

College of Optometrists Rare and Historical Books Collection

This document is an incomplete listing of the rare and historical books in the College Library's Historical Collections 1 and 2. The annotations in this bibliographic catalogue are taken from the books themselves, the 1932, 1935 and 1957 BOA Library Catalogues, Albert, 'Sourcebook of Ophthalmology', IBBO vols 1 & 2, various auction catalogues and booksellers catalogues and ongoing curatorial research. This list was begun by the BOA Librarian (1999-2007) Mrs Jan Ayres and has been continued by the BOA Museum Curator (1998-) Mr Neil Handley.

Date of current version: 12 February 2015

ABBOTT, T.K.

Sight and touch: an attempt to disprove the received (or Berkeleian) theory of vision. Longman, Green, Longman, Roberts & Green, 1864

A refutation of Berkley's theory that the sight does not perceive distance, which is perceived by touch or by the locomotive faculty.

Sir William de Wiveleslie Abney (1844-1920)

The English physicist Sir William de Wiveleslie Abney (1843-190?) was one of the founders of modern photography. His interest in the theory of light, colour photography and spectroscopy spurred his investigations into colour vision. He entered the Royal Navy at the age of 17, retiring in 1881 with the rank of Captain. Elected a Fellow of the Royal Society in 1876 he was awarded the Rumford Medal in 1882 for his work on radiation. He was a pioneer in the chemistry of Photography. In 1892 he gave a lecture at the Royal Society of Arts on 'Colour Blindness' and in 1894 delivered the Tyndall Lectures at the Royal Institution on Colour Vision.

ABNEY, William de Wiveleslie

Colour measurement and mixture.

Society for Promoting Christian Knowledge, London, 1891 207p. ill.

A treatise on the analysis of light from which is deduced the formation of the spectrum and the position of the colours in it. The second half of the book contains a detailed description of colour, describing both compound and simple colours and their measurement.

ABNEY, William de Wiveleslie

Colour vision. Being the Tyndale lectures, delivered in 1894 at the Royal Institution. London, Sampson Low, Marston & Company, 1895. 231p. ill.

In this series of lectures on perception of colour and luminosity, the author describes the macula lutea, or the yellow spot of Soemmering, and the use of the colour patch and other apparatus for measuring impressions. The second author concentrates on heredity and disease related colour blindness, including, tobacco-alcohol amblyopia. He cites examples from his own cases. Visual tests are also demonstrated.

ABNEY, William de Wiveleslie

Researches in colour vision., and the trichromatic theory.
Longman, Green & Co. London, 1913, 418p. 104 ill.

ADAM, Curt

Handbook of treatment for diseases of the eye. Translated by W.G. Sym and E.M. Lithgoe
Rebman Ltd, London, 1911 264p. 36 ill.

Deals with therapeutics and their application. Includes chapters on the general treatment of the eyes, the practice of refraction, the prescription of spectacles and first aid for ocular injuries.

ADAM, C.

Ophthalmoskopische Diagnostikan der Hand typischer Augenhintergrundsbilder.
Urban & Swarzenberg, Berlin. 1912 232p. ill

A textbook of ophthalmology giving the methods of making an examination with an ophthalmoscope, descriptions of the appearance of the eye in health and disease etc.

George Adams Sr (1709-1772)

Optician and mathematical instrument maker to King George III.

ADAMS, George

A treatise describing the construction and explaining the use of new celestial and terrestrial globes designed to illustrate, in the most easy and natural manner the phenomena of the earth and heavens, and to show the correspondence of the two spheres with a great variety of astronomical and geographical problems. 2nd edition.
The Author, London, 1769 345p. ill.

This second edition is greatly preferred to the 1st (1766) which had 242 pages and only 3 plates. A sixth edition (called the thirtieth) in 1810 was edited by his son, Dudley Adams, demonstrating that the book was a considerable success. Includes at the end a *Catalogue of Mathematical, Philosophical and Optical Instruments made and sold by George Adams, Mathematical Instrument-Maker to the King, At his Shop the Sign of Tycho Brahe's Head (No 60) in Fleet Street, London. Where Gentlemen and Ladies may be supplied with such Instruments as are either Invented or Improved by himself; and Constructed according to the most perfect Theory*. The optical instruments with prices include reflecting telescopes from 4 inches to two feet in length, The new achromatic refracting telescope, large double constructed microscope, Wilson's pocket microscope, Ellis' microscope, a solar microscope, pocket camera obscura, book camera, a new instrument for taking perspective views, concave and convex mirrors, prisms, zograscopes, opera glasses, reading glasses, spectacles for the nose, spectacles for the temples, spectacles with double joints 'which neither press the nose or the temples', Brazil pebbles.

George A Adams (1750-1795)

A famous London optician who acquired a world wide reputation as a maker of spectacles and microscope lenses. He was the son of George Adams Sr and followed his father into the instrument-making business, but also published works on electricity and vision. He succeeded his father as mathematical instrument maker to the Court.

ADAMS, George

An essay on vision, briefly explaining the fabric of the eye, and the nature of vision intended for the service of those whose eyes are weak or impaired.

R. Hindmarsh, London 1789 153p. ill.

An anatomy of the eye and description of the nature of vision and the role of light, colour and distances written in layman's terms. Stresses what can be done to preserve vision and attempts to stop the practice of prescribing spectacles for healthy eyes.

ADAMS, George

An essay on vision, briefly explaining the fabric of the eye and the nature of vision intended for the service of those whose eyes are weak or impaired. 2nd Edition.

R. Hindmarsh, London, 1792 172p. ill.

ADAMS, George

Essays on the microscope containing a practical description of the most improved microscopes; a general history of insects, their transformations, peculiar habits and oeconomy. 2nd edition edited and improved by Frederick Kanmacher.

Dillon & Keating, for W.S. Jones, London 1798 724p ill.

Contains a practical description of improvements made to microscopes: a general history of insects, their transformations, peculiar habits and oeconomy.

Sir William Adams (1783-1827)

A British ophthalmologist who studied and worked under John Cunningham Saunders at the London Infirmary for Curing Diseases of the Eye and Ear. He was awarded a knighthood in 1814 for his controversial claim to cure the Egyptian Ophthalmia which was currently devastating British soldiers. He became surgeon and oculist to the Prince Regent and the dukes of Kent and Sussex. Two years before his death he changed his name to his wife's maiden name – Rawson,.

ADAMS, Sir William

Official papers relating to operations performed by order of the Directors of the Royal Hospital for Seamen at Greenwich on several of the pensioners belonging thereto, for the purposes of ascertaining the general efficacy of the new modes of treatment practiced by Mr Adams for the cure of the various aspects of cataract, and the Egyptian ophthalmia.

W. Winchester & Son, London 1814

Bound with A special report of the General Committee of the London Infirmary for curing diseases of the eye; in which certain pretensions of Sir William Adams, advanced by the Official Papers published by order of the Hon. Directors of Greenwich Hospital, lately submitted to a medical committee, appointed by Government and affecting the rights of the Infirmary, and the merits of the late John Cunningham Saunders Esq. , its founder and surgeon, are examined and disproved by the correspondence of Mr Saunders and other documents. Published by order of the general Committee by Longman, Hurst, Rees, Ormew and Brown, 1815

ADAMS, Sir William

A practical inquiry into the causes of the frequent failure of the operations of depression, and of the extraction of cataract, as usually performed, with a series of new and improved operations.

Baldwin, Craddock and Joy, London 1817 413p ill.

Reviews the history of cataract surgery and includes chapters on the causes and symptoms of cataract. The author describes three methods of treating the disease: extraction, depression and solution absorption and describes his own method for extracting hard cataracts by dilating the pupil with belladonna, placing the cataract in the anterior chamber of the eye, dividing the cornea and extracting the lens. His method was criticised by contemporaries as being complicated and harmful.

ADAMS, Sir William

Practical observations on Ectropium, or eversion of the eyelids with the description of a new operation for the cure of that disease; on the modes of forming an artificial pupil, and on cataract.

J Brettell for J Callow, London 1812 252p ill.

The author describes how to create a normal eyelid using a knife of his own design to remove an angular part of the lid, and describes a method of creating an artificial pupil when the natural one is obliterated. Originally the operation of iridectomy was undertaken for the purely optical purpose of forming an artificial pupil rather than the curative measure that it became in the hands of Beer and von Graefe. This method is based on those used by Cheselden and Sharpe.

ADAMS, Sir William

A treatise on artificial pupil in which is described a series of improved operations for its formation; with an account of the morbid states of the eye to which this is applicable.

Baldwin, Craddock & Joy, London, 1819 193p ill.

The author describes a modification of Cheselden's operation for creating an artificial pupil using an iris scalpel of his own design. An appendix includes 117 cases.

Francois d'Aguilon (1566-7? – 1617)

French scientist and rector of a Jesuit College in Antwerp. Given the task of teaching exact sciences for the whole of Belgium he developed the project into a master treatise on optics. He discovered the horopter and described its importance in explaining binocular vision.

AGUILON, Francois d'

Opticorum libri sex.

Officina Platiniana, by the widow and sons of John Moretus, Antwerp, 1613. 684p. ill.

Contains the author's observations on stereoscopic projects and extensive discussions of binocular vision.

The work has been described as a masterpiece of Baroque book illustration and a masterwork on optics (the illustrations being drawn by Peter Paul Rubens). The work

is divided into six parts: the eye; the object and nature of vision; the optic ray and horopter, including perspective instruments; the general ideas which enable the knowledge of objects; errors in perception; luminous and opaque bodies; and projection. Contains the first discussions of stereoscopic projections, although they had been known from the time of Ptolemy, and Aguilon was the first to distinguish a third type of colour produced by the actions of lenses or mirrors

AIRY, G.B

On the undulatory theory of optics designed for the use of students in the University
Macmillan & Co, London. 1877 159p. ill.

Light consists of undulations depending on transversal vibrations and these travel with certain velocities in different media, according to laws described by the author. He then develops the theory with mathematical illustrations.

AIRY, Osmund

Geometrical optics adapted to the use of the higher classes in schools &c.
Macmillan & Co, London, 1870 130p. 72 ill.

A simple explanation of basic optics, including reflection, caustic curves, refraction lenses etc.

ALCOCK, N.H. and ELLISON, F O'B

A textbook of experimental physiology for students of medicine.
J & A Churchill, London. 1909 139p ill.

Sections on muscles, circulation, digestion, respiration, the nervous system etc, gives an account of visual sensations, defects of the eye, colour vision, ophthalmoscopy and retinoscopy.

ALDIS, W. Steadman

An elementary treatise on geometrical optics. 3rd Edition
Deighton, Bell & Co, Cambridge 1888 195p. ill.

ALDIS, W. Steadman

An elementary treatise on geometrical optics. 4th Edition
Deighton, Bell & Co, Cambridge 1893 195p. ill.

A guide for those reading for the Cambridge Mathematical Tripos. Covers the laws of refraction, refraction through prisms, plates and lenses. Includes examples and self tests.

ALEXANDER, Alexander

A treatise on the nature of vision, formation of the eye and the causes of imperfect vision.

Longman, Rees, Orme, Brown & Co. London, 1833. 103p. ill.

Briefly describes the anatomy of the eye, the nature of vision and defects of sight. A chapter on the choice of spectacles includes advice to avoid 'large, round spectacles'.

ALGER, Ellice M.

Refraction and motility of the eye, with chapters on colour blindness and the field of vision. Designed for students and practitioners. 2nd Rev. Edition.
F.A. Davis Company, Philadelphia 1920 394p.

A compendium aimed at the student and general practitioner. Covers the principles of optics, basic anatomy of the eye, examination of the eye – ophthalmoscopy and retinoscopy, errors of refraction, strabismus, ocular paralysis and colour-blindness.

AL-GHÂFIQÎ, Mohammad ibn Qassoûm ibn
(Al-morchid fi'l-kohhl) ou Le guide d'oculistique.
French translation by Max Meyerhof
Barcelona, 1933. 225p 1 pl. 10 ill.

A translation of the 12th century Arabic edition in which Al Ghâfiqî classified the diseases of the eye in 37 different varieties. The translator suggests that the following two centuries added little to the knowledge expressed here.

ALHAZEN (Ibn al Haitham) 964-1039

Born in Basra on the Persian Gulf although he spent his later years in Egypt. He was a mathematician and is best known for his works on physiological optics.

ALHAZEN (Ibn al-Haitham)
Opticae thesaurus.
(E. Episcopius and the heirs of N. Episcopius for) Officina Episcopiana, 1572. 288p.
ill.

This work was translated from the Arabic in the 12th century and was the foundation of western optical science, influencing Bacon, Kepler, Peckham and Witelo. It reflects some controversial early theories on sight e.g. the contemporary belief that the 'crystalline humour' was the principle organ of sight but also moves on from some of these theories.

ALLEN, Edmund T.
ABC of fitting glasses: a manual for the optician.
Geo. K. Hazlitt & Co. Chicago, 1897 100p 27. Ill.

A practical handbook explaining the technique to be adopted in refraction, the symptoms and treatment of errors of refraction, and the diagnosis of cataract and glaucoma.

ALLEN, Edmund T.
ABC of fitting glasses: a manual for the optician. 2nd Edition.
Geo. K. Hazlitt & Co. Chicago, 1910 100p 27. Ill.

ALLEN, Edmund T.
The science of higher prisms.
Geo. K. Hazlitt & Co. Chicago, 1897 113p. 15 ill.

A consideration of prisms and their actions on the eyes, with a study of the anatomy and physiology of the ocular muscles.

Grant Allen (1848-1899)

English philosopher educated at Birmingham and Oxford who became professor of mental and moral philosophy in Jamaica before returning to England in 1876

ALLEN, Grant

Der Farbensinn, sein Ursprung und ein Entwicklung
Ernst Günter, Leipzig, 1880 274p.

German translation of an English text of 1879 in which the author presents his theory of the development and origin of colour vision. Traces the early realisation of colour by insects, birds and animals through the perception of different appearance and varieties of flowers and fruit. Also discusses protective colouring in animals.

ALLING, Arthur N. and GRIFFIN, Ovidus Arthur

Diseases of the eye and ear; a manual for students and practitioners.
Hodder & Stoughton London, 1905.

A handbook in the 'Medical Epitome' Series for students and practitioners giving the salient factors of diseases of the salient structures of the eye.

Gustav Adolf Friedrich Wilhem Alt (1851-1920)

An American ophthalmologist and founder of the first ophthalmologic journal published west of New York City. Founded in 1883 it continued until 1918 when it merged with the American Journal of Ophthalmology with Alt as its editor. Born in Mannheim he interrupted his medical studies to become soldier in the Franco-Prussian war. In 1872 he returned to his studies in Heidelberg and graduated in 1875.

ALT, Adolf

Lectures on the human eye in its normal and pathological conditions.
G. P. Putnam's Sons, New York, 1880 208p 95 ill.

Describes the histological conditions of the eye from Alt's own examination of microscopical specimens of normal and pathological eyes. Describes the cornea, conjunctiva, iris choroids etc and the results of injuries to the eyeball.

ALT, Adolf

Original contributions concerning the glandular structures appertaining to the human eye and its appendages.
American journal of Ophthalmology, St Louis, 1900 23p. ill.

An essay on the glands of the eye, with detailed illustrations, chiefly made from Alt's own specimens

AMEILHON, M.

Mémoire dans lequel on examine s'il est prouvé que les Anciens aient connu le
Télescope ou les Lunettes d'approche, comme quelques Modones le prétendent.
1779, 41p (pamphlet)

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 1
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 2
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 3
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 4
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 5
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 6
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 7
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 8
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 9
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 10
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 11
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 12
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.

Vol. 13
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol.14
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 15
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 16
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 17
Cleveland Press, Chicago. 1913

American encyclopaedia and dictionary of ophthalmology. Edited by C. A. Wood.
Vol. 18
Cleveland Press, Chicago. 1913

AMERICAN OPTICAL COMPANY

Illustrated catalogue of spectacles and eyeglasses in 8K, 10K and 14K gold, platinum, silver and alumnico, Roman alloy, German silver, filled gold, steel etc lenses, trial sets and other material.
American Optical Company, 1984

AMSDEN, L.G.
Principles and practices of refraction.
Toronto, 1903

A condensation and classification of generally accepted optical principles on refraction and methods of measuring and correcting errors of vision, written in non-technical language. Chapters on refraction, hyperopia, astigmatism, methods of testing, frame-fitting, retinoscopy, amblyopia, colour vision etc.

Analyse de la lumière, déduite des lois de la mécanique.
Bachelier, Libraire Pour Les Sciences.
Bachelier, Libraire Pour Les Sciences, Paris, 1826. 626p. ill.

Based on Newtonian principles: mathematical laws of refraction, reflection and colour, physical explanation of the division of light into seven homogeneous rays and an analysis of the nature of light.

Henry Clay Angell (1821-1911)

One of the first to practice as an ophthalmologist in the USA. After receiving his doctorate from Philadelphia he studied for three years at the University of Vienna and went on to practice homeopathic medicine and ophthalmic surgery in Boston where

he was also professor of ophthalmology. He was for 58 years a member of the American Institute of Homeopathy. He became the first Editor of the New England Medical Gazette in 1866.

ANGELL, Henry Clay
The sight and how to preserve it.
London 1880

A popular account of the defects of the eye and their correction by means of spectacles.

ANGELL, H.C.
A treatise on diseases of the eye for the use of general practitioners.
Boston, 1870

The first textbook to concentrate on homeopathic treatment of the eye.

ANGELL, H.C.
A treatise on diseases of the eye.
New York, 1878

ANGELY, John Ludovic
De oculo organisque lacrymalibus, ratione aetatis, sexus, gentis et variorum animalium.
Typis Adolphi Ernesti Jungii, Erlangae, 1803. 110p.

A comparison of the formation of the cornea, choroids, iris, crystalline lens, optic nerve and other structures in infants, adults, animals, albinos etc.

Pierre Ango (1640-1694)

French Jesuit who taught mathematics at Caen. His wave theory of light was posited eight years before Huygens published 'Traite de la lumiere'. Like Huygens Ango acknowledges a debt to another Jesuit, Ignace Gaston Pardies (1636-1673) who in an unpublished work wrote of a wave theory based on optical experiments with reflected and refracted rays.

ANGO, Pierre
L'optique divisee en trois livres.
Estienne Michallet, Paris 1682 367p. ill.

This outline of a wave theory of light was proposed eight years before Christiaan Huygen's 'Traite de la Lumiere' was published. It is a seventeenth century description of the properties of light and its propagation in waves including the principle of vision and of colour, the means of correcting defective sight with glasses and the varieties of optical instruments etc.

Antoine (Maitre Jan) 1650-1725

Studied in Paris and then returned to his native Méry-Seine to practise surgery and ophthalmology.

ANTOINE , (Maitre-Jan)

Tractat von den Augenkrankheiten.

Translated from the original French by Johannem Timme

Philipp Gottfried Saurmann, Bremen, 1731 846p. ill.

Includes Maitre-Jan's rediscovery of the true nature of cataract. In the 1680's, as a result of performing couching operations, he observed that cataracts are not membranes or humours formed behind the iris (which was the contemporary understanding) but rather the hardening and opacification of the crystalline lens.

Carl Ferdinand Ritter von ARLT, (1812-1887)

Born in Bohemia, Arlt was a pupil of and assistant to JN Fischer at the University of Prague. In 1856 he became Professor of Ophthalmology at the University of Vienna. He was a founder of the "reform of ophthalmology" and improved the blepharorrhaphy which had been invented in 1826 by von Walther. In his *Die Krankheiten des Auges, für praktische Ärzte* (1st edn 1851) he described granular conjunctivitis (Arlt's Trachoma).

ARLT, Carl Frederick von

Clinical studies on diseases of the eye. Translated by Lyman Ware.

Edinburgh, 1885

English translation of 'Klinische darstellung der Krankheit des Auges' first published in Vienna in 1881. Each section is prefaced by general considerations on the subject and then divided into two parts dealing with inflammatory and non-inflammatory affections.

ARLT, Carl Frederick von

Die Pflege der Augen im gesunden und kranken Zustande nebst einem Anhang über Augengläser.

Prague, 1865

First published in Prague in 1846. Contends that the primary causes of eye diseases are 'negligence and ignorance'.

Art of preserving the sight unimpaired to an extreme old age and of re-establishing and strengthening it when it becomes weak.

Henry Colburn, London 1815 247p

A translation of Georg Joseph Beer's, 'Pflege gesunder und geschwächter des augen, although the author's name does not appear in any of the English versions, the text being attributed merely to 'an experienced oculist'. Discusses the best method of treating weak eyes and the means of rendering first aid to the eyes.

Art of preserving the sight unimpaired to an extreme old age and of re-establishing and strengthening it when it becomes weak. 2nd edition

Henry Colburn, London 1815 239p

Art of preserving the sight unimpaired to an extreme old age and of re-establishing and strengthening it when it becomes weak. 5th edition

Henry Colburn, London 1822 259p ill.

Art of preserving the sight unimpaired to an extreme old age and of re-establishing and strengthening it when it becomes weak. 6th edition
Henry Colburn, London 1824 259p ill

ASHER, W.
Repetitorium der Augenheilkunde.
Leipzig, 1912 346p. 59 ill.

A treatise on ophthalmology giving a short history of the subject. The diseases of the structures of the eye and the best methods of trusting them. Chapters on the anomalies of refraction and accommodation.

Paolo ASSALINI, (1759-1840)

Born in Italy, Assalini studied in Paris and Vienna. In 1811 he became the first surgeon to Napoleon and professor of surgery at Milan military hospital. Afterwards he worked in private practice in Naples. He improved Pellier's lid retractor and Scarpa's cataract needle and in 1782 was the first to use the procedure of iridodialysis.

ASSALINI, Paulo
Ricerche sulle pupille artificiali.
Della Stampiera Reale, Milan 1811 59p ill.

Describes the tearing of one third of the iris from its roots when trying to extract an opaque adherent lens capsule with forceps through a corneal incision, resulting in a useful new pupil. Describes his own methods, plus those of Cheselden, Venzel, Buzzi and Demour.

AUERBACH, F.
Ernst Abbe: sein Leben, sein Wirken, sein Personlichkeit.
Leipzig 1918

A treatise on the life, work and personality of Ernst Abbe. His career is traced with an account of his work as a university lecturer. There is a section on the work of the Carl Zeiss firm and the author's research there.

AUERBACH, S.
Headache, its varieties, their nature, recognition and treatment. Translated by E. Playfair.
London 1913.

A differential diagnosis and classification of the individual varieties of headache, together with appropriate methods of treatment. Also includes methods of general diagnosis and examination.

AUZOUT, Adrian
Considerations of Monsieur Auzout upon Mr Hook's new instrument for grinding of optick glasses.

Philosophical Transactions 4, London, 1665 19p

A paper dealing with the famous controversy on the grinding of lenses between the English and the continental schools. Auzout's comments on Hooke's 'engine for grinding spherical glasses are replied to by Hooke. His answer also includes a further account of Signor Campani's book about 'opticke glasses'.

AUZOUT, Adrian

Lettre a Monsieur L'Abbe Charles sur le regguaglio di due nouve osservazioni etc. da Guiseppe Campani avec des remarques ou il est parle' des nouvelles découvertes dans Saturne & dans Jupiter, & de plusiers choses curieuses tou chant les grandes luneter &c.

Jean Cusson, Paris 1665 62p. ill.

Deals mainly with the rivalry between Campani, optician of Bologna, who constructed Cassini's telescopes and announced the first observation of Jupiter's satellites by means of a powerful new telescope, and Auzout, one of the original members of the Academie des Sciences and the inventor of the micrometer. Auzout questions some of the claims Campani makes for his instrument and also discusses the difficulties of providing suitable lenses. Includes the earliest letter charts for testing sight by which Campani and Auzout tested their claims for superior magnifying power. Very few copies of this treatise were printed. This copy comes from the Colbert library.

AWDRY, W.

Easy lessons in light.

London 1880. 114p. 43 ill.

Introduction to the properties of light, plus a lengthy description of refraction.

AXENFELD, T.

Bacteriology of the eye. Translated by A. Macnab.

London, 1908. 402p. 90 ill.

The author does not give a complete statement of general bacteriological principles, but provides a study of infectious eye diseases, their diagnosis and treatment.

AXENFELD, T.

Die Aetiologie des Trachoms.

Jena, 1914. 200p. 6 ill.

James AYSCOUGH, (d.c.1762)

A London spectacle and microscope maker and shopkeeper of scientific instruments.

AYSCOUGH, James

A short account of the eye and the nature of vision. Chiefly designed to illustrate the use and advantage of spectacles, wherein are laid down rules for chusing glasses properly, for remedying all the different defects of sight...

4th edition.

E. Say for A. Stahan, London, 1755. 26p. ill.

A layman's guide to the need for spectacles and guidelines for obtaining suitable ones.

AYSCOUGH, James

A short account of the nature and use of spectacles. In which is recommended a kind of glass for spectacles preferable to any hitherto made use of for that purpose.
The Author, London, 1750. 15p.

Karl BAAS, (1866-1944)

BAAS, K.

Das Gesichtsfeld, ein Handbuch für Augenärzte, Neurologen, Praktischen Ärzte und Studierende.
Stuttgart, 1896.

A handbook on the normal and pathologic field of vision which describes eye diseases, e.g. glaucoma and diseases of the choroids retina and optic nerve in addition to methods of measuring the field of vision.

Charles Babbage (1792-1871)

English mathematician educated at Peterhouse Cambridge. Babbage was the co-founder of the Astronomical Society, and Lucasian professor of Mathematics at Cambridge (1829-39). He produced a simple ophthalmoscope in 1847.

BABBAGE, C. (Ed.)

Scriptores optici – or a collection of tracts relating to optics.
R. Wilks for Baldwin, Craddock and Joy, 1823. 590p ill.

Text in Latin, French and English with a handwritten dedication (by the editor?) to the Duke of Somerset.

BABBITT, E. D.

The principles of light and colour.
New York, 1878. 580p. ill.

Deals with aspects of philosophy, psychology, chemistry and therapeutics. Discusses the sources and development of light, the principles of vision and the science of colour.

Ludwig Bach (1867-1912)

German ophthalmologist distinguished for his work on the bacteriology of the eye, the reactions of pupils and malformations of the eye.

BACH, Ludwig & SEEFELDER, R.

Atlas zur Entwicklungsgeschichte des menschlichen Auges.
Willhelm Engelmann, Leipzig, 1911 214p. 50 pl. 24 ill.

The development of the human eye, describing and illustrating the growth of the lens, cornea, iris, pupil, optic nerve etc.

Roger Bacon (1214-1294)

English philosopher and scientist educated at the Universities of Oxford and Paris and joined the Franciscan order in 1250. He stressed the importance of experiment in the study of nature and the use of mathematics in astronomy and physics. He believed that the innate wisdom granted to humanity by divine authority could only be developed by reason backed by experience. His writings on optics state the laws of reflection and refraction.

BACON, Roger

Opus Majus ad Clementem quartum, Pontificem Romanum.
Guillemi Bowyer, Londin, 1733. 477p ill.

This was written in response to Pope Clement IV's request in 1266 for a copy of Bacon's philosophical works, Samuel Jebb prepared this first edition containing 6 parts, from the Trinity College MS which was the most complete then known. A 7th part was discovered later but was not published until 1860.

Bacon stressed the usefulness of mathematics in both human and divine affairs, as mathematics alone gave absolute certainty. He also studied optics, which was to him the fundamental physical science, emphasising the magnifying properties of lenses and setting down eight rules governing the properties of convex and concave spherical surfaces seen from various vantage points. This publication did much to refute a contemporary idea that Bacon was little more than an alchemist dabbling in magic.

BACON, Roger

Perspectiva

W. Richter for A Humm Frankfurt. 1614 207p ill.

The first edition of Bacon's treatise on optics in which he discusses the structure of the various parts of the eye, the principles of correct vision the impression of light and colour on the eye, and the reasons for imperfect vision. The second part shows a knowledge of the properties of lenses and spherical mirrors.

BACON, Roger

Specula mathematica.

Wolfgang Richter for Anton Humm, Frankfurt. 1614 83p. ill

Discusses the transmission of light from a geometric perspective. Here Bacon seeks to establish the necessity of a knowledge of mathematics to the understanding of science. Also includes chapters on the principles of light, rays of light from the sun and the stars and the angle of the incidence of light.

Charles Bader (1825-1899)

A German ophthalmologist who settled in London after the political disturbances of 1848. He became an ophthalmic assistant surgeon at Guy's hospital and, according to Hirschberg, introduced the use of the ophthalmoscope to England.

BADER, Charles

The natural and morbid changes of the human eye and their treatment. Vol. 1. Text.
N. Trübner & Co. London, 1868 505p.

Includes discussion on anatomy and the diagnostic use of the ophthalmoscope and suggests treatments for cataract and other diseases and congenital abnormalities.

BADER, Charles

Plates illustrating the natural and morbid changes of the human eye.
N. Trübner & Co. London, 1868 32p 10 plates

Of the ten plates five are in colour and show the parts of the eye as they appear when examined through an ophthalmoscope. The plates were made by the noted lithographic firm of Day & Son after water colours by R. Schweizer.

BAKER, A.L.

Thick lens optics, an elementary treatise for the student and amateur.
New York, 1912. 131p. ill.

A working manual on the optics of the microscope and telescope and discussing what form of lens is needed to produce what effect. There are questions and answers at the end of chapters.

BAKER, Henry

Of microscopes and the discoveries made thereby: the microscope made easy. Vol.1.
2nd ed.
J. Dodsley London. 1785. 324p. ill.

Part one deals with salts and crystals and how to prepare these substances for the microscope...

BAKER, Henry

Of microscopes and the discoveries made thereby: employment for the microscope.
Vol.II. 2nd ed.
J. Dodsley London. 1785 442p. ill.

Part two deals with various animalcules as seen through the microscope, with a description of the microscope used in these experiments.

This two volume work is by the founder of the Bakerian lecture who was also a Fellow of the Royal Society.

James Moores Ball (1863-1929)

An American ophthalmologist who spent most of his life teaching. During his lifetime he collected a valuable collection of books and specimens related to ophthalmology which, after his death was left to the Army Medical Museum in Washington.

BALL, J.M.

Modern ophthalmology, a practical treatise on the anatomy, physiology and diseases of the eye.
Philadelphia, 1904. 820p. ill.

Includes the development of the eye, the physiology of vision, the structures of the eye, their examination and treatment and the hygiene of the eyes. Also discusses microscopic examination of the eyes.

BALLENGER, W.L. and WIPPERN, A. G.
Ear, nose and throat, a manual for students and practitioners.
London, 1901 511p. ill.

Sections on examination of patients, variety of test-types, ophthalmoscopes etc, anatomy, diseases and injuries of the eye, errors of refraction etc.

BALY, E.C.C.
Spectroscopy.
London, 1905. 568p. 163 ill.

A practical explanation and an account of the historical development. Detailed descriptions of the use of various instruments and the prism spectroscope in practice.

