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# The Grammar of Lithography

*A Practical Guide for the Artist and Printer  
in Commercial and Artistic Lithography,  
and Chromolithography, Zincography,  
Photo-lithography, and Lithographic  
Machine Printing*

W. D. RICHMOND



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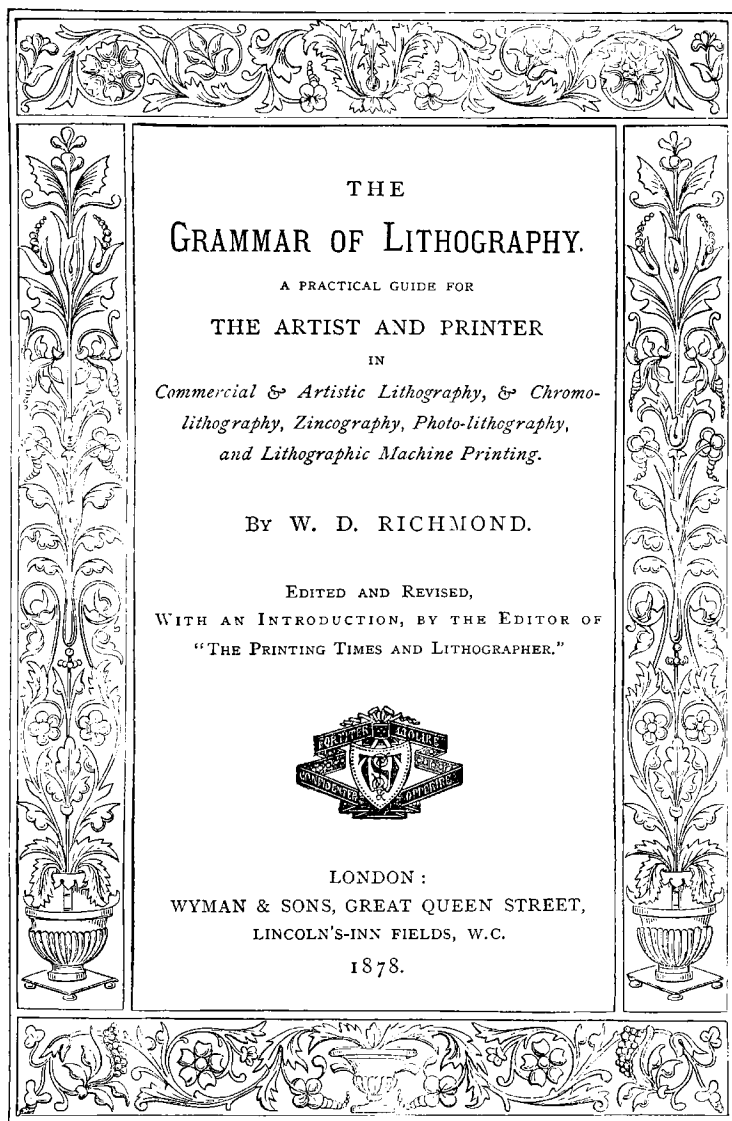
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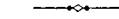
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## EDITOR'S INTRODUCTION.

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HERE formerly existed a deep-seated and it must be admitted an unreasoning prejudice, against technical hand-books treating practically of any trade or profession. It was sedulously instilled into the minds of the young especially, that an acquaintance with the processes of the different industrial occupations could be acquired only by observing and imitating the methods of adepts. This idea was fostered by persons possessed largely with a selfish motive: they had gained their own knowledge of their art in the tedious and irksome manner which, in their case, was the only possible one, and were determined, as far as lay in their power, that such knowledge should be obtained by their successors in the same unintelligent way.

The rise of trade journalism, which is coincident with the establishment of *The Builder*—a periodical that has, in a variety of ways, been of signal service to the industrial community—and the gradually increasing influence and importance attained by the newspapers which each trade and interest soon brought into existence, showed the fallacy of the old prejudice; and it proved what was even of more consequence, the great and substantial use which might be made of the Press in imparting technical

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instruction, partly supplementary to and partly independent of workshop and laboratory practice. A large class of persons became accustomed to find their practical knowledge, even in their own peculiar *métier*, increased and enlarged by the perusal of articles in serials of this character; and it was only a natural development of things when the articles grew into treatises, when isolated facts, hints, recipes, and instruction were welded together into connected grammars, guides, and hand-books of the different departments of craftsmanship.

