who are not skilled in ornamental drawing or designing.

In carrying out my invention, I first cover the glass with metal foil rolled smoothly upon the glass, to which it will adhere sufficiently by the use of suitable slightly adhesive mucilage. I then place upon the foil a pattern-plate of sheet metal, and holding it firmly cut the foil, as indicated by the pattern, with a cutting-tool, the cutting-tool following the edges of the pattern-plate, and being guided by it. The foil thus cut out may then be removed and

the acid applied as usual in etching glass by acid.

I do not claim, broadly, the use of pattern-plates for producing ornamental designs upon glass; neither do I claim the employment of acids for engraving or etching upon glass or metal; but

What I claim as new in the art or process of ornamenting glass is—

1. Attaching temporarily with mucilage or other suitable adhesive substance metallic foil to the article to be ornamented, then producing upon such foil and surface the desired pattern by means of a stencil or guide plate and suitable cutting-tool.

2. Etching the design, so formed, by corrosion in the usual manner, all substantially as described, for the purpose set forth.

SAMUEL M. ADAMS.

Witnesses:

JOHN E. LEEMUN,  
JOHN JOHNSTON.