Richard Banister (1570?-1626)

Banister has been described as “an itinerant but honest oculist”. He was the first to point out that hardness of the eyeball is an essential diagnostic sign of glaucoma. He was educated under his own kinsman, John Banister the surgeon and because of his own poor eyesight learned from a variety of contemporaries eminent in eye disorders. His practice was based at Stamford in Lincolnshire where he performed many cataract operations . He cured 24 blind people in Norwich, for which service he received a certificate from the mayor and aldermen.

BANISTER Richard

A treatise of one hundred and thirteene diseases of the eyes, and eye liddes the second time published, with some profitable additions of certaine principles and experiments Lond, Felix Kyngston for Thomas Man, 1622

A record of observations by a critical observer. It is a running commentary on prevailing ophthalmic practice and is perhaps the more valuable for its biographical asides.

The volume begins with an address to the reader followed by *Banister's Breviary* (pp.1-87) including aphorisms about the eyes and errors in their treatment. The *Treatise* proper follows with another title page and ten-page summary, the page numbers then restarting at 1 (to 233).

Pages 234-263 are a version of Bayley's *A Briefe Treatise concerning the preservation of the Eye-Sight* (1586).

Pages 264-307 are *A Discourse of the Scorby*, followed by a treatise (pages 308-342) *Of the nature and divers kinds of cancers or cankers*.

[The second part of this book is a reprint of the English translation of Guillemeau's 'Traites des maladies de l'oeil'(1585).] QUERY: ACCURACY OF THIS STATEMENT.

Paul Barbette (1623-1699)

Born in Strasbourg he studied first with his surgeon father and then at Montpellier, Paris and Leiden. He established a successful practice in Amsterdam.

BARBETTE, Paul

Chirurgical and anatomical works.

Henry Rhodes, London. 1687. 393p. ill.

First published in Latin in 1672. One section deals with the extraction of cataract.

BARCK, Carl

A history of spectacles. Lecture delivered before the Academy of Science, St Louis
Reprinted from The Open Court for April 1907.

A lecture delivered before the Academy of Science, St Louis. Traces the development of different types of glasses with many illustrations of early spectacles.

BARFUß, F.W

Optik, Catoptrik und Dioptrik.

Bernh. Fr. Boigt, Weimar, 1839 526p. ill.

A description of geometric optics with chapters on light , the structure of the eye, the nature of vision, lenses and prisms, grinding and polishing glass. Much of the book is devoted to descriptions of optical instruments.

BARLOW, P.

Optics.

London, 1875. 92p. 10pl.

An extract from an encyclopaedia giving a brief history of optical discoveries from early times, including the work of Alhazen, Kepler, Newton, Brewster etc. Explains the general properties of light and shadow, the formation of images, the laws of refraction, concave and convex mirrors, varieties of lenses and the theory of optical instruments.

Isaac Barrow (1630-1677)

Chiefly famed as a mathematician. In 1664 he became the first Lucasian Professor of Mathematics at Cambridge, a position he resigned in 1669 in favour of his pupil, Isaac Newton. His studies also included philosophy and theology and in 1661 he became professor of Greek and the following year professor of philosophy. He became director of Trinity College and, in 1675, Chancellor of the University of Cambridge. His contemporaries regarded his ability a second only to Newton.

BARROW, Isaac

Lectiones XVIII, in quibus opti corum phaenomenon genuinae rationes investigantur, ac exponuntur.

G. Godbid for J. Dunmore and O. Puleyn, London 1669. 127p. ill.

Lectures investigating the phenomena of the eyes. Discusses the properties of light and rays and illustrates the principles of optics with geometrical tables

BARTHOLINI, Erasmi

Experimenta crystalli islandici disdiaclastici quibus mira et infolita refractio detergitur.

Joannem Blaeu, Amsterdam, 1670 60p. ill

A description of experiments concerning Iceland Spar. Chapters on the first principles of optics and prisms. Bartholini is famed as the discoverer of double refraction in Iceland Spar.

Georg Bartisch (1535-1606)

A German barber and surgeon, Bartisch served a three year apprenticeship in surgery and lithotomy. He was an itinerant oculist and surgeon through Saxony, Silesia and Bohemia, was the first to practice the extirpation of the Bulbus and invented several new surgical instruments as well as publishing the first ophthalmology book written in the vernacular.

BARTISCH, Georg

Augen-dienst

Georg Scheuerel, Nürnberg, 1686 442p ill.

A later edition of Ophthalmodouleia. In which the illustrations are printed in mirror image and updated to show people in 17th century dress.

BARTISCH, Georg

Ophthalmodouleia, das ist die Augendienst. Newer und wolgegruendeter Bericht von ursachen und erkentnues aller Gebrechen, Schaeden und maengel der Augen und des Gesichtes.

M. Stoeckel, Dresden, 1583. 273p ill.

Fine example of anatomical illustrations, including layered diagrams. Many of the woodcuts are the work of the artist Vesal. The first scholarly work on ocular disease, beginning with the anatomy of the head and eye and progressing to more specific treatments for strabismus, cataracts (distinguishing between 6 different types), trachoma, external growths on the lids, injuries and foreign bodies. Bartisch prided himself on his surgical skills, but also advocated the use of a variety of questionable drugs. The author warns readers against depending on artificial aids like spectacles which he regarded as serving little useful purpose. Bartisch believed in prevention rather than cure and stressed the importance of a healthy diet and care of the mouth, teeth and skin – a holistic approach that was considerably ahead of his time

Copy one bound in leather with clasps; copy two bound in medieval MSS.

BASSETT, A.B.

A treatise on physiological optics.

Cambridge, 1892. 411p. ill.

An investigation of interference of light, colours of thick and thin plates, diffraction, double refraction, rotary polarisation, reflection and refraction of polarised light. Includes the theories of Fresnel, Green, Rayleigh and Kelvin on optical phenomena.

BATEMAN, H.

The mathematical analysis of the electric and optical wave motion.
Cambridge, 1915. 159p. 5 ill.

An introduction to contemporary developments of Maxwell's electromagnetic theory connected with the solution of the partial differential equation of wave-motion.

BATES, F.A.

Ocular refraction and the shadow test.
New York, 1903. 205p. 145 ill

A treatise stressing the importance of retinoscopy in the treatment of eye defects. Includes chapters on light, lenses, the physiology of the eye and retinoscopy.

BAUDRY, S.

Injuries to the eye in their medico-legal aspect.
Philadelphia, 1900. 161p.

Translation of a French work dealing with traumatic lesions of the ocular adnexa and the eyeball and simulated affections of the eye.. The injuries are treated from a prognostic standpoint.

Walter BAYLEY (1529-1592-3?) also spelled Bailie, Baley, Bailey and Baily
Educated at the University of Oxford where he became Professor of Medicine in 1561. He was physician to Queen Elizabeth I.

BAYLEY, Walter

A briefe treatise touching the preservation of the eie-sight consisting partly in good order of diet, and partly in use of medicines. 6th edition
Joseph Barnes, Oxford. 1602. 25p.

Some historians suggest that the first edition of this work (1586) was the first English vernacular work on ophthalmology printed in England.

For another printing of this work see under BANISTER.

And for another (1633) see under VAUGHAN where the author questions whether Bayley's work is well known and undertakes to rescue it from the 'soile of oblivion'.

BEARD, C.H.

An international system of ophthalmic practice: ophthalmic semiology and diagnosis.
London, 1913. 400p. ill. 13 colour plates and 71 figures in the text.

A treatise on the lids, conjunctiva, globe, cornea, iris, pupil etc. Diagnoses the diseases of the structures of the eye and offers suggestions for their treatment.

BEARD, C.H.

An international system of ophthalmic practice: a treatise on surgical operations pertaining to the eye and its appendages.

Philadelphia, 1914. 745p. ill. 13 coloured plates and 71 figures in the text.

Preparations for operations on the muscles of the eye, conjunctiva, globe and orbit and descriptions of the instruments used. Also describes treatments for glaucoma and trachoma.

BEAUMONT, W.M.

Injuries of the eyes of the employed and the Workmen's Compensation Act.

London, 1907.

Intended to help the practitioner in cases which might be the subject of legal action.

BEAUMONT, W.M.

The shadow test in the diagnosis and estimation of ametropia.

London, 1890. 40p. ill.

An early textbook on retinoscopy, describing the method of making the test, the diagnosis of hypermetropia, myopia, and astigmatism.

BECK, C. & ANDREWS, H.

Photographic lenses a simple treatise.

London, 320p. ill.

BECKER, August

Kristaloptik

Stuttgart, Ferdinand Eake, 1903. 362p. 106 ill.

A detailed description of the essential phenomena which crystals reveal in optics. Charts the historical development of the theories of light, chromatic, rectilinear, circular and elliptic polarisation.

Edmond Becquerel (1820-1891) was the French physicist who discovered the paramagnetism of liquid oxygen.

BECQUEREL, E

La lumiere, ses causes et ses effets. Vol.1. Sources de lumiere.

Librairie de Firmin Didot Frères et Cie, Paris, 1867 431p ill.

An experimental rather than theoretical treatise on the principles of light and the influence of light in substances. Discusses the sources of light, phosphorescence, phenomena of incandescence, luminous effects produced by electricity, the principles of photography.

BECQUEREL, E

La lumiere, ses causes et ses effets. Vol.II. Effets de lumiere.

Librairie de Firmin Didot Frères et Cie, Paris, 1867 431p ill.

August Beer (1825-1863) was a German mathematician, physicist and chemist whose chief work was in electromechanics.

August BEER, (1825-1863)

BEER, August

Einleitung in die höhere Optik.

Friedrich Vieweg und Sohn, Braunschweig, 1853 430p. ill.

German translation of French original.

BEER, August

Grundriss des photometrischen Calculs.

Brunswick, 1854

BEER, August

Introduction à la haute optique. Translated from the German by M.C. Forthomme.

Emile Mellier, Paris, 1858 374p. ill.

An introduction to higher optics; including a detailed description of the properties of light, the oscillation theory of light, the propagation, polarisation and transference of light.

Georg Joseph Beer, (1763-1821)

Austrian ophthalmologist, a pupil of Barth, who opened the first known eye hospital in Vienna in 1776. He was the foremost ophthalmic surgeon of his day.

BEER, Georg Joseph

The art of preserving the sight unimpaired to an extreme old age; and of re-establishing and strengthening it when it becomes weak: with instructions how to proceed in accidental cases which do not require the assistance of professional men, and the mode of treatment proper for the eyes during, and immediately after, the small pox. To which are added, observations on the inconveniences and dangers arising from the use of common spectacles etc.

Henry Colburn, 1816

3rd English Edition. This is the translation of the author's 'Pfleger gesunder und geschwächter augen' (1800) which was the first reasonably complete treatise on ocular hygiene. The author warned about exposure to bright light, the need for proper artificial light and the avoidance of exposure to noxious fumes. There is a good description of asthenopia for which Beer advises rest and irrigation of the eyes. Beer was vehemently against wearing spectacles.

BEER, Georg Joseph

Bibliotheca ophthalmica or repertorium. Vol.I.

Carl Schaumberg and Co. 1799 496p ill.

An analytical bibliography of the literature on eye diseases from earliest times to the end of the 17th century. Text in various languages. Gives biographical information and references to articles in which the books were reviewed and adds Beer's own criticisms which often extend over several pages and include a synopsis of the text.

BEER, Georg Joseph

Moyens infaillibles de conserver sa vue en bon état jusqu'à une extrême vieillesse.
Ad Stapleaux, Bruxelles, 1802 168p. ill.

French translation of the original 'Pfleger gesunder und geschwächter Augen, nebst einer Vorschrift, wie man sich bey plötzlich Zufällen an den Augen'.

BEEVOR, Charles E.

Diseases of the nervous system. A handbook for students and practitioners.
H.K. Lewis, London. 1898 432p.

BELFREY

De l'optilogue; ou du cylindre parlant.
Dabin, Paris. 1801. 67p. ill.

An instrument based on optical principles for communicating to deaf mutes, for transmitting regulations to a great number of people over a distance, etc. The machine is a cylinder in which letters, broken up in a particular way, revolve.

BERGER, E.

Katechismus der Farbenlehre.
Leipzig, 1898

A historical summary of the theories of colour, the relation of light and colour, complementary colours, fluorescence and phosphorescence. Also, a practical section with special reference to painting and applied arts.

George Berkley, Bishop of Cloyne (1685-1753)

Entered Trinity College, Dublin at the age of 15 and was elected a Fellow there in 1707. TCD at that time was much influenced by the work of Newton and Boyle. In 1705 Berkley founded a society to discuss the 'new philosophy'.

BERKELEY, George

An essay towards a new theory of vision. 2nd edition.
Aaron Rhames for Jeremy Pepyat, Dublin, 1709 198p. ill.

A treatise which is held to be the earliest attempt to distinguish in an act of vision between what we actually see with the eye and what we supply from previous experience. Bishop Berkeley's theory of vision became the foundation for later psychophysiological investigations of vision. The second edition was printed in the same year as the first and contains an appendix not included in the first.

BERNARD, F.

Deuxieme memoire sur la determination des indices de refraction au moyen de transport.

Paris, 1855 4p.

Bound with FOUCAULT 'Vitesses relatives de la lumiere'

BERNARD, F.

Sur l'absorption de la lumiere par les milieux non cristallises.

Paris, 1852 61p. 2 ill.

Bound with FOUCAULT 'Vitesses relatives de la lumiere'

BERNARD, H.M.

Studies in the retina, rods and cones in the frog and some other amphibia.

n.d. illus.

A comparative study illustrated by many plates.

BERNOULLI, Jean

Recherches physiques et géométriques sur la question comment se fait la propaation de la lumière.

L'Imprimerie Royale, Paris. 1736. 66p. ill.

Geometrical work on the question of how the propagation of light takes place.

Attempts to reduce the laws of refraction to mechanical causes. The author is heavily influenced by Newton.

Sir George Andreas Berry (1853-1940)

A Scottish ophthalmologist educated at Marlborough and Edinburgh. He studied mathematics under Professor Tait and became one of the six members of his Senior Class. In 1881 he became a fellow of the Royal College of Surgeons of Edinburgh. He worked with his Uncle, Professor Hansen Grut in Copenhagen and studied in France, Germany, Austria and Holland. During his time as House Surgeon at Moorfields Eye Hospital (1878-9) he was one of the moving spirits behind the formation of the Ophthalmological Society of the United Kingdom which was founded in 1880. From 1922-1931 he was also a Member of Parliament.

BERRY, George Andreas

Diseases of the eye a practical treatise for students of ophthalmology.

Edinburgh, 1889. 670p. 144 ill.

Provides clinical descriptions of the principle diseases of the eye and recommends diagnostic, treatment and surgical procedures. An emphasis on foreign bodies in the eye and on sympathetic ophthalmia.

BERRY, G.A.

The elements of ophthalmoscopic diagnosis.

Edinburgh 1891. 83p.

Includes chapters on the ophthalmoscopic appearance of the structures of the eye in health and disease.

BERRY, G.A.
Manual of practical ophthalmology.
Edinburgh, 1904. 570p. 223 ill

A reproduction of the author's 'Diseases of the eye' containing the same information differently arranged.

BERRY, George A.
Subjective systems in eye diseases.
Edinburgh, Oliver & Boyd 1886. 118p 13 ill

Discusses the orders of vision which are the symptoms of diseases in the eye and the central nervous system. Stresses the importance of subjective methods of examination.

Arnold Adolf Berthold (1803-1861)

A German physiologist who received his medical degree in Göttingen in 1823 where he returned as a lecturer and practicing physician after studying in Berlin and Paris.

BERTHOLD, Arnold A.
Das myopodiorthiticon oder der Aparat die Kurzsichtigkeit zu Heilen.
Bandenhoek und Kuprecht, 1840. 16p. ill

A description of the device which brought fame to the author. The Myopodiorthoticon, he claimed, could cure myopia by forcing the patient to read at successively greater distances.

BEST, H.
The blind, their condition and the work being done for them in the USA.
New York, 1919. 763p.
A social survey with sections on the general conditions of the blind, the possibilities for preventing blindness, education of blind children and intellectual and material provision for the blind.

George BEW

A Vice-President of the Manchester Literary and Philosophical Society

BEW, George
Observations on blindness, and on the employment of other senses to supply the loss of sight.
Manchester, 1782. 26p.

An 18th century inquiry into the means by which the blind can mitigate their disability with the help of the senses of hearing and touch. Also contains a description of the life and character of Dr Henry Moyes, the blind chemistry lecturer. This is extracted from *Volume 1 of The Memorials of the Literary and Philosophical Society of Manchester.*

Shelford BIDWELL, (1848-1909)

Pioneer in the field of telephotography, born in Norfolk and educated at Cambridge. He made important discoveries in the fields of electricity and magnetism and physiological optics and invented an instrument for electrically transmitting photographic images.

BIDWELL, Shelford
Curiosities of light and sight.
London, 1899. 226p. 50 ill.

Based on a series of lectures. Discusses light and the eye, colour and its perception, optical defects and optical illusions. Includes experiments in optical illusions and describes methods of constructing the necessary apparatus.

BILLET, F.
Traité d'optique physique. Vol.1.
Mallet-Bachelier, Paris, 1858. 540p. 7 ill.
A resume of Fresnel's work in a systematic form. Includes a detailed account of the polarisation of light.

BILLET, F.
Traité d'optique physique. Vol.2.
Mallet-Bachelier, Paris, 1858. 638p.

Jean-Baptiste Biot (1774-1862)

French physicist who conducted important studies on the polarisation of light (book six of volume four of his *Traité de physique experimentale et mathématique* [1st edn 1816] is devoted to this subject). Through the patronage of Laplace he was appointed early in his career as professor of physics at the College de France.

BIOT, J.B
Instructions pratiques sur le'observation et la mesure des proprietes optiques appelees rotatoires.
Paris, 1945. 49p.
Bound with BIOT, J. B. 'Memoires sur l'optiques'.

BIOT, J.B.
Memoire sur les lunettes achromatiques a oculaires multiples.
Paris, 1841. 309p. 2 ill.
Bound with BIOT, J. B. 'Memoires sur l'optiques'.

Describes the theory of different eyepieces and their magnification. Analyses the work of Dollond, Euler, Fraunhofer and Ramsden.

BIOT, J.B.
Memoires sur l'optique
1836-46. 1150p. 27 ill.

Contains 9 optical memoires by an author who was one of the last to defend Newton's corpuscular theory of light.

BIOT, J.B

Memoires sur les phenomes rotatoires.
Paris, 1846 222p. 9 ill.
Bound with BIOT, J. B. 'Memoires sur l'optiques'.

Contains the law of rotary polarisation.

BIOT, J.B
Memoire sur la polarisation lamellaire.
Paris 1841. 187p. 5 ill.

BIRKHÄUSER, Rudolph
Über die Schädigungen des menschlichen Sehorganes durch stumpfe Traumen des
Schädels wie des Augapfels.
Emil Birkhäuser, Basel, 1909. 126p. 14 pl. 4 ill.

Describes the damage caused to the eye through injuries. Quotes case studies and
illustrates individual cases.

BISCHOFF, Frederich
A treatise on the extraction of the cataract.
W. Bulmer & Co. for G. Nicol, London, 1793. 80p ill.

Encourages young surgeons to perform cataract extractions rather than leave the task
to 'travelling oculists' who had no care for the long term well-being of the patient.
Describes methods of operating for cataract by depression and extraction, the
instruments used, and the aftercare of the patient.

BLACK, G.
Eyesight and how to care for it.
London. 139p. 21 ill.

A practical handbook on the anatomy and physiology of the eye, errors of refraction,
injuries and disease.

BLAIR, C.
Errors of refraction and their treatment.
Bristol,. 1910. 106p. 4 ill.

A discussion of practical and clinical points.

BLAKESLEY, T.H.
Geometrical optics
London, 1903. 123p. 33 ill.

Contains chapters on refraction, reflection, simple optical instruments and lenses.

BLANCOURT, H.
The art of glass, showing how to make all sorts of glass, crystal and enamel; likewise
the making of pearls, precious stones, china and looking glasses. With an appendix,
containing exact instructions for making glass eyes of all colours.

D. Brown and others, London, 1699. 355p. ill.

BLUETT, F.J.
Defective vision.
London, 1891

A handbook intended for the public giving simple instruction on errors of refraction, the commoner diseases and the testing of sight.

Emil Bock (1857-1916)

Slovenian ophthalmologist born in Galicia, who received his medical degree in Vienna in 1881 and worked principally as an ophthalmic surgeon in Ljubljana. He specialised in the pathology of the eye.

BOCK, Emil
Die Brille und ihr Geshichte.
Vienna, Joseph Safar, 1903. 62p. 32 ill.

A description of the use of spectacles from the earliest times, with illustrations of early spectacles.

Hermann Boerhaave (1668-1738)

Dutch Physician born in Voorhaut. He received his MD from the University of Leiden in 1693. He is regarded as the Father of the modern method of clinical instruction and is considered to be the founder of practical ophthalmology in the eighteenth century. He was also the first to describe accurately the muscular fibres in the ciliary body.

Hermann Boerhaave (1668-1738)

Boerhaave had a great reputation as a clinician and was the creator of the modern method of clinical teaching. His writing had an enormous influence during his lifetime and he numbered Haller, Cullen, Prongle, Van Swieten and de Haen among his pupils.

BOERHAAVE, Hermann
Praelectiones publicae de morbis oculorum.
G. Cavelier, 1748. 250p. ill.

Hirschberg describes this book as providing ‘the scientific foundation for practical ophthalmology of the eighteenth century. Includes a large section on cataracts. The text contains the first accurate discussion of anomalies of refraction in an ophthalmology textbook.

BOHNE, W.
Handbook for opticians. 2nd edition.
New Orleans, The Author. 1892 250p. 33 ill.

BOHNE, W.
Handbook for opticians.
New Orleans, 1895. 276p. ill.

Deals mainly with technicalities for the optical craftsman. Includes chapters on different qualities of lenses, prisms, spherical and cylindrical lenses, the measuring and setting of compound lenses and the selection of spectacles. Also discusses the anatomy of the eye and errors of refraction.

LECOQ DE BOISBAUDEN, M.

Specres lumineux prismatiques et en longuers d'ondes. Destinés aux recherches de chimie minérale.

Gautier-Villars, Paris, 1874. 207p + tables

BOIS-REYMOND, E.D.

Hermann von Helmholtz: Gedachtnissrede.

Leipzig, 1897. 80p.

A commemorative address dealing with discoveries in physics at the time of Helmholtz and his contributions, particularly in physiological optics.

BOLAS, T.

Glass blowing and working.

London, 1898. 212p. ill.

A description of the various phases and processes of glass-working and the tools employed in the trade.

BOLAS, T.

The lens, a practical guide to the choice, use and testing of photographic objectives.

London, 1902 176p. 152 ill.

An explanation of the properties of the photographic lens without the aid of mathematical formulæ.

BOLDT, J.

Trachoma. Translated from the German by J.H. Parsons and T. Snowball

London, 1904. 232p.

Discusses the history, distribution, symptoms, ætiology, diagnosis and treatment of trachoma. Contains an additional chapter by Mr Treacher Collins on the results of his researches.

The book of English trades. 7th edition.

Richard Phillips, London, 1818. 442p ill.

BOOTH, F.

Radiant energy and the ophthalmic lens.

Philadelphia, 1921

Francisci Josephi BORRI, (1627-1695)

Italian Jesuit priest and physician of Milan.

BORRI, Francisci Josephi

Epistolae duae: i. Ceribri orto et uso medico. II. De artificio oculorum humores restituendi.

D. Paullii, Copenhagen. 68p. ill.

An exchange of letters between the author and the Danish physician Thomas Bartholinus in which Borri describes his method of infusing celandine juice to restore eye fluid.

Boscovitch (1711-1787)

A Jesuit mathematician, from Dalmatia, with a particular interest in astronomy. He became Professor of Mathematics at the Collegium Romanum, and in 1764 held the Chair in Mathematics at the University of Pavia. On a visit to England he was elected as a Fellow of the Royal Society and, following the suppression of the Jesuits in Italy accepted an invitation from the King of France to become Director of Optics for the Marine.

BOSCOVICH, Rogerio Josepho

Dissertatio de lumine.

145p. ill.

BOSCOVICH, Rogerio Josepho

De lentibus et telescopiis dioptric dissertatio.

Antonni de Rubeis, Romae 1755. 58p. ill.

BOSCOVICH, Rogerio Josepho

Memorie sulli cannocchiali diottrici

Guissepe Marelli, Milano, 1771. 114p. ill.

Discusses the optical principles behind the construction of telescopes, stressing the four essential qualities in making them: distinctiveness of impression, magnification, clearness, and the field of view.

BOSWELL, P.G.H.

A memoir on British resources of sands and rocks used in glass making.

London. 1918. 183p 13 ill.

The second edition of a memoir published at the instruction of the Ministry of Munitions of War by the Imperial College of Science and Technology. The requirements of good glass-sand are analysed and the British sands suitable for glass making are described.

BOUDON, P.

Traité de l'usage des lunettes et pieces curieuses qui dependent de cet art.

Raymond Barcouda, Castres. 1682 58p.

The making of spectacles discussed by a professional optician. Gives instructions for choosing spectacles, and discusses the properties spectacles should have, and the uses of coloured spectacles.

Pierre Bouger (1698-1758)

French hydrographer, the founder of experimental photometry and of atmospheric optics. He invented the photometer to assist in his studies of the transmission and gradations of light. His writings were published posthumously by Nicholas Louis de Caille

BOUGER, Pierre

Essai d'optique sur la gradation de la lumiere.
Claude Jombert, Paris. 1729. 164p. ill.

Observations on the properties of light applied to optical problems. Methods of measuring light and calculating its strength. Discusses reflections of light from various surfaces and the nature of transparency and opacity.

BOUGER, Pierre

Optice, de diversis luminis gradibus dimetiendis.
J. Trattner, Vienna, 1762. 195p. ill.

Research into theories of light, and the construction of instruments for this purpose.

BOUGER, Pierre

Traité d'optique sur la gradation de la lumiere.
H.L. Guerin et L. F. Delatour, Paris 1760. 380p. ill.

Explains the author's discovery in 1729 of 'Bouger's law' which states that in a medium of uniform transparency, the light remaining in a collimated beam is an exponential function of the length of its path in the medium. This was also known later as 'Lambert's law'.

BOULLIAU, Ismael (BULLIALDO, Ismaele) (1605-1694)

De natura lucis.
Ludovicum de Heuqueville, Paris. 1638 156p. ill.

The first 60 pages contain an interesting history of optical theories from Plato to Gemma Frisius, including Empodocles, Aristotle, Ficinus and Alhazen. Applies Kepler's inverse square hypothesis to light. Discusses the connection between light and heat and light and colour etc. The first of the author's many scholarly works. The author converted to Catholicism and devoted his life to science (still at that date largely the province of the Jesuits). He supported Galileo and was one of the few astronomers who accepted Kepler's theory of the ellipticity of orbits.

BOURGEOIS, Charles

Memoire sur les lois que suivent dans leurs combinaisons entre elles, les couleurs produites par la refraction de la lumiere ...
The author, Paris, c.1810 80p. ill.

The author was both a painter and a physician, interested in the systematic study of colours, in particular what he called 'the density' of colour. He made numerous experiments and measurements with different colouring materials.

BOUTAN, A. & D'ALMEIDA, J. Ch.

Cours élémentaire de physique suivi de problèmes. 3rd edition
Dunod, Paris, 1867. 635p. 453 ill.

Includes chapters on light, refraction, reflection, the spectrum, polarisation and optical instruments.

John Bowen

A Fellow of the Royal College of Physicians, Edinburgh and a member of the Royal College of Surgeons, London.

BOWEN, John

Practical observations on the removal of every species and variety of cataract, by hyalixix, or vitreous operation...

J. Callow, London. 1823 120p. ill.

Describes the author's original successful operation of hyallonyxis – ie the puncturing of the vitreous body for the removal of cataracts,

Sir William Bowman (1816-1892)

Studied medicine at Birmingham and London. He was surgeon at the Royal Ophthalmic Hospital (Moorfields) from 1846-1876. He revolutionised the contemporary knowledge of the muscle and kidney and virtually created a new anatomy of the eye. He discovered the anterior elastic lamina of the cornea (Bowman's membrane) and the ciliary muscle as well as creating many surgical procedures, for example those for ptosis, lacrimal disorders and the creation of an artificial pupil. His inventions included lacrimal probes and suction syringes for soft cataract operations.

BOWMAN, William

The collected papers of Sir William Bowman edited by J. Burden Sanderson and J. W. Hulke. Vol. 1.

London, 1892. 288p. 7 pl. 83 ill.

Physiological anatomy

BOWMAN, William

The collected papers of Sir William Bowman edited by J. Burden Sanderson and J. W. Hulke. Vol. 2.

London, 1892. 422p.

Mainly ophthalmological, including treatment of epiphora, artificial pupils, iridectomy in glaucoma, colour blindness etc.

BOWMAN, W.

Franz Cornelius Donders.

1891. p.24. 1 ill.

A brief review of the life of Donders and his ophthalmological work on refraction, accommodation, colour-blindness etc.

BOWMAN, W.

Lectures on the parts concerned in the operations on the eye and on the structure of the retina, to which are added, a paper on the vitreous humour; and also a few cases of ophthalmic disease.

Longman, Brown, Green and Longmans, London, 1849. 143p. ill.

Delivered at the Royal London Ophthalmic Hospital, Moorfields, June 1847. The anatomical structure of all parts of the human eye. Includes a paper on the vitreous humour.

Robert Boyle (1627-1691)

Irish born chemist, physicist and natural philosopher. He carried out research at Oxford (1650-1668) and London (1668-1691) including studies in optics and the properties of colour.

BOYLE, Robert

Experiments and considerations touching colours: the beginnings of an experimental history of colours.

Henry Herringman, London, 1664 423p. ill.

It has been suggested that this work might have influenced Newton's prismatic studies. Also discusses snow blindness and the iridescence of bubbles.

BRADBERRY

Patent spectacles.

The author, London. 1818. 31p. ill.

Stresses the blessings of sight, the value of spectacles and the necessity for those prescribing spectacles to be well versed in the laws of anatomy and the nature of optical glass. The author cites a number of people who have been helped by his spectacle prescriptions.

Sir David Brewster (1781-1868)

A Scot who wrote extensively on optics and was an instrument maker. One of his many discoveries was that which led to the introduction of the dioptric system to British lighthouses. He is said to have coined the term 'colour blindness'

BREWSTER, Sir David

The kaleidoscope, its history, theory and construction with its application to the fine and useful arts. 2nd edition.

John Murray, London, 1858. 189p. 57 ill.

BREWSTER, Sir David

Letters on natural magic addressed to Sir Walter Scott.

John Murray, London, 1832. 351p. ill.

Covers optical illusions, natural phenomena, scientific deceptions and spectral illusions, preceded by an account of the eye.

BREWSTER, Sir David
The life of Sir Isaac Newton
John Murray, London 1831. 366p. ill.

BREWSTER, Sir David
Manuel d'optique, un traité complete et simplifié de cette science. Vol. 1.
La Librairie Encylopedique de Roret, Paris. 1833 268p.

Covers the refraction and reflection of light and physical optics.

BREWSTER, Sir David
Manuel d'optique, un traité complete et simplifié de cette science. Vol. 2.
Translated from the original English by P. Vergnaud.
La Librairie Encylopedique de Roret, Paris. 1833 289p.

