

# SYSTEM OF OPHTHALMOLOGY

Edited by  
SIR STEWART DUKE-ELDER

VOLUME XIII  
THE OCULAR ADNEXA

PART I  
DISEASES OF THE EYELIDS

# SYSTEM OF OPHTHALMOLOGY

EDITED BY

**SIR STEWART DUKE-ELDER**

**VOL. XIII**

## THE OCULAR ADNEXA

By

**Sir Stewart Duke-Elder**

*G.C.V.O., F.R.S.*

and

**Peter A. MacFaul**

*M.B., B.S., F.R.C.S.*

Ophthalmic Surgeon, Middlesex Hospital, and the Royal  
National Orthopaedic Hospital, London; Honorary Research  
Assistant, Institute of Ophthalmology, University of London

*WITH 1,300 ILLUSTRATIONS AND 6 COLOURED PLATES*

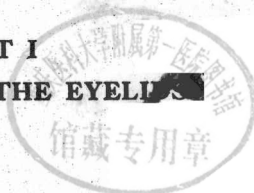
**PART I**

**DISEASES OF THE EYE**

**LONDON**

**HENRY KIMPTON**

**1974**



© Henry Kimpton Publishers, 1974

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of Henry Kimpton Publishers, 205, Great Portland Street, London, W1N 6LR.

First published 1974

ISBN 0 85313 787 0

ISSN 0082 1195

Peter A. Macfadyen

Optometric Services, Moorfields Hospital and the Royal National Orthopaedic Hospital, London; Honorary Research Assistant, Institute of Ophthalmology, University of London

WITH 1300 ILLUSTRATIONS AND 8 COLOURED PLATES

PART I

DISEASES OF THE EYE

LONDON

HENRY KIMPTON

1974

MADE AND PRINTED IN GREAT BRITAIN

## PREFACE

A STUDY of diseases of the lids, lacrimal apparatus, orbit and para-orbital areas comprises a vast medley of unrelated conditions, some of them merely of local interest, others essentially dermatological, and many of them having widespread systemic implications. In the last category the greatest stress has been directed to their ophthalmological aspects, but sufficient attention has been given to their general nature to give a relatively complete clinical picture as well as to serve as a guide to the appropriate treatment. It is true that in many cases the ætiology is obscure; when this is so our ignorance is pointed out and the various hypotheses that have been suggested from time to time have been indicated and their virtues and deficiencies analysed in the light of modern knowledge.

Since our study of the clinical methods of diagnosis in Volume VII of this *System* was limited to the examination of the eye itself, a considerable amount of attention has been given to this part of the subject, particularly when specific techniques are employed in the elucidation of diseases of the lacrimal apparatus and the orbit. As in the other volumes of this *System* this book is essentially clinical and does not pretend to give the surgical procedures in detail; for this, textbooks on ophthalmic surgery, of which many excellent treatises exist, or in some cases on plastic surgery should be consulted. An indication is given only of the outlines of the many various procedures which have been or are advocated with the appropriate references to the literature and general indications of their applicability to any particular circumstance. In order to maintain the completeness aimed at throughout this *System*, a note on the history of many subjects and bibliographies of them all have been included.

It has once again been found advisable for ease of manipulation to expand one volume of the *Text-Book of Ophthalmology* into two, the first dealing with diseases of the lids and the second with the remainder of our subject. The two, however, form one composite whole and when the same condition is discussed in different localities, cross-references are frequent to avoid reduplication of the text or of the bibliographies.

STEWART DUKE-ELDER.

INSTITUTE OF OPHTHALMOLOGY  
UNIVERSITY OF LONDON

1974

## ACKNOWLEDGMENTS

THE WRITER of a book of this type must pile up a mountain of debt to hosts of his colleagues who have contributed much to the advancement of our specialty. This I have freely done but in each case the acknowledgement has been made in the bibliographies. My debt for illustrations is more technical, but again a very great many of my colleagues have been most liberal in supplying me with illustrations for the multitude of conditions described in these pages; again, they are all acknowledged in the legends to the figures. So far as clinical pictures are concerned, my greatest debt is to Dr. Peter Hansell and his staff at the Institute of Ophthalmology for giving me permission to take what I wanted from their ever-growing collection, as well as to Dr. Peter Borrie of St. Bartholomew's Hospital, and to Professor Arthur J. Rook of Addenbrooke's Hospital, Cambridge, for allowing me to make free use of illustrations from his *Textbook of Dermatology*. For the illustrations of tumours I have been liberally supplied by Dr. M. Lederman of London, Professor A. Mortada of Cairo, and Dr. D. Silva of Mexico. For pathological illustrations I have as usual received many from Norman Ashton, Professor of Pathology at the Institute of Ophthalmology, and Lorenz E. Zimmerman of the Armed Forces Institute of Pathology in Washington. Dr. Glyn Lloyd of Moorfields Eye Hospital, and Dr. Stephen Trokel of New York have supplied me with many excellent radiographs. Finally, Dr. F. N. L. Poynter, lately Director of the Wellcome Institute of the History of Medicine, has filled many gaps in my sequence of historical personalities to whom we owe much.

For the somewhat arduous job of reading proofs I have to thank Sir Allen Goldsmith and Miss Mina H. T. Yuille for their welcome help. As with other volumes in this *System* my indebtedness is as great as ever to my secretary, Miss Rosamund Soley, for preparing the manuscript and the figures, reading the proofs, undertaking the immense task of verifying the bibliographies and compiling the index.

