

BOOK REVIEW

Photography: Its Science and Practice. John R. Roebuck and Henry C. Stachle, *D. Appleton-Century Company* (New York, N. Y.), 1942.

The present book is an outgrowth of one originally prepared by Professor Roebuck for use in a course in photography in the Physics Department of the University of Wisconsin about 1916. In view of the many advances that have been made in the art since that time, it became necessary for Professor Roebuck, with the aid of Dr. Henry C. Stachle of the Research Laboratories of the Eastman Kodak Co., to rewrite the book completely.

The result of this collaboration is a highly commendable and valuable addition to the photographic literature. It will prove valuable both to amateurs and experts, in providing an overall view of the photographic process, without going too deeply into technicalities. There are, in addition, thousands of persons who make photography their hobby and have acquired a considerable grasp of the technics of photography, and yet require information on the scientific fundamentals of the subject. It is for such persons that the book is primarily intended.

The whole of the modern science of photography is surveyed. A brief sketch of the historical development of photography leads to a study of the nature of the photographic emulsion and the manner in which an image is produced. Attention is next given to the properties of photographic materials in relation to their reaction to light, the factors determining correct exposure, and the sensitivity to color needed to preserve tonal values. The chemical processes of development are then treated, followed by a study of positive processes such as printing, enlarging, making lantern-slides, and reproduction for the graphic arts. The chapter on latent-image theory presents the latest views on the mechanism of image formation, and another chapter is devoted to lenses and the optical aspects of photography. Modern processes of color photography are outlined, and the final chapter gives a concise presentation of the subject of pictorial composition and aids in making good pictures. The last section of the book forms a brief laboratory manual consisting of a series of practical experiments.

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