Covers the application of optical principles to the explanation of the phenomena of nature and optical instruments.

BREWSTER, Sir David
Populares, vollstandiges Handbuch der Optik. Vol 1.
Translated by F. Hartmann.
Gottfr. Basse, Leipzig 1835

BREWSTER, Sir David.
The stereoscope, its history, theory and construction with its application to the fine and useful arts and to education.
John Murray, London, 1856. 235p. 50 ill.

The theory of stereoscopic vision based on monocular and binocular vision. Describes various stereoscopes and the methods of taking pictures for them . Also discusses their application to the arts, natural history, education and amusement.

BREWSTER, Sir David.
The stereoscope, its history, theory and construction with its application to the fine and useful arts and to education.
John Camden Hotten, London, 1870. 235p 52 ill.

BREWSTER, Sir David
A treatise on new philosophical instruments for various purposes in the arts and sciences, with experiments on light and colour.
John Murray, Edinburgh, 1813. 427p. ill.

Describes telescopes, micrometers and the catadioptric microscope and his experiments with materials other than glass...

BREWSTER, Sir David
A treatise on optics.
Longman, Rees, Orme, Brown and Green, London, 1831. 383p. ill.

Brewster made important discoveries in most fields of optics and particularly in that of polarisation. Includes sections on catoptrics, physical optics, the application of optical principles, and optical instruments.

BREWSTER, Sir David.

A treatise on optics.

Longman, Green, Brown & Longmans, London, 1853 526p. 239 ill.

William Briggs (1642-1704)

Born in Norwich and studied medicine with Vieussens at Montpellier and St Thomas' Hospital London. He became physician in ordinary to William III. One of the few 17th century specialists on the eye he worked towards providing a new theory of vision, based on his understanding of the optic nerves and the optic chiasm. His is the first recorded description of nyctalopia.

BRIGGS, William

Nova visionis theoria.

Sam Simpson for Sam Smith, London, 1685 80p. ill.

Briggs, William

Ophthalmographia, sive oculi ejusque partium description anatomica, nec non ejusdem Nova Visionis Theoria, Regiae Societati Londinensi proposita.

R. Green, London. 1685.

Nova Visionis and *Ophthalmographia* bound together in one volume. Described as the first English treatise on the anatomy of the eye. Briggs describes the papilla of the optic disk and hypothesised that the vibrations caused by rays of light striking fibres of the retina were conveyed to the papilla and thence to the ophthalmic thalami, on the analogy of a spider's web. Briggs's *Ophthalmographia* was originally published in 1676.

BRIOT, Charles

Essais sur la théorie mathématique de la lumière.

Mallét-Bachelier, Paris, 1864. 132p.

Four books on the general laws of vibratory movements, double refraction, dispersion of light and circular polarisation. Much of the book is based on the work of Cauchy.

Bernard Edward Brodhurst (1822-1900)

Studies general surgery in London and Paris and ophthalmic surgery in Vienna under Jaeger and Rosas. With the exception of this book his main work was in the field of orthopaedics.

BRODHURST, Bernard Edward

Crystalline lens and cataract.

John Churchill, London. 1850 243p. 5. Ill.

Christian Henry Brown (1857-1933)

BROWN, C.H.

Clinics in optometry. A compilation of eye clinics covering fully all errors of refraction and anomalies of muscles, with methods of examination, tests and corrections used in actual practice.
Philadelphia, 1907.

BROWN, C.H.

The Opticians Manual, a treatise on the science and practice of optics
Philadelphia, 1896. 376p. ill..

BROWN, C.H.

The Opticians Manual, a treatise on the science and practice of optics. 2nd Ed.
Philadelphia, 1897. 417p. ill.

BROWN, C.H.

The Opticians Manual, a treatise on the science and practice of optics. 2nd ed.
Philadelphia, 1899. 417p. ill.

BROWN, C.H.

Supplement to the Opticians Manual.
Philadelphia, 1899. 200p. ill.

BROWN, C.H.

The Opticians Manual, a treatise on the science and practice of optics. 6th Ed.
Philadelphia, 1902. 419p. ill.

BROWN, C.H.

The Opticians Manual, a treatise on the science and practice of optics. Vol.2. 6th Ed.
Philadelphia, 1902. 403p. ill.

BROWN, C.H.

The Opticians Manual, a treatise on the science and practice of optometry. Vol. 1.
Anatomy and physiology of the eye, principles of refraction, light and lenses eye
examination, sight testing equipment, presbyopia...
Keystone Publishing, Philadelphia, 1908/1918 459p.

BROWN, C.H.

The Opticians Manual, a treatise on the science and practice of optics. Vol. 2.
Myopia, hypermetropia, astigmatism and muscular anomalies.
Keystone Publishing, Philadelphia, 1908/1918 405p.

BROWN, J.H.

Spectroptia, or surprising spectral illusions showing ghosts everywhere and of any
colour. 2nd edition.
Griffith & Farran, London. 1864. 11p. 16. Ill.

Describes visual illusions based on the principle of retinal after-images. The first part
consists of directions for seeing the spectres and the second describes how the
spectres are produced.

Edgar Athelstane Browne (?-?)

Surgeon to the Liverpool Eye and Ear Infirmary and to the Dispensary for Skin Diseases.

BROWNE, Edgar Athelstane

How to use the ophthalmoscope, being elementary instruction in ophthalmoscopy.

London, Trübner & co., 1876

A short account of the way to use an ophthalmoscope to diagnose eye disease.

BROWNE, Edgar Athelstane

How to use the ophthalmoscope, being elementary instruction in ophthalmoscopy. 3rd edition.

London, Trübner & co., 1887 115p. ill.

BROWNE, E.A

Squint occurring in children.

London, 1904

Deals with the concomitant convergent squint of childhood, and omitting all varieties of muscular abnormalities.

BROWNING, John

Our eyes and how to preserve them from infancy to old age with special information about spectacles.

London 1884 128p. 70 ill.

A later edition, with considerably enlarged chapters on short sight and astigmatism and additional chapters on complaints of the eye and care of the eye when riding etc.

BROWNING, John

Our eyes and how to preserve them from infancy to old age with special information about spectacles.

London 1889. 128p. 70 ill.

BRUCE-CLARK, W.

The dissector's manual.

London, 1883. 390p. 49 ill.

Includes 8 pages on the dissection of the eye.

BRÜCKE, E.

Principes scientifiques des beaux-arts, essais et fragments de theorie.

Paris, 1878. 168p. 39 ill.

Includes sections on perspective, light and shade and colouring.

BRYCE, Thomas Hastie

Quains elements of anatomy in four volumes Vol. 1. Embryology. 11th edition.

Longmans Green & Co, 1908. 275p. ill.

BULL, G.J.
Asthenopia of astigmatic persons
Paris, 1892. 19p

Extract from the minutes of the Société Française d'Ophthalmologie: Sitting of May 2
1892.

BURCH, G.J.
Physiological optics.
Clarendon Press, Oxford. 1912.

BURCH, G.J.
Practical exercises in physiological optics.
Oxford, 1912

BURDON-COOPER, J.
Studies in the photo-activity and therapy of the tungsten-titanium arc.
John Wright & Sons Ltd, Bristol;, 1931. 85p.

BÜRJA, Abel
Optik, Katoptrik und Dioptrik.
Christain Gottfried Schöne, Berlin, 1793 384p. ill.

Illustrated with diagrams and mathematical tables.

BURLINI, Biagio
Raccolta di maccine, ed instrument d'ottica che si fabricano in Venezia.
Modesto Fenzo, Venezia. 1758. 23p. ill.

A catalogue of the glasses, spectacles and optical instruments of a Venetian optician
of the 18th Century. The frontispiece shows his shop on the Grand Canal, with a
display of spectacles and other optical instruments. Four broadsides bound in the book
illustrate telescopes, microscopes etc.

BURNET, John
An essay on the education of the eye, with reference to painting. 4th Ed.
Henry Sotheran & Co., London, 1880 73p. 35. Ill.

Describes ways of educating the eye to appreciate the leading principles of
perspective, form and arrangement.

Swan Moses Burnett (1847-1906)

Received his MD from New York and then studied ophthalmology and otology in
Paris and London before returning to Washington as Professor of Ophthalmology and
otology.

BURNETT, S.M.
The principles of refraction in the human eye based on the laws of conjugate foci.
Philadelphia, 1904. 67p. 24 ill.

The development of an article published in the American Journal of Ophthalmology which deals with the conjugate foci in refracting systems, in accommodation, ophthalmoscopy, retinoscopy and astigmatism.

BURNETT, S.M.

A theoretical and practical treatise on astigmatism.
USA, 1887. 245p. 59 ill.

The author discusses the 'paradoxical manifestations of astigmatism' and its causes in the human eye. He also describes the uses of skiascopy and keratometry.

BURNHAM, G.H.

Combined treatment in diseases of the eye.
London, 1906 92p.

The author recommends that his 'combined treatment' be administered when the conventional methods have failed. This treatment consists of an injection of pilocarpin, mercury and iodide of potassium.

BURSY, Carl

Das kunstliche Licht und die Brillen.
G. Renher, Mitau und Leipzig, 1846 43p.

Two essays on artificial illumination and on spectacles. The first essay stresses the harmful effects of artificial light and the second traces the history of the development of spectacles.

BUXTON Alfred St Clair

Vision and vision testing, with practical tests. With appendix containing rules relating to vision of candidates for the Indian Government Service.
London, 1887 83p. 22 ill.

BUXTORF, Johann

Dissertatio inauguralis medica de visu.
E. and J. R. Thurnisius, Basileæ, 1728. 23p. ill.

The author of this monograph on the structure of the eye and the mechanism of vision was Professor of Hebrew at the University of Basel.

CADALSO, Joseph

Optica del cortejo
Juan Sellent, Barcelona, 1790. 70p

Advice on optics at the Court.

Santiago Ramon y Cajal (1852-1934)

Born in Spain and educated in Saragossa, after army service in Cuba he studied medicine at Madrid and later became Professor of anatomy and histology at the University of Saragossa. He improved Golgi's chrome-silver stain and applied it to

the entire nervous system. In 1906, together with Golgi he was awarded the Nobel prize. He devoted his later years to research on the degeneration and regeneration of nervous tissue.

CAJAL, S. Ramon y

Die Retina der Wirbelthiere untersuchungen mit der Golgi-cajal'schen chromsilbermethode und der erlischen methylenblafärbung.

J. F. Bergmann, Wiesbaden, 1894 179p. 7 plates 3 ill.

Classic account of 'vertebrate retina'.

CALDER, Francis William Grant

Practical hints on the cure of squinting by operation.

Henry Renshaw, London, 1841 96p

The author claims that this operation effects perfect cures.

CAMERON, Sidney

More light, a simple account of how the brain works.

Williams & Norgate, n.d. 75p. 2 ill.

A philosophical handbook on the workings of the brain in which the author confutes the idea that incoming sensations penetrate by way of the optic nerve to the brain where they are the cause of perception and ideas and ultimately of movements. The author suggests that there are no 'incoming' sensations and that the true function of the optic nerve is not to carry sensory impulses from the eye to the brain but to carry outgoing nerve currents to the terminal organs of the optic nerve.

CAMPBELL, Kenneth

The refraction of the eye and anomalies of the ocular muscles.

Baillière, Tindall & Cox, London, 1903. 203p. 107 ill.

A treatise dealing with various defects of the eye and their treatment. Includes chapters on the use of ophthalmoscopy and the normal fundus as seen with the ophthalmoscope.

CANTON, Edwin

On the arcus senilis, or fatty degeneration of the cornea

London, 1863. 228p. 30 ill.

Describes the formation, hereditary factors and treatment of arcus senilis. Taken from a series of articles which originally appeared in the Lancet.

CANTON, Edwin

Surgical and pathological observations. First separate edition.

Samuel Highley, London, 1855 105p.

Composed of eight papers previously published in the Lancet and the Medical Gazette. There are two chapters on ophthalmology, a chapter on the occurrence of a

cysticercus cellulosae in the subconjunctival tissue and a chapter on intraocular cysticercus.

CARR, D. C.

How to preserve the eyes in a healthy state from childhood to old age, and to restore them when injured.

Hamilton, Adams & Co. London, 1841. 101p.

Charles Joseph Frédéric CARRON du VILLARDS (1800-1860)

The son of a military physician and professor at Turin. He studied with Antonio Scarpa in Pavia and later with Jacques Lisfranc. In 1835 he founded the first eye dispensary in Paris.

CARRON du VILLARDS, Charles Joseph Frédéric

Guide pratique pour l'étude des maladies des yeux

Société Encyclographique des Sciences Medicales, Paris, 1838 644p 2 tables 13 figures 4 folding plates.

Includes an extensive bibliography with entries arranged chronologically under a number of specific subjects derived from Beer's 'Bibliotheca ophthalmica' Vienna 1799. This is a comprehensive work on the treatment of diseases of the eye which is of particular interest because it reflects the author's travels in North Africa, Mexico, Central and South America. The plates depict operations of the lids, cataracts and that of reforming a pupil. At one stage this book was owned by Auge Guépin (1805-1873) of Nantes who specialised in ophthalmology and is said to have founded one of the earliest eye clinics in Europe.

Robert Brudenell Carter (1828-1818)

Was first apprenticed to a general practitioner and then studied at the London Hospital where he received his MD in 1851. An early English user of the ophthalmoscope he was one of the most distinguished of the 19th century ophthalmologists. He developed a photometer to test for colour sense and devised an operation for corneal staphyloma.

CARTER, Robert Brudenell

Defects of vision which are remediable by optical appliances.

London, Macmillan 1877. 143p. 35 ill

Suggests means of treating defects of accommodation and convergence, presbyopia, hyperopia, myopia, astigmatism and asthenopia.

CARTER, Robert Brudenell

Eyesight: good and bad,

Macmillan, London, 1880. 265p. 58 ill.

A general description of eyesight, written to describe the construction of the organs of vision in a way accessible to any educated person.

CARTER, Robert Brudenell

The modern operations for cataract.

Macmillan, London. 1884 83p.

Discusses the operations for cataract currently in use in three Lettsomian Lectures presented by Carter in 1884. In these lectures he advises early surgical intervention and the use of preliminary iridectomy.

CARTER, Robert Brudenell & FROST, W. A.
Ophthalmic surgery.
London, Cassell, 1887 554p. 92 ill.

Contains a concise description of the anatomy and physiology of the eye, its examination, pathological condition and colour vision.

CARTER, Robert Brudenell
A practical treatise on diseases of the eye.
London., Macmillan, 1875 591p. 95 ill

Anatomy and physiology of the eye, examination of the eye, use of the ophthalmoscope, diseases of the structures of the eye, injuries and the use and selection of spectacles.

CARTER, Robert Brudenell and CHEATLE, A. H.
Sight and hearing in childhood.
119p 10 ill.

CASTELL, P.
L'optique des couleurs.
Briasson, Paris, 1740 487p. ill.

CAUCHY, Augustin Louis
Mémoire sur la dispersion de la lumière.
J. G. Calve, Prague, 1836. 236p. 1st published in Paris in 1830.

The author's famous theories on the dispersion of light worked out in mathematical detail.

Bonaventura Cavalieri (1598-1647)

A Milanese Jesuit and Professor of mathematics at Bologna who was also a correspondent of Galileo. He was the first to find a formula for finding the focal distance of parallel rays of light for any convex or concave lens.

CAVALIERI, Bonaventura
Lo specchio ustorio overo trattato delle settioni coniche.
G. Ferroni, Bologna, 1650 136p. ill.

Eminent mathematician and disciple of Galileo. This text, first published in 1632 introduces the concept of the inertia of bodies and describes the optical principles of the sun's rays falling on mirrors and causing fire.

CAZIN, Achille

Thèses présentées a la Faculté des Sciences de Paris pour le doctorat és sciences physiques. Ist thèse – essai sur la détente et la compression des daz; 2nd thèse – propositions de chimie et de minéralogie données...
Mallet-Bachelier, Paris, 1862

CHAMBERS, William and CHAMBERS, Robert
Natural philosophy. 5th treatise. Vol. 1.
William and Robert Chambers, Edinburgh, 1853. 116p. ill.

CHAMPIER, Symphorien
Speculum Galeni
Lyons, 1512 462p.

A very rare compendium compiled by the great Lyonese humanist and physician from the various ancient medical texts ascribed to Galen. The volume begins with Champier's life of Galen and a list of his works, followed by a complete treatise of medicine mostly compiled from Galenic books. The second part contains five further tracts attributed to Galen, including 'De Oculis'. This 20 leaf treatise is one of the first on the subject ever printed.

George Chandler (d.1822)

Became a member of the Corporation of Surgeons in 1769, was a surgeon at St Thomas' Hospital and held many teaching posts at the College of Surgeons. He acquired a reputation as an extremely rapid operator.

CHANDLER, George
A treatise of a cataract, its nature, species, causes and symptoms with a distinct representation of the operations by couching and extraction: also Mr Daviel's comparative view of their respective merits.
S. Chandler for T. Cadell, London, 1775

The author describes, among other things, a method of simple extraction for senile cataract known as the Chandler buttonhole.

CHANDLER, George
A treatise on the diseases of the eye, and their remedies; to which is prefixed, the anatomy of the eye; the theory of vision; and the several species of imperfect sight.
T. Cadell, London 1780

One of the earliest attempts to compile a complete textbook of eye diseases in English. The author presents the first full description of the optics of the eye.

CHAPMAN, E.J.
Blowpipe practice.
Toronto, 1880. 292p. 13 ill.

A sketch of the use of the blowpipe in qualitative mineral examinations. A series of tables for the practical determination of minerals generally.

CHAPPIUS, J. et BERGET, A.,

Leçons de physique general. Vol. 3.
Paris, 1909. 502p. 213 ill.

CHAPPIUS, J. et LAMOTTE, M.
Leçons de physique general, chemist-optician. Vol. 4.
Paris 1911, 213p. 72 ill.

The chemist-optician a survey of the theory and practice of visual optics especially with reference to sight testing and spectacle fitting.
London, 1908. 210p. 87 ill.

De CHAULIAC, Guy
Cyrugia Guidonis de cauliaco. Et cyrugia Brunii. Theodorici Rogerij Rolandi Bertapalio Lanfranci.
B. Locatellus, 1500-1 (?1519)

Modern surgery begins with Guy de Chauliac. These works were originally written between the twelfth and the fourteenth centuries.

CHÉRUBIN D'ORLÉANS (1613-1697)

A French Capuchin scholar and instrument maker whose real name was François Lasserie. The inventor of the binocular telescope.

CHERUBIN, D'ORLEANS

Dissertation en laquelle sont resolues quelques difficultez pretendues au sujet de l'invention du binocle & de quelques autres continues dans les livres de la vision parfaite.
Paris, 1681. 72p.

The rarest of Cherubin d'Orleans books in which he defends his invention of the binocular against a number of French scientists who either claimed priority or did not believe the principle of seeing with both eyes together.

CHERUBIN D'ORLEANS

La vision parfaite
Sebastien Mabre-Cramoisy, Paris, 1677. 187p ill.

The author describes a binocular microscope and a telescope he constructed to demonstrate his belief that a clearer image is created by using two eyes.

CHERUBIN D'ORLEANS

La dioptrique oculaire ou la theoretique, la positive et la mechanique, de loculaire en toutes ses especes.
T. Jolly, Paris, 1671. 419p. ill.

The author discusses the effects of various types of spectacles and explains his techniques for grinding lenses. It charts how landmark developments in the theory of vision (Kepler's discovery of the formation of an image on the retina etc) affected the construction of optical instruments, and how the use of such instruments confirmed or

challenged developing optical theories. Includes an analysis of a room size camera obscura etc.

William Cheselden (1688-1752)

Studied medicine with the anatomist Cowper and was later surgeon at St Thomas' Hospital, physician to the queen and a fellow of the Academy of Surgery, Paris.

CHESELDEN, William

The anatomy of the human body. 7th edition

C. Hitch and R. Dodsley, London, 1750 334p. ill.

First printed in 1713 this was for many years the standard textbook in English medical schools. Describes his innovation, the irrodotomy in which he created an artificial pupil when inflammation had closed or obscured the natural pupil.

CHESELDEN, William

Observations made by a young man who was born blind.

1728 6p. ill. Pamphlet

CHEVALIER, Arthur

Hygiene de la vue. 2nd edition.

L. Hachette et Cie, Paris. 1862. 344p. 78ill.

Discusses ways of preserving sight and the proper use of spectacles.

Jean Gabriel Auguste Chevallier (1778-1848)

A French optician and instrument maker celebrated for inventing many optical instruments and devising some of the earliest vision tests involving the reading of print.

CHEVALLIER, Jean Gabriel Auguste

Le conservateur de la vue.

Prudhomme for author, Paris, 163p

Includes an anatomy of the eye and a description of spectacles – including Benjamin Franklin's bifocals – telescopes, binoculars and microscopes.

An appendix gives the price of spectacles. Monocles, lenses, telescopes, microscopes and other optical apparatus.

Michel Eugene Chevreul (1786-1889)

Studied chemistry under Nicholas Vauquellin at the Museum of Natural History, Paris and later became professor of chemistry at Gobelins where he was in charge of the dyeing department. He is known for his studies of dyeing and colour theory.

CHEVREUL, Michel Eugene

Laws of contrast of colours and their application to the arts, painting, decorating of buildings, mosaic work, tapestry and carpet weaving, calico printing, dress, paper staining, and printing. Translated from the French by J. Spanton

Routledge, Warne and Routledge, London, 1860. 237p. 18ill.

One of the most important 19th century texts on colour.

CHEVREUL, Michel Eugene
Théorie des effets optiques que présentent les étoffes de soie.
Diderot Freres, Paris, 1846 208p. ill.

CHILDE, G. F.
Investigations in the theory of reflected ray-surfaces and their relation to plane reflected caustics.
J.C. Jutta, Cape Town, 1857 140p. 3. ill.

CHURCH, A.H.
Colour: an elementary manual for students.
London, 1887 192p. 36 ill.

The author was Professor of Chemistry at the Royal Agricultural College, Cirencester. On the origin, phenomena, and employment of colour, including the definition and production of colour, mutual relations of colours, analysis of light and the modification of colour by illumination.

John Herbert Claiborne (1861-1922)

An instructor in clinical ophthalmology at Cornell University Medical College, surgeon to the New Amsterdam Eye and Ear Hospital and professor of ophthalmology at the New York Polyclinic, he wrote on a wide range of subjects including the fitting of glass eyes and the effects of poisons upon the eyes.

CLAIBORNE, J. Herbert
Cataract extraction: being a series of papers with discussion and comment, read before the ophthalmical section of the New York Academy of Medicine.
New York, 1908. 169p. 5 ill.

CLAIBORNE, J.H.
The functional examination of the eye.
Philadelphia, 1895. 96p. 21 ill.

The functional examination in the determination of the refractive condition of the eye. Includes chapters on the properties of lenses, prisms etc., and the treatment of errors of refraction.

CLAIBORNE, J. Herbert
The theory and practice of the ophthalmoscope.
Michigan, 1888. 77p. 35 ill.

CLAPIN, A.C.
Optical problems.
J Deighton, Cambridge, 1850 77p. ill
Bound with GRIFFIN, W. N. 'Treatise on optics'.

CLARKE, E.
Eyestrain, commonly called asthenopia.

London, 1892. 168p. 22 ill.

Deals with general symptoms and varieties of eye strain, ciliary strain in emmetropia, ametropia, hyperopia and astigmatism, its causes and treatment, the effects of errors of accommodation in causing eyestrain etc.

CLARKE, E.

The errors of accommodation and refraction of the eye and their treatment.
Bailliere, Tindall & Cox, London. 1903. 225p. 85 ill.

CLARKE, E.

Practical exercises in light.
London, 1914. 187p. 155 ill.

CLARKE, Ernest

Problems in the accommodation and refraction of the eye. A brief review of the work of Donders and the progress made during the last fifty years.
London 1914, 108p. 21 ill.

CLASSEN, J.

Mathematische Optik.
Leipzig, 1901. 207p. 52 ill.

Textbook of mathematical optics emphasising the importance of mathematical formulæ for the comprehension of light. Includes material on the properties of light, interference, diffraction etc., and the principles of reflection and refraction.

CLAY, Reginald S.

The history of the microscope, compiled from original instruments and documents, up to the introduction of the achromatic microscope.
London, Charles Griffin & Co., 1932. 266p. ill.

CLAY, Reginald S.

Practical exercises in light: being a laboratory course for schools of science and colleges.
Macmillan & Co, London. 187p. ill.

CLAY, Reginald S.

Treatise on practical light.
London, 1911. 519p. 408 ill.

An experimental treatise dealing with the laws of refraction, mirrors and lenses, optical instruments, colour measurement etc.

William Cleoburey (1793-1853)

Studied at St Bartholomew's Hospital and in 1814 settled in Oxford where he became surgeon to the University and the city's leading ophthalmologist.

CLEOBUREY, William

A review of the different operations on the eyes for the restoration of lost, and the improvement of, imperfect vision. Also, a full account of the various structures and diseases of the eyes and their appendages.

Thomas and George Underwood, London, 1826 288p

Draws on case histories from the author's Oxford practice and reviews cataract operations of extraction, depression and discission in addition to methods for forming an artificial pupil.

CLIFFORD, W.K.

Seeing and thinking.

London , 1880. 156p. 13 ill.

A series of lectures on the eye and the brain, the eye and seeing and the brain and thinking.

Henry Coddington (c.1800-1845)

A Cambridge mathematician and classicist who wrote mostly about optics and invented a grooved lens to view the anterior ocular tissue, particularly that of the cornea.

CODDINGTON, Henry

An elementary treatise on optics.

J. Smith for J. Deighton and Sons, Cambridge, 1823 192p. ill.

Based on lectures by Whewell and illustrated with many optical tables.

CODDINGTON, Henry

An elementary treatise on optics. 2nd edition

J. Smith for J. Deighton and Sons, Cambridge, 1825 196p. ill.

CODDINGTON, Henry

A treatise on reflexion and refraction of light, being part 1 of a system of optics.

J. Smith for Simpkin and Marshall, Cambridge. 1829. 296p ill.

Mathematical account of the properties of light, the power of a lens, vision in mirrors, caustic, chromatic dispersion of light etc.

Hermann Ludwig Cohn (1838-1906)

Studied natural sciences at Breslau and Heidelberg where he was taught by Helmholtz and Bunsen. Cohn did much to promote school hygiene and also advocated regular examination of children's eyes – an idea which was put into practice in 1885. He also constructed a refracting ophthalmoscope with a rotating disc and corrective lens and experimented in photography of the fundus.

COHN, Hermann Ludwig

The hygiene of the eye in schools. Translated and edited by W. P. Turnbull.

London, 1886. 236p. 53 ill.

Provides statistics based on Cohn's studies of school children, including figures on the occurrence of myopia. and the effects of seating and lighting arrangements, print types, handwriting and spectacles.

COLE, R.S.

A treatise on photographic optics.

London, 1899 330p. 104 ill

COLLET-MEYGRET, G. F. H.

Application des lois de l'optique au trajet de la lumière dans l'oeil.

Farge, Paris. 1803 28p.

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E. Treacher Collins (1862-1937)

Became house surgeon in Moorfields in 1884 and curator of the hospital's museum in 1889. He wrote much on the pathology of the eye, drawing upon his observations of the pathological specimens held in this museum. He travelled widely and was instrumental in the foundation of the International Federation of Ophthalmological Societies.

COLLINS, E. Treacher

Pathology and bacteriology of the eye. 2nd edition.

P. Blakiston's Son & Co. Philadelphia, 1925. 731p. 4 coloured plates and 306 figures.

COLLINS, E. Treacher & MAYOU, M. Stephen

Researches into the anatomy and pathology of the eye.

London, 1896. 140p. 38 ill.

Extrapolated from three lectures delivered before the Royal College of Surgeons.

COLLINS, F.W. (Editor)

Disease diagnosed by observations of the eye. Vol.1. Part 1.

USA, 1919. 122p. 40 ill.

Colour Blindness. Papers and pamphlets of the late 19th to early 20th century from the collection of F.W. Edridge-Green

Bound together in 5 volumes.

Joannis de Concoregio (c1380)

The author was an Italian doctor born in Milan in about 1380. He was professor of medicine at Bologna in 1405.

CONCOREGIO, Joannis de

Practica nova medicine.

Venice, 1501 314p

A series of medical lectures given in various Italian universities from 1434 to 1438. The first 15 chapters deal with the anatomy and diseases of the head and the next 10 with affections of the eyes and eyelids.

Johann Michael Conradi (d. 1742)

A teacher at the gymnasium in Coburg.

CONRADI, John Michael

Der Dreyfach gearte Sehe-Strahl in einer kurtzen doch deutlichen Anweisung zur Optica oder Sehe-Kunst.

The author, Coburg, 1710. 120p ill.

Contains descriptions and copperplate illustrations of optical instruments.

Sir Astley Paton Cooper (1768-1841)

Studied anatomy and surgery under John Hunter and Henry Cline in London and later became surgeon at Guy's and St Thomas' Hospitals.

COOPER, Sir Astley Paston

Lectures on the principles and practice of surgery. 8th edition.

Edward Portwine, London. 1835 612p.

COOPER, Robert

See Obadiah Walker

Sir William White Cooper (1816-1886)

English Ophthalmologist who trained at St Bartholomew's Hospital and later became one of the original staff at the North London Ophthalmic Institution. In 1843 he became ophthalmic surgeon to the Westminster Hospital and in 1859 he was appointed Surgeon-Occulist to Queen Victoria.

COOPER, William White

On near sight, aged sight, impaired vision and the means of assisting sight. 2nd edition
John Churchill, London, 1853. 320p.

COOPER, William White

On wounds and injuries of the eye.

John Churchill, London. 1859. 330p 44. ill.

The incidence and treatment of foreign bodies in the eye and eyeball, including gunshot wounds, incised and punctured wounds, contusions, rupture of the eyeball, intraocular haemorrhage, burns and chemical injuries and sympathetic ophthalmia.

COOPER, William White

Practical remarks on near sight, aged sight and impaired vision with observations upon the use of glasses and on artificial light.

John Churchill, London, 1847. 216p.

Investigations of theories of light and principles of reflection and refraction. Includes chapters on the structure of the eye, the causes, symptoms and treatment of myopia and presbyopia and the effect of artificial light on the eye.

COPELAND, R.S.

Refraction, including muscle imbalance and the adjustment of glasses.
Philadelphia, 1906. 144p. 79 ill.

A brief account of the basics of refraction and chapters on lenses, the normal eye, defects of vision, muscular imbalance and spectacles.

COULOMB, R.

L'oeil artificiel.
Paris, 1905. 152p. 86 ill.

A treatise on artificial eyes, dealing with their early use for statues and mummies, the first attempts to make them from vulcanite, celluloid and enamel and the modelling of a good contemporary example. Describes the methods of enucleation, the fitting and removal of the eye and the requirements of colour, thickness and form.

COURTIVRON, Gaspard le Compasseur de Créquy-Montoford, Marquis de
Traite d'optique, où la Théorie de la lumière dans la système Newtonian, avec des nouvelles solutions des principaux problèmes...
Durand, Paris, 1752. 192p. ill.

