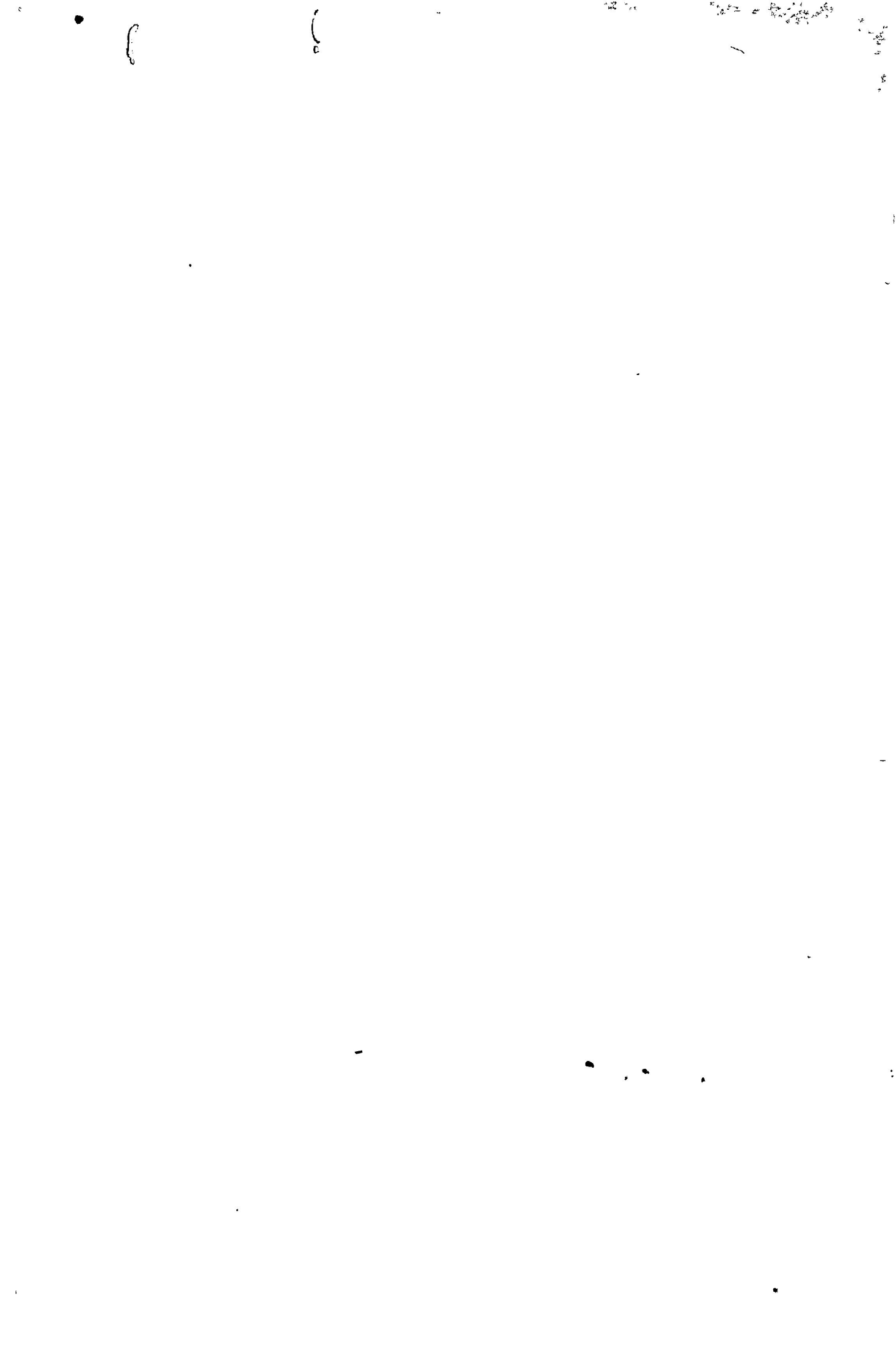


DICTIONARY
OF PHOTOGRAPHY



DICTIONARY OF PHOTOGRAPHY

AND REFERENCE BOOK FOR AMATEUR
AND PROFESSIONAL PHOTOGRAPHERS

Edited and largely re-written by

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Editor of 'Amateur Photographer'

