JAPANESE ILLUSTRATION

A HISTORY OF THE ARTS OF WOOD-CUTTING AND COLOUR PRINTING IN JAPAN

By EDWARD F. STRANGE, M.J.S.

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the foundation of a true appreciation of its higher branches. The student of aquatints is not likely to confine himself to them alone, but is sure, sooner or later, to pass on to an appreciation of the wonders of line engraving and the rich beauty of the finest mezzotints.

CHAPTER I

THE AQUATINT PROCESS

THE art of aquatinting is still practised, more, however, as the occasional pastime of the modern etcher than as a method of engraving, excepting in so far as it forms the basis of photogravure. The few artists who have recently attempted to revive it speak more of its difficulties and uncertainties as a method of reproduction than of its interest as a process, or the beauty of its results. But we are dealing with a period when it constituted the ordinary means of rendering the drawings of the water-colour artist, and when the command over it as a method of translation was apparently as certain as that over its immediate successor lithography. Indeed, the surprising feature of aquatint engraving during the period under observation is the extent of its use and the variety of subjects to which it was applied with equal success. The present chapter, devoted to an account of the process, is largely drawn from two contemporary treatises, the one by Paul Sandby (1725-1809), who first practised it in England, the other by T. H. Fielding (1781-1851), who, during a long life, did some of the most attractive work ever produced in aquatint. Paul Sandby left a paper entitled *A Mode of Imitating Drawings on Copper Plates discovered by P. Sandby, R.A., in the year*

1775, *to which he gave the Name of Aquatinta*,[1] and Fielding published his treatise on different modes of engraving in 1841,[2] so that our authorities belong respectively to the beginning and end of the time during which it was the favourite method of book illustration. Fielding's work is indeed something of a survival, for by 1830 lithography had largely superseded aquatint; that date therefore has been taken as marking the close of our period, though a few later books have been included in the list of books illustrated with aquatints. The technique of the process differs at the present day in details only from that in use when T. H. A. Fielding, J. C. Stadler, J. Clark, J. Hill, the Daniells and many others did the work so much appreciated in their time.

The first step in the process of aquatint engraving is to lay a ground or grain upon a highly polished copper plate. To get this grain it is necessary to cover minute portions of the plate so that these will be protected from the acid bath and only the intervening spaces be affected by it. But the spaces to be bitten must lie so close together that they cannot be detected by the naked eye. Anything therefore in the nature of a deposit that resists the action of acid will suffice, provided it is fine enough. The acid will attack the spaces that separate the particles deposited, and when the plate is inked and printed from, they will appear as tiny white spaces into which the ink has not penetrated.

At the present time there are many ways of getting

[1] *Thomas and Paul Sandby, Royal Academicians. Some Account of their Lives and Works*, by William Sandby. London, 8vo, 1891.

[2] *The Art of Engraving with the Various Modes of Operation*, by T. H. Fielding. London, 8vo, 1841

an aquatint ground, but for a considerable period only two were in use, the dust ground and the spirit ground. The former is believed to have been invented by Jean Baptiste Leprince, from whom Sandby derived it. Sandby, however, seems to have modified this method by the invention of the spirit ground, for which he claims the title of "discovery."

Leprince made a box containing a flywheel with a cord wound round the axle which could be pulled from the outside. Into this box he put some very finely powdered resin or bitumen. The box was then closed and the wheel set in motion so as to raise the dust in a cloud. When this had begun to settle he slid his copper plate, previously rubbed over with a greasy rag, into the box. When completely covered with the powder, the plate was struck sharply on the back to detach the superfluous dust, and the remaining resin was fixed by warming the plate until the dust changed colour from a brown to a bluish tint. In a good ground the grains of resin should be all of the same size, for where they vary the smaller particles are destroyed by the acid before the plate is sufficiently bitten.

In the liquid or spirit ground resin is dissolved in pure alcohol, and a certain quantity of water added, which, when the solution is poured over the plate, reticulates the resin, *i.e.*, draws it together, leaving a network of tiny channels in which the copper is exposed. The spirit evaporates and in a few minutes the granulation is complete. The resin will thus be found spread over the plate in minute grains, ready to resist the acid, which will bite only in the little network