A rare Newtonian text on optics. Contains the first hypothesis on the aberration of light and the relation between velocity and colour. The author also suggests solutions for various dioptric problems.

George Cowell (1836-1927)

An English ophthalmologist who studied Medicine at St George's Hospital under the anatomist Gray. He was surgeon and lecturer at Westminster Hospital for over 50 years. He founded the Victoria Hospital for Children, Chelsea.

COWELL, G.

Lectures on cataract, its causes, varieties and treatment.
London, 1883. 126p. 38 ill.

Describes the chief methods and modifications which have been introduced in the operative treatment of cataract.

CRAMPTON, Philip

An essay on the entropion or inversion of the eyelids.
J. Carpenter, London. 1805. 75p. ill.

Describes the distinguishing marks of the disease, its causes and the operations for its cure.

Francis Richardson Cross (1848-1931)

English ophthalmologist who read medicine at King's College, London where he was elected a Fellow in 1896. He studied in Vienna, Berlin Paris and also Utrecht where he was influenced by Professor Snellen the ophthalmologist. From 1912-1915 he was President of the Ophthalmological Society of the United Kingdom. Most of his working life was spent in Bristol where he served as High Sheriff in 1897.

CROSS, F.R.

Dynamic skiametry in theory and practice.
New York. 1911. 223p. 71 ill.

Discussion of the theory and application of the principles of skiametry, illustrated with the various instruments used in the test with an explanation of their workings.

CROWLEY, R.H.

The hygiene of school life.
London, 1910. 403p. 17 ill.

Includes information about defective vision, external eye diseases and the training of blind children.

CRUM, Walter

An experimental inquiry into the number and properties of the primary colours and the source of colour in the prism.
Atkinson & Co., Glasgow, 1830 47p. ill.

Based on similar experiments by Dr Reade of Cork – both being developments of Newton's theories.

CUFF, John

Verses occasioned by the sight of a camera obscura.
The author, London, 1747. 16p.

On the last page is an advertisement for an optical instrument sold by John Cuff 'at the sign of the reflecting microscope and spectacles.

Sir John Harrison Curtis (1778-?)

English otologist and ophthalmologist who in 1816 founded the Royal Dispensary for Diseases of the Ear where he lectured on aural anatomy, physiology and pathology. He was appointed Royal Oculist.

CURTIS, John Harrison

A treatise on the physiology and diseases of the eye containing a new mode of curing cataract without an operation; experiments and observations on vision, also on inflection, reflection and colours of light; together with remarks on the preservation of sight, and on spectacles, reading glasses etc.
Longman, Rees, Orme, Brown, Green and Longman, London, 1833. 222p. ill.

This text is written for laymen and outlines his theory of the interrelationship between physical defects.

CURTIS, John Harrison

A treatise on the physiology and diseases of the eye containing a new mode of curing cataract without an operation; experiments and observations on vision, also on inflection, reflection and colours of light; together with remarks on the preservation of sight, and on spectacles, reading glasses etc. 2nd edition.

Longman, Rees, Orme, Brown, Green and Longman, London, 1835 222p. ill.
Bound with: An essay on the deaf and dumb; shewing the necessity of medical treatment in early infancy: with observations on congenital deafness. Published in 1829.

Discusses experiments on vision, the reflection and colours of light, the preservation of sight and the spectacles which are needed to cure refractive errors.

Siegfried Czapski (1861-1907)

A German instrument maker at the Carl Zeiss factory. He invented the corneal microscope in which binocular vision is obtained by using a combination of two microscopes.

CZAPSKI, S.

Theorie der optischen Instrumente nach Abbe.
Breslau, 1893. 292p. 94 ill.

The principles of optics and the theory of optical instruments. Describes prisms and lenses and the construction of microscopes and magnifying glasses.

DAGUENET

A manual of ophthalmoscopy. Translated by C.S. Jeaffreson.
London, 1880, 240p. ill.

A condensation of essential information on diseases of the fundus, with emphasis on the value of functional symptoms. Includes sections on various ophthalmoscopes, functional examination of the eyes and the deeper structure of the eye.

DAHLFELD, C.

Bilder für stereoskopische Übungen Vol. 1.
Stuttgart, 1919. 8p.

DAHLFELD, C.

Bilder für stereoskopische Übungen zum gebrauch für schielende. Vol.2.
Ferdinand Enke, Stuttgart, 1919. 30 cards + booklet.

The cards for the stereoscope are intended to cure squints by exercising the muscles of the eye.

John Dalrymple (1803-1852)

British ophthalmologist, born in Norwich and studying medicine at Edinburgh. He specialised in ophthalmic surgery and in 1832 was elected assistant surgeon to the Royal London Ophthalmic Hospital, becoming full surgeon in 1834. 'Dalrymple's Sign' in exophthalmic goitre is named after him.

DALRYMPLE, John

The anatomy of the human eye.
Longman, Rees, Orme, Brown and Green, London, 1834 294p ill.

DARIER, E.

Ocular therapeutics according to the most recent discoveries.
Translated by S Stephenson.
London, 1903. 278p.

A translation of the author's, 'Leçons de Thérapeutique Oculaire'.

DAVIDSON, F.
Sight testing for the general practitioner.
London, 1912. 82p.

Basic information on errors of refraction and prescribing spectacles.

DAVIS, A.E.
The refraction of the eye.
New York, 1900. 431p. 21 ill.

A history of the ophthalmometer, describing the instrument and its applications in the measurement of astigmatism. Discusses the causes of strabismus and the methods of measuring it.

DEGRAVERS, Peter
A complete physico-medical and chirurgical treatise on the human eye and ear.
The author, Edinburgh, 1788 235p. ill.

Covers anatomy and physiology, properties of light and vision, external and internal diseases of the eye and their cures.

Ferdinand Dejean (c.1728 – 1797)

DEJEAN, Ferdinand
Medicatione moriborium ocularum sine operatione manuali.
Sam. Et Joann. Luchtmans et Joann. Henric. Van Damme, 1773. 37p.

On the methods and advantages of treating ocular disease by means of drugs rather than by surgery.

DELARUE, François
Cours complet des maladies des yeux.
The author, Paris, 1820 484p.

Delarue was born in France in about 1785; he studied medicine in Paris where he took a medical degree. He was physician to the Bureau of Charity in Paris and gave free medical lectures, especially on diseases of the eye. This treatise is his only known ophthalmological work.

DELAVAL, Edward Hussey
An experimental inquiry into the cause of the changes of colours in opaque and coloured bodies with an historical preface relative to the parts of philosophy therein examined, and to the several arts and manufacturers depending...
J. Nourse, London 1777. 213p.

A survey of the history of dyeing in antiquity, especially in the East, followed by the description of numerous chemical experiments with colours for dyeing purposes. The author undertook these experiments in consideration of the new and expanding textile industry in England.

Antoine Pierre Demours (1762-1836)

French ophthalmologist, son of the equally celebrated Pierre Demours. He was a renowned surgeon and became ophthalmologist to Ludwig XVIII and Karl X of Bavaria. He introduced into France the invention of Himly, Mydriasis, a preliminary step in certain ophthalmic operations.

DEMOURS, Antoine Pierre

Traite des maladies des yeux avec des planches coloriées representant ces maladies d'après nature. Vol. 1.

The author, Paris, 1818, 551p

The structure of the eye and its appendages; the diseases of the eyelids, cornea, iris etc; ophthalmia and its treatment; amaurosis; myopia; cataract; glaucoma etc.

DEMOURS, Antoine Pierre

Traite des maladies des yeux avec des planches coloriées representant ces maladies d'après nature. Vol. 2.

The author, Paris, 1818, 518p

Descriptions of cases treated by the author and his father.

DEMOURS, Antoine Pierre

Traite des maladies des yeux avec des planches coloriées representant ces maladies d'après nature. Vol. 3.

The author, Paris, 1818, 517p

Descriptions of cases treated by the author and his father.

DEMOURS, Antoine Pierre

Traite des maladies des yeux avec des planches coloriées representant ces maladies d'après nature. Vol. 4 (Atlas).

The author, Paris, 1818, 126p

This work in 3 volumes plus atlas contains hundreds of case studies from the author and his father's practices.

DENICKE, C. L.

Vollständiges Lehrgebäude der ganzen optik oder der Sehe-Spiegel.

David Feursen, Altona, 1757 182p.

A handbook for the optician, with instructions for making lenses, optical instruments and microscopes. Illustrates a wide variety of microscopes, showing their construction in great detail.

Charles Pierre Denonvilliers (1808-1872)

French surgeon who received his MD from the University of Paris in 1837 and became professor of anatomy there in 1849. Was best known as an ophthalmic and plastic surgeon.

DENONVILLIERS, C. and GOSSELIN, L.

Traité theorique et pratique des maladies des yeux.

Paris, 1855 955p.

A detailed description of the course of ocular diseases, the incidence of errors of refraction and of colour blindness.

John Theophilus Desaguliers

Desaguliers was one of the earliest public lecturers in science in London. He attended Keill's last course of lectures and based his own upon them. The lectures are full of information about industrial practice and scientific instruments including Boyle's air pump, thermometers and barometers. He stressed the need for practical experiment and for combining theory with practice. Desaguliers was Curator of Experiments to the Royal Society.

DESAGULIERS, John Theophilus

Lectures of experimental philosophy.

W. Mears, London, 1719. 201p. ill.

René Descartes (1596-1650)

French philosopher known as the 'Father of the Newer Philosophy'. He received virtually his only education from the Jesuits from 1604-1612. He enlisted in the Dutch army for two years and then the Bavarian army before settling in Holland where he lived for most of the rest of his life.

DESCARTES, René

Discours de la methode pour bien conduire sa raison, et chercher la verité dans les sciences, Plus La Dioptrique et Les Meteores, qui sont des essais de cette Methode.

Theodore Girard, Paris, 1668

Classic work on the philosophy of science from which stems 'Cogito, ergo sum'. The discourse is only a small part of the book. From the aspect of this collection the most important part is La Dioptrique a treatise on optics, the theory of vision and the anatomy of the eye. It also includes a section on the telescope. This edition was the first to which Descartes name was attached, the first two editions being published anonymously.

DESCARTES, Rene

Le monde de Mr. Descartes ou le traité de la lumiere et des autres principaux objets des sens.

Michel Bobbin et Nicolas le Gras, Paris, 1664

Descriptions of the senses and an account of the properties of light

DESCARTES, Rene

Passiones animae

J. Jansson Jr Amsterdam, ?1656 121p. (bound with 'Principia Philosophiae')

DESCARTES, Rene

Philosophiae speciminasue dissertation de methodo dioptrice et meteora

J. Jansson Jr Amsterdam, 1656 290p. (bound with 'Principia Philosophiae')

DESCARTES, Rene

Principia philosophiae.

J. Jansson Jr., Amstelodami, 1656. 241p ill.

DESCHANEL, A. Privat

Elementary treatise on natural philosophy. Translated and edited with extensive additions by J.D. Everett. Part iv Sound & Light.

Blackie & Son, London, 1872. 266p 176 ill.

The second half of this treatise deals with light. Discusses reflection, refraction, lenses, vision, the principles of optical instruments, the wave theory of light, polarisation etc.

DESCHANEL, A. Privat

Elementary treatise on natural philosophy. Translated and edited with extensive additions by J.D. Everett. Part iv: Sound and light.

Blackie & Son, London, 1876. 188 ill.

Louis-Auguste Desmarres (1810-1882)

Famous French ophthalmologist who began as an estate steward and later gave violin and water colour lessons to earn his way through university. He became the private secretary of Sichel and the chief of his crowded clinic. He received his medical degree in Paris in 1839 and established his own private ophthalmic hospital in 1841.

DESMARRES, Louis Auguste

Traité théorique et pratique des maladies des yeux.

Germer Baillière, Paris, 1847. 904p. ill.

The second systematic textbook on diseases of the eye to be published in France. Includes methods of examining the eye, and descriptions of diseases of the eye, eyelid and lachrymal glands.

Abbé Desmonceaux (1734 -?)

French abbot, physician and ophthalmologist who has, inaccurately, been described as the first person to propose the removal of the transparent lens in high myopia. He became a priest when young but because of his desire to be of the greatest service to the sick he studied medicine and ophthalmology in his leisure hours

DESMONCEAUX

Traite des maladies des yeux. Volume 1.
The author, Paris, 1786. 480p. ill.

Includes the methods of examining the eye, the use of the ophthalmoscope, the diseases of the eyeball, eyelids and lachrymal glands.

DESMONCEAUX

Traite des maladies des yeux. Volume 2.
The author, Paris, 1786. 497p. ill.

An eighteenth century description of the eyes, the anatomy of the orbit, the principles of vision and of colour, the sight of children, methods of preserving sight and diseases of structures of the eyes.

Charles Deval (1806-1862)

Born in Constantinople he spent most of his life in Paris where he received his MD in 1834. He studied ophthalmology under Sichel and then set up his own practice. His 'Chirurgie oculaire' was only the second work in French devoted to eye surgery.

DEVAL, Charles

Traite theoretique et pratique des maladies des yeux.
Paris, 1862 1056p. 56 ill.

The diseases of the eye, with an emphasis on therapeutics. A description of eye examinations and the theory of using an ophthalmoscope and a discussion of the symptoms and treatment of eye diseases.

DIBDIN, W.J.

Practical photometry, a guide to the study of the measurement of light.
London, 1889, 227p. 32 ill.

The history and principles of photometry, the working of different types of photometer and colour and stellar photometry.

Denis Diderot (1713-1784)

French encyclopaedist, philosopher of materialism, critic, novelist and dramatist who was educated at Jesuit schools in Langres and Paris. From 1745-72 his major project was his encyclopedie

DIDEROT, Denis

An essay on blindness.
J. Barker, London, 1773. 134p. ill.

The author addresses the psychological and cognitive effects of blindness.

Friedrich Dimmer (1855-1926)

Austrian ophthalmologist born in Prague. He studied in Vienna, receiving his MD in 1878. He taught in Innsbruck and Graz before returning to Vienna.

DIMMER, Friedrich

Der augenspiegel und die ophthalmoskopische diagnostik.
Toeplitz & Deuticke, Leipzig und Wien, 1887, 175p.

Described by Hirschberg as the ‘most complete book of ophthalmoscopy’ of its time.

DIRCKS, HENRY

The ghost! As produced in the spectre drama, popularly illustrating the marvelous optical illusions obtained by the apparatus, being a full account of its history, construction and various adaptations.

E. & F. N. Spon, London, 1863. 102p. 8 ill.

DIRCKS, Henry

Marvellous optical illusions obtained by the apparatus called the Dirksian Phantasmagoria. Being a full account of its history, construction and various adaptations.

E. & F.N. Spons, London, 1863. 102p. 8 ill.

A description of an apparatus for producing spectral optical illusions; describes the scientific nature of the invention and various methods of demonstrating it.

Diseases of the eye and ear. A collection of articles by many authors.
Numerous pages and illustrations.

James Dixon (1813-1896)

British ophthalmologist who in 1836 became a Member and in 1843 a Fellow of the Royal College of Surgeons. He was for many years surgeon to the London Ophthalmic Hospital.

DIXON, J.

A guide to the practical study of the diseases of the eye.
London, 1855, 395p. 11 ill.

The diseases of the eye regarded from an objective point of view. Analyses the tissues of the eye in health and disease and gives general rules for treatment.

DON, J.

Sound, light and heat (first stage).
London, 1897. 307p. 161 ill.

An elementary scientific textbook containing a section on light – the causes of light, reflection from plane and curved surfaces, refraction dispersion and optical instruments.

Frans Cornelis Donders (1818-1889)

Dutch ophthalmologist who has been described as the greatest of all time. Despite a maternal wish that he should read theology and enter the ministry he studied medicine at Utrecht, Vliessingen and The Hague receiving his medical degree in 1840. At the

age of 30 he became professor of anatomy and physiology at Utrecht. He was friendly with Sir William Bowman and Albrecht von Graefe.

DONDERS, F. C., HESS, W., ZEHEND, W. (Editors)
Bericht über die siebenzehnte versammlung der Ophthalmologischen Gesellschaft.
Vol. 1.
Ferdinand Enke, Stuttgart, 1885
London, 1897. 307p. 161 ill.

DONDERS, F.C.
An essay on the nature and the consequences of anomalies of refraction. Edited by
C.A. Oliver.
London, 1899. 81p. 82 ill.

Sections on emmetropia, ametropia and their consequences, amplitude of accommodation, visual acuteness and projection in emmetropia and ametropia and their modification by age.

DONDERS, F.C.
On the anomalies of the accommodation and refraction of the eye.
New Sydenham Society, London, 1864. 635p.

A two part treatise, the first dealing with accommodation and refraction of the eye generally and the second with anomalies of refraction, the emmetropic eye, hypermetropia, myopia and the anomalies of accommodation.

DOPPLER A. Christian
Zwei Abhandlungen aus dem Gebiete der Optik. 1. Optisches Diastemometer; 2. Über ein Mittel, periodische Bewegungen von ungemeiner Schnelligkeit noch wahrnehmbar zu machen und zu bestimmen.
Borrosch und André, Prag, 1845. 16p. ill.

Two optical treatises, the first on the optical diastemometer, an instrument for astronomical observation, and the second on a method of making periodic movements of unusual speeds perceptible and measuring them.

Heinrich Wilhelm Dove(1803-79)

Was Professor of Physics at the University of Königsberg and was especially interested in meteorology. His main contribution to physics was the observation of the earth's magnetism, polarisation phenomena, especially the optical properties of rock crystals and induced electricity.

DOVE, H.W.
Darstellung der Farbenlehre und Optische Studien.
Berlin, 1853. 292p. 3 ill.
Bound with Fortsetzung optische Studien. 51p + tables.

As well as the physics of colour phenomena Dove takes up stereoscopic vision and apparatus, and in two extended chapters, polarisation and circularpolarisation of light.

DOVE, H.W.
Fortsetzung optische Studien.
Berlin 1859. 51p. 12 ill.
Bound with 'Darstellung der Farbenlehre und Optische Studien,

DOVE, H. W.
Die neuere Farbenlehre mit andern chromatischen Theorien.
Berlin, 1838. 67p.

Theories of light and colour from Newton onwards.

DOYNE, R.W.
Notes on the more common diseases of the eye.
London, 1896. 47p. 1 ill.
Basic information on the more common eye troubles and the principles underlying their treatment.

DRUDE, Paul
A theory of optics. Translated from the German by C. R. Mann and R. A. Millikan.
Longmans, Green & Co., London, 1902. 546p. ill.

DRUDE, Paul
The theory of optics. Translated from the German by C. R. Mann and R. A. Millikan.
Longmans, Green & Co., London, 1933. 546p.

DRUIFF, G.E.
Refraction.
London, 1907.

An attempt to explain simply but scientifically the anatomy and physiology of the eyes, the laws of refraction, the action of prisms and lenses

Alexander Duane (1858-1926)

American ophthalmologist who obtained his MD from the New York College of Physicians and Surgeons in 1881. He identified 'Duane's syndrome' a congenital anomaly of ocular motility and invented 'Duane's clinometer' an instrument for estimating torsional deviations in the eye. He was elected President of the American Society in 1924.

DUANE, Alexander
A new classification of the motor anomalies of the eye based upon physiological principles. Together with their symptoms, diagnosis and treatment. The prize essay of the Alumni Association of the College of Physicians and Surgeons for 1896.
Modern reprint. 100p. Tables

Lithographic reproduction of the essay that originally appeared in the 'Annals of Ophthalmology and Otology' October 1896 and January 1897. It describes Duane's syndrome and his ideas about palsy of the superior rectus evoked a controversy.

Edward Wilson Duffin (1800-1874)

Born in Yorkshire, gained his MD from the University of Edinburgh in 1821 and from 1828-68 practiced general surgery in London. He was one of the earliest surgeons to operate for strabismus.

DUFFIN, Edward W.

Practical remarks on the new operation for cure of strabismus or squinting.

John Churchill, London 1840. 147p. ill.

The author (1800-1874) was among the first to operate on strabismus and the text discusses his method of operating. Also discusses the anatomy and physiology of the muscles of the eyeball, varieties of strabismus; their causes and diagnosis.

DUNCAN, J. & STARLING, S.G.

Textbook of physics.

London, 1923. 365p. 273 ill.

Aimed at advanced students. The section on light includes the propagation of light, the principles of reflection and refraction, optical instruments and theories of colour.

DUNMAN, T.

A short textbook of sound, light and heat. Revised by C. Jones.

London, 1888. 182p. 135 ill.

DUTHIE, A.L.

Decorative glass processes.

London, 1919. 267p. 39 ill.

Describes the kinds of glass in use with chapters on leaded lights, stained glass, brilliant cutting and bevelling, sand blast, crystalline glass, gilding, silvering and mosaic

DUVERGER, C. et VELTER, E.

Ophthalmologie de guerre.

Paris, 1919. 239p. 14 ill.

A handbook on methods of treating ocular wounds, based on experience gained in ophthalmic hospitals during the first World War. The cases are divided into those which required enucleation and those in which the eyes could be preserved and restored.

ECCLES, J.R.

Advanced lecture notes on light.

Cambridge, 1919. 141p.

A sequel to the authors 'Lecture notes on light' covering rainbows, magnifying power, chromatic and spherical aberration, wave theory of light, interference, polarisation etc.

ECCLES, J.R.

Lecture notes on light.

Cambridge, 1917. 217p. 157 ill.

Covers photometry, velocity of light, refraction, reflection, prisms, lenses, the eye, optical instruments, the spectrum, colour etc.

EDER, J.M.

The chemical effect of the spectrum.

London, 1833. 97p.

Frederick William Edridge-Green (1863-1953)

English ophthalmologist who studied at St Bartholomew's and the University of Durham who became medical officer at Northumberland House Asylum and then at Hendon Grove Asylum. A somewhat controversial figure he is chiefly known for his work on colour vision and his invention of the colour perception spectrometer and the colour lantern. He was the first person to make testing for colour blindness a practical possibility. He endowed an annual lecture on vision or colour vision.

EDRIDGE-GREEN, F.W.

Collected papers. Vol 1. 1887-1910.

See also Colour Blindness

EDRIDGE-GREEN, F.W.

Colour blindness and colour perception

London, 1891. 311p. 7 ill.

The author's theory based on the examination of colour blind people. Includes the physical basis of colour, psycho-physical perception of colour, normal colour perception, the composition of colour, acquired colour blindness, and tests for colour blindness.

EDRIDGE-GREEN, F.W.

Colour blindness and colour perception 2nd edition

London 1909. 321p. 10 ill.

EDRIDGE-GREEN, F. W.

The Hunterian lectures on colour vision and colour blindness delivered before the Royal College of Surgeons of England on Feb 1st & 3rd 1911.

London 1911. 76p. 9. ill.

A brief statement of the author's theories of colour vision and colour-blindness and a description of tests to detect colour blindness.

EDSER,E.

Light for students

London, 1904. 579p. 306 ill.

The first ten chapters deal with geometrical optics, explaining the consequences of the laws of reflection and refraction of light and the theory of the more important optical instruments. The final ten chapters describe the development of the wave theory of light.

ELLIOT, R.H.

Glaucoma, a textbook for the student of ophthalmology.
London, 1918. 546p 158 ill.

Discusses intraocular pressure and the tension of the eye, the aetiology and diagnosis of glaucoma, secondary and congenital glaucoma, iridectomy in glaucoma and the newer operations for glaucoma.

ELLIOT, R.H.

Sclero-corneal trephining in the operative treatment of glaucoma.
London, 1914. 187p 45 ill.

Describes the surgical technique, possible complications, patient care and the statistical results of trephining.

ELSCHNIG, Anton

Die Functionsprüfung des Auges für Studierende und Ärzte.
F. Deuticke, Leipzig. 1911. 198p 48 ill.

Contains information on refraction, accommodation, the field of vision, colour blindness and the investigation of eye diseases.

William Emerson (1701-1782)

A mathematician from Durham whose brief attempt at teaching convinced him of the need for a series of mathematical textbooks, including a four volume work on optics.

EMERSON, W.

The elements of optics.
J Nourse, London, 1768. 355p. ill.

Eighteenth century treatise discussing direct vision, light and colours, catoptrics, dioptrics, optical instruments, perspective etc.

EMTAGE, W.T.A.

Light.
London, 1896. 352p. 232 ill.

Provides the chief points in the history of geometrical and physical optics, particularly the experimental aspect.

Francisco Eschinardi (1623-1703)

ESCHINARDI, Francisco

Centuria problematum opti corum, seu diologi optica pars altera.
H.H. Corbelletti, Rome, 1666. 222p.

The principle difficulties in catoptrics and dioptrics solved according to 17th century knowledge. The author is influenced by Aristotle and Alhazen in his account of the laws of reflection and refraction and the principles of vision.

ESCHINARDI, Francisco
Dialogus opticus in quo aliquibus quaesitis compendiosè respondetur.
H.H. Corbelletti, Rome, 1666 84p. ill.

Includes a theory of the working of telescopes and the types of lenses used.

ESCHINARDI, Francisco
Pars altera centuriae opticae seu dialogi optici pars tertia.
Nicolai Angeli Tinafsi, Rome. 236p. ill.

The third part of the 'Dialogi Optici' in which the author deals mainly with the theory of lenses and their application to telescopes and microscopes.

ESCHINARDI, Francisco
Problematum opti corum, centuria.
H.H. Corbelletti, Rome, 1666. 260p. ill.

Euclid (fl 300 BC)

Greek mathematician famous for his work in geometry. In his Optics he states that vision is caused by rays proceeding from the eye to the object, that the figure formed by the visual rays is a cone whose vertex is the eye and whose base is at the edges of objects seen, and that for every object there is a certain distance from the eye at which it ceases to be visible because it falls within the interspace between two visual rays – the minimum visual angle.

EUCLID

Optica et catoptrica, numquam antehac graece aedita.
Andreas Wechel, Parisiis, 1557, 112p. ill.

The first half of the book is in Greek and the second half is the same text translated into Latin. The 'Optica' consists of 61 theorems, most of them accompanied by explanatory diagrams and the 'catoptrica'. Doubt has been cast upon the genuineness of the work, but although there are probably later additions and interpretations, the core of the work is held to be that of Euclid. Until the time of Kepler (1571-1630) the book was regarded as authoritative and its theorems widely quoted. Expresses the problems of vision in a mathematical form.

Leonhard Euler (1707-1783)

Swiss optician and professor of mathematics who was totally blind for the last seventeen years of his life. He was bitterly opposed to the emission theory of light and also the theory of immediate action at a distance.

EULER, Leonhard
Dioptricae, pars prima de explicatione principiorum. Librum Primum
Impensis Academiae Imperialis Scientiarum, Petropoli, 1769. 327p. ill.

EULER, Leonhard
Dioptricae, pars secunda de constructione telescopiorum dioptricum cum appendice de constructione telescopiorum catoptrico-dioptricum.. Librum Secundum

Impensis Academiae Imperialis Scientiarum, Petropoli, 1770. 592p ill.

EULER, Leonhard

Dioptricae, pars tertia de constructione microscoporum tam simplicium quam compositorum. Librum Tertium

Impensis Academiae Imperialis Scientiarum, Petropoli, 1771. 440p. ill.

This 3 volume work discusses the properties of lenses and provides an introduction to the construction of dioptric instruments. Vol. 1 deals with the emission and undulatory theories of light. Vol. 2 deals with the construction of telescopes and Vol.3 with the construction of microscopes.

EVANS

A letter to Sir R.J. Harvey on the utility of the infirmary for diseases of the eyes established at Norwich and on the necessity of extending the benefits of the Institution...

The Author, Norwich. 1823. 11p.

Griffith Francis Dorsett Evans (early 19th Century)

A physician on the staff of the Eye, Ear and Throat Hospital in Shrewsbury from its foundation in 1814 to 1832.

EVANS, Griffith Francis Dorsett

Practical observations on cataract and closed pupil and on the amputation of the arm at the shoulder joint.

F. Houlston and Son, Wellington, 1815. 108p. ill.

EXLEY, Thomas

Physical optics or the phenomena of optics explained according to mechanical science and on known principles of gravitation.

Longman, Rees, Orme, Brown, Green and Longman, London, 1834. 206p.

Deals with polarisation and diffraction of light, colour, refraction, reflection, the eye and the nature of vision.

Exposition des produits de l'industrie Francaise au Palais du Louvre, annee 1827 (no 416).

Boucher, Paris. 27p.

Fabri, Honore (1607-1688)

A French Jesuit scientist who taught metaphysics, astronomy, mathematics and natural philosophy at Lyons from 1640-1646 when he was transferred to Rome as a member of the Penitentiary College or the Inquisition. He discovered the circulation of the blood independently of Harvey in about 1636. His contribution to the science of optics lies in his writings on light and colours.

FABRI, Honore

Tractus duo: quorum priore est de plantis, et de generatione animalium; posterior de homine.

Francis Muguet, Paris, 1666. 244p. ill.

The first part discusses plants and generation and the second human physiology including vision.

FAHIE, J.J.

Galileo, his life and work.

London, 1903. 51p. 29 ill.

Includes chapters on his invention of the telescope and microscope.

John Farrar (1779-1853)

American mathematician, physicist and astronomer who was professor of mathematics and natural philosophy at Harvard from 1807-1836. He translated and adapted the mathematical and astronomical works of Euler, Lacroix, Legendre, Biot et al, making these European scientists work accessible for the first time.

FARRAR, John

An experimental treatise on optics comprehending the leading principles of the science and an explanation of the more important and curious optical instruments Hilliard & Metcalfe, Cambridge. 1826 350p. ill.

Divided into three parts, Catoptrics, Dioptrics and Analysis of Light, also includes a detailed description of various optical instruments.

Farre, John Richard see Adams Sir William

FAY, W.G

New methods in the science of fitting glasses.

Ohio, 1896 115p. 15 ill.

The causes and symptoms of errors of refraction and methods of testing. The author describes his method of examining the eye and correcting all errors of refraction from a distance of 14 inches.

John Fearn (1768-1837)

An English philosopher who served in the Royal Navy before retiring to devote himself to metaphysical speculation.

FEARN, John

Color images in the brain.

Longman, Rees, Orme, Brown and Green, 1831 39p. ill

Bound with FEARN, John ‘ A rationale of the laws of cerebral vision’.

FEARN, John

The human sensorium investigated as to figure

Longman, Rees, Orme, Brown and Green, 1832 38p. ill

Bound with FEARN, John ‘ A rationale of the laws of cerebral vision’.

FEARN, John
A rationale of the laws of cerebral vision.
Longman, Rees, Orme, Brown and Green, 1831. 176p ill.

FEARN, John
Refutation of Sir David Brewer
Longman, Rees, Orme, Brown and Green, 1832 50p. ill

Bound with FEARN, John ‘ A rationale of the laws of cerebral vision’.

Christopher Smith Fenner (1823-1879)

An American ophthalmologist who was educated at Yale and lectured on eye diseases at Louisville Medical College. His writings deal principally with physiological optics.

FENNER, C.S.
Vision, its optical defects, and the adaptation of spectacles.
Philadelphia, 1875 299p 75 ill.