In the conduct of a journal devoted to printing and the auxiliary arts—THE PRINTING TIMES AND LITHOGRAPHER—the Editor has been constantly called upon to answer questions of an elementary character, and consulted on points more abstruse, connected with Lithography and the processes allied with it. The correspondents' column was too circumscribed for sufficiently detailed replies; and the information desiderated by one reader was only partially required by others. He therefore resolved to cause to be written a series of chapters on Lithography which should embrace every practical exigency that might arise in the ordinary pursuit of the art; and in a form suitable not only for the initiatory instruction of the mere tyro, but for occasional reference by the more advanced practitioner.

He was confirmed in his resolve by another consideration. Repeated requests for the name of a complete treatise on the subject had to be answered with the statement that there was really not a work on Lithography of practical utility in the market. For nearly half a century no treatise of practical value on the art had appeared in the English language. The last considerable work of the kind was that issued by Mr. Hullmandel, and was intended chiefly for amateurs.

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Indeed, it may be said that, from the date of the publication of the English translation of the *Manual of Lithography* issued by SENEFELDER (1819), no other work of importance commensurate with the subject has been given to the public. There was every reason, therefore, that the hiatus should be supplied, and that one of the most beautiful, useful, and progressive of the Reproductive and Graphic Arts should have its processes formulated and its methods scientifically described in a thoroughly practical and complete treatise, brought up to the present time.

Experience showed that a book of the kind was wanted, not merely by amateurs but by many persons who are already engaged in the practice of Lithography. In these latter days the exigencies of trade competition demand a division of labour that has a strong tendency to keep an apprentice ignorant of many things connected with the art of printing from and drawing upon stone. In the larger towns, the reputation made by certain firms for special work favours this division so much, that there are many respectable offices where, for instance, little beyond the ordinary routine of printing in black for commercial purposes is seen. While this systematic division, perhaps, increases the money-value of a workman to his employer, it decreases his general capability. This is soon discovered when he is employed as the working manager of a small general business, a position in which he is required to carry out, in a respectable manner, almost any kind of work that may be brought to the office.

This want of acquaintance with the minutiae of the manifold varieties of printing and preparation of work is especially observable among artists and writers. In London, many lithographic artists know very little of printing, while printers are equally ignorant of drawing. This is un-

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doubtedly the cause of much heart-burning and recrimination between the two parties. The printer perhaps thinks the draughtsman should draw so firmly that there should be little fear of over-etching, while the artist thinks the printer ought to be able to print anything, just as it is put upon the stone. There should be a desire to do the best on both sides; but it is feared that not unfrequently the one is more bent on proving the correctness of a pet theory, than on doing the best he can for his employers. A more extended knowledge would frequently prevent these little differences, and it is hoped that the study of the following pages will tend to a better understanding between the different grades of practitioners of the art.

With these considerations in view, the Editor, after rejecting more than one compilation, eventually selected a practical lithographer of unusual experience and ability in every department of the art, Mr. W. D. Richmond, to prepare the present Treatise. It is believed that his more than twenty-three years' experience, acquired under circumstances accorded to few, his facility for explaining in clear and simple language the various processes involved, and above all his thorough acquaintance with the *rationale*—the chemical and mechanical basis—of the art, have amply justified the selection, and that this “Grammar of Lithography” is undoubtedly the most useful and practical, as it is certainly the most full and complete, Hand-book of the kind that has yet made its appearance.

It will be observed that no specimens of Lithography have been given in this volume. To have done so would have been to increase the cost of the book without imparting to it any corresponding increment of practical value. Nearly every shop-window, if not every street-hoarding, affords examples of the different styles, and to reproduce what is so accessible and so commonplace was needless. Nor has

any portion of the available space been occupied in historical details. These would possess great interest, but as yet they need such an amount of collection, investigation, and classification as to require a separate and independent work for their adequate treatment. This we may some day attempt, in the mean time we can only admit the want, and suggest the interest which would attach to a work which should supply it.

The Editor has gratefully to acknowledge the valuable assistance with which he has been favoured by several gentlemen of high position in the profession of Lithography and the world of Art. Amongst others he must not omit to name Mr. LOUIS HAGHE, the eminent artist, who was himself formerly a lithographic draughtsman and whose name alone is a guarantee of the importance of the co-operation which he has so kindly accorded; Mr. MICHAEL HANHART, who is identified with the progress of Artistic Lithography in this country; Mr. WILLIAM SIMPSON, the famous artist and traveller, who, in his younger days achieved so high a reputation as a practical Lithographer; and Mr. HARRY SANDARS, of Oxford, an expert of exceptional talent and ripe practical knowledge. These gentlemen have each carefully read and corrected the proof-sheets of the different chapters prior to their appearance in the *PRINTING TIMES AND LITHOGRAPHER*, and their concurrence in the principles and processes here detailed affords to the Editor every confidence in the accuracy, utility, and comprehensiveness of this Treatise.

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