Finally, Mr. Ronald Deed of my publishers, Henry Kimpton, has as usual condoned all my vagaries and granted all my requests with a smile.

# CONTENTS OF PART I

## SECTION I

### DISEASES OF THE EYELIDS

#### CHAPTER I

#### CIRCULATORY AND SECRETORY DISORDERS

|                                                                                                               | PAGE |
|---------------------------------------------------------------------------------------------------------------|------|
| A. General Considerations . . . . .                                                                           | 3    |
| B. Disorders of the Circulation . . . . .                                                                     | 5    |
| (a) Active Hyperæmia . . . . .                                                                                | 5    |
| (b) Passive Hyperæmia . . . . .                                                                               | 6    |
| (c) Hyperæmia of the Lid-margin . . . . .                                                                     | 6    |
| (d) Varicose Veins . . . . .                                                                                  | 7    |
| (e) Racemose (Cirroid) Aneurysm . . . . .                                                                     | 7    |
| (f) Telangiectases . . . . .                                                                                  | 8    |
| (g) Hæmorrhage into the Lids . . . . .                                                                        | 8    |
| (h) Œdema . . . . .                                                                                           | 11   |
| 1. Vascular Œdema . . . . .                                                                                   | 11   |
| Inflammatory, 12; toxic, 13; static, 14; hæmopoietic, 15; allergic (urticaria), 15; Quincke's œdema fugax, 17 |      |
| 2. Lymphœdema . . . . .                                                                                       | 19   |
| The Melkersson-Rosenthal syndrome, 21                                                                         |      |
| C. Disorders of Secretion . . . . .                                                                           | 23   |
| I. The Sweat Glands . . . . .                                                                                 | 23   |
| (a) Oligidrosis and Anhidrosis . . . . .                                                                      | 23   |
| (b) Hyperhidrosis . . . . .                                                                                   | 24   |
| (c) Hæmatidrosis . . . . .                                                                                    | 25   |
| (d) Chromidrosis . . . . .                                                                                    | 25   |
| (e) Uridrosis . . . . .                                                                                       | 27   |
| II. The Sebaceous Glands . . . . .                                                                            | 28   |
| (a) Asteatosis . . . . .                                                                                      | 29   |
| (b) Seborrhœa . . . . .                                                                                       | 29   |
| (c) Acne Vulgaris . . . . .                                                                                   | 30   |
| (d) Rosacea; rhinophyma . . . . .                                                                             | 32   |
| (e) Senile Sebaceous Hyperplasia . . . . .                                                                    | 32   |
| (f) Hypersecretion of the Meibomian Glands . . . . .                                                          | 33   |

#### CHAPTER II

#### INFLAMMATIONS OF THE LIDS

|                                         |    |
|-----------------------------------------|----|
| I. General Pathology . . . . .          | 37 |
| (a) Superficial Inflammations . . . . . | 37 |

|                                                                                                                                                                                | PAGE |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| I. General Pathology— <i>contd.</i>                                                                                                                                            |      |
| (b) Deep Inflammations                                                                                                                                                         | 42   |
| 1. Cellulitis and Abscess                                                                                                                                                      | 42   |
| 2. Necrosis and Gangrene                                                                                                                                                       | 45   |
| 3. Foreign-body Granulomata                                                                                                                                                    | 49   |
| II. Dermatitis due to Irritative Factors                                                                                                                                       | 51   |
| (a) Eczematous Dermatitis                                                                                                                                                      | 51   |
| The Wiskott-Aldrich syndrome, 57                                                                                                                                               |      |
| (b) Contact Dermatitis (Dermatitis Venenata)                                                                                                                                   | 58   |
| Vegetable excitants, 60; industrial excitants, 60; nickel dermatitis, 61; spectacle dermatitis, 62; clothing dermatitis, 63; medicinal dermatitis, 63; cosmetic dermatitis, 66 |      |
| (c) Neurodermatitis                                                                                                                                                            | 70   |
| (d) Dermatitis Artefacta                                                                                                                                                       | 71   |
| (e) Dermatitis Medicamentosa                                                                                                                                                   | 74   |
| III. Dermatitis due to Physical Agents                                                                                                                                         | 76   |
| (a) Ephelides                                                                                                                                                                  | 77   |
| (b) Polymorphic Light Eruptions                                                                                                                                                | 78   |
| IV. Dermatitis due to Infective Agents                                                                                                                                         | 81   |
| (a) Dermatitis due to Bacterial Infections                                                                                                                                     | 81   |
| 1. Staphylococcal Infections                                                                                                                                                   | 81   |
| Impetigo contagiosa, 82; staphylococcal impetigo, 83; sycosis, 85; chancriform pyoderma, 86; staphylococcal scarlatina, 86; infective eczematous dermatitis, 87                |      |
| 2. Streptococcal Infections                                                                                                                                                    | 91   |
| Streptococcal impetigo, 91; erysipelas, 92; scarlet fever, 94                                                                                                                  |      |
| 3. Angular Blepharo-conjunctivitis                                                                                                                                             | 95   |
| 4. <i>Neisseria catarrhalis</i> Infection                                                                                                                                      | 96   |
| 5. Diphtheritic Infections                                                                                                                                                     | 96   |
| 6. Anthrax                                                                                                                                                                     | 97   |
| 7. Glanders                                                                                                                                                                    | 101  |
| 8. Chancroid                                                                                                                                                                   | 102  |
| 9. Tuberculosis                                                                                                                                                                | 103  |
| Primary tuberculosis, 104; lupus vulgaris, 104; scrofuloderma, 108; tuberculous gumma, 109; tuberculides, 109                                                                  |      |
| 10. Leprosy                                                                                                                                                                    | 111  |
| Lepromatous leprosy, 112; tuberculoid leprosy, 113                                                                                                                             |      |
| 11. Rhinoscleroma                                                                                                                                                              | 115  |
| 12. Granuloma Venereum (Inguinale)                                                                                                                                             | 116  |
| 13. Bubonic Plague                                                                                                                                                             | 118  |
| 14. Actinomycosis                                                                                                                                                              | 118  |
| 15. Erysipeloid                                                                                                                                                                | 120  |