An outline of the facts about physiological optics and the defects of the eye, including sections on the nature of light, visual sensations and perceptions, and the treatment of errors of refraction and defects of accommodation.

Andrew Freeland Fergus (1857-1932)

Scottish Ophthalmologist who after studying medicine in Glasgow studied ophthalmology in Paris with Edouard Meyer and with Snellen and Donders at Utrecht. He was Ophthalmic Surgeon for West Scotland and President of the Scottish National Institutions and Societies for the Blind and a member of the Ophthalmological Society of the United Kingdom. He was particularly interested in diplopia and the operative treatment of strabismus, miners’ nystagmus, workmen’s compensation and sclerocorneal trephining.

FERGUS, A Freeland
The ophthalmoscope and how to use it with a chapter on diplopia. 2nd ed.
Churchill, London. 1924 49p. ill.

Notes on the elementary optical principles which govern the use of the ophthalmoscope. Includes a chapter on diplopia.

FERGUSON, James
Lectures on select subjects in mechanics, hydrostatics, pneumatics and optics with the use of the globes, the art of dialling and the calculation of the mean times of new and full moons and eclipses.
A. Millar, London, 1760. 470p. ill.

FERGUSON, James
Select mechanical exercises showing how to construct different clocks, orreries and sundials etc.
W. Strahan and T. Cadell. London, 1773. 272p. ill.

Describes the mechanism of various curiously-made clocks etc., also tables computing different weights, measurements etc.

FERNANDEZ, J.
Henry's outlines of science
London, 1871 178p 25 ill.

An elementary exposition of the introductory facts of chemistry, anatomy, astronomy etc.

FERRARI, G.
Dioptric instruments, being an elementary exposition of Gauss' theory and its application, Translated by O. Faber.
HMSO, London, 1919. 214p. 74 ill.

Part 1 covers general theory worked out mathematically and the fundamental properties of the dioptric system. Part 2 contains an application of theory to the eye, to lenses and to instruments.

Adolf Eugene Fick (1852-?)
German physician.

FICK, A.E.
Diseases of the eye and ophthalmoscopy. Translated by Albert B Hale.
Kimpton, London. 1896 488p. 158 ill.
Part 1 deals with methods of examination, function tests and objective methods of investigation. Part 2 discusses diseases of the eye, errors of refraction and diseases of the eyeball.

FICK, A.E.
Diseases of the eye and ophthalmoscopy. Translated by Albert B Hale.
John K King & Son.. Manchester, 1902 488p. ill.

The first part deals with methods of examination, function tests and objective methods of investigation. The second discusses diseases of the eye, errors of refraction and injuries to the eyeball.

FINCK, Johann Franz Christian et LUDOLF, Hieronymus
De praerogativa remediorum, pharmaceuticorum in affectibus oculorum.
Johan Christoph Hering, Erfurt, 1750. 30p. Pamphlet

A doctoral dissertation on the choice of pharmaceutical remedies, submitted by J.F.C. Finck to Professor Ludolf.

FINE, Orance
De speculo ustorio, ignem ad propositam distantiam generante, liber unicus ex quo duarum linearum semper appropinquatum, nunquam concurrentium coligitur demonstratio.
Michael Vacosani, Lutetiae, 1551. 25p. ill.

Describes how to make parabolic mirrors by an apparatus which the author illustrates. The mirror can be constructed so that it will set objects on fire. The theory is worked

out mathematically. Includes a three page dedication to Sir John Mason, English ambassador to France.

John Herbert Fisher (1867-1933)

English ophthalmologist educated at St Thomas' Hospital and London University. He was elected to membership of the Ophthalmological Society of the UK in 1915 and later became President. He was the Hunterian Professor of Surgery and Pathology at the Royal College of Surgeons and President of the Council of British Ophthalmologists.

FISHER, J. H.

Ophthalmological anatomy, with some illustrative cases.

London, 1904. 188p.

Covers the anatomy of the visual pathways, cranial nerves, ocular muscles, eyelids orbit etc.

FLAMMARION, C.

Popular astronomy, a general description of the heavens. Translated from the French by J. Ellard Gore.

Chatto and Windus, London, 1894. 686p. 291 ill.

FLETCHER, L.

The optical indicatrix and the transmission of light in crystals.

Henry Frowde, London 1892. 112p. 19 ill.

The laws of transmission of rays of light in biaxial crystals. The nature and properties of light, rays, polarisation, reflexion, refraction.

FLICK, C.S.

La couronne Olympique du travail.

Joint Council of Qualified Opticians, London, 1937. 81p. ill

Published in honour of the presentation of this Belgian award to John Hamer Sutcliffe, the Secretary of the British Optical Association.

FLORSCHUTZ, B.

Auge und Brille.

Coburg, 1880 152p. 17 ill

François Anthime Eugène Follin (1823-1867)

Received his MD from the University of Paris in 1850 and in 1853 became professor of surgery there. Follin's particular interest was ophthalmology and his writings cover glaucoma, iridectomy, retinal haemorrhage, diseases of the lacrimal passages, illumination, accommodation and the use of the ophthalmoscope.

FOLLIN, Eugene

Leçons sur l'exploration de l'oeil et en particulier sur les applications de l'ophthalmoscope au diagnostic des maladies de l'oeil.

Adrien Delahaye, Paris, 1863. 303p. ill.

Six lectures delivered at the Clinique Chirurgicale de la Charité on the use of an ophthalmoscope to diagnose various eye diseases.

FONTANELLE, Bernard le Bovier de
The elogium of Sir Isaac Newton.
J. Tonson, London. 1728. 32p. ill.

This contemporary survey of Newton's life describes his scientific triumphs and his admirable character. Makes brief reference to the theories underlying the 'Principia' and 'Opticks'.

FORREST, J.
Eye, nose throat and ear, a manual for students and practitioners.
London, 1914. 403p. 134 ill

On the anatomy, physiology and examination of the commoner diseases of the eye.

FORREST, J.
The recognition of ocular disease.
London, 1911. 170p. ill.

Aimed at opticians seeking a general knowledge of eye disease. Describes the anatomy, pathology and examination and of each structure of the eye. Includes a chapter on elementary physiology and pathology.

FORREST, James
The recognition of ocular disease. 2nd Edition
J & H Taylor, Birmingham and London, 1926. 167p. ill.

The second edition contains a few minor alterations and gives a greater space to scotometry.

Vittorio Fossombroni (1754-1844)

A Tuscan statesman and mathematician who wrote a series of works on physics and mathematics.

FOSSOMBRONI, V.
Ricerche sull' intensita del lume.
Alberto Pazzoni, Arezzo, 1781. 140p. ill

Bound behind RUGGIERI BUZZAGLIA Dissertazione sopra il questo...

A rare work in which the author treats the subject of photometry mathematically. Contains a preliminary discourse on the progress of mathematics.

FOSTER, M. and LANGLEY, J. N.
A course of elementary practical physiology and histology.
Macmillan & Co. London. 1888. 412p. 10 ill.

A textbook on dissection, structure of the blood, bone and nervous tissue and the action of the heart and lungs etc. Includes chapters on the eye and on vision.

FOUCAULT, L.

Sur les vitesses relatives de la lumiere dans l'air et dans l'eau.
Paris, 1853. 35p. 1 pl.

FOURNET, A.

Is bad sight on the increase? The philosophy of sight.
Swan Sonnenschein, London. 1889. 196p. 2. ill.

L. Webster Fox (1853-1931)

American ophthalmologist graduated from Jefferson Medical College in 1878. After further study in Vienna he worked at Moorfields eye hospital before returning to Philadelphia.

FOX, L. Webster and GOULD, Geo M.

A compend of the diseases of the eye; including refraction and surgical operations.
Young J. Pentland, Edinburgh, 1887. 164p. 71 ill.

FOX, L. Webster and GOULD, Geo M

A compend of the diseases of the eye; including refraction and surgical operations.
P. Blakiston & Co. Philadelphia. 1892. 148p. 60 ill.

Deals with refraction and functional disorders affecting vision.

The second edition is revised and enlarged to contain two extra parts; one on the diseases of the eye and the other on surgical operations etc., and on instruments.

FOX, L. Webster

Diseases of the eye
D. Appleton & Co. New York. 1904. 584p. 301 ill.

Principles underlying the normal as well as the pathological changes which take place in the eye. Includes anatomy, diseases of the structures of the eye, refraction and extra-ocular muscles.

FOX, L. Webster

A practical treatise on ophthalmology.
D. Appleton & Co. New York, 1910. 807p. 306 ill.

FRANCOIS MARIE, de Paris, capucin

Nouvelle decouverte sur la lumiere pour la mesurer et en compter les Degrés.
Louis Sevestre, 1700. 92p.

Describes an attempt to measure light by what the author describes as the first successful "lucimetre". Also illustrates a graduated measure for counting the degrees of light. The book is dedicated to the Duc de Chartres and his arms are stamped on both covers. The author describes different methods of measuring both transparent

and opaque bodies and divides these methods into direct and reflex and explains the use of each kind.

Johann Christoph August FRANZ, 1807-1895?

was educated at Leipzig and practised in Brighton.

FRANZ, Johann Chrisoph August

The eye, a treatise on preserving this organ in a healthy condition, and of improving the sight to which it is prefixed, a view of the anatomy and physiology of the eye with observations on its expression as indicative of the character and emotions of the mind. J. Churchill, London, 1839. 293p.

Stresses the importance of treating diseases in the early stages and also contains suggestions for precautions to be followed in various occupations in order to protect the eyes. Covers the anatomy and physiology of the eye, the art of preserving the eyes and improving sight and the importance of dealing with disorders early.

Joseph von Fraunhofer (1787-1826)

German optician, the inventor of a machine for polishing mathematically uniform lenses, of the stage micrometer, of various achromatic lenses and the first person to observe the dark lines of the solar spectrum.

FRAUNHOFER, Joseph

Bestimmung des Brechungsvermögens und Farbenstrahlungsvermögens verschiedener Glasarten in Bezug auf die Vervollkommnung achromatischer Fernrohre. Der Akademie, Munich, 1817 34p. ill.

Describes the estimation of the refractive and chromatic aberration power of various kinds of glass in relation to the improvement of achromatic telescopes. A first edition of the paper read before the Bavarian Academy in 1815, in which Fraunhofer announced his discovery of the absorption lines in the solar spectrum named after him. This eventually led to the discovery of spectroscopy.

FRAY, Joseph

The repairing optician, a beginner's guide to the optical workshop. Henry Frowde, London, 1920. 183p. 110. ill.

Includes descriptions of tools, their making and tempering, styles of frames, general repairs, gold and rolled gold, rimless lens mounting, types of lenses, centring and cutting.

FREVAL, Jean Baptiste de

The history of experimental physics. J. and J. Pemberton, 1739, 232p. ill.

Bound with FREVAL, J.B. 'Nature display'd'

FREVAL, Jean Baptists de

Spectacle de la nature, or nature displayed, being discourses on such particulars of natural history as were thought most proper to excite the curiosity and form the minds of the young. 4th edition

J. & J. Pemberton, London, 1739. 204p. ill.

An eighteenth century translation from the French containing chapters on the ways of light and the wonders of vision and on colour.

FREVAL, Jean Baptists de

Spectacle de la nature, or nature displayed, being discourses on such particulars of natural history as were thought most proper to excite the curiosity and form the minds of the young.

J. & J. Pemberton, London, 1776. 368p. ill.

George Frick (1793-1870)

American ophthalmologist. The first American to publish in this field and often known as 'The father of American ophthalmology'. In 1840 deafness curtailed his career and he spent the last thirty years of his life in Europe.

FRICK, George

A treatise on diseases of the eye including the doctrines and practice of the most eminent modern surgeons and particularly those of Professor Beer. Edited by R. Welbank.

London, 1826. 308p. 1 ill.

This is the first British edition. It was originally published in America in 1823 by Garrison & Morton and was written by the first American known to have specialized in the diseases of the eye. The chapter on cataract is considered his best.

Percy H. Fridenberg (1868-1960)

American ophthalmologist who in his early years was a triologist (eye, ear and throat) and a member of the American Otological Society. Later he became Vice-President of the American Academy of Ophthalmology and Otolaryngology.

FRIDENBERG, Percy

The ophthalmic patient.

The Macmillan Co., 1900. 312p. 95 ill.

Information on eye wards, hospital routine, ophthalmic therapeutics, principles of surgical cleanliness, nursing of different operations, post-operative nursing and treatment, dressings and bandages and eyeshades.

FRIEDMAN, Clifford S.

Modern optics, a manual for the student and practitioner.

Chicago, 1904. 84p. ill.

Deals briefly with the principles of geometric optics, errors of refraction and retinoscopy.

FRIEGER, Georg

Dissertation mathematica de oculo quod sit camera obscura maxime artificiosa.
Litteris Buchianis, Jenae. 1735 52p. ill.

William Adams Frost (1853 – 1935)

Obtained his MRCS whilst at St George's hospital, London. He specialised in ophthalmic surgery and worked at Moorfields, St George's, the Victoria Hospital for Children and the Royal Westminster Ophthalmic Hospital.

FROST, W. Adams

The fundus oculi with an ophthalmoscopic atlas illustrating its physiological and pathological conditions.

Edinburgh & London, Young J. Pentland, 1896. 322p. 47pl. 59 ill.

A series of chromolithographs drawn from living cases and selected as typical examples of fairly common conditions. The first part deals with the normal fundus, optic disc, retinal vessels, and macula lutea. The second part is concerned with pathological conditions.

Ernst Fuchs (1851-1930)

Studied under Billroth in his hometown of Vienna, where he received his MD in 1874. He succeeded Jaeger as professor of ophthalmology and director of the eye clinic, retiring in 1915.

FUCHS, Ernst

The causes and prevention of blindness, Translated by R.E. Dudgeon
Baillière, Tindall & Cox, London. 247p. 18 ill.

English edition of Die Ursachen und die Verhütung der Blindheit Gekrönte
Preisschrift.

FUCHS, Ernst

Lehrbuch der Augenheilkunde.

Franz Deuticke, Leipzig. 1894. 832p. 200. ill.

This textbook was written to provide the author's students with the substance of his teaching. It became one of the classics of eye pathology and went through 18 German editions between 1889 and 1945 and 10 British and American editions between 1892 and 1933. Contains sections on refraction and accommodation (including chapters on the theory of glasses, optical properties of the eye, symptoms, detection, and treatment of refractive errors) the examination of the eye, diseases of the eye and operations.

FUCHS, Ernst

Textbook of ophthalmology. Translated by Alexander Duane. 3rd edition.
J.B. Lippincott Company, 1908. 908p. 445 ill.

FUCHS, Ernst

Textbook of ophthalmology. Translated by Alexander Duane. 7th edition.
J.B. Lippincott Company, 1923. 997p. 455 ill.

Contains enlarged chapters on refraction and additional information on astigmatism, the structure of the lens, colour vision etc.

FUNKE, Otto

Lehrbuch der Physiologie für Akademische Vorlesungen und zum Selbststudium.
Leopold Voss, Leipzig, 1866. 386p 105 ill.

Includes a section on vision which describes the retina, cornea, crystalline lens, vitreous humour etc. Also covers physiological optics, properties of light, reflection, accommodation and irradiation.

FURNEAUX, William S.

Human physiology. 6th edition.
Longmans, Green & Co. London. 1895. 249p. 218 ill.

Contains one chapter on the eye and vision.

FURNEAUX, William S.

Human physiology. Revised edition.
Longmans, Green & Co. London. 1924 (1931 reprint). 290p. ill

FURSTENAU, Johan Hermann and PANZER, J. B.

Vitiis praecipuis de oculorum.
I.G. Emax, Rintelen. 1748. 24p.

A dissertation on the principle defects of the eye by J.B. Panzer submitted to Professor Furstenau.

GAILLARD, Petrus

Soli iustitiae omnia intuenti oculo theses mathematicas. De optica deque mirabili visionis oeconomia.
5p. ill.

A thesis on the eye, describing the anatomy of the eye and the nature of vision. A feature of the pamphlet is the plate of a dissected eye and illustrations showing the theories of vision.

GALBRAITH, Joseph A. and HAUGHTON, Samuel

Manual of optics. 5th edition.
Longman, Brown, Green, Longmans & Roberts, 1861. 82p. 65 ill.

Sets out the principles of reflection and refraction, the dispersion of light, the structure of the eye and the construction of optical instruments.

Xavier Galezowski (1832-1907)

Born in Poland, he studied medicine At St Petersburg and continued his studies in Paris. Galezowski founded, and for many years edited the 'Recueil d' Ophthalmologie, was a prolific author and the inventor of many instruments and surgical procedures.

GALEZOWSKI, Xavier
Des amblyopies et des amauroses toxiques.
P. Asselin, Paris. 1878 180p.

Chapters on hallucinations and illusions, tobacco amblyopia, visual troubles caused by opium, nystagmus etc.

GALEZOWSKI, Xavier
Traite des maladies des yeux pour mesurer l'acuite de la vision, les limites du champ visuel et la faculte chromatique. 2nd edition.
J-B Baillière et fils, Paris. 1875 980p.

This text covers anatomy, physiology, pathology, method of examination, and diseases of the eye, and the principles of the ophthalmoscope.

GALEZOWSKI, Xavier
Traite iconographie d'ophtalmoscopie. 2nd revised and enlarged edition.
J-Baillière et fils, Paris. 1886 355p. 80.ill.

Discusses various ophthalmoscopes used in refraction and examination of the eye and the connection between ocular changes and cerebral and constitutional maladies.

Galileo Galilei (1564-1642)

Born in Pisa where he entered the university at 17 as a medical student before turning to mathematics and continuing his education at Padua. In 1609 he constructed an improved version of a new Dutch invention – the telescope. He was the first person to use the refracting telescope to make important astronomical observations. These observations convinced him of the accuracy of Copernicus' heliocentric theory of the motion of the planets (the planets revolve around the sun) rather than the Catholic Church's approved theory that the planets revolved around the Earth. By this time he was a professor of astronomy at the University of Pisa and, as such required to teach the Church's approved doctrine. His defence against thinking for himself rather than thinking what the Church told him to think was the reasonable; 'I do not feel obliged to believe that the same God who has endowed us with sense, reason and intellect has intended us to forgo their use'. Because of this, in 1633 the Penitentiary College (otherwise known as the Inquisition) convicted him of the crime of heresy, forcing him to publicly withdraw his support of Copernicus and sentencing him to life imprisonment. Because of his old age this was moderated to house imprisonment. He spent the last nine years of his life under house arrest at his villa in Florence. His originality as a scientist was in his methodology: that of reducing problems to their basics, applying commonsense and logic and then analysing and resolving them according to simple mathematical descriptions. His 'Law of Inertia' was the foundation of Isaac Newton's 'First Law of Motion'

GALILEI, Galileo
Opere di Galileo Galilei divise in quattro tomi. Vol. 1.
Nella stampiera del seminario, Gio. Manf. . Padova, 1744 601p. ill.

Includes a life of Galileo.

GALILEI, Galileo

Opere di Galileo Galilei divise in quattro tomi. Vol. 2.

Nella stampiera del seminario, Gio. Manf. . Padova, 1744. 564p ill

GALILEI, Galileo

Opere di Galileo Galilei divise in quattro tomi. Vol. 3.

Nella stampiera del seminario, Gio. Manf. . Padova, 1744. 486p. ill.

GALILEI, Galileo

Opere di Galileo Galilei divise in quattro tomi. Vol. 4.

Nella stampiera del seminario, Gio. Manf. . Padova, 1744 342p. ill.

The four volumes on Galileo's philosophy and mathematics are written in the form of dialogues and letters.

GANDY, Walter

The romance of glass-making, a sketch of the history of ornamental glass.

S.W. Partridge & Co. London. 1898. 160p. 28 ill.

Glass of Egyptian, Phœnician, Hebrew, Persian, Greek, Roman and early Christian periods with characteristic examples of ornamental glass from medieval Italy, Germany, France and Great Britain. Also includes a section on the art of making window glass.

Thomas Gataker (c.1715-1769)

Surgeon to St George's Hospital and to the King.

GATAKER, Thomas

An account of the structure of the eye, with occasional remarks on some disorders of that organ.

R. & J. Dodesly, London 1761. 86p.

Lectures delivered at the Surgeons' Hall on the structure of the eye and eyelids and also the use of eye waters and ointments, delivered in lectures at the Theatre of Surgeon's Hall.

Arthur Geissler (1832-1902)

GEISSLER, Arthur

Die Farbenblindheit, ihre Prüfungsmethoden und ihre Praktische Bedeutung.

Otto Wigand, Leipzig. 1882. 113p. 1 ill.

Theories of colour-perception and methods of testing colour-blindness. Also includes the concealment of colour-blindness, acquired colour-blindness and an analysis of the vision of the colour-blind and of blue, green and red blindness.

Louis Florent Deshais Gendron (fl. 1770)

Studied in Montpellier and practised ophthalmology in Paris where, around 1762, he was professor and demonstrator of ophthalmology at the Ecole de Chirurgie.

GENDRON, Louis Florent Deshais
Traite des maladies des yeux et des moyens et operations propres a leur guerison. Vol. 1.
Claude J. B. Herrisant, Paris, 1770. 389p

GENDRON, Louis Florent Deshais
Traite des maladies des yeux et des moyens et operations propres a leur guerison. Vol. 2.
Claude J. B. Herrisant, Paris, 1770. 438p

The first textbook on ophthalmology since that of Maitre-Jan some fifty years earlier.

GENTH, Charles - see Pagenstecher, Hermann

GERRISH, Frederick Henry
A textbook of anatomy.
Henry Kimpton, London. 1899. 917p. 950 ill.

Jacob Hugo Gerold (Gerson) 1814-1898

Received his MD from Berlin in 1835 and then practised in his native Aken. Wrote many books on eye diseases and visual defects.

GEROLD, Hugo
Die ophthalmologische Physik und ihre Anwendung auf die Praxis für Ärzte und studierende. Part 1.
Wilhelm Braumüller, Vienna, 1869. 272p. 139 ill.

GEROLD, Hugo
Die Ophthalmologische Physik und ihre Anwendung auf die Praxis für Ärzte und studierende. Part 2.
Wilhelm Braumüller, Vienna, 1870. 388p. ill.

A comprehensive survey of optics in two volumes dealing with the properties of light, emission of rays, reflection and refraction; the making of glass and different kinds of spectacles; construction of optical instruments; examination of eyes with an ophthalmoscope; defects of vision; and theories of colour and colour blindness.

GIBBONS Edward E.
The eye its refraction and diseases.
The Macmillan Company, New York. 1904. 472p. ill.

On the propagation and refraction of light, the anatomy and physiology of the eye, visual acuity and accommodation, the principles of ophthalmoscopy and retinoscopy, errors of refraction.

GINSBERG, S.
Grundriss der pathologischen Histologie des Auges.
Berlin, 1903 487p 107 ill.

Marc Antoine Louis Felix Giraud-Teulon (1816-1887)

Received his MD in Paris in 1848 and practiced ophthalmology there. He wrote mainly on the physiology and pathology of vision. His chief claim to fame is his invention of a binocular ophthalmoscope.

GIRAUD-TEULON, Marc Antoine Louis Felix

An elementary treatise on the function of vision. Translated from the second French edition by Lloyd Owen.

Bailliere, Tindall & Cox, London, 1880. 158p. 9 ill.

Part 1 covers general ideas upon the physiology of the eye, the eye as an optical instrument, the association of the two eyes in the act of unaided vision, the physiological influence of age upon the properties of the visual apparatus. Part 2 concentrates on functional pathology – treatment and hygiene, anomalies of binocular vision and the nature and use of spectacles.

GIRAUD-TEULON, Marc Antoine Louis Felix

Précis de la réfraction et de la accommodation de l'oeil.

Brussels, 1865. 159p. 44 ill.

Concise treatise on refraction and accommodation. Part 1: Physiology of the eye, development of its functions; ophthalmoscopy and Part 2: Errors of refraction, ametropia, and astigmatism; anomalies of accommodation; physiological principles of binocular vision.

GLAZEBROOK, R.T.

Heat and light.

Cambridge, 1894 207p. ill

GLAZEBROOK, R.T.

James Clerk Maxwell and modern physics.

Cassell & Co. London, 1901 224p. 1 ill.

GLAZEBROOK, R.T.

Light, an elementary textbook, theoretical and practical for colleges and schools. 2nd edition.

Cambridge University Press, Cambridge, 1895. 207p. 134 ill.

Simple experiments on the nature of light and optical instruments.

GLAZEBROOK, R.T.

Physical optics. 4th edition

Longman. Green & Co. 1898. 458p. 183 ill.

A treatise dealing with the facts of geometrical as well as physical optics. Covers the rectilinear propagation of waves, reflection and refraction, prisms and lenses, interference, diffraction, dispersion and achromatism, double refraction. Polarisation etc.

GLEICHEN, Alexander

Lehrbuch der geometrischen Optik.
B.G. Tübner, Leipzig, 1902. 511p. 231 ill.

GLEICHEN, Alexander
Leitfaden der praktischen Optik.
S. Hirzel, 1906. 221p. 158 ill.

GLEICHEN, Alexander und KLEIN, Erich
Schule der Optik für Optiker, und zum Gebrauch in optischen und mechanischen
werkstätten,
Ferdinand Enke, Stuttgart, 1914. 440p. 506 ill.

The first part is theoretical and covers mathematical principles, reflection, refraction, magnifying glasses, microscopes, telescopes, photographic optics, remedies for correction of ametropia, glasses and ophthalmological instruments and the second part is practical and covers the fashioning of glass etc.

GLEICHEN, Alexander
The theory of modern optical instruments, translated by H.H. Emsley and W. Swaine.
HMSO, London. 1918. 336p. 241 ill.

A reference book containing many worked examples. Part 1 includes a précis of the more important laws of refraction at spherical surfaces and of the formation of images by lenses and their combinations. Part 2 covers the application of these theories.

GOBLET, H.F.
A theory of sight, on how we see.
Chapman & Hall, London, 1869. 310p

A general account of the principles of vision and colour.

Johann Wolfgang von Goethe (1749-1832)

Born in Frankfurt am Main he went to Leipzig at the age of 16 to study law and studied later in Strasbourg. Remembered chiefly for his plays and poems Goethe was a poet, novelist, playwright, courtier and natural philosopher. He made important discoveries in connection with plant and animal life and evolved a non-Newtonian and unorthodox theory of the character of colour and light which influenced the abstract painters Kandinsky and Mondrian.

GOETHE, Johann Wolfgang von
Beyträge zur Optik.
Industrie Comptoirs, Weimar, 1791-1792

Despite slight knowledge of mathematics Goethe opposed Newton's theories of colour and light and here presents his own theories, including experiments with prisms and beams of light.

GOETHE, Johan Wolfgang von
Zur Farbenlehre. Volume 1.

Tübingen, 1810. 654p.

GOETHE, Johan Wolfgang von
Zur Farbenlehre. Volume 2.
Tübingen, 1810. 757p.

GOETHE, Johan Wolfgang von
Zur Farbenlehre. Volume 3.
J. G. Cotta'schen Buchhandlung Tübingen, 1810. Tables.

Goethe's theory of colour based on his experiments with prisms in which he suggested that all colours are darker than white. He also suggested that colours owe their existence to some form of co-operation between light and shadow and attacked Newton's theory that white light is a composite of colour. The volume of plates is rare. The 3 volumes comprise Goethe's most extensive work.

GOMPERTZ, Benjamin
On the aberation of light.
Richard Taylor, London. 1824. 16p. ill.

A memoir of the astronomical society of London working out the theory of aberration, particularly for astronomers. There is a strong mathematical element.

GORDON, Mrs
The home life of Sir David Brewster. 3rd edition
David Douglas, Edinburgh, 1881. 255p. ill.

His daughter's recollections.

Bernard de Gordon (end 13th –beginning 14th centuries)

French physician of Scottish descent who studied medicine at Salerno, Italy. His dates are not known, but he did teach at Montpellier between 1285 and 1307. He was the first person to describe petite mal seizures.

GORDONIO, Bernardus de
Lilium medicinae
Guliel. Rouillius, Lugduni, 1574. 1115p

Text first published in 1491 when it was believed to be the first recommendation of spectacles as an aid to vision in the elderly. Contains probably the first reference to spectacles as "oculus berellinus" (because the lenses were made from a smoky stone berillus). The work is an early medical encyclopaedia containing the entire pathology of the human system

George Milbry Gould (1848-1922)

Worked as a Unitarian pastor and then as a bookseller before turning to medicine. After graduating in Philadelphia he settled there and practiced as an ophthalmologist with a special interest in the correction of refraction. He published several works stressing the deleterious effects on health of even small errors of refraction.

GOULD, George M.
Biographic clinics; the origin of the ill health of De Quincy, Carlyle, Darwin, Huxley and Browning. Vol. 1.
Rebman Ltd., 1903, 223p.

GOULD, George M.
Biographic clinics. The origin of the ill health of George Elliott, George Henry Lewes, Wagner, Parkman, Jane Welch Carlyle, Spencer etc. Vol. 2.
Rebman Ltd., London, 1904. 392p.

GOULD, George M.
Biographic clinics. Essays concerning the influence of visual function, pathologic and physiologic upon the health of patients. Vol. 3.
Rebman Ltd., London. 1905. 516p.

GOULD, George M.
Essays concerning the influence of visual function, pathologic and physiologic upon the health of patients. Vol. 4.
Rebman Ltd., London. 1906. 375p.

GOULD, George M.
Essays concerning the influence of visual function, pathologic and physiologic upon the health of patients. Vol. 5.
Rebman Ltd., London. 1907. 399p.

A collection of articles demonstrating the theory that unsuspected eyestrain is often the cause of serious disease, neurasthenia etc.

GOULD, George M. and PYLE, Walter L.
A compend of the diseases of the eye and refraction including treatment and surgery.
P. Blakiston, Son & Co., Philadelphia, 1897 258p. 112 ill.

GOULD, George M. and PYLE, Walter L.
A manual of the diseases of the eye and refraction, including treatment and surgery.
2nd edition. Revised and enlarged.
London 1900. 295p 103 ill.

Sir William Richard Gowers (1845-1915)

Was a pupil of William Jenner at University College London. His first book was the manual and atlas of medical ophthalmology although he is better remembered for his work in the field of neurology particularly the pathology of the nervous system.

GOWERS, W. R.
A manual and atlas of medical ophthalmoscopy.
London, 1879. 352p. 42 ill.

Section 1: changes in retinal vessels, optic nerve etc of general medical significance.
Section 2: ophthalmoscopic changes in special diseases. Autotype plates reproduced from the author's own sepia drawings represent pathological appearances. A detailed description of each case is given.

Regarded as the author's first book of any significance, this stresses the value of the ophthalmoscope in aiding diagnosis.

GOWERS, W. R.

A manual and atlas of medical ophthalmoscopy. Ed. By M. Gunn.
London, 1890. 330p. 95 ill.

GOWERS, W. R.

A manual and atlas of medical ophthalmoscopy. 4th edition Ed. By M. Gunn.
J. & A. Churchill, London, 1904. 318p.

GRANDORGAEUS, Andreus

De natura ignis, lucis et colorum.

