CRYSTALLOGRAPHY: AN OUTLINE OF THE GEOMETRICAL PROPERTIES OF CRYSTALS

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Crystallography: An Outline of the Geometrical Properties of Crystals by T. L. Walker

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T. L. WALKER

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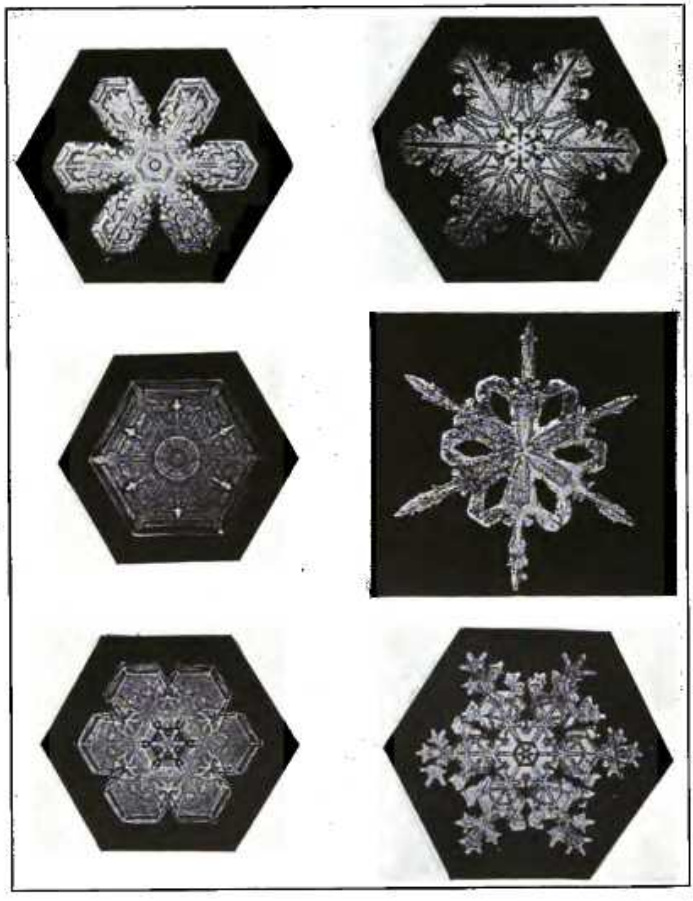

(After Chamberlin and Salisbury)

Fig. 1

CRYSTALLOGRAPHY

AN OUTLINE OF THE GEOMETRICAL PROPERTIES OF CRYSTALS

BY

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PREFACE

DURING the past twenty years Dr. Victor Goldschmidt of Heidelberg has done much to make crystallography an attractive subject. His development of the two-circle goniometer, the gnomonic projection and a new system of symbols which can be read directly from the projection has largely contributed to this end. For many years the writer has used in his classes the methods of Goldschmidt with gratifying results. The chief motive in writing this book arose from the desire to have in the English language a connected elementary statement of crystallography from this point of view. It is hoped that the present work may be generally useful, not only as a presentation of the geometrical properties of crystals, but also on account of its following in outline the newer methods so splendidly developed by Goldschmidt. I fear I may be criticised for my frequent repetition of some of the fundamental ideas such as are usually only slowly comprehended by the student. My defense lies in the fact that it is neccessary for all but the exceptional student.

The extracts from papers on crystallography contained in the last chapter should serve to indicate to the student the chief problems of crystallography as well as the methods of solving them.

The writer acknowledges his great indebtedness to Dr. Goldschmidt for assistance in many ways; to Professors E. H. Kraus, T. C. Chamberlin and R. Salisbury for permission to use figures contained in their works; to colleagues who kindly consented to the publication of extracts of their papers in the last chapter and to Professor A. L. Parsons and H. V. Ellsworth for assistance in proof-reading and in many other ways.

UNIVERSITY OF TORONTO,
June, 1914

T. L. WALKER

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