|                                                                                                                    | PAGE |
|--------------------------------------------------------------------------------------------------------------------|------|
| IV. Dermatitis due to Infective Agents— <i>contd.</i>                                                              |      |
| (b) Dermatitis due to Spirochætal Infections . . . . .                                                             | 120  |
| 1. Syphilis . . . . .                                                                                              | 120  |
| Primary chancre, 120; secondary syphilides, 122; tertiary syphilides, 124; congenital syphilis, 126                |      |
| 2. Yaws (Framboesia) . . . . .                                                                                     | 129  |
| Gangosa, 132; goundou, 132                                                                                         |      |
| 3. Pinta . . . . .                                                                                                 | 132  |
| 4. Rat-bite Dermatitis . . . . .                                                                                   | 134  |
| (c) Dermatitis due to Viral Infections . . . . .                                                                   | 135  |
| 1. Measles . . . . .                                                                                               | 135  |
| 2. Smallpox (Variola) . . . . .                                                                                    | 137  |
| 3. Vaccinia . . . . .                                                                                              | 137  |
| Vaccinia pustule, 137; vaccinia blepharitis, 139; generalized vaccinia, 140                                        |      |
| 4. Cowpox . . . . .                                                                                                | 141  |
| 5. Herpes (Simplex: Febrilis) . . . . .                                                                            | 142  |
| Kaposi's varicelliform eruption, 142                                                                               |      |
| 6. Varicella-Zoster . . . . .                                                                                      | 146  |
| 7. Verruca . . . . .                                                                                               | 150  |
| 8. Molluscum Contagiosum . . . . .                                                                                 | 154  |
| 9. Lymphogranuloma Venereum . . . . .                                                                              | 159  |
| 10. Ornithosis . . . . .                                                                                           | 159  |
| (d) Dermatitis due to Rickettsiæ . . . . .                                                                         | 159  |
| Boutonneuse fever, 160; South African tick-bite fever, 160; tsutsugamushi fever, 160; Q fever, 160                 |      |
| (e) Dermatitis due to Fungal Infections . . . . .                                                                  | 161  |
| 1. Sporotrichosis . . . . .                                                                                        | 163  |
| 2. North American Blastomycosis . . . . .                                                                          | 165  |
| 3. Cryptococcosis (Torulosis) . . . . .                                                                            | 167  |
| 4. Paracoccidioidomycosis . . . . .                                                                                | 168  |
| 5. Coccidioidomycosis . . . . .                                                                                    | 169  |
| 6. Mycetoma . . . . .                                                                                              | 170  |
| 7. Rhinosporidiosis . . . . .                                                                                      | 171  |
| 8. Aspergillosis . . . . .                                                                                         | 173  |
| 9. Candidiasis (Moniliasis) . . . . .                                                                              | 174  |
| 10. Tinea (Ringworm) . . . . .                                                                                     | 175  |
| Favus, 178                                                                                                         |      |
| (f) Dermatitis due to Protozoa . . . . .                                                                           | 180  |
| 1. Leishmaniasis . . . . .                                                                                         | 181  |
| Cutaneous leishmaniasis, 181; American leishmaniasis (espundia; uta), 182; visceral leishmaniasis (kala-azar), 185 |      |
| 2. Trypanosomiasis . . . . .                                                                                       | 186  |