Marinus Yvon, Cadoni. 1664. 128p

Benevenutus Grassus (Grapheus) (12th Century)

The most celebrated ophthalmologist of medieval Europe and author of the first book on eye diseases to be printed in moveable type. He was probably born in Judea; learned from Arabic ophthalmology; studied medicine in Salerno and later taught and practiced as an itinerant ophthalmologist in Italy and southern France.

GRASSUS, Benevenutus

De oculis eorumque egritudinibus et curis. Translated and edited (with notes and additions from the first printed edition, Ferrara 1474) by C.A. Wood
Stanford University Press, 1929 101p. 5. ill.

English translation of the first ophthalmic book ever printed. It is not certain when the work was first published. The original version is thought to have been in Arabic, but this translation is of the Latin version published in 1474.

GRAVESANDE, William Jacob van's

Mathematical elements of natural philosophy, confirm'd by experiments, or, an introduction to Sir Isaac Newton's philosophy. 4th Edition

Written in Latin and translated into English by J.T. Desaguliers.

J. Senex, London, 1731. 259p. illus. Vol. 1.

GRAVESANDE, William Jacob van's

Mathematical elements of natural philosophy, confirm'd by experiments, or, an introduction to Sir Isaac Newton's philosophy. 4th Edition

Written in Latin and translated into English by J.T. Desaguliers.

J. Senex & T. Longman, London, 1731. 285p.. Vol. 2.

This is the 4th edition in English of Gravesande's 'Physics Elementa Mathematica' which has been described as "easily the most influential book of its kind, at least before 1750..." Gravesande was the most influential exponent of Newtonian philosophy in continental Europe.

GRAY, George J.

A bibliography of the works of Sir Isaac Newton together with a list of books illustrating his works. 2nd edition, revised and enlarged.

Bowes and Bowes, Cambridge, 1907. 80p. ill.

Carl Richard Greef (1862-1938)

German ophthalmologist who studied at Marburg, Berlin and Frankfurt and elsewhere in Europe before becoming professor of ophthalmology at the University of Berlin.

GREEFF, R.

Anleitung zur mikroskopischen Untersuchung des Auges.
August Hirschwald, Berlin. 1910. 146p. 7 ill.

GREEFF, Richard

Atlas of external diseases of the eye for physicians and students.
Translated by P. W. Shedd
H.K. Lewis, London, 1910. 140p. 54 pl.

Describes various diseases of the eye, their diagnosis, prognosis and therapy.

GREEFF, R.

Guide to the microscopic examination of the eye. Translated from the German by H. Walker.
Rebman Ltd, London. 1901. 171p. 5 ill.

Information on the necessary equipment, the examination of fresh tissues, methods of hardening and fixing, the imbedding process, the practice of staining. Describes methods for special tissues, the iris, lens, retina, optic nerve and cornea.

GREEFF, Richard

Die pathologische Anatomie des Auges.
August Hirschwald, Berlin. 1902-6. 689p. 229 ill.

David Gregory (1638-75)

A Scottish astronomer and mathematician who was a member of the Royal Society and Professor of Mathematics at Edinburgh University

Gregory succeeded his Uncle, James Gregory, as Professor of Mathematics at Edinburgh University in 1683. From 1691 to his death in 1708 he was Professor of Mathematics at Oxford. He was in communication with Isaac Newton and his writings show a strong Newtonian influence.

GREGORY, David

Catoptricae et dioptricae spaericae elementa.
Sheldonian Theatre, Oxonii, 1695. 99p. ill.

A rare first edition of the work which is important for the first hint of achromatic lenses. At the end of the book mention is made of the possibility of counteracting colour-aberration in lenses by combining in them media of different densities, thus giving the first idea of the achromatic telescope.

GREGORY, Dr. and BROWNE, W.

Elements of catoptrics and dioptrics.
E. Curll, London, 1715. 204p. ill.

An adaptation of Gregory's lectures, delivered at the University of Edinburgh. They are described as having been composed in such a way that the reader needs nothing except Euclid's Geometry to understand them. In the addenda Browne works out a series of corollaries and problems based on Gregory's principles. He also explains varieties of telescopes and microscopes and some of Huygens theories on their working.

James Gregory (1638-1675)

Scottish mathematician, astronomer and investigator of optics. He was professor of mathematics at the Universities of St Andrews (1668-1674) and Edinburgh (1674-75). In letters to Isaac Newton in 1672 he developed the design of the 'catoptrical' telescope. Upon his death other unpublished writings were found on mathematics and mechanics predating discoveries which have been attributed to Newton.

GREGORY, James

Optica promota, seu abdita radiorum reflexorum et refractorum mysteria, geometricè enucleata.

J. Hayes for S. Thomson, 1663. 134p. ill.

The author describes his invention of the Gregorian reflecting telescope. He shows the theory of the instrument in a series of problems and theorems. His work is influenced by Alhazan, Vitello and Kepler.

William N Griffin (1815-1892)

GRIFFIN, William N.

The theory of double refraction.

J. and J.J. Deighton, T. Stevenson, Cambridge, 1842. 29p.

Bound with GRIFFIN W.N. 'A treatise on optics'

GRIFFIN, William N.

A treatise on optics. 2nd edition.

J. & J. Deighton, T. Stevenson, Cambridge. 1842. 177p. ill.

GRIMALDI, Francesco Maria

Physico-Mathesis de Lumine, Coloribus et Iride

Vittorio Bonati, Bologna, 1665. 535p. ill.

Grimaldi is well known for his discovery of the principles of diffraction contained in this volume and later adapted by Newton. Mainly concerned with light, he works out many experiments on reflection and refraction and on the relation of colour to light. In the second part he analyses Aristotle's knowledge of optics.

Francesco Maria Grimaldi (1618-1663)

Grimaldi, a Jesuit, became professor of mathematics at his order's college in his native city of Bologna in 1648 where he was assistant to Giovanni Riccioli. He discovered and named the phenomenon of the 'diffraction' of light. This was reported in his posthumous work *Physico-mathesis de lumine, coloribus, et iride* of 1665

(Physicomathematical Studies of Light, Colours and the Rainbow). He showed that when a beam of light passed through two successive narrow apertures, the pattern of light produced was a little bigger than it should have been if the light had travelled in an absolutely straight line. Grimaldi considered that the beam had bent outward very slightly, indicating that light must have a wave nature. In this sense he can be said to have been the first to attempt a wave theory of light. The result presented difficulties to all 17th-century corpuscular theories of light. He also studied in detail and named the dark areas on the moon, drawing an accurate map or 'selenograph' which was published by Riccioli. The lunar crater Grimaldi is named after him.

GRIMSDALE, Harold B.

The chief operations of ophthalmic surgery: a practical guide for students.

“The Medical Times Ltd”, London, 1904. 144p. 23 ill.

Describes briefly surgery on the external muscles, the globe of the eye and for ptosis, and analyses cataract, glaucoma, iridectomy and enucleation.

Harold Barr Grimsdale (1866-1942)

Educated at Winchester Caius College Cambridge and St George's Hospital. Began his career as house physician at St George's and, on the retirement of Brudenell Carter was promoted to ophthalmic registrar. At the same time he went to Moorfields to work under William Lang whose chief assistant he became.

GRIMSDALE, Harold

A textbook of ophthalmic operations.

Bailliere, Tindall & Cox., London, 1907. 349p. 116 ill.

GRIMSDALE, Harold and BREWERTON, Elmore

A textbook of ophthalmic operations. 2nd edition.

Bailliere, Tindall & Cox., London, 1920. 438p. 129 ill.

GRIMSEHL, E. and TOMASCHECK, R.

A textbook of physics. Vol.4. Optics. Translated by W.M. Deans

Blackie & Son Ltd, 1933. 301p. 321 ill.

Concentrates on the propagation of light, discussing geometrical optics, the influence of wave-length on refraction phenomena, the interference of light waves, the velocity and polarisation of light.

GRIMSHAW, John

Eyestrain and eyesight; how to help the eye and save the sight.

J & A Churchil, London, nd 77p. 38 ill.

Advice intended for the layperson on the vision of the school child, correction of errors of refraction and the medical inspection of the eyes of schoolchildren.

GRIMSHAW, Robert

Modern workshop hints, describing unusual and rapid ways of doing work.

Sampson Low, Marston & Co. London, 1902. 428p. 528 ill.

Lathe work and tools, milling, planning, boring and drilling, grinding, callipers, gauges and foundry work.

GRIMSHAW, Robert

Shop kinks: a book entirely different from any other on machine shop practice. 2nd edition.

Sampson Low, Marston & Company, London 1896. 393p. 222il.

A collection of useful hints for those working with machines.

GRITTI, Rocco

Dell'ottalmoscopia e delle malattie end-oculari per esso riconoscibili.

Patronation, Milan 1862. 446p. 6il.

1st edition. An early Italian work on the ophthalmoscope and its use in the examination of the eyes, with many case histories interspersed in the text. The book is divided into three parts dealing with the theoretical, physiological and pathological aspects of the subject respectively. Included in the first part (pages 55-68) are descriptions of a dozen types of ophthalmoscope (The instruments of Helmholtz, Follin, Ruete, Coccius, Jaeger, Hasner, Liebreich among others). Plate 1 shows Helmholtz's ophthalmoscope and its use. Plates 2-6 were made from drawings by the author, showing the eye as seen using the above instruments. Clearly this author was well versed on the various makers of ophthalmoscopes during his time.

Rocco Gritti (1828-1920). Born in Bergamo Province Italy, received his MD at Pavia in 1853, and from 1865-18992 was Chief Surgeon at the Ospedale Maggiore in Milan. A surgical innovator, Gritti was known especially for his procedure for amputation of the thigh, described in a treatise in 1857.

GROTH, P.

The optical properties of crystals with a general introduction to their physical properties. Translated by B. H. Jackson.

John Wiley & Sons, New York, 1910.

A treatise on the regular relation between optical properties and the symmetry of crystals, based on geometry. Discusses properties of optically uniaxial and biaxial crystals, and the absorption of light in crystals.

GRUNERT, J.A.

Allgemeine theorie der Fernrohre und Mikroskope.

Leipzig, 1846. 251p. 1 ill.

Bound with GRUNERT, J.A. 'Optische Untersuchungen'

GRUNERT, Johann August

Optische Untersuchungen.

Leipzig, 1846. 716p. 3. Ill.

Contains three sections: The theory of achromatic objects; The general theory of telescopes and microscopes; The theory of double achromatic oculars.

GRUNERT, J.A.
Theorie der achromatischen Objective für Fernrohre.
Leipzig, 1847.

Bound with GRUNERT, J.A. 'Optische Untersuchungen'

GRUNERT, J.A.
Theorie der zweifachen achromatischen Oculare.
Leipzig, 1851. 206p

Bound with GRUNERT, J.A. 'Optische Untersuchungen'

Pierre Guerin (1740-1827)

Chief Surgeon at the Hotel Dieu in Lyons and renowned for his eye operations.

GUERIN, Pierre
Traite sur la maladies des yeux.
V. Reguilliat, Lyons, 1769.

Guerin's first published work in which he proposes a new method of cataract extraction using an instrument of his own design which serves to keep the eye in place while cutting the cornea at the same time. The instrument and method of use are shown in a folding plate.

GUIDO, Nicolaus
Optrica, catoptrica et dioptrica. Latin manuscript.
The author, 1659

The principles of optics – the properties of light, vision, refraction from plane and spherical surfaces, the structure of the eye, reflection, the principles of microscopes and telescopes.

Sebastian Guillié (1780-1865)

Received his professional degree in Paris in 1807 and for a short while was an army physician before he became Superintendent for the Institution for the Blind. Shortly afterwards he was arrested and imprisoned for a year, by mistake. He had quackish tendencies, having made his fortune by selling an expensive "drogue antiglaireuse".

GUILLIÉ, Sebastien
Essai sur l'instruction des aveugles.
Imprime par des aveugles, Paris, 1817. 224p. ill.

Account of the author's method of instructing the blind in various crafts.

Allvar Gullstrand (1862-1930)

Swedish ophthalmologist and Nobel Laureate studied medicine at Uppsala and wrote his doctoral thesis on the theory of astigmatism. In 1894 he was elected the first professor of ophthalmology at Uppsala. He made a considerable contribution to the advancement of physiological optics, particularly in the mathematics of replacing

surfaces and optical systems; the introduction of the schematic eye and the replacement of the conceptions of focal distance with the dioptré. In honour of his sixtieth birthday the Swedish Society of Medicine founded the Gullstrand Gold Medal. The medal is awarded every ten years to a leading ophthalmologist of any nationality.

GULLSTRAND, Allvar

Das allgemeine optische Abbildungssystem.

Almqvist & Wiksells Boktryckeri-A-B, Stockholm, 1915 139p 9 illus.

GULLSTRAND, A.

Einführung in die Methoden der Dioptrik des Auges des Menschen.

Leipzig 1911. 180p. 20 ill.

GULLSTRAND, Allvar

Die reele optische Abbildung.

Almqvist & Wiksells Boktryckeri-A-B, Uppsala & Stockholm, 1906. 119p. 2. Ill.

Monograph covering optical images and the principles of optical projection.

George James Guthrie (1785-1856)

Born in London, Guthrie was apprenticed to a surgeon at thirteen and became a member of the Royal College of Surgeons at sixteen. From 1801-1807 he was an army surgeon in Canada and then, during the Napoleonic wars in Spain and Waterloo. An ophthalmic surgeon, he wrote much on the subject and also founded the Westminster Ophthalmic Hospital, serving as its chief surgeon until 1838.

GUTHRIE, George James

Lectures on the operative surgery of the eye.

Burgess and Hill, London, 1827. 554p. ill.

Hirschberg and others consider the first edition to be the first systematic English textbook on ophthalmic surgery. This is the second edition of a work dealing principally with cataract, based on the author's experience at the Royal Westminster Infirmary for Diseases of the Eye.

GUTHRIE, George James

A treatise on the operations for the formation of the artificial pupil in which the morbid states of the eye requiring them are considered...

Longman, Hurst, Rees, Orme and Brown, London, 1819. 209p. ill.

In 1817 Guthrie gave a series of lectures on the anatomy and diseases of the eye, the first systematic series given in England. He wrote this book as a compendium of contemporary English and European thought on the construction of an artificial pupil and presented a careful overview of the surgical procedure.

Otto Haab (1850-1931)

A Swiss ophthalmologist who received his MD from the University of Zurich in 1875. Haab enriched the knowledge of the pathology of the anatomy of the eye and made advances in surgical ophthalmology, particularly in the treatment of eye injuries. He

identified the phenomenon which became known as Haab's reflex and designed a powerful magnet for extracting foreign bodies from deep within the eye.

HAAB, O

Atlas and epitome of operative ophthalmology. Edited by G.E. de Schweinitz
W.B. Saunders & Co., London 1905. 337p. 184 ill.

Authorised translation from the German with editorial notes and additions.

HAAB, O.

Atlas of the external diseases of the eye including a brief treatise on the pathology and treatment. Edited by G. E. de Schweinitz.

W. B. Saunders, 1899. 228p. 46 ill.

The examination of the eye by different method to detect disease. Diseases of the lachrymal apparatus, eyelids conjunctiva, cornea, sclera, iris and ciliary body, lens, vitreous body, orbit and glaucoma. Includes a series of coloured plates with brief clinical histories.

HAAB, O.

An atlas of ophthalmoscopy with an introduction to the use of the ophthalmoscope, translated and edited by Ernest Clarke.

Balliere, Tindall & Cox, London, 1895. 119p. 72 ill.

HAAB, O.

An atlas of ophthalmoscopy with an introduction to the use of the ophthalmoscope, translated and edited by Ernest Clarke.

Balliere, Tindall & Cox, London, 1898. 119p. 72 ill.

The examination of the fundus by means of the ophthalmoscope. Describes the method of conducting an ophthalmic examination and the ophthalmoscopic appearance of the normal fundus. Illustrated with colour plates.

HAAB, O.

Atlas der äusserlich sichtbaren Erkrankungen des Auges nebst Grundriss ihrer Pathologie und Therapie.

J.F. Lehmanns, München, 1910. 260p, ill.

HAAB, O.

Atlas der ausseren Erkrankungen des Auges nebst Grundriss ihrer Pathologie und Therapie.

Lehmann's Medicin Handatlanten Band XVIII.

J. F. Lehmann, Munchen, 1901. 242p. 47 ill.

The examination of the eye by different methods to detect disease. Diseases of the lachrymal apparatus, eyelids, conjunctiva, cornea, sclera, iris and ciliary body, lens, vitreous, orbit and glaucoma. Includes a series of colour plates with clinical histories appended.

HAAB, O.

Atlas und Grundriss der Ophthalmoskopie und ophthalmoskopischen Diagnostik.
Lehmann's Medicin Handatlanten Band VII.
J. F. Lehmann, Munchen, 1904. 174p. 88 ill.

This text was later translated into English as 'Atlas and epitome of ophthalmoscopy and ophthalmoscopic diagnosis' It describes the ophthalmoscope, giving measurements of myopic and hypermetropic eyes and of astigmatism, examination by the indirect method, size of the visual field, and measurement of refractions.

HAAB, O.

Atlas und Grundriss der Lehre von den Augenoperationen.
Lehmann's Medicin Handatlanten Band XXXI.
J. F. Lehmann, Munchen, 1920. 399p. 184 ill.

Charles Nicholas Alexander Haldat de Lys (1770-1852)

A French ophthalmologist who began as an army surgeon and then set up in private practice in Nancy before receiving his MD from Strasbourg in 1803. He was permanent secretary to the Academy of Science, Letters and Art at Nancy.

HALDAT, M. de

Optique oculaire, suivie d'un essai sur l'achromatisme de l'oeil.
J-B. Bailliere, Paris, 1849. 84p. ill

Description of the eye and its appendages, the functions of the cornea, the iris, the aqueous humour, the crystalline lens etc. An article on the "Achromatism of the eye" is appended.

HALLIBURTON, W. D.

Handbook of physiology.
London, 1903. 912p 692 ill.

HALLIWELL, James Orchard

Rara mathematica, or a collection of treatises on the mathematics and subjects connected with them, from ancient unedited manuscripts.
John William Parker, London. 1839. 120p.

HANKE, V.

The treatment of diseases of the eye. Translated by J.H. Parsons and G. Coats.
London, 1905. 222p.

Includes chapters on the examination of the eye, causes, symptoms and treatment of diseases of the separate structures of the eye.

Howard Ford Hansell (1855-1934)

Received his MD from Jefferson Medical College, Philadelphia in 1879 and became professor of ophthalmology there in 1894.

HANSELL, H. F. & REBER, W.

A practical handbook of the muscular anomalies of the eye.
London, 1899 182p. 33 ill.

Principle facts in the diagnosis and treatment of abnormal states of the eye muscles. Anatomy and physiology of the ocular muscles, structural and functional anomalies, operations on the muscles.

HANSELL, H. F. & REBER, W.

A practical handbook of the muscular anomalies of the eye.
Philadelphia, 1912. 223p. 82 ill.

Principle facts in the diagnosis and treatment of abnormal states of the eye muscles. Anatomy and physiology of the ocular muscles, structural and functional anomalies and operations on the muscles.

HANSELL, H. F. & SWEET, W. M.

Textbook of diseases of the eye.
London, 1903. 532p. 255.ill.

A treatise on the external and functional examinations of the eye, test lenses, ophthalmoscope, retinoscope, ophthalmometer, refraction, diseases of the eye, wounds and injuries, anomalies of external ocular muscles, ocular symptoms in general disease.

HARDWICKE, W.W.

Sight-testing made easy.
London, 1909. 66p. 12 ill.

Nathaniel Bishop Harman (1869-1945)

Was educated at the City of London School and St John's College, Cambridge. He followed this with clinical training at the Middlesex Hospital where he qualified in 1895 and then went on to take a double first in natural sciences. He was appointed lecturer in anatomy at both Caius and King's College, Cambridge. He volunteered for service as a field surgeon in the South African War and was decorated. When he returned to England he practiced as an ophthalmologist at Moorfields, working as chief clinical assistant to E Treacher Collins. In 1901 he was appointed as ophthalmic surgeon to the Belgrave Hospital for Children. He is most famous for his pioneering work in reforming the education of children with defective sight. Working with James Kerr, the Schools Medical Officer for London he persuaded the authorities to institute special classes for visually handicapped children, and later, special 'myope' or sight saving schools. In addition to his clinical interest he also designed special equipment for these schools and was influential in improving school lighting and the design of school books. He served on the Departmental Committees on the Causes and Prevention of Blindness in 1920-1922 and 1938 and secured the compulsory notification of ophthalmia neonatorum.

HARMAN, N. Bishop

Aids to ophthalmology. 6th edition
Bailliere Tindall & Cox, 1919. 226p. 163 ill.

HARMAN, N. Bishop

Aids to ophthalmology

Bailliere Tindall & Cox, 1921. 226p. 112 ill.

HARMAN, N. Bishop
Aids to ophthalmology. 7th Ed.
Bailliere Tindall & Cox, 128p. 164 ill.

On the examination of the eye, bacteriology, diseases of structure, injuries, refraction, prescribing glasses and myopia. Contains additional information on glaucoma and two new chapters on "Eye signs of body disease" and "The blind"

HARMAN, N. Bishop
The conjunctiva in health and disease.
London, 1905 276p 43 ill.

HARMAN, N. Bishop
The eyes of our children.
London. 1916. 119p. 32 ill.

The eyes of the child, their common defects and the best means of safeguarding their use both at home and at school.

HARMAN, N. Bishop
Preventable blindness: an account of the disease known as ophthalmia of the newborn and its effects, with a plea for its suppression.
London, 1907 109p. 9 ill.

Statistics to show that one third of cases of blindness arise from ophthalmia of the new born. Chapters on the incidence of the disease, its contagiousness, bacteriology, treatment and prevention.

HARRIS, Joseph
A treatise of optics containing elements of science in two books.
B. White, London, 1775. 282p. ill.

Gustavus Hartridge (1849-1923)

Received his medical training at Kings College Hospital, London. He served on the staff of several London Hospitals and concentrated mostly on errors of refraction. He was also the Hunterian Prosector at the Royal College of Surgeons and Vice President, Secretary and Member of the Council of the Ophthalmological Society of the United Kingdom.

HARTRIDGE, G.
The ophthalmoscope, a manual for students. 2nd ed.
London, 1894. 159p. 67 ill and 4 plates.

The optical principles of the ophthalmoscope with methods of examination, appearance of the normal fundus etc.

HARTRIDGE, G.
The ophthalmoscope, a manual for students. 3rd ed.

London, 1897. 159p. 72 ill.

HARTRIDGE, G.

The refraction of the eye, a manual for students.

London, 1896. 258p. 101 ill.

The main facts necessary for the determination of errors of refraction and the prescribing of suitable glasses. Chapters on optics, the refraction of the eye, accommodation, convergence, ophthalmoscopy and retinoscopy.

HARTRIDGE, G.

The refraction of the eye, a manual for students.

London, 1907. 273p. 109 ill.

Nicolas Hartsoeker (1656-1725)

Dutch physicist, investigator of optics and instrument maker who in 1684 began a twelve year stay in Paris where he made lenses, microscopes, telescopes and studied physics, mathematics and astronomy. Between 1696 and 1704 he taught and conducted astronomical research in Amsterdam before moving to Dusseldorf and then Utrecht

HARTSOEKER, Nicolas

Essay de dioptrique.

Jean Anisson, Paris, 1694. 233p. ill.

Reviews the principles of optics as they were known at the end of the seventeenth century. Contains one of the earliest descriptions of a screw barrel microscope. Discusses the anatomy of the eye and the physics of vision, the nature and origin of rays of light, the causes of colour and the difficulties of producing optical lenses. Hartsoeker ground a lens of greater focal distance than any previously constructed.

HASLUCK, P.N.

Microscopes and accessories, how to make and use them.

London, 1905. 160p. 140 ill.

HASLUCK, P.N.

Optical lanterns and accessories, how to make and manage them, including instructions on making slides.

London, 1901, 160p, 147 ill.

HASLUCK, P.N.

Practical pattern making.

London, 1905. 160p. 300 ill.

Charles Hayter (1761-1835)

Was a well known miniature painter and architect .

HAYTER, Charles

A new practical treatise on the three primitive colours assumed as a perfect system of rudimental information simplyfying their universal powers in regular order of gradation, into colourless darkness when equilaterally concentrated...

The author, London. 1826.

Copy signed by the author with a handwritten dedication to his son, George whose question about the nature of the colour yellow when he was 14 prompted the thinking behind this book.

This work is based on Thomas Young's theory that all colours can be mixed from yellow, red and blue as the primary colours with orange, green, purple, olive, brown and slate as the derivatives the author attempts to demonstrate 'the relative dependence of every colour on its predecessors, produced by unavoidable union according with their equilateral intersections, finally concentrating into colourless shade'.

HAZARD-MIRAULT, Charles Francois

Traite pratique de l'oeil artificiel.

The author, Paris, 1818. 250p. ill.

The author describes his method of fitting enamel eyes. As an appendix there is included the Latin text of D. Mauchart's "Dissertation on artificial eyes" (1749)

HEATH, R.S.

A treatise on geometrical optics.

Cambridge, 1895. 388p. ill.

A comprehensive survey dealing with the properties of light, reflection, refraction, lenses form and properties of a thin pencil dispersion and achromatism, the eye, vision etc. The chapters on optical instruments have been rewritten

HEATHER, J.F.

Mathematical instruments Their construction, adjustment, testing and use. Vol. II. : Optical instruments. Including (more especially) telescopes, microscopes and apparatus for producing copies of maps and plans by photography.

Crosby Lockwood & Son, London, nd. 141p. ill.

HEATHER, J.F.

A treatise on mathematical instruments. In which their construction and the methods of testing, adjusting and using them are concisely explained.

Virtue Brothers & Co. London, 1864. 170p ill.

HEINICKE, Johann Christian

Dissertatio inauguralis medica qua visus vitia duo rarissima

Literis Viduae Gerdesiae, Wittenberg. 1723. 32p.

A description of two unusual cases of contraction and doubling of vision, with an attempt at explaining their causes.

HELM, George Frederick

Short sight, long sight and astigmatism. An elementary guide to the refraction of the eye.

J. & A. Churchill, London, 1886. 103p. 35 ill.

Hermann Ludwig Ferdinand von Helmholtz (1821-1894)

The physicist, physiologist and inventor of the ophthalmoscope was born in Potsdam received his medical education at the Friedrich Wilhelm Institute in Berlin. Helmholtz made essential contributions in the fields of energetics, hydrodynamics, electrodynamics, sensory physiology, and epistemology.

HELMHOLTZ, Hermann von

Beschreibung eines augenspiegels zur Untersuchung der Netzhaut im lebenden Auge.

Johann Ambrosius Barth, Leipzig, 1910.

Description of the ophthalmoscope believed to have been invented by the author in 1851.

HELMHOLTZ, H. von

Handbuch der physiologischen optik.

Leopold Voss, Hamburg und Leipsig. 1867

Regarded as Helmholtz's most important work, the first systematic treatise applying physical laws to the study of the physiology of the eye, and equally valuable for the original discoveries and the historical inventions it contains. 2 copies both with atlas.

HELMHOLTZ, H. von

Handbuch der physiologischen optik.

Leopold Voss, Hamburg und Leipsig. 1896

HELMHOLTZ, Hermann Ludwig Ferdinand von

Popular lectures on scientific subjects. Translated by E. Atkinson.

Longmans, Green & Co., London. 1873. 396p. 51 ill.

Includes papers on the criticism of Goethe's theory of colour vision and a vision theory divided into three sections on the eye as an optical instrument, the sensation of sight and the perception of sight.

HELMHOLTZ, Hermann Ludwig Ferdinand von

Wissenschaftliche Abhandlungen. Vol.1.

Johann Ambrosius Barth, Leipzig, 1882. 938p. 1 portrait and 3 lithograph plates.

HELMHOLTZ, Hermann Ludwig Ferdinand von

Wissenschaftliche Abhandlungen. Vol.2.

Johann Ambrosius Barth, Leipzig, 1883. 1021p. 5 lithograph plates.

HELMHOLTZ, Hermann Ludwig Ferdinand von

Wissenschaftliche Abhandlungen. Vol.3.

Johann Ambrosius Barth, Leipzig, 1885. 654p. 12 ill.

HENDERSON, F.L.

Lessons on the eye, for the use of undergraduate students.
Philadelphia, 1903. 205p. 133 ill.

A compendium for medical students dealing with anatomy, refraction and the more ordinary diseases of the separate structures of the eyes

HENDERSON, Thomas

Glaucoma, an inquiry into the physiology and pathology of the intra ocular pressure.
Edward Arnold, 1910. 222p. ill.

Friedrich Gustav Jakob Henle (1809-1885)

German anatomist and physiologist who studied under Johannes Müller in Berlin and later became professor of anatomy at Zurich (1840-44) Heidelberg (1844-1852 and Göttingen (1852-1885) He made an intensive study of the anatomy and physiology of the eye and made major discoveries in the histology of the epithelial tissues, the larynx, the muscles, the arteries and the cornea. He also discovered important structures in the Brain and kidney (including the tubules named after him).

HENLE, Friderich Gustav Jacob

De membrana pupillari, aliisque oculi membranis pellucentibus.
E. Weber, Bonn. 1832. 40p. ill.

A handbook of the membranes of the pupil by the well known German anatomist who gave the first accurate account of the histology of the cornea.

HEPWORTH, T. C.

The book of the lantern, being a practical guide to the working of the optical (or magic) lantern. 3rd edition.

Hazell, Watson & Viney, London. 1890. 278p. 76 ill.

Ewald Hering (1834-1918)

German investigator of sensory physiology, received his MD at Leipzig in 1860. He studied the physiology of space perception, the operation of feedback mechanisms in the regulation of respiratory movements, electrical phenomena in nerve and muscle and colour vision.

HERING, E.

Die Lehre vom binocularen Sehen

Leipzig, 1868. 146p. 29 ill.

Describes the principles of binocular vision, the working of the ocular muscles and the relationship between accommodation and convergence.

HERMAN, R.A.

A treatise on geometric optics.

Cambridge University Press, Cambridge. 1900. 334p. 103 ill.

Sir John Frederick William Herschel (1792-1871)

The English astronomer, physicist, chemist and investigator of optics and photography was the son and nephew respectively of the astronomers William and

Caroline Herschel. He studied mathematics at Cambridge and is best known for his contributions to astronomy, particularly his observations from the Cape of Good Hope (1834-1838). He also made contributions to optics, photography and the understanding of colour vision and colour blindness.

HERSCHEL, John Frederick William

Astronomy/Optics.

Manuscript with astronomy at one end and optics at the other. 260p ill.

HERSCHEL, John Frederick William

Light.

London. 1828. 245p. ill.

A treatise on the properties of light by Sir William Herschel (1738-1832), the constructor of the famous giant telescope, 40 feet in length, and the discoverer of Uranus.

Carl von Hess (1863-1923)

A German ophthalmologist, Director of the Munich Eye Klinik. He was a proficient linguist and the only son of Wilhelm Hess a prominent ophthalmologist. In 1922 the German Ophthalmological Society presented him with the Graefe medal – the highest distinction within its gift.

HESS, C. von

Die refraction und Akkommodation des menschlichen Auges ihre Anomalien.

