AN INTRODUCTION TO THE CHEMISTRY OF PAINTS

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BY

J. NEWTON FRIEND

PH.D. (WÜRZ.) D.SC. (B'HAM.)

AUTHOR OF "THE THEORY OF VALENCY"

WITH DIAGRAMS

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INTRODUCTION

THIS little work is the outcome of a series of lectures delivered to a class of Practical Painters and Decorators at the Darlington Technical College. The majority of the students could not be accused of possessing even a most elementary knowledge of chemistry, and further inquiries have shown that such is the condition of affairs amongst painters generally; although, of course, there are notable exceptions, which serve to "prove the rule," as the saying is. The appreciation with which these lectures were received encouraged me to publish the same in book form, in the hope of appealing to a much larger circle, and of thus creating a wider interest in the subject.

It is all very well to tell the youthful painter that cadmium yellow may not be tinted with white lead, and that it is unwise to mix together Prussian blue and lime; but he is very liable to forget such rules until he has learned their force by bitter experience. If, however, he is made to understand *why* these pigments are incompatibles, his interest is awakened, and the subject presents itself to him in an entirely new light. Now, this can only be done by a judicious inclusion of chemistry into the curriculum of the painter.

But the very name of chemistry is enough to frighten many practical men, for the simple reason that the majority of chemists will persist in laying such stress on symbols and formulæ, atoms and molecules. The consequence is that, before the student can begin to acquire a really practical and useful knowledge of chemistry, he has to wade through and memorize a number of (to him) dull and isolated facts, which might well be left out altogether, or at any rate reserved until the student has reached a more advanced stage. As the

practical man has neither time nor inclination to do this, he not infrequently leaves chemistry severely alone, and therefore fails to appreciate its value and importance.

It has been my endeavour, therefore, to show that a very thorough knowledge of the chemistry of paints may be acquired by the average student, without even a mention of such things as symbols, formulæ, atomic weights, and the like; but for the sake of those who may wish to pursue any branch of the subject further, references are given, whenever possible, to more advanced literature and to original papers. Many well recognized tests for pigments and liquid vehicles are included in the various chapters, and will, it is hoped, prove of service to manufacturers and colour mixers. Should this work fall into the hands of the expert chemist, I trust that its pages will not be found altogether devoid of interest even for him.

It is at once my duty and pleasure to acknowledge the very kind assistance rendered to me by my friend and colleague, Mr. William Davison, who has patiently read through this work both in manuscript and in proof, and has made numerous useful suggestions, at the same time correcting many errors. Although I can scarcely hope that the book is, even now, entirely free from error, I believe that any inaccuracies will be of a relatively unimportant nature, for every endeavour has been made to consult the best authorities, and to include the newest and most reliable work.

J. N. F.

THE TECHNICAL COLLEGE,
DARLINGTON.

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