|                                                                                                                                           | PAGE |
|-------------------------------------------------------------------------------------------------------------------------------------------|------|
| IV. Dermatitis due to Infective Agents— <i>contd.</i>                                                                                     |      |
| (g) Dermatitis due to Metazoa . . . . .                                                                                                   | 187  |
| 1. Nematodes . . . . .                                                                                                                    | 188  |
| Ascariasis, 188; enterobiasis, 188; ankylostomiasis, 188;<br>trichiniasis, 188; gnathostomiasis, 188                                      |      |
| 2. Filariasis . . . . .                                                                                                                   | 188  |
| Loaiasis, 188; wuchereriasis, 190; dracontiasis, 190; oncho-<br>cerciasis, 190; dirofilariasis, 192; thelaziasis, 193                     |      |
| 3. Platyhelminthes . . . . .                                                                                                              | 194  |
| Schistosomiasis, 194; distomiasis, 194; sparganosis, 194; echi-<br>nococcosis, 195; cysticercosis, 195                                    |      |
| 4. Arthropoda . . . . .                                                                                                                   | 195  |
| Pediculosis, 195; phthiriasis, 196; palpebral myiasis, 199;<br>porocephaliasis, 201                                                       |      |
| 5. Bites and Stings: the Spit of Snakes . . . . .                                                                                         | 201  |
| V. Inflammations of the Lid-margins (Blepharitis) . . . . .                                                                               | 205  |
| (a) General Clinical Picture . . . . .                                                                                                    | 205  |
| (b) General Aetiology . . . . .                                                                                                           | 210  |
| (c) General Treatment . . . . .                                                                                                           | 213  |
| (d) Clinical Types of Blepharitis . . . . .                                                                                               | 217  |
| 1. Blepharitis of Cutaneous Origin . . . . .                                                                                              | 217  |
| 2. Blepharitis of Conjunctival Origin . . . . .                                                                                           | 218  |
| 3. Seborrhœic Blepharitis . . . . .                                                                                                       | 219  |
| 4. Rosacea Blepharitis . . . . .                                                                                                          | 221  |
| 5. Follicular Impetiginous Blepharitis . . . . .                                                                                          | 224  |
| 6. Irritative and Allergic Blepharitis . . . . .                                                                                          | 225  |
| 7. Demodectic Blepharitis . . . . .                                                                                                       | 226  |
| 8. Blepharitis due to Specific Infections . . . . .                                                                                       | 230  |
| Exanthematous, 230; diphtheritic, 231; syphilitic, 231; tuber-<br>culous, 231; leprotic, 231; viral, 232; mycotic, 232; parasitic,<br>232 |      |
| VI. Inflammations of the Glands of the Lid-margins . . . . .                                                                              | 233  |
| (a) Hidradenitis . . . . .                                                                                                                | 233  |
| (b) Hordeolum Externum (Stye) . . . . .                                                                                                   | 234  |
| VII. Deep Inflammations of the Lids . . . . .                                                                                             | 236  |
| (a) Tarsitis . . . . .                                                                                                                    | 236  |
| Trachoma, 236; vernal catarrh, 237; tuberculosis, 237; tuleræmia,<br>237; syphilis, 237                                                   |      |
| (b) Inflammations of the Tarsal Glands . . . . .                                                                                          | 241  |
| 1. Seborrhœic Meibomitis . . . . .                                                                                                        | 241  |
| 2. Chalazion . . . . .                                                                                                                    | 242  |
| 3. Hordeolum Internum . . . . .                                                                                                           | 247  |
| 4. Chronic Suppurative Meibomitis . . . . .                                                                                               | 249  |

# CONTENTS

xiii

|                                                                   | PAGE |
|-------------------------------------------------------------------|------|
| CHAPTER III                                                       |      |
| DERMATOSES OF UNKNOWN OR VARIED ETIOLOGY                          |      |
| I. Dermatoses characterized by Anomalous Keratinization . . . . . | 251  |
| (a) The Ichthyosiform Dermatoses . . . . .                        | 253  |
| (b) The Follicular Keratoses . . . . .                            | 260  |
| 1. Dyskeratosis Follicularis (Darier-White) . . . . .             | 260  |
| 2. Pityriasis Rubra Pilaris . . . . .                             | 261  |
| 3. Keratosis Pilaris Atrophicans . . . . .                        | 262  |
| 4. Acanthosis Nigricans . . . . .                                 | 263  |
| II. The Erythemato-squamous Dermatoses. . . . .                   | 264  |
| (a) Psoriasis . . . . .                                           | 264  |
| (b) Parapsoriasis . . . . .                                       | 266  |
| (c) Seborrhœic Dermatitis . . . . .                               | 267  |
| (d) Erythroderma (Exfoliative Dermatitis) . . . . .               | 270  |
| III. The Papular Dermatoses . . . . .                             | 272  |
| (a) Lichen Planus . . . . .                                       | 272  |
| (b) Lichen Sclerosus et Atrophicus . . . . .                      | 273  |
| (c) Acne Agminata . . . . .                                       | 275  |
| IV. The Bullous Dermatoses . . . . .                              | 277  |
| (a) Pemphigus . . . . .                                           | 278  |
| (b) Pemphigoid . . . . .                                          | 280  |
| (c) Dermatitis Herpetiformis . . . . .                            | 281  |
| (d) Erythema Multiforme . . . . .                                 | 281  |
| (e) Epidermolysis Bullosa . . . . .                               | 283  |
| (f) Toxic Epidermal Necrolysis (Lyell's Disease) . . . . .        | 286  |
| V. Granulomatous Lesions . . . . .                                | 291  |
| (a) Pyoderma Vegetans . . . . .                                   | 291  |
| (b) Granuloma Annulare . . . . .                                  | 292  |
| (c) Granuloma Faciale . . . . .                                   | 293  |

## CHAPTER IV

### THE LIDS IN SYSTEMIC DISEASE

|                                                       |     |
|-------------------------------------------------------|-----|
| I. The Lipid-storage Diseases (Lipoidoses) . . . . .  | 295 |
| (a) Xanthomatosis . . . . .                           | 298 |
| 1. Xanthelasma Palpebrarum . . . . .                  | 298 |
| 2. Xanthoma Tuberosum . . . . .                       | 300 |
| 3. Xanthoma Disseminatum . . . . .                    | 302 |
| 4. Xanthoma Diabeticorum . . . . .                    | 303 |
| 5. Disseminated Lipogranulomatosis (Farber) . . . . . | 303 |
| 6. The Histiocytoses . . . . .                        | 304 |
| (i) Histiocytosis X. . . . .                          | 304 |