(Handbuch der Gesamten Augenheilkunde, Dritte neubearbeitete Auflage, Graefe-Saemisch)

Wilhelm Engelmann, Leipzig. 1910. 618p. 109 ill.

HEWLETT, Richard T.

A manual of bacteriology clinical and applied. With an appendix on bacterial remedies. 2nd edition.

J & A Churchill, 1902 533p.

HEWSON, Thomas

Observations on the history and treatment of the ophthalmia accompanying the secondary forms of lues venerea.

Longman, Hurst, Rees, Orme, Brown & Green, 1824. 117p. ill.

The symptoms of venereal ophthalmia and the progress of this disease.

Mme Alfred Heyman

The wife of a prominent Parisian ophthalmologist who discovered the significance of the Vittore Pisano sketch (1417) held in the Louvre which shows the earliest image of cap spectacles.

HEYMAN, Mme Alfred

Lunettes et lorgnettes de Jadis

Paris, 1911, 124p. 30 pl. 127 ill.

This was published in a limited edition of 300 – of which the College of Optometrists Library holds two copies.

Charles Higgins (1846-1920)

Trained at Guy's Hospital, London where he became ophthalmic surgeon and lecturer. He is particularly remembered for his work on the extraction of cataract.

HIGGENS, Charles

Hints on ophthalmic and out-patient practice.

J. & A. Churchill, 1877.

Describes the use of the ophthalmoscope and also includes basic details on the treatment of glaucoma, iritis and photophobia.

HIGGENS, Charles

A manual of ophthalmic practice.

H.K. Lewis, London. 1888. 314p. 52 ill.

Covers diseases of, and injuries to the eye and various surgical techniques.

HIGGENS, Charles

A manual of ophthalmic practice.

H.K. Lewis, London. 1903. 375p. 67 ill.

Gives more space to errors of refraction than the earlier edition.

HIGGINS, Bryan

A philosophical essay concerning light. Volume 1.

J. Dodsley, London. 1776. 256p. ill.

An eighteenth century lecture delivered to a school of practical chemistry.

HIGGINS, W..M.

An introductory treatise on the nature and properties of light and on optical instruments.

John Nimmo, London 1829 174p. ill.

On the nature of light, reflection and refraction, theories of vision and colour, inflection, double refraction, the polarisation of light and optical instruments.

HIGGINS, W..M.

An introductory treatise on the nature and properties of light and on optical instruments.

John Nimmo, London 1829 174p. ill.

Bound together with a copy of Robert Phelps 'Elementary treatise on optics' 1835.

Discusses the nature of light, reflection, theory of vision, theory of colour, inflection, double refraction, polarisation of light and optical instruments.

HIGHTON, H.P.

Light.

Rivington, Percival & Co. London, 1895. 243p. 127 ill.

HILL, Leonard

Physiology for beginners.

Edward Arnold, London. 1902. 124p. 59 ill.

James Hinshelwood (1859-1919)

HINSHELWOOD, J.

Letter, word and mind-blindness.

H.K. Lewis, London. 1900. 88p.

Uses case studies to illustrate the psychological aspects of vision deficiencies.

Eugen von Hippel (1867-1939)

Became professor of ophthalmology at Heidelberg (1897-1909), Halle (1909-1914), and Göttingen (1914-1939). His chief contributions were his researches on papilledema, sympathetic ophthalmia, tubercular infection of the eye, diseases of the optic nerves and angiomas retinae – which later became known as “Hippel’s disease”.

HIPPEL, E. von

Bericht über die siebenzehnte Versammlung der Ophthalmologischen Gesellschaft.

Edited by W. Wagenmann, W. Hess and Th. Leber.

J. F. Bergmann, Wiesbaden, 1899 403p

P. de a Hire (1640-1718)

A French ophthalmologist who, in 1709 repeated the submersion experiment of Jean Méry on the eye of a cat and came to the correct solution of the most important question raised by that experiment. Méry’s experiment revealed that the fundus of a cat could be observed under water but not normally and suggested that the water evened over various tiny inequalities existing on the anterior corneal surface. Hire realised that this was not so but rather that the water removed the corneal refraction of light so that all the light rays leaving a given point on the fundus emerge from the eye not as a parallel but as a strongly divergent pencil.

HIRE, M. de la

Remarques sur la cataracte et le glaucome.

I.B.W. Mery, France, 1708 5p pamphlet

Bound with MERY ‘Cataracte et du glaucome’

Julius Hirschberg (1842-1925)

Received his MD from Berlin in 1866 and became assistant to von Graefe in his ophthalmology clinic there. He became Professor of Ophthalmology in 1879. He is best remembered for his monumental history of ophthalmology and for founding the ‘Centralblatt für Augenheilkunde’. His research focussed on syphilis and the magnet extraction of foreign bodies.

HIRSCHBERG, J.
Die Arabischen lehrbuecher der augenheilkunde ein capitel zur Arabischen
Littergeschichte.
Konigl. Akademie der Wissenschaften, Berlin. 1905. 117p.

HIRSCHBERG, J.
Geschichte der Augenheilkunde bei den Arabern.
Leipzig, 1905. 243p. 46 ill.

HIRSCHBERG, J.
Geschichte der Augenheilkunde, Italiens Augenartze 1800-1850 [Die Augenheilkunde
in der Neuzeit].
Geschichte der Augenheilkunde. Drittes Buch, elfter abschnitt.
Wilhelm Engelmann, Leipzig 1915.

HIRSCHBERG, J.
The treatment of short sight. Translated by G. Lindsay Johnson.
Rebman Co. New York, 1912. 123p. 12 ill.

Jabez Hogg (1817-1899)

Studied at Charing Cross Hospital and became ophthalmic surgeon to several London
hospitals.

HOGG, Jabez
The cure of cataract and other eye infections.
Bailliere Tindall & Cox, London 1878. 96p. 51 ill.

A write-up of investigations using the ophthalmoscope.

HOGG, Jabez,
A manual of ophthalmic surgery, being a practical treatise on the use of the
ophthalmoscope in the diseases of the eye.
John Churchill & Sons, London. 1863.

HOGG, Jabez
The microscope: its history, construction and application. 4th Ed.
Routledge, Warnes and Routledge, 1859, 621p. ill.

HOGG, Jabez
The microscope: its history, construction and application. 15th Ed.
George Routledge & Sons, 1911, 704p. ill.

HOGG, Jabez
The ophthalmoscope, its mode of application explained, and its value shown, in the
exploration of internal disease.
John Churchill, London, 1858. 107p 18 ill.

Includes case histories and illustrations of the appearance of various diseases

HOLDEN, Ward A

An outline of the embryology of the eye.
G. Putnam's Sons, New York, 1893. 69p. 21 ill.

HOLLAND, John
The pleasures of sight – a poem.
J. Blackwell, Sheffield, 1829 96p. ill.

HOLMGREN, Alarick Frithiof (1831-1897)

Swedish physiologist who studied at Uppsala, where he became Professor from 1861-1897. In 1869 he studied for a time with Helmholtz. He was the founder and director of Sweden's first physiologic laboratory. In 1877 he designed a colour blindness test to support the Young-Helmholtz theory of colour vision – a test which remained in use for many years.

HOLMGREN, F.
De la cecite des couleurs dans ses rapports avec les chemins de fer et la marine.
Paris 1877. 144p. 6 ill.

Suggests several improved methods of testing the colour vision of railwaymen and sailors

Carsten Holthouse (1810-1890)

Studies at Bart's and in Paris and in 1836 established a surgical practice in London. From 1840 until 1870 he was Instructor in anatomy, physiology and surgery at Aldersgate Medical School and at the medical school of Westminster Hospital.

HOLTHOUSE, Carsten
On squinting, paralytic affectations of the eye, and certain forms of impaired vision.
John Churchill, London. 1858. 210p.

Edwin Hermus Holthouse (1855-1949)

The second son of Carsten Holthouse, born in Smyrna when his father was serving at the Civil Hospital during the Crimean war. He undertook his medical training at King's College Medical School serving as house surgeon there and then as clinical assistant at Moorfields. He became Surgeon at the St Pancras and Northern Dispensary and later the Western Ophthalmic Hospital.

HOLTHOUSE, Edwin
Convergent strabismus and its treatment: an essay.
J. & A. Churchill, London. 1887. 177p

Discusses the causes, heredity and treatment of strabismus; the refraction in monolateral convergent strabismus; vision in monolateral convergent strabismus and alternating convergent strabismus.

Hendrik Hondius (1573-1648)

HONDIUS, Hendrik
Grondige onderrichtinge inde optica ofte perspective konste.
Frederick de Wit, Amsterdam. 1647.

Classic Dutch work on perspective which remained in print largely unchanged for about a century after its original publication in 1622. Contains many diagrams illustrating the principles of light and the rules of perspective etc.

Robert Hook (1635-1703)

A physicist and experimental philosopher originally from the Isle of Wight, educated at Westminster and Oxford. From 1660 he lived in London and was associated with the Royal Society, first as curator of experiments, then, lecturer on mechanics and, from 1677-1682 as Secretary. He invented the air pump, devised a watch controlled by a spiral spring (predating Christian Huygens invention by more than ten years) and, after the Great Fire of London, designed several buildings. It is possible that he was the inventor of the reflecting telescope, although there is some doubt about this. In 'Micrographia' which was published in 1667, the first work devoted entirely to microscopical investigations, he wrote on the wave theory of light, stated the law of elasticity, anticipated Newton's principles of gravitation and the orbits of the planets and explained the origin of fossils and suggested their importance in discovering earth's history. There is a facsimile edition of this work published in 1961 in the College Library.

HOOK, Robert

A contrivance to make the picture of anything appear on a wall, cupboard or within a picture-frame etc.

Philosophical Society, London, 1668 3p.

HORNER, J.

A practical treatise on helical gears.

Whitaker & Co, London. 1893. 127p. 116 ill.

HORNER, J.

Toothed gearing. A practical handbook for offices and workshops.

Crosby, Lockwood & Son, London. 1904. 216p. 184 ill.

HORSLEY, S.

Difficulties in the Newtonian theory of light considered and removed.

1770 24p.

HOUSTON, E.J.

The wonder book of light.

London, 1909, 349p. 112ill.

Written in very simple language, intended for young people.

HOUSTOUN, R.A.

Studies in light production.

"The Electrician" Printing & Publishing Co. Ltd., London, nd. 115p. 22 ill.

HOUSTON, R.A.

A treatise on light.

Longmans, Green & Todd, London. 1915. 478p 328 ill.

A comprehensive textbook intended for advanced students. Includes geometrical optics, physical optics, spectroscopy, photometry and mathematical theory.

HOVESTADT, H.

Jena glass and its scientific and industrial applications. Translated and edited by J.D. Everett and Alice Everett.
Macmillan, London. 1902. 419p.

Jacob Hovius (c.1675-1740)

Became a doctor of philosophy a master of arts and a doctor of medicine all at Utrecht. Hovius was one of the lesser opponents of the then new theory of the nature of cataract. Throughout the middle ages it was believed that a cataract was formed from a deposit of corrupt and dissipated "humour" in a non-existent gap between the pupil and the lens. The truth had been suspected by Quarré as early as 1643, but the idea was not accepted and was forgotten until it was rediscovered by Brisseau and Maitre Jan in the early eighteenth century when it became the subject of a bitter debate.

HOVIUS, Jacobus

De circulari humorum ocularium motu.
1716. 203p. ill.

Created a considerable stir in the ophthalmological world because it contained the first accurate description of the influx and efflux of the ocular humours as well as a less accurate means of measuring them and also the first description of the "circulous venosus" which is formed by the venae vorticosae.

Lucien Howe (1848-1929)

An American ophthalmologist who studied at Harvard and Bellevue. He continued his education in Europe under Lister in Edinburgh and Helmholtz. Returning to his native land he settled in Buffalo and established an ophthalmology practice where he remained for 50 years.

HOWE, Lucien

The muscles of the eye, Vol 1. Anatomy and physiology, including instruments for testing and methods of measurement.
G. Putnam's Sons, New York, 1907. 473p. 236 ill.

HOWE, Lucien

The muscles of the eye. Vol 2. Pathology and treatment.
G.P. Putnam's Sons, New York, 1908.

HUGHES, E.L.

Squint and ocular paralysis with a short account of the disturbances of muscle balance.
H.K. Lewis, London, 1907. 206p. 61 ill.

Covers binocular single vision, amblyopia, varieties of squint and their non-operative treatment and analyses the anatomy and physiology of the extrinsic muscles.

John Whitaker Hulke (1830-1895)

Studied ophthalmology under Bowman at King's College, London and later worked both at Moorfields and the Middlesex Hospital. In 1867 he was elected to the Royal Society on the strength of his research in the human retina and was also a noted palaeontologist. In 1890 he was elected as President of the Royal College of Surgeons.

HULKE, J.W.

A practical treatise on the use of the ophthalmoscope. Being the essay for which the Jacksonian Prize in the year 1859 as awarded by the Royal College of Surgeons of England.

John Churchill, London. 1861. 70p. 16 ill.

Robert Hull (1795-1856)

HULL, Robert

Cursory notes on the morbid eye.

Longman, Orme, Brown, Green and Longman, London, 1840, 249p.

Diseases of the conjunctiva, sclera, iris choroid, retina, cornea, ciliary body, vitreous humour and optic nerve and their treatments.

Abu Zaid Hunain b. Ishaq al Ibadi (808-873)

Also known by the Latin name Johannitus this Christian physician working in Bagdad practised as an oculist with much success

HUNAIN ibn IS-HAQ

The book of the ten treatises of the eye, ascribed to Hunain ibn Is-Haq (809-877 AD). The earliest systematic textbook on ophthalmology. Edited and transcribed from the only two known Arabic MSS by M Meyerhof. Text in Arabic with an English translation and glossary.

Cairo, 1928. 475p. 7 ill.

There is an 11th book devoted to ocular operations which still exists in two mediaeval Latin translations.

HUNT, E.

Colour vision. An essay discussing existing theories, explaining views hitherto incompletely published, and comprising illustrated descriptions of important new experiments.

John Smith & Son, Glasgow. 1892. 122p. 3 ill.

HUNT, R.

Researches on light in its chemical reactions.

Longman, Brown, Green & Longmans. London. 1854. 396p. ill.

James Hunter (19th Century)

Surgeon at the Edinburgh Eye hospital

HUNTER, James

On the influence of artificial light in causing impaired vision and on some methods of preventing or lessening its injurious action on the eye.

Laing & Forbes, Edinburgh, 1840. 94p. 9 ill.

HUTCHISON, R.

Applied physiology, a handbook for students of medicine.

Edward Arnold, London, 1908. 298p. 21 ill.

HUXLEY, T.H.

Lessons in elementary physiology. 4th Edition.

Macmillan & Co., London, 1870. 348p. 87 ill.

Christiaan Huygens (1629- 1695)

Dutch astronomer, mathematician and optician. He studied mechanics, mathematics and law, but concentrated on optics, in 1665 inventing a successful method of lens grinding, he discovered a satellite of Saturn and the existence of the Saturnian ring and invented the pendulum clock. He established the wave theory of light, which he presented to the Paris Academy in 1678, even though his 'Traité de la lumiere' was not published until 12 years later.

HUYGENS, Christiaan

Traité de la lumiere.

Pierre Vander, Leiden, 1690. 124p. ill.

Huygens formulated a pulse theory of light rather than the corpuscular theory advanced by Newton. The author assumes the existence of a luminiferous ether.

HUYGENS, Christiaan

Treatise on light. In which are explained the causes of that which occurs in reflection and in refraction and particularly in the strange refraction of Iceland Crystals.

Translated by S.P.Thompson.

Macmillan & Co., 1912. 128p. ill.

INTERNATIONAL OPTICAL CONGRESS

Proceedings of the 2nd International Optical Congress held at Trinity College Cambridge, September 6-11 1930.

c.1930. 56p.

Personal copy of J Harwood FBOA

ISA, Alii Ben

Monitorii oculariorum. Edited by C. A. Hille

Arnold, Dresde et Lipsiae, 1845. 63p.

Recapitulates the work of Arabic philosophers particularly in medicine and particularly Isa's writings on the functions of the eye, the anatomy and diseases of the eye, and the structure of the ocular muscles are reproduced.

Shinobu Ishihara (1879-1963)

Japanese ophthalmologist and professor emeritus of Tokyo University. He graduated from Tokyo University in 1905 and worked as a military doctor for one year before continuing his studies in Japan and Germany. He is most famous for his hand-painted tests for colour-blindness but he also wrote widely on myopia, trachoma accommodation and other subjects.

ISHIHARA, S.

The series of plates designed as test for colour-blindness.
Tokyo, 1917. 5p. 16 ill.

Edward Jackson (1856-1942)

An American who after several years of general practice took up ophthalmology, being based at the Philadelphia Polyclinic and the Wills Eye Hospital. In 1898 he became professor of ophthalmology at the University of Colorado (1905-1921). His major achievements were his descriptions of skiascopy, his improvements in the measurement of astigmatic errors and his writing on a wide variety of subjects.

JACKSON, Edward

Essentials of refraction and diseases of the eye.
Henry Kimpton, London. 1893. 145p. 52 ill.

JACKSON, Edward

Essentials of refraction and diseases of the eye. Part 1. Essentials of diseases of the nose and throat Part 2.
W.B. Saunders, Philadelphia. 145p. 52 ill.

A basic handbook describing the principles of refraction and the commoner diseases of the eye using question and answer format.

JACKSON, Edward

A manual of the diagnosis and treatment of the diseases of the eye.
W. B. Saunders, Philadelphia, 1900. 604p. 180 ill.

JACKSON, Edward

Skiascopy and its practical application to the study of refraction. 2nd ed.
The Edwards & Docker Co., Philadelphia. 1896. 108p. 27 ill.

Describes test methods and the application of general optical principles. Also describes regular and irregular astigmatism.

JACKSON, Edward

Skiascopy and its practical application to the study of refraction. 3rd ed.
The Edwards & Docker Co., Philadelphia. 1898. 108p. ill.

JACKSON, John

Ambidexterity, or two-handed and two-brainedness. An argument for natural development and rational education.
Kegan Paul, Trench, Trübner & Co., London 1905. 258p. 24 ill.

Arthur Jacob (1790-1874)

An Irish anatomist and ophthalmologist who, after study in Edinburgh, Paris and London settled in Dublin where he became a celebrated professor of anatomy and physiology at the Royal College of Surgeons. He discovered the layer of rods and cones in the retina, now named 'Jacob's membrane' and also described the disease now known as 'Jacob's ulcer'.

JACOB, Arthur

A treatise on the inflammations of the eyeball including the idiopathic, scrofulous, rheumatic, arthritic syphilitic, gonorrhoeal, post febrile, sympathetic phlebitic and neurologic species or varieties: together with circumscribed inflammations of the cornea, chamber of aqueous humour, crystalline lens, choroid membrane and retina; and inflammation of the eye from injury.

Dublin Medical Press, Dublin 1849 344p.

Eduard von Jaeger, Ritter von Jaxthal (1818-1884)

Son of Friederich von Jaeger and Grandson of Georg Joseph Beer. His father taught him about the diseases of the eye and in 1854 he qualified as a docent at the University of Vienna. He was the first to introduce the ophthalmoscope as a means of determining ocular refraction, was also the first to discover the ocular signs of diabetes and introduced the Jaeger test-types for determining visual acuity.

JAEGER, E von

Ophthalmoscopical atlas. Revised by M Saltzmann, Translated by W.A. Martin
Leipzig, 1890. 86p

JAEGER, E von

Über die einstellung des dioptrischen Apparates im Menschlichen Auge
Vienna 1861 283p. 5 ill.

Jaeger's work on physiological optics ante-dated those of both Donders and Helmholtz. It contains many new and important observations in the field of Dioptrics, including the structure of the emmetropic, myopic and hyperopic eye and the principles of accommodation.

JAMIN, J.

Coers de physique de l'ecole polytechnique. Vol.1.
Mallet-Bachelier, Paris. 1858. 532p. 270 ill.

JAMIN, J.

Coers de physique. Vol.2.
Paris. 1859. 532p. 194 ill.

JAMIN, J.

Coers de physique de l'ecole polytechnique. Vol.3.
Paris. 1866. 532 -804p. 480 ill.

Jean Janin de Combe-Blanche (1731-1799)

Janin was an ophthalmologist from Avignon, famous for the invention of Janin's ophthalmic ointment and his vesicatory plaster. He was born at Carcassone in 1731, studied ophthalmology at Montpellier and practised at Nimes and Avignon. He was

an able surgeon but was also notorious for his blatant self-advertising. His books were much used by 18th Century surgeons

JANIN de Combe-Blanche, Jean
Memoires et observations anatomiques physiologiques et physiques sur l'oeil.
Les Freres Perisse, Lyons et Paris, 1772. 474p.

Contains the first published account of hypermetropia, and the first experiment of using lenses of complimentary colours before both eyes.

2 copies The less interesting binding having a book plate of the Surgeon General's Office. The other having an elaborately gilded contemporary French binding.

JANIN de Combe-Blanche, Jean
Observations sur plusieurs maladies des yeux.
Aime de la Roche, Lyon. 1767 35p.

Eighteenth century description of various cases of eye disease, fistulas, cataract etc.

Louis Emile Javal (1839-1907)

A French ophthalmologist who invented the Javal or Javal-Schiötz ophthalmometer. This was a development of an instrument invented by Helmholtz to which Coccius had already made some improvements by substituting a double refracting crystal for the plates. He became blind because of chronic bilateral glaucoma in later life. He began his working life as an engineer, but became interested in Medicine following a close relative consulting von Graefe about a case of strabismus. He took his degree in Medicine at Paris in 1868. Following service in the Franco-Prussian war he turned to ophthalmology and by 1878 became Director of the Ophthalmologic Laboratory at the School of Higher Studies and in 1885 became a Fellow of the Academy of Medicine

JAVAL, Émile
The blind man's world
An English version of "Entre aveugles": advice to people who have recently lost their sight. Translated by W. Ernest Thompson.
George Fulman and Sons, 1904 158p. 2ill.

JAVAL, Émile
Physiologie de la lecture et de l'écriture.
Felix Alcan, Paris, 1906. 296p. 96 ill.

JAVAL, Émile
Manuel theorique et pratique du strabisme.
G Masson & Cie, Paris, 1896. 372p. 45 ill.

JEAFFRESON, C.S.
Notes on nursing in eye diseases.
John Wright & Co. Bristol 1894. 90p. 90 ill.

JEAFFREASON, Christopher S.
Aids to ophthalmic diagnosis.

Newcastle, 1874. 42p. 7 ill.

JAEGER, E. von
Über die Einstellung des dioptrischen Apparates im menschlichen Auge.
Vienna, 1861 283p. ill.

The first illustrated work on the fundus. Describes the structure of emmetropic, myopic and hyperopic eye and the principles of accommodation.

JEAN, George W.
Ophthalmoscopic diagnosis for general practitioners and students.
E.B. Meyrowitz Inc. London, 1915. 123p. 68 ill.

Benjamin Joy Jeffries (1833-1915)

Studied first at Harvard and then in Europe under Arlt and von Hebra. Practised in Boston and was surgeon to the Massachusetts Eye and Ear Infirmary from 1866 to 1902. He was the first person to note the dangers of colour blindness in certain occupations, notably the railway service

JEFFRIES, Benjamin Joy
Colour blindness: its dangers and detection.
Houghton Mifflin & Co. Boston, 1883. 334p. 6 ill.

JELLETT, J. H.
Researches in chemical optics.
1873. 80p. 6. Ill.

Describes the phenomena of rotary polarisation in relation to chemical research.

John Ellis Jennings (b.1862)

JENNINGS, J. Ellis
Colour-vision and colour-blindness, a practical manual for railroad surgeons.
F.A. Davis & Co., Philadelphia 1905. 132p. 28 ill.

Covers the physical anatomy of the retina, colour sensations, the theories of colour blindness, methods of detecting it and rules for the examination of the sight of railway employees.

JENNINGS, J.E.
Manual of ophthalmoscopy for students and general practitioners.
P. Blakiston's Son & Co., Philadelphia 1902. 180p. 96 ill.

JESSOP, Walter H.H.
Manual of ophthalmic surgery and medicine. 2nd ed.
J & A Churchill, London, 1908. 532p. 163 ill.

JOHNS, B.G.
Blind people: their works and their ways, with sketches of the lives of some famous blind men.

John Murray, London. 1867. 196p. 19 ill.

George Henry Sacheverell Johnson (1808-1891)

Mathematician, astronomer and cleric, studied at Oxford where he later lectured and became professor of astronomy (1839-1842). From 1854 he was Dean of Wells Cathedral.

JOHNSON, George Henry Sacheverell

Optical investigations. Three essays: the determination of the direction of a ray of light after passing through a spherical refracting surface of a denser medium; optical applications of the forms of caustics, optical images.

D.A. Talboys, Oxford, 1835. 107p. ill.

George Lindsay Johnson (1853-1943)

English Ophthalmologist who studied at Göttingen, Cambridge and St Bartholomew's Hospital. His career began as Registrar at the Royal Westminster Ophthalmic Hospital and he later worked with Brudenell Carter at the Royal Eye Hospital. He was a frequent visitor to the zoo where he studied the comparative anatomy of the eye. He emigrated to South Africa in 1911.

JOHNSON, George Lindsay

Contributions to the comparative anatomy of the mammalian eye, chiefly based upon ophthalmic examination.

Philosophical Transactions of the Royal Society of London
Royal Society of London, London, 1901. 82p. 30 pl. 1 illus.

A record of the examination of the eyes of nearly every mammalian family by using an ophthalmoscope. Includes colour plates of the fundus of mammals.

JOHNSON, G. Lindsay

A pocket atlas and textbook of the fundus oculi with drawings from life by Arthur W. Head.

Adlard & Son, London, 1911. 205p. 73 ill.

JOHNSON, George Lindsay

Photographic optics, and colour photography.

Ward & Co. London, 1909. 304p. 200 ill.

JOHNSTON, J.M.

Eye studies, a series of lessons on vision and visual tests.

Chicago, 1892. 228p. 13 ill.

JONES, D.E.

Elementary lessons in light, heat and sound.

London, 1905. 282p. 172 ill.

A physics course, emphasising the experimental side. Includes chapters on shadows, photometry, velocity, reflection, refraction, spherical mirrors, lenses, optical instruments, dispersion and colour.

Thomas Wharton Jones (1808-1891)

Practiced first as a GP before turning to ophthalmology and becoming an ophthalmic surgeon and later professor of ophthalmology at University College Hospital. Babbage showed Jones his prototype ophthalmoscope in 1847 (before Helmholtz invention), but Jones did not value it and discouraged Babbage from developing it.

JONES, T.W.

The principles and practice of ophthalmic medicine and surgery.
London, 1855. 549p. 101 ill.

In this work Jones describes the primitive ophthalmoscope that Babbage had shown him some seven years before Helmholtz invention

JONES, T.W.

Defects of sight and hearing, their nature, causes, prevention and general management.
London, 1866. 168p. 12 ill.

JONES, William

Observations on Dr Wollaston's statements respecting an improvement in the form of spectacle glasses.
Reprint from Phil. Mag. , London, 1804.

The author lists his objections to the meniscus lens advocated by Dr Wollaston.

JORDAN, Gibbs Walker

New observations concerning the colours of thin transparent bodies.
London, 1800. 106p.

Bound with JORDAN 'Observations of Newton...'

JORDAN, Gibbs Walker

Observations of Newton concerning the inflections of light and appearing to lead to a change of his theory of light and colours.
T. Cadell Jnr and W. Davies, London, 134p. ill.

A treatise on interference. The author shows the weakness of Newton's emission theory of light. His experiments are important because they were made three years before Young's announcement of the discovery of the principle of interference.

JOYCE, Rev J.

Scientific optical dialogues intended for the instruction and entertainment of young people in which the first principles of natural and experimental philosophy are fully explained.
Baldwin, Craddock and Joy, London, 1818. 260p. ill.

A simple explanation of the properties of lenses, telescopes, microscopes etc, and the elementary facts of light, colour and vision.

Johann Christian Jüngken (1793-1875)

Studied at the University of Berlin where he was the pupil and assistant of Carl Ferdinand Graefe and, from 1825 Professor of Surgery and ophthalmology. He was the first ophthalmic surgeon to perform an operation under general anaesthesia.

JÜNGKEN, J.Ch.

Die Augendiätetik oder die Kunst, das Sehvermögen zu erhalten und zu verbessern. Berlin, 1870, 144p. 2 ill.

A treatise dealing with the development of vision in childhood, including lighting in nurseries; inflammation of the eyes of neonates; injuries to the eyes in childhood and spectacle prescriptions for children.

Henry Edward Juler (1866-1921)

A descendent of a Huguenot family he studied in Paris and Berlin and returned to London as a clinical assistant at the Royal London Ophthalmic Hospital. At that time there was no formal teaching there and Juler, plus several others, laid the foundations for a school of ophthalmology and encouraged students from Charing Cross Hospital to attend.

JULER, Henry E

A handbook of ophthalmic science and practice. Smith, Elder & Co. London, 1884. 430p. ill.

JULER, Henry E

A handbook of ophthalmic science and practice. 2nd edition Smith, Elder & Co. London, 1893. 549p. ill.

Information on anatomy, physiology and affections of the structures of the eye. States optical principles, errors of refraction and their estimation, the principles of the ophthalmoscope, colour vision etc.

JULER, Henry E

A handbook of ophthalmic science and practice. 3rd edition Smith, Elder & Co. London, 1904. 733p. 215 ill.

Information on anatomy, physiology and affections of the structures of the eye. Gives optical principles, and information on errors of refraction and their estimation, the principles of the ophthalmoscope, colour vision etc.

JUNCKER, Joann & HOSSE, Gotthilf August

De ophthalmia.

J. C. Hilliger, Halle, 1744. 19p.

Hosse's dissertation on ophthalmia submitted to Professor Juncker

James Jurin (1684-1750)

Studied at Trinity College, Cambridge and settled in London in about 1712. He was a pupil of Newton and was particularly interested in the application of physiology, including physiological optics. He was Secretary of the Royal Society from 1721-1727

JURIN, James

An essay upon distinct and indistinct vision.
C. Crownfield, Cambridge, 1738. 57p ill.

Bound with SMITH 'Opticks' Vol.2.

Abraham Gotthelf Kaestner (1719-1800)

A mathematician who was educated at Leipzig University where he taught from 1739-1756. He then became professor of mathematics and physics at Göttingen until his death in 1800

KAESTNER, Abraham Gotthelf

In optica quaedam Boerhavii et Halleri commentatur.
Ioh Gottl. Imman. Breitkopf, Lipsiae. 1785. 44p.

Comments on the elementary principles of geometrical optics based on the writings of Boerhaave and Haller. Also considers varieties of lenses and their effects.

KAYSER, Heinrich

Lehrbuch der Spectralanalyse.
Julius Springer, Berlin, 1883, 358p. 96 ill.

KECKERMANN, Bartholomaeus

Systeme compendiosum totius mathematices geometriae, opticae, astronomiae et geographiae.
Petrus Antonius, Hanoviae, 1617, 607p. ill.

