

## Lithographic Printing

Lithography relies on the natural repulsion between grease and water. The image is drawn on stone in a greasy medium. The surface is then damped, then a greasy ink is rolled over it. The ink sticks only to the greasy image. The Machin and Potts patents (no.6938 of 3 December 1835, and no.7139 of 2 July 1836) include the transfer to tissue paper of impressions from 'lithographing blocks'. M. Ducote used lithography, with etching, for transfers to china in 1839, and his process was demonstrated to the Duke of Sutherland at Thomas Dimmock's factory in Hanley on 10 April 1841. Francis Morley used the process at the Broad Street works, Shelton, in the same decade.

The process was awkward because it was difficult to make the tissue paper strong enough to go through the press without tearing: one answer was to stick it lightly to zinc plates. In 1895 the problem was solved by the invention of Brittain's Duplex paper, consisting of a layer of tissue over a stiffer paper backing. The general adoption of lithographic printing by the ceramics industry is therefore a 20<sup>th</sup> century story.

***Early lithographic decoration on a bone china teacup & saucer in a design registered by***