The Hand-Schüller-Christian disease, 304; Letterer-Siwe disease, 305; eosinophilic granuloma of bone, 305

|                                                                                                                    | PAGE |
|--------------------------------------------------------------------------------------------------------------------|------|
| I. The Lipid-storage Diseases (Lipoidoses)— <i>contd.</i>                                                          |      |
| (a) Xanthomatosis— <i>contd.</i>                                                                                   |      |
| 6. The Histiocytoses— <i>contd.</i>                                                                                |      |
| (ii) Sinus Histiocytosis with Massive Lymphadenopathy                                                              | 306  |
| (iii) Juvenile Xanthogranuloma                                                                                     | 307  |
| II. Lipid Proteinosis (Urbach-Wiethe)                                                                              | 310  |
| III. Amyloidosis                                                                                                   | 313  |
| Primary systemic, 314; secondary systemic, 315; localized amyloidosis, 315                                         |      |
| IV. The Mucinoses                                                                                                  | 318  |
| (a) Myxœdema                                                                                                       | 318  |
| (b) Sclerœdema                                                                                                     | 320  |
| V. Connective-tissue Diseases                                                                                      | 321  |
| (a) Lupus Erythematosus                                                                                            | 322  |
| Discoid, 322; systemic, 325                                                                                        |      |
| (b) Dermatomyositis                                                                                                | 327  |
| (c) Scleroderma                                                                                                    | 330  |
| Progressive systemic sclerosis, 330; morphea, 332                                                                  |      |
| (d) Idiopathic Atrophoderma                                                                                        | 334  |
| (e) Polyarteritis Nodosa                                                                                           | 334  |
| (f) Wegener's Granulomatosis                                                                                       | 335  |
| (g) Pseudoxanthoma Elasticum                                                                                       | 335  |
| (h) Nodular Fasciitis                                                                                              | 335  |
| (i) Malignant Atrophic Papulosis (Degos)                                                                           | 336  |
| VI. Disorders of Protein Metabolism                                                                                | 338  |
| Gout, 338; acrodermatitis enteropathica, 338; alkaptonuria, 339; Hartnup disease, 339; porphyria, 339              |      |
| VII. Deficiency Diseases                                                                                           | 340  |
| Vitamin A deficiency, 340; pellagra, 340; riboflavine deficiency, 341; vitamin C deficiency, 341; kwashiorkor, 341 |      |
| VIII. Sarcoidosis                                                                                                  | 342  |
| CHAPTER V                                                                                                          |      |
| ATROPHIES, HYPERTROPHIES, DEGENERATIONS, PIGMENTATIONS                                                             |      |
| I. Atrophies                                                                                                       | 347  |
| (a) Senile Atrophy                                                                                                 | 347  |
| (b) Senile Elastosis                                                                                               | 349  |
| (c) Senile Elastosis with Cysts and Comedones (Favre-Racouchot Disease)                                            | 349  |
| (d) Blepharochalasis                                                                                               | 350  |
| The Laffer-Ascher syndrome, 353; fat hernia, 354                                                                   |      |

# CONTENTS

XV

|                                                                                                 | PAGE |
|-------------------------------------------------------------------------------------------------|------|
| <b>II. Hypertrophies</b>                                                                        | 355  |
| (a) Chronic or Recurrent Inflammatory Conditions                                                | 355  |
| (b) Elephantiasis Nostras                                                                       | 356  |
| (c) Pachydermo-periostosis                                                                      | 359  |
| <b>III. Degenerations</b>                                                                       | 361  |
| (a) Degenerations of the Skin                                                                   | 361  |
| Colloid milium, 361                                                                             |      |
| (b) Degenerations of the Tarsus                                                                 | 362  |
| Fatty degeneration, 362; bone formation, 362                                                    |      |
| <b>IV. Anomalies of Pigmentation</b>                                                            | 364  |
| (a) Melanotic Hyperpigmentation                                                                 | 364  |
| (b) Melanoderma                                                                                 | 365  |
| (c) Haemochromatosis                                                                            | 365  |
| (d) Dyschromia                                                                                  | 368  |
| (e) Melanotic Hypopigmentation                                                                  | 369  |
| Vitiligo, 369                                                                                   |      |
| <b>CHAPTER VI</b>                                                                               |      |
| <b>DISORDERS OF THE EYEBROWS AND LASHES</b>                                                     |      |
| <b>I. Disturbances of Growth</b>                                                                | 373  |
| (a) Hypertrichosis                                                                              | 373  |
| Ciliary polytrichosis, 374; ciliary trichomegaly, 375; superciliary trichomegaly, 375           |      |
| (b) Hypotrichosis: Alopecia and Madarosis                                                       | 377  |
| <b>II. Anomalies of Direction</b>                                                               | 383  |
| (a) Trichiasis                                                                                  | 383  |
| (b) Cilia Incurvata                                                                             | 386  |
| <b>III. Ciliary Trichoses</b>                                                                   | 387  |
| Trichorrhexis nodosa, 387; monilethrix, 387; pili torti, 388                                    |      |
| <b>IV. Anomalies of Pigmentation</b>                                                            | 389  |
| Canities: poliosis, 389                                                                         |      |
| <b>CHAPTER VII</b>                                                                              |      |
| <b>CYSTS AND TUMOURS</b>                                                                        |      |
| <b>A. Cysts of the Lids</b>                                                                     | 391  |
| I. Cysts of the Sweat Glands (Hidrocystomata)                                                   | 391  |
| II. Cysts of Moll's Glands                                                                      | 394  |
| III. Cysts of Sebaceous Glands                                                                  | 395  |
| Milium, 395; pilar and epidermoid cysts, 395; cysts of Zeis's glands, 397; meibomian cysts, 398 |      |