This is the substance of lectures delivered in Danzig in 1605 by a professor of theology and philosophy. The section on optics deals with the nature of light, the elementary principles of vision and the refraction of light. As with many of his contemporaries, Keckermann's teaching is based on the work of Vitello and his interest in optics is mainly as an introduction to astronomy rather than for its own intrinsic importance.

KELLY, John

The life of Dolland, J., inventor of the achromatic telescope with a copious appendix of all the papers referred to. 3rd edition with additions.
W.M. Thiselton, London, 1808. 123p. ill.

KEMPE, J. Arthur

Diseases of the eye, a manual; for senior students.
D. & S. Lovingsstone, Edinburgh 56p.

Peter Kennedy (1685-?)

English surgeon who specialised in ophthalmology partly as a result of having suffered from sore eyes as a child. He travelled across France, Italy and the Netherlands, spending time also in Constantinople.

KENNEDY, Peter

Ophthalmographia, or a treatise of the eye.

Part I. Containing a New and Exact Description of the Eye;
as also the Theory of the Vision Considered, with its Diseases. Part II.
Containing the Signs, Causes, and Cure of the Maladies Incident to
the Eye. To which is Added an Appendix of some of the Diseases of
the Ear; Wherein is Observed the Communication Between these Two
Organs

Bernard Lintott, London, 1713. 95p. ill.

In 1777 this copy was owned by William Burton, surgeon of Sheffield.

Johannes Kepler, or Keppler (1571-1630)

A theologian, astronomer and physicist. He entered the University of Tübingen with the intention of becoming a minister of religion. While there he studied the new Copernican astronomy of Michael Maestlin, which until then was a subject which had not particularly interested him. He was offered a chair of Astronomy at Graz in 1594, but following an edict against all protestant preachers issued by the Archduke Ferdinand in 1598 he fled to Hungary and from there to Prague where he was given refuge by the astronomer Tycho Brahe, mathematician to Emperor Rudolph II. Kepler assisted Brahe in his work and succeeded him as court mathematician (1601-1612) and from 1612-1627 was district mathematician at Linz. He was an early defender of the Copernican heliocentric system and is perhaps best known for his three laws of planetary motion. In the field of optics he was the first person to show that the image is formed on the retina and that the lens serves as a refracting device. He also demonstrated that myopia is caused by the convergence of rays before reaching the retina, described central and peripheral vision and many other aspects of refraction and accommodation. It has been said that no one person has done so much for the development of physical or physiological optics.

KEPLER, Johannes

Ad vitellionem paralipomena, quibus Astronimiae pars optica traditur...de modo visionis, & humorum oculi usu, contra Opticos & Anatomicos.

Claudius Marnius and heirs of Joannes Aubrius, Frankfurt. 1604 449p. ill.

Kepler's first optical work in which he explains the physiological causes of sight defects. Also discusses the nature of light, the fundamental principles of catoptrics, the principles of vision and the measurement of refraction.

KEPLER, Johannes

Dioptrice seu demonstratio eorum quae visui et visilibus propter conspicienda non ita pridem inventa accidunt. Praemissae epistolae Galilei de iis, qua post editionem Nuncii siderii ope Perspicilli, nova & admiranda in coelo deprehensa sunt. Item examen praefationis Ionnis Penae Galli in Optica Euclidis, de usu optices in philosophia. 2nd Edition

Jacob Flasher & Gulielmus Morden. Londini, 1653. 121p. ill.

Describes the theory of the telescope, including a refracting telescope with a positive eyepiece which offered a larger field of vision than the Galilean equivalent. Special reference to the invention of spectacles.

KEPLER, Johannes

Dioptrice
W. Heffer & Sons, Cambridge, 1962.

Heffer Scientific Reprint: the Latin text of the 1611 edition.

KERSCHBAUMER, R. Putatia
Das Sarkom des Auges.
J. F. Bertmann, Wiesbaden, 1900. 286p. 10 ill.

A monograph on the anatomy and histology of sarcoma in which a great number of different cases are described. Also discusses the symptoms aetiology and therapy of sarcoma.

KETTELER, E.
Theoretische Optik, gegründet auf as Bessel-Sellmeier'sche Princip.
Brunswick, 1885. 652p. 48 ill.

Athanasius Kircher (1602-1680)

A German priest, philosopher and scientist who taught philosophy, mathematics, astronomy and Hebrew at the Universities of Würzburg and Avignon. The Thirty Years War forced him to leave and in 1633 he settled in Rome where he spent the rest of his life chiefly involved in independent research and writing on the fields of magnetism, optics, acoustics, music theory, astronomy, mathematics, philology, chemistry, geography, archaeology, theology, philosophy and medicine. Although he contributed little that was new to these subjects he was responsible for the wider dissemination of knowledge in these wide ranging subjects.

KIRCHER, Athanasius
Ars magna lucis et umbrae, in decem libros digesta. Quibus admirandae lucis et umbrae in mundo, atque adeo universa natura, vires effectusque.
Ludovico Grignani for Hermann Scheus, Rome 1646. 935p. ill.

First edition of Kircher's principal contribution to optics, treating light, shadow, colour, refraction, projection, distortion and luminescence, and providing early descriptions of the camera obscura and magic lantern.

KIRCHER, Athanasius
Ars magna lucis et umbrae.
Jan Jansson, Amsterdam, 1671. 810p. ill.

KIRCHHOFF, G.
Gesammelte Abhandlung. Vol.1.
Johann Ambrosius Barth, Leipzig, 1882. 641p. 30 ill.

William Kitchiner (1775[?]-1827)

A Londoner who gained a medical degree at Glasgow but never practised. Instead, thanks to a private income, he was able to devote himself to independent research in optics, cooking and musicology.

KITCHINER, William

The economy of the eyes, precepts for improvement and preservation of the sight.
Hurst, Robinson & Co. London, 1824 246p. ill.

Advice on the choosing of spectacles, the quality of lenses and the means of preserving the eyes. Describes and illustrates the “pancreatic eye tube” which he invented for achromatic, reflecting telescopes and microscopes.

KITCHINER, William
Spectacles, opera glasses and theatres.
George B Whittaker, London. 1826.242p.

KITTO, John
The lost senses. Series II Blindness.
Charles Knight & Co., London, 1845. 245p

Samuel Klingenstierna (1698- 1765)

KLINGENSTIERNA, Samuel
Tentamen de definiendis et corrigendis aberrationibus radiorum luminis in lentibus spaericis refracti et de perficiendo telescopio dioptrico.
Academia Scientiarum, Petropli, 1762 102p. ill.

A rare work in which the author gives the mathematical basis of the achromatic lenses which were constructed by his friend John Dollond.

Georg Simon Klugel (1739-1812)

German mathematician and physicist who studied under Kaestner at Göttingen, later becoming professor of mathematics and physics at the University of Halle.

KLUGEL, Georg Simon
Analytische dioptrik.
Johann Friederich Junius, Leipzig 1778. 304p. ill.

The first part contains a general history of optical instruments, depending on the principles of refraction, illumination, magnification and the field of vision and the second the theory and construction of telescopes and microscopes. The principles of the Gregorian telescope are worked out at length.

Arnold Knapp (1869-1956)

An American ophthalmologist who graduated from Harvard in 1869 with an arts degree and from the College of Physicians and Surgeons, Columbia University in 1892. He worked for his father at the New York Ophthalmic and Aural Institute which he had established in 1889, later taking it over until, as the Hermann Knapp Memorial Eye Hospital, it merged with the Institute of Ophthalmology of the Presbyterian Hospital in 1940. Knapp was director of a hospital for more than thirty years, professor of ophthalmology at Columbia for twenty five years and editor of the Archives of Ophthalmology (founded by his father in the year of his birth) for forty years.

KNAPP, Arnold

Medical ophthalmology.
P. Blakiston's Son & Co., London, 1918. 509p. 32 ill.

Max Knies (1851-1917)

Studied under Küne and Becker in Heidelberg, Saemisch in Bonn and Johann Horner in Zürich, before becoming an ophthalmologist in Freiberg where he became professor at the University in 1888. He is particularly remembered for his work on glaucoma.

KNIES, M.

Relations of diseases of the eye to general diseases. Edited by Henry D, Noyes.
Bailliere, Tindall and Cox, 1895. 467p 19 ill.

Links between the eye and the nervous system, the diseases of the skin, digestive organs, respiratory organs etc. Also discusses the effect of poisons, infections and constitutional diseases on the eyes.

KNIES, Max

Relations of diseases of the eye to general diseases. Edited by Henry D, Noyes.
Bailliere, Tindall and Cox, 1897. 467p 19 ill.

English edition of Die Beziehungen des Sehorgans. Discusses diseases of the eye in relation to the nervous system, diseases of the skin and the organs of digestion and respiration. Includes a section on the effects of poisons and infections on the eyes.

KNOWLES, R. H.

Encyclopedia-dictionary and reference handbook of the ophthalmic sciences.
New York, 1903. 191p. 73 ill.

KNOWLES, R. H.

Eye defects: how to detect and correct them.
96p. ill.

Johann Christopher Kolhans (1604-1677)

KOLHANS, Johann Christopher

Tractatus opticus.

Friderich Lanckisch, Leipzig, 1663.

A discussion of the structure of the eye and its appendages, the principles of refraction and the theories of light and colour.

KRAUTERMANN, Valentin

Der sichere Augen und Zahnarzt.

Johann Jacob Beumelburg, Arnstadt und Leipzig, 1737. 272p. ill.

Wilhelm Küne (1837-1900)

German physiologist who became professor of physiology at the University of Amsterdam from 1868-71 and at the University of Heidelberg from 1872-1899.

KÜNE, W.

Photochemistry of the retina, and on visual purple. Edited by Michael Foster,
Translated from the original German
Macmillan & Co., London, 1878. 104p.

Experiments on the visual purple which revealed that purple was present in the rods
but absent from the cones.

John Howard Kyan (1774-1850)

Best known for inventing a chemical process for preserving wood.

KYAN, John Howard

Elements of light and their identity with those of matter, radiant and fixed.
Longman, Orme, Green, Brown and Longman, London. 1838 130p. ill.

Nicholas Louise de Caille (1713-1762)

LA CAILLE, Nicholas Louis de

Clarissimi viri D. de la Caille... Lectiones elementares opticae ex editione Parisina
anni MDCCLVI in Latinum traductae. Editio Altera (2nd edition)

Joannis Thomae Trattner, Vindobonae, 1766. 144p

Eighteenth century lectures on the properties of light, vision, colour and perspective;
the laws of reflection and refraction; the theory of telescopes, microscopes etc

(La Caille) 145-150p (Boscovitch) 13 tables

Acessit Brevis theoria micrometri objectivi a Rogerio Josepho Boscovich

LA CAILLE, Nicholas Louis de

Lecons elementaires d' optique.

Desaint, Paris, 1766. 204p. ill.

An experimental treatise on optics by a French astronomer. La Caile was a
Mathematics professor at Mazarin College was also famous for his astronomical
calculations and observations and for his proposal for an astronomical expedition to
the Cape of Good Hope. The first part of the book deals with geometrical optics, the
second with catoptrics and dioptrics, including the construction of the telescope and
microscope, and the third with perspective.

Pierre Félix Lagrange (1857-1928)

Became Professor of Surgery at the University of Bordeaux in 1883 and Professor of
Ophthalmology in 1910. Particularly known for his important work on tumours of the
eye.

LAGRANGE, Pierre Félix

Fractures of the orbit, and injuries to the eye in war. Edited by J.H. Parsons.

Translated by H. Child.

University of London Press, London, 1918, 248p 83 ill.

LAGRANGE, Pierre Felix

Etudes sur les tumeurs de l'oeil, de l'orbite et des annexes.
G, Steinheil, Paris. 1893. 278p. 27 ill

LAGRANGE, Pierre Félix et VALUDE, E. (editors)
Encyclopedie Francaise d'ophtalmologie. Tome Premier.
Paris, 1905. 947p. 570 ill.

LAGRANGE, Pierre Félix et VALUDE, E. (editors)
Encyclopedie Francaise d'ophtalmologie. Tome Deuxieme.
Paris, 1905. 942p. ill.

LAGRANGE, Pierre Félix et VALUDE, E. (editors)
Encyclopedie Francaise d'ophtalmologie, optic géométric, physique, physiologique,
refraction. Tome Troisième.
Paris, 1904. 1134p. ill.

LAGRANGE, Pierre Félix et VALUDE, E. (editors)
Encyclopedie Francaise d'ophtalmologie. Rapports des affections oculaires avec la
pathologie gènèrale, semiologie oculaire/ Tome quatrième.
Octave Doin, Paris, 1905. 907p. ill.

LAGRANGE, Pierre Félix et VALUDE, E. (editors)
Encyclopedie Francaise d'ophtalmologie. Glaucoma –affections sympathiques,
maladies des paupières – tumeurs des paupières. Tome cinquième.
Paris, 1906. 1152p. ill.

LAGRANGE, Pierre Félix et VALUDE, E. (editors)
Encyclopedie Francaise d'ophtalmologie. Affections du tractus uvéal – maladies du
corps vitré. Tome sixième.
Paris, 1906. 1145p. ill.

LAGRANGE, Pierre Félix et VALUDE, E. (editors)
Encyclopedie Francaise d'ophtalmologie. Affections du cristallin – maladies du nerf
optique – tumeurs du nerf optique – paralysie des muscles de l'oeil – l'hémianopsie
latérale homonyme. Tome septième.
Paris, 1908. 883p. ill.

LAGRANGE, Pierre Félix
Atlas d'ophtalmoscopie de guerre. Text in English and French.
Masson et Cie, Paris, 1918. 249p. ill.

Johann Heinrich Lambert (1728-1777)

German philosopher and mathematician. In 1764 Frederick the Great made him a member of the Council of Architecture and the Academy of Sciences. In his 'Photometria' he was the first person to formulate a scientific basis for the measurement of light.

LAMBERT, Johann Heinrich
Les proprietes remarquables de la route de la lumiere par les airs et en general, par
plusiers milieux refringens spheriques et concentriques, avec la solution des

problemes, qui y ont du rapport, comme sont les refractions astronomique et terrestres, etce qui en depend.

Nicholas van Daalen, A la Haye, 1759. 116p ill.

The author analyses the path of light and includes discussion of atmospheric refraction.

LAMBERT, Johann Heinrich

Photometria sive de mensura et gradibus luminis, colorum et umbrae

Vidvae Eberhardi Klett, Augustae Vindeloricum, 1760. 560p. ill.

Edmond Landolt (1846-1926)

Swiss ophthalmologist who studied under Knapp in Heidelberg, Arlt in Vienna, Von Graefe and Helmholtz in Berlin, Horner in Zürich, and Snellen and Donders in Utrecht. In 1874 he settled in Paris where he co-directed the Laboratoire d'Ophthalmologie with Javal, maintained a private practice and worked at the institute National des Jeunes Aveugles. He discovered 'Landolt's bodies' between the rods and cones of the outer nuclear layer of the retina, investigated the functions of the ocular muscles and devised a new advancement operation.

LANDOLT, E.

A manual of examination of the eyes. Translated by S.M. Burnett.

Bailliere, Tindall & Cox, London, 1879. 312p. 45 ill

Not just a translation, but a careful revision of the original work.

LANDOLT, E. & GYGAX, P.

Ophthalmological therapeutics. Translated by E. Neyman.

J.B. Lippincott-company, London.1898. 138p.

LANDOLT, E. & LANDOLT, M.

Defective ocular movements and their diagnosis. Translated by A. Römmele and E. W. Brewerton.

London 1913. 99p. 27. ill.

LANDOLT, E.

Handbook of the polariscope and its practical applications. Translated by D.C. Robb and V. H. Veley.

Macmillan & Co., London, 1882. 262p. 56 ill.

LANDOLT, E.

The refraction and accommodation of the eye and their anomalies.

Young J. Pentland, 1886 600p 147 ill.

Covers physical optics – reflection and refraction, lenses, the dioptric system of the eye. Includes methods of determining the refraction and accommodation of the eye and anomalies of refraction and their treatment.

LANE, Henry Edward

Diagnosis from the eye. A new art of diagnosing with perfect certainty from the iris of the eye, the normal and abnormal conditions of the organism in general and of the different organs in particular. A scientific essay for the public and medical profession. Kosmos Publishing Co. Chicago, 1904. 156p. 71 ill.

William Lang (1852-1937)

A British Ophthalmologist who was educated at the Moravian school in Lausanne. At the age of 18 he entered the London hospital, qualifying as MRCS in 1874 and becoming FRCS in 1879. He was one of the 113 founders of the Ophthalmological Society of which he was senior Vice President in 1903. In 1916 he acted as President of the Ophthalmological Section of the Royal Society of Medicine.

LANG, W.

Methodical examination of the eye.

Longmans, Green & Co., 1895. 96p. 15 ill.

Aimed at students, providing information on the external examination of the eye, the orbit, lids, conjunctiva, cornea, iris etc., vision, colour vision, tests for binocular vision and ophthalmoscopic examination.

LANGSDORF, Karl Christian

Grundlehren der photometrie der Optischen Wissenschaften. Volume 1.

Johann Jaco Balm, Erlangen, 1803. 517p. ill.

LANGSDORF, Karl Christian

Grundlehren der photometrie der Optischen Wissenschaften. Volume 2.

Johann Jaco Balm, Erlangen, 1805. 542p. ill.

Two books outlining the theories of light, dioptric principles, measurement of light etc., images cast by rays which are reflected from mirrors. Detailed accounts of different kinds of telescopes and microscopes and their properties.

Dionysius Lardner (1793-1859)

Irish physical scientist who was educated at Trinity College, Dublin, best known as the editor of Lardner's Encyclopaedia, 132 volumes on scientific subjects published between 1830 and 1844. In 1828 Lardner was professor of Natural Philosophy and Astronomy at University College London, but lost the chair in 1840 when he ran away with the wife of an army officer who demanded a huge sum in damages. He spent some years lecturing in the USA and then settled in Paris from 1845-1859.

LARDNER, Dionysius

Handbook of natural philosophy. Optics.

Walton & Maberly, London, 1861. 432p. 290 ill.

Investigations on light, reflection and refraction, properties of lenses, chromatic aberration, interference and diffraction, polarisation of light, the eye, optical instruments, spectacles etc.

Auguste Laugel (1830-1914)

LAUGEL, Auguste
L'optique et les arts.
Germer Bailliere, Paris. 1869. 152p. 3 ill.

Describes the eye as an optical instrument, the phenomena of vision, principles of colour vision and formation of images.

LAURANCE, Lionel
The eye, its elementary anatomy, physiology and optical constants.
The Orthos Press, London, 1908. 100p. 23ill.

LAURANCE, Lionel
General and practical optics.
The Orthos Press, London. 363p. 345 ill.

LAURANCE, Lionel
General and practical optics. 2nd edition.
Lionel Laurance, 1914 363p. 345 ill.

Primarily aimed at students sitting optical examinations. Covers the properties of light, varieties of lenses, the methods of transposing, theories of colour, the principles of chromatic aberration and polarisation.

LAURANCE, Lionel & WOOD, H. Oscar
General and practical optics. 4th edition.
School of optics, London 327p. 320 ill.

LAURANCE, Lionel
Visual optics and sight testing.
Lionel Laurance, London, 1912. 396p 151 ill.

Covers the anatomy and physiology of the eye, the preliminaries to sight testing, the correction of errors of refraction, methods of subjective sight testing, the principles of keratometry, retinoscopy and ophthalmology.

John Zachariah Laurence (also Lawrence) 1830-1874)

Born in Paris and educated at University College, London, he practised in London, founding the Ophthalmic Hospital at Southwark in 1857 and serving on its surgical staff until 1873. With Thomas Winson he founded the 'Ophthalmic Review' which only survived for three editions but which was revived in 1881. Shortly after Giraud-Teulon introduced the first binocular indirect ophthalmoscope Laurence collaborated with C. Heisch to produce a new instrument.

LAURENCE, John Zachariah
Optical defects of the eye and their consequences, asthenopia and strabismus.
Robert Hardewicke, London, 1865. 112p. 30 ill.

Optical considerations on myopia, hypermetropia, astigmatism, presbyopia, paralysis of accommodation, asthenopia and the connection between convergent strabismus and hypermetropia.

LAURENCE, John Z and MOON, Robert
A handy book of ophthalmic surgery.
Robert Hardwicke, London 1866. 160p 63 ill.

Methods of examining the eye; ophthalmic operations; the treatment of diseases and injuries of the structures of the eye and of optical defects of vision.

M. Andreas Laurentius (1558-1609) also known as André du Laurens

Received his MD from Montpellier where he taught until 1598 when his reputation as a teacher and physician led to his appointment as physician to Henri IV

LAURENTIUS, M. Andreas

A discourse of the preservation of the sight: of melancholike diseases; of rheumes, and of old age.

Translated by Richard Surphlet

Shakespeare Association Facsimiles No. 15 - facsimile of the 1599 edition
Oxford University Press, London 1938 194p.

Ophthalmology for the layman

Sir William Lawrence (1783-1867)

Educated at St Bartholomew's Hospital London where he subsequently became chief surgeon and lecturer on anatomy and surgery from 1827-1865. He was also surgeon at the Royal Ophthalmic Hospital, Moorfields from 1814-1826

LAWRENCE, William

A treatise on the diseases of the eye.
John Churchill, London. 1833. 820p.

LAWRENCE, William

A treatise on the diseases of the eye. 3rd edition
Henry Bohn, London. 1844. 820p

Includes chapters on the pathology of the eye, affections of the eyelids, conjunctiva, choroids, retina, lens, injuries of the eyeball, ophthalmic inflammation, amaurosis, and cataract.

LAWRENCE, William

A treatise on the venereal diseases of the eye.
John Churchill, London. 1833. 227p.

Nature, treatment and symptoms of venereal diseases affecting the eye, including gonorrhœal inflammation of the conjunctiva, external tunics, and iris and syphilitic diseases of the eye.

Lawrence, William see Adams, Sir William

George Lawson (1831-1903)

Trained at King's College Hospital, London and after serving in the Crimea set up a London practice in ophthalmic and general surgery. He was surgeon at the Royal Ophthalmic Hospital, Moorfields from 1862-1891 and was appointed surgeon-oculist to Queen Victoria in 1886.

LAWSON, George

Diseases and injuries of the eye their medical and surgical treatment. 2nd edition. Henry Renshaw, London, 1874 400p. 90 ill.

Aims at presenting all the medical and surgical affections of the eye, with the treatment essential for their relief. Includes a chapter on the anomalies of refraction and accommodation.

LAWSON, George

Diseases and injuries of the eye their medical and surgical treatment. 5th edition. Henry Renshaw, London, 1885 452p. 99 ill.

LAWSON, George

Diseases and injuries of the eye their medical and surgical treatment. 6th edition. Smith, Elder & Co, London, 1903 587p. 251 ill.

Deals with elementary optics, general principles of ocular refraction; methodical examination of the eye, ; hypermetropia; presbyopia; myopia; astigmatism; retinoscopy; prescribing of spectacles; diseases and structures of the eye and injuries.

LAWSON, George

Injuries of the eye, orbit and eyelids their immediate and remote effects. Longmans, Green & Co., London, 1867. 430p. 92 ill.

Describes the treatment of superficial injuries to the eye from burns, scalds and chemicals and penetrating wounds. Includes foreign bodies in the eye, the removal of traumatic cataract, intraocular haemorrhage, rupture of the globe and orbital fractures.

Nicholas Le Cat (1700-1768)

Studied medicine in Paris and settled in Rouen where he became chief surgeon at the Hôtel Dieu in 1736 and established a school of anatomy and surgery in 1736. In 1744 he became a founder member of the Rouen Academy des Sciences. He was a surgical innovator who developed new methods for lithotomy and the treatment of lacrimal fistulae.

LE CAT, Claud Nicholas

Traite des sens.

Rouen, 1740 323p ill. Note odd pagination

The anatomy and physiology of the sense organs are described in a philosophical manner by the author who was an eminent French surgeon of the period.

Joseph Le Conte (1823-1901)

American geologist and physiologist who, after graduating from Harvard, taught at the universities of Georgia and California.

Le CONTE, Joseph

Sight: an exposition of the principles of monocular and binocular vision.

C. Kegan Paul & Co, London. 1881. 275p 132. ill

The author's best known work, the chapters on binocular vision and the laws of parallel and convergent motion of the eyes and horopter being considered classics of their kind.

LEES, William

Acoustics light and heat.

William Collins and Sons, London 320p. 210 ill.

LEES, William

Elements of light, heat and acoustics.

William Collins and Sons, London. 176p 98ill.

A basic textbook dealing with theories of light, reflection, refraction, structure of the eye, vision, long and short sight, spectacles. Prisms, solar spectrum, colour and chromatic aberration.

LEMNIUS, Levinus

De miraculis occultis naturae, libri IIII Item de vita cumanimi et corporis incolumitate recte instituenda, liber unus.

Tobias Steinmann, Jena 1588. 716p.

LENDON, E. H.

Atlas of diagrams to accompany the method of Cuignet or retinoscopy.

London, 1902 13p 13 ill.

LENDON, Edwin Harding

The method of Cuignet or retinoscopy. A thesis for the degree of MD.

Bailliere, Tindall & Cox, London. 1902. 66p.

A definition of the shadow test, the development of the theory of retinoscopy, methods of examination by these means and the apparatus required.

Charles le Roy (1726-1779)

French physicist and physician educated at Montpellier where he became professor from 1757-1777. His most important scientific contribution was to physics when in 1751 he published a theory of evaporation which, although it was incorrect in some details was more accurate than any previous theory and was a stepping-stone for Lavoisier and Dalton.

LE ROY, Charles

Melanges de physique et de medecine.

P.G. Cavalier, Paris, 1771 400p. ill.

Includes information about the mechanisms of vision which allow for accommodation to different distances.

LEROY, Lewis
Essentials of histology.
W.B. Saunders, Philadelphia.1900. 231p. 72 ill.

LEUTMANN, Johann Georg & HERTEL, C. G.
Johann Georg Leutemann's neue Anmerckungen vom Glasschleiffen, nebst allerhand
neuen optischen instrumenten... Zur Erla
Rengerischen Buchhandlung, Halle, 1738 96p. ill.

An account of the methods of grinding glass, describing the instruments used and the
construction of some optical instruments.

LEVY, W. Hanks
Blindness and the blind, or a treatise on the science of typhology.
Chapman & Hall, London, 1872. 518p.

LEWIS, James J.
Pocket ophthalmic dictionary including pronunciation, derivation and definition of the
words used in optometry. 7th edition.
Chicago, 1916 286p. ill.

LEWIS, James J.
State board examinations, questions and answers.
James J Lewis, Chicago, 1919. 123p. 75 ill.

Questions from different American State Board optometric examinations and brief
answers covering practical optics, the anatomy and physiology of the eye,
pathological conditions, the treatment of refractive errors etc.

L.F.D.
L'ophthalmophile, ou l'ami de l'oeil. Essai sur l'influence physique de la lecture sur
la vue l'homme, et sur l' moyens d'en diminuer les funestes effets.
Text followed by 'Merte des Femmes' poeme by Gabriel Legouve.
Les Freres Delemer, Brussels, 1820.

LIBAUDE and BONGARD, De ROQUIGNI
Memoire sur les moyens de perfectionner l'espece de cristal necessaire a la
construction des lunettes achromatiques.
L'Imprimerie Royale, Paris. 1775. 32p.

Dollond's use of crown and flint glass to achieve achromatism was criticised for its
lack of clarity by the French Royal Academy of Science. Libaud was instructed to
make something better. This work describes his experiments and the substances he
finally chose to make achromatic glass.

LIEBKNECHT, Georg & ALBRECHT, C.
Diatribes Academica de speculis causticis.
Tobias Oerlingius, 1704. 112p.

Richard Liebreich (1830-1917)

German ophthalmologist who was assistant to von Graefe in Berlin from 1854 to 1862. He produced the very first atlas of ophthalmoscopy. His great interest was in the use of the ophthalmoscope to observe the changes in the eye wrought by disease. In 1859 he gave a detailed description of the changes caused by nephritis.

LIEBREICH, R.

Atlas of ophthalmology. 2nd edition. Translated by H. R. Swanzy.
London, 1870. 31p. 12pl.

The first atlas of the fundus. The first German edition was published in Berlin and Paris in 1863. Liebreich was assistant to Helmholtz at the time that Helmholtz developed his ophthalmoscope. Includes information on the normal fundus, staphyloma posticum, diseases of the choroids and retina, detachment of the retina, changes of the optic disc, congenital anomalies etc.

LIEBREICH, R.

Atlas of ophthalmology. 3rd edition. Translated by H. R. Swanzy.
J. & A. Churchill, London, 1885

LINK, Heinrich Friedrich

Über die Natur des Lichts.

Akademie der Wissenschaften, St Perdsburg, 1808. 287p

LINNELL, E. H.

The eye as an aid in general diagnosis. A handbook for the use of students and general practitioners.

The Edwards & Docker Co. Philadelphia, 1897. 248p. 11 ill.

Analyses the symptoms of nervous and constitutional eye diseases. Discusses the ophthalmoscopic diseases of the fundus; the relation of ocular affections to functional nervous diseases and ocular affections of toxic origin. Includes a table of ocular diseases with characteristic symptoms.

Squier Littell (1803-1886)

Educated at the University of Pennsylvania. The textbook below was an influential work. Littell also edited the 'Monthly Journal of Foreign Medicine'.

LITTELL, S.

A manual of diseases of the eye. Revised by H. Houstoun
John Churchill, London, 1838. 307p.

An ophthalmology textbook detailing diseases of the structures of the eye, the treatment of wounds, errors of refraction and the prescribing of spectacles.

Humphrey Lloyd (1800-1881)

Educated at Trinity College, Dublin where he became professor of natural and experimental science in 1831. His optical discoveries supported the wave theory of light and contributed to knowledge on the properties of reflection and refraction. He also researched the earth's magnetic field and helped establish a system for

simultaneous measurements at observation posts worldwide, demonstrated the existence of electrical currents in the earth's crust and calculated their effect on the daily variations on the magnetic field.

LLOYD, Humphrey,

Elementary treatise on the wave-theory of light. 2nd edition.

Longman, Brown, Green, Longman and Roberts, London, 1857. 208p. 28 ill.

LLOYD, Humphrey

Elements of optics.

Hodges and Smith, Dublin, 1849 115p. ill.

An abridgement of the author's 'Treatise on light and vision' containing principles of light; structure of the eye; vision through a system of lenses and through mirrors and lenses combined.

LLOYD, Humphrey

A treatise on light and vision.

Longman, Rees, Orme, Brown and Green, London 1831. 402p. ill.

Part one offers the theory of simple light, principles of reflection and refraction, aberration in refraction. Part two provides the theory of compound light, dispersion of light by a combination of prisms or lenses, conditions of achromatism and phenomena of colour. Part three gives the laws of vision and the principles of optical instruments.

LLOYD-OWEN, D.C.

The elements of ophthalmic therapeutics, being the Richard Middlemore Postgraduate Lectures delivered at the Birmingham Midland Eye Hospital, 1889.

Cornish Brothers, Birmingham, 1890. 68p.

LLOYD-OWEN, D.C.

Pain in eye disease, its character