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PREFACE

TO THE EIGHTEENTH EDITION

IT is now nearly seventy years since the first edition of the DICTIONARY OF PHOTOGRAPHY was published, and even then it was not an entirely new publication. It was, in fact, a reprint, with some small additions, of an explanatory glossary of photographic terms that had appeared, in serial form, in *The Amateur Photographer* during 1888. In the hands first of its original author, the late E. J. Wall, and then of successive editors, the DICTIONARY has been kept continually up to date and gradually expanded to its present size. Naturally, very little is left of the original matter; nevertheless, working details, even if brief, of all older processes that have been of real value or importance in the past are still retained.

Much of the steady increase in size of the DICTIONARY has come about through the need to include new text to keep pace with the introduction of new equipment and new techniques; in addition, the articles dealing with the more important subjects have been expanded almost to the proportions of small handbooks. Several of these have been either entirely re-written or drastically revised for this edition; notable among them are the articles dealing with cinematography, colour photography, and flash work, for in all three departments there have been considerable changes and advances since the appearance of the last edition. Many minor matters have been similarly dealt with.

This edition, like its predecessors, makes no attempt to report the work of scientists and research workers investigating the photographic process, nor to detail the many specialized techniques now so widely used in industry and research, for to be of any real value in either of these fields it would have to be expanded to very many times its present size. The DICTIONARY sets out only to cover ordinary general photography, as practised by the skilled amateur or the non-specialist professional, but within these limits it has been made as complete as possible.

Preface to the Eighteenth Edition

The main emphasis of the book continues to be on the practical side, but it does include enough of the scientific basis of the various matters discussed to give the photographer a real grasp of the essentials of the subject. Without this, he is likely to find himself helpless if faced with a difficulty, a failure, or even an unfamiliar task. Particular pains have been taken to make such more theoretical considerations as directly applicable as possible to practical problems, and in this connection the experience gained in answering many thousands of queries from readers of *Amateur Photographer* has proved invaluable.

It is perhaps too much to hope that the **DICTIONARY** is quite as complete as it is intended to be, for in compiling a book of so ambitious a character it is virtually impossible not to overlook some items, even if only quite minor ones, that ought to be included. It is not impossible, but only rather difficult, to make sure that such a book contains no errors or ambiguous statements; the Editor cannot find any, but others may. He will be grateful to hear of any omissions or errors that may be noticed, in order that matters may be rectified in a future edition.

Sincere acknowledgements are due to the following contributors:—

T. Thorne Baker, F.R.P.S.	..	(Emulsions: Phototelegraphy)
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A.L.M.S.

DICTIONARY OF PHOTOGRAPHY

A

A. In chemical nomenclature, *a* as a termination has been widely used in the past to indicate indifferently the oxide or the hydroxide of an alkaline or alkaline earth metal; as *alumin-a*, *lithi-a*, *potassi-a*, *stronti-a*, or *magnesi-a*. Also as a termination for the names of alkaloïdal organic compounds, as *morphi-a*, but in this latter case the syllable *-ine* is preferred, as *morph-ine*. As a prefix in scientific and technical names, *a* signifies negation, from the Greek privative prefix *a*; as "chromatic" having relation to colour, "*a*-chromatic" not having relation to colour.

Abaxial. In optics, not coincident with the axis. The term is applied to the oblique or marginal rays of light passing through a lens.

Aberration. Defects in the performance of a lens or mirror which prevent it from giving an absolutely sharp image. Complete removal of all aberrations is impossible, both theoretically and practically, but in a well-designed photographic lens the residual aberrations are small. The aberrations inherent in any optical system of transparent material with spherical surfaces are: chromatic aberration, spherical aberration, coma, curvature of field, astigmatism, and distortion. (See under these headings.)

See also LENS.

Abrasion Marks. See STRESS MARKS.

Absolute. Pure or unmixed: often applied to alcohol almost entirely free from water. (See ALCOHOL.)

Absolute Temperature; Absolute Zero. Since the temperature of a body is the expression of molecular movements, complete withdrawal of heat would cause the cessation of these movements. The temperature at which this occurs has been accurately determined, and is approximately -273°C .

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