|                                                                                                                                            | PAGE |
|--------------------------------------------------------------------------------------------------------------------------------------------|------|
| B. Tumours of the Lids . . . . .                                                                                                           | 398  |
| I. Epithelial Cutaneous Tumours . . . . .                                                                                                  | 402  |
| (a) Papilloma . . . . .                                                                                                                    | 402  |
| (b) Senile Keratosis . . . . .                                                                                                             | 404  |
| (c) Seborrhœic Keratosis . . . . .                                                                                                         | 406  |
| (d) Kerato-acanthoma . . . . .                                                                                                             | 407  |
| (e) Inverted Follicular Keratosis . . . . .                                                                                                | 411  |
| (f) Tricho-epithelioma . . . . .                                                                                                           | 413  |
| (g) Benign Calcified Epithelioma of Malherbe . . . . .                                                                                     | 416  |
| (h) Cornu Cutaneum . . . . .                                                                                                               | 418  |
| (i) Carcinoma (Epithelioma) . . . . .                                                                                                      | 420  |
| Squamous-celled, 423; basal-celled, 427; baso-squamous<br>celled, 432; pigmented basal-celled, 433; the basal-cell<br>naevus syndrome, 433 |      |
| (j) Intra-epithelial Carcinoma . . . . .                                                                                                   | 444  |
| Extra mammary Paget's disease, 444; Bowen's disease, 444                                                                                   |      |
| (k) Xeroderma Pigmentosum . . . . .                                                                                                        | 445  |
| II. Epithelial Glandular Tumours . . . . .                                                                                                 | 450  |
| (a) Tumours of the Sebaceous Glands . . . . .                                                                                              | 450  |
| 1. Adenoma . . . . .                                                                                                                       | 450  |
| Sebaceous naevus, 452                                                                                                                      |      |
| 2. Adenocarcinoma . . . . .                                                                                                                | 453  |
| (b) Tumours of the Sweat Glands . . . . .                                                                                                  | 458  |
| 1. Adenoma (Hidradenoma) . . . . .                                                                                                         | 458  |
| 2. Syringoma . . . . .                                                                                                                     | 460  |
| 3. Pleomorphic Adenoma . . . . .                                                                                                           | 461  |
| 4. Adenocarcinoma . . . . .                                                                                                                | 463  |
| (c) Papillary Cystadenoma Lymphomatosum . . . . .                                                                                          | 465  |
| (d) Oncocytoma . . . . .                                                                                                                   | 466  |
| III. Mesenchymal Tumours . . . . .                                                                                                         | 467  |
| (a) Fibroma . . . . .                                                                                                                      | 467  |
| Tuberous sclerosis, 469                                                                                                                    |      |
| (b) Lipoma . . . . .                                                                                                                       | 470  |
| (c) Myoma . . . . .                                                                                                                        | 471  |
| (d) Myxoma . . . . .                                                                                                                       | 471  |
| (e) Chondroma . . . . .                                                                                                                    | 471  |
| (f) Sarcoma . . . . .                                                                                                                      | 471  |
| IV. Tumours of Lympho-reticular Tissue . . . . .                                                                                           | 474  |
| (a) Lymphoma . . . . .                                                                                                                     | 475  |
| (b) Lymphosarcoma . . . . .                                                                                                                | 478  |
| (c) Reticulum-cell Sarcoma . . . . .                                                                                                       | 480  |
| (d) Giant Follicular Lymphoma (Brill-Symmers disease) . . . . .                                                                            | 482  |
| (e) Burkitt's Tumour . . . . .                                                                                                             | 482  |
| (f) Hodgkin's Disease . . . . .                                                                                                            | 482  |
| (g) Mycosis Fungoides . . . . .                                                                                                            | 483  |

