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CELLULOSE

AN OUTLINE OF THE CHEMISTRY OF
THE STRUCTURAL ELEMENTS OF PLANTS
WITH REFERENCE TO THEIR
NATURAL HISTORY AND INDUSTRIAL USES

BY
CROSS & BEVAN

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PREFACE

THE purpose of this short work on a large subject is to consolidate the scattered contributions of investigators, with more especial reference to the work of the past fifteen years. By this later work the subject has been considerably widened, not merely through the growth of the subject-matter, but by notable additions of experimental methods on the one hand, and theoretical generalisations on the other. In reviewing the present position of cellulose chemistry the work has taken the form of a monograph as distinguished from a textbook. In adopting the freer form of writing we have reserved a certain latitude of treatment, in view of the fact that 'Cellulose' has not yet been accorded a definite position in the specialised sections of organic chemistry; and also because we find it necessary to address ourselves to original workers, and from time to time to point out with particular emphasis the weaker points in the evidence for the theoretical conclusions. At such points suggestions are given of subject-matter for further research, which it is our desire to stimulate. In presenting this work, on the other hand, to the masters and 'past masters' of the science it would have been out of place to have adopted

the more positive method of a textbook, or to have entered into the more minute detail of a handbook.

In the incidental treatment of the technology of the subject we have endeavoured to maintain the scientific perspective rather than to discuss the practical details of processes.

The photo-micrographs included in the work are from the expert handiwork of our friend Mr. J. CHRISTIE, F.R.M.S., of 72 Mark Lane, E.C., to whom we record our best thanks for this interesting addition to the subject-matter.

The book is printed upon a paper carefully selected as composed of the 'normal' celluloses, and to the exclusion of the inferior 'celluloses' ordinarily employed for the manufacture of printing papers. Upon the reasons for this preference we have something to say in the text (p. 305).

We have to thank our friend Mr. J. C. CHORLEY for contributions of experimental results, and for kind assistance in connection with the proofs.

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