# CONTENTS

xvii

|                                                              | PAGE |
|--------------------------------------------------------------|------|
| B. Tumours of the Lids— <i>contd.</i>                        |      |
| V. Vascular Tumours . . . . .                                | 488  |
| (a) Hæmangioma . . . . .                                     | 488  |
| Capillary, 488; cavernous, 490; plexiform 491                |      |
| (b) Hæmangio-endothelioma . . . . .                          | 493  |
| (c) Hæmangio-pericytoma . . . . .                            | 494  |
| (d) Spider Angioma . . . . .                                 | 495  |
| (e) Senile Angioma . . . . .                                 | 496  |
| (f) Angioma Serpiginosum . . . . .                           | 500  |
| (g) Telangiectatic Granuloma . . . . .                       | 501  |
| (h) Angiokeratoma of Mibelli . . . . .                       | 503  |
| (i) Multiple Hæmorrhagic Sarcoma (Kaposi) . . . . .          | 503  |
| (j) Glomus Tumour . . . . .                                  | 505  |
| (k) Lymphangioma . . . . .                                   | 506  |
| VI. Nerve-tissue Tumours . . . . .                           | 507  |
| (a) Neurofibromatosis . . . . .                              | 507  |
| (b) Neurilemmoma . . . . .                                   | 513  |
| (c) Granular-cell Schwannoma of Abrikossoff . . . . .        | 515  |
| (d) Ganglioneuroma . . . . .                                 | 515  |
| (e) (Amputation Neuroma) . . . . .                           | 516  |
| VII. Pigmented Tumours . . . . .                             | 518  |
| (a) Nævus . . . . .                                          | 518  |
| (b) Malignant Melanoma . . . . .                             | 526  |
| (c) Intra-epithelial Melanoma . . . . .                      | 528  |
| VIII. Metastatic Tumours . . . . .                           | 536  |
| IX. Developmental Tumours (Phakomatous Choristoma) . . . . . | 538  |

## CHAPTER VIII

### MOTOR DISORDERS AND DEFORMATIONS OF THE EYELIDS

|                                                                            |     |
|----------------------------------------------------------------------------|-----|
| I. Disturbances in Motility . . . . .                                      | 541 |
| (a) Blepharoptosis . . . . .                                               | 542 |
| Of upper lid, 542; of lower lid, 548                                       |     |
| 1. Apparent, pseudo-, mechanical, pseudo-paralytic, toxic ptosis . . . . . | 550 |
| 2. Myogenic ptosis . . . . .                                               | 552 |
| (i) Muscular Dystrophies (Myopathies) . . . . .                            | 552 |
| (ii) Chronic Progressive Ophthalmoplegia (Ocular Myopathy) . . . . .       | 553 |
| (iii) Myotonic Dystrophy (Myotonia Atrophica) . . . . .                    | 558 |
| (iv) Myasthenia Gravis . . . . .                                           | 561 |
| (v) The Myasthenic Syndrome . . . . .                                      | 567 |

|                                                       | PAGE |
|-------------------------------------------------------|------|
| I. Disturbances in Motility— <i>contd.</i>            |      |
| (l) Lid-retraction . . . . .                          | 568  |
| 1. Physiological, mechanical, neurogenic . . . . .    | 568  |
| 2. Myogenic . . . . .                                 | 569  |
| (c) Lid-lag . . . . .                                 | 572  |
| (Familial) periodic paralysis, 572                    |      |
| II. Abnormalities of the Palpebral Aperture . . . . . | 573  |
| (a) Entropion . . . . .                               | 573  |
| (b) Ectropion . . . . .                               | 581  |
| (c) Lagophthalmos . . . . .                           | 586  |
| (d) Blepharophimosis . . . . .                        | 589  |
| (e) Epicanthus Lateralis . . . . .                    | 590  |
| (f) Ankyloblepharon . . . . .                         | 590  |
| (g) Symblepharon . . . . .                            | 591  |
| ADDENDUM. Diseases of the Caruncle . . . . .          | 592  |
| INDEX . . . . .                                       | i    |

## CHAPTER VIII

## MYOTIC DYSPLASIA AND DYSPLASIA OF THE MYOTIC

|                                                       |     |
|-------------------------------------------------------|-----|
| 1. Dysplasia in Myotia . . . . .                      | 541 |
| (a) Buphthalmos . . . . .                             | 542 |
| Of upper lid, 542; of lower lid, 542                  |     |
| 2. Myogenic dysplasia . . . . .                       | 550 |
| (a) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 552 |
| (b) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 553 |
| (c) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 554 |
| (d) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 555 |
| (e) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 556 |
| (f) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 557 |
| (g) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 558 |
| (h) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 559 |
| (i) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 560 |
| (j) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 561 |
| (k) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 562 |
| (l) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 563 |
| (m) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 564 |
| (n) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 565 |
| (o) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 566 |
| (p) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 567 |
| (q) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 568 |
| (r) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 569 |
| (s) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 570 |
| (t) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 571 |
| (u) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 572 |
| (v) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 573 |
| (w) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 574 |
| (x) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 575 |
| (y) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 576 |
| (z) Myogenic dysplasia (Myogenic dysplasia) . . . . . | 577 |

## CONTENTS OF PART 2

### SECTION II

#### DISEASES OF THE LACRIMAL APPARATUS

##### CHAPTER IX

##### DISEASES OF THE LACRIMAL GLAND

|                                                                                                                                                   | PAGE |
|---------------------------------------------------------------------------------------------------------------------------------------------------|------|
| I. Disorders of Secretion . . . . .                                                                                                               | 596  |
| (a) Lacrimal Hypersecretion . . . . .                                                                                                             | 597  |
| (b) Lacrimal Hyposecretion . . . . .                                                                                                              | 599  |
| II. Inflammations of the Lacrimal Gland . . . . .                                                                                                 | 601  |
| (a) Acute Dacryoadenitis . . . . .                                                                                                                | 601  |
| 1. Acute Palpebral Dacryoadenitis . . . . .                                                                                                       | 601  |
| 2. Acute Orbital and Orbito-palpebral Dacryoadenitis . . . . .                                                                                    | 604  |
| Primary, 605; epidemic, 606; secondary, 606; gonococcal, 606; mumps, 607; infectious mononucleosis, 608; zoster, 608; African histoplasmosis, 608 |      |
| (b) Chronic Dacryoadenitis . . . . .                                                                                                              | 610  |
| Trachomatous, 612; tuberculous, 613; leprotic, 615; syphilitic, 615; actinomycetic, 617                                                           |      |
| (c) Sarcoidosis . . . . .                                                                                                                         | 618  |
| (d) Mikulicz's Syndrome . . . . .                                                                                                                 | 620  |
| III. Lacrimal Involvement in General Disease . . . . .                                                                                            | 622  |
| (a) Thyrotoxicosis . . . . .                                                                                                                      | 622  |
| (b) Hypothyroidism . . . . .                                                                                                                      | 623  |
| (c) Other Diseases . . . . .                                                                                                                      | 623  |
| Blood and connective-tissue diseases; primary amyloidosis, 623                                                                                    |      |
| IV. Atrophies of the Lacrimal Gland . . . . .                                                                                                     | 625  |
| (a) Senile Atrophy . . . . .                                                                                                                      | 625  |
| (b) Idiopathic Atrophy (the Gougerot-Sjögren Syndrome) . . . . .                                                                                  | 626  |
| (c) Consecutive Atrophy . . . . .                                                                                                                 | 635  |
| V. Cysts of the Lacrimal Gland . . . . .                                                                                                          | 638  |
| (a) Simple Dacryops of the Palpebral Lobe . . . . .                                                                                               | 638  |
| (b) Multiple Cystic Degeneration . . . . .                                                                                                        | 640  |
| (c) Simple Cysts of the Orbital Lobe . . . . .                                                                                                    | 641  |
| (d) Parasitic and Dermoid Cysts . . . . .                                                                                                         | 641  |
| (e) Cysts of Krause's Glands . . . . .                                                                                                            | 642  |

|                                                                                                                                                   | PAGE |
|---------------------------------------------------------------------------------------------------------------------------------------------------|------|
| VI. Tumours and Pseudo-tumours of the Lacrimal Gland . . . . .                                                                                    | 643  |
| (a) Pseudo-tumours . . . . .                                                                                                                      | 647  |
| (b) Tumours . . . . .                                                                                                                             | 650  |
| 1. Epithelial Tumours . . . . .                                                                                                                   | 650  |
| (i) Mixed Tumours . . . . .                                                                                                                       | 652  |
| Benign pleomorphic adenoma, 652; malignant pleomorphic adenocarcinoma, 655                                                                        |      |
| (ii) Adenocarcinoma . . . . .                                                                                                                     | 657  |
| (iii) Oncocytoma (Oxyphil-cell Adenoma) . . . . .                                                                                                 | 659  |
| (iv) Tumours of Krause's Glands . . . . .                                                                                                         | 660  |
| (v) Tumours of Ectopic (Aberrant) Lacrimal Gland Tissue . . . . .                                                                                 | 661  |
| 2. Lympho-reticular Tumours . . . . .                                                                                                             | 662  |
| (i) Lymphoma . . . . .                                                                                                                            | 663  |
| (ii) Leucæmia . . . . .                                                                                                                           | 664  |
| (iii) Hodgkin's Disease . . . . .                                                                                                                 | 664  |
| (iv) Lymphosarcoma . . . . .                                                                                                                      | 664  |
| (v) Reticulo-histiocytoma . . . . .                                                                                                               | 665  |
| (vi) Giant Follicular Lymphoma . . . . .                                                                                                          | 665  |
| (vii) Plasmacytoma . . . . .                                                                                                                      | 668  |
| 3. Other Tumours . . . . .                                                                                                                        | 668  |
| Angioma, 668; melanoma, 668; ganglioneuroma, 668                                                                                                  |      |
| 4. Secondary Tumours . . . . .                                                                                                                    | 669  |
| 5. Metastatic Carcinoma . . . . .                                                                                                                 | 669  |
| VII. Fistulæ of the Lacrimal Gland . . . . .                                                                                                      | 670  |
| VIII. Dacryoliths . . . . .                                                                                                                       | 672  |
| IX. Prolapse of the Lacrimal Gland . . . . .                                                                                                      | 672  |
| CHAPTER X                                                                                                                                         |      |
| DISEASES OF THE LACRIMAL PASSAGES                                                                                                                 |      |
| I. Epiphora . . . . .                                                                                                                             | 675  |
| Methods of Investigation . . . . .                                                                                                                | 677  |
| Instillation of coloured fluids, 678; syringing, 679; probing, 680; radiological examination, 682; microscintigraphy, 686; nasal examination, 686 |      |
| II. Insufficiency of the Lacrimal Passages . . . . .                                                                                              | 687  |
| (a) Insufficiency of the Puncta . . . . .                                                                                                         | 687  |
| (b) Insufficiency of the Lacrimal Sac . . . . .                                                                                                   | 690  |
| (c) Valvular Insufficiency (Pneumatocoele) . . . . .                                                                                              | 691  |
| III. Inflammations of the Lacrimal Passages . . . . .                                                                                             | 693  |
| (a) Canaliculitis . . . . .                                                                                                                       | 693  |
| Suppurative, 694; trachomatous, 695; tuberculous, 695; viral, 696; actinomycotic, 696; mycotic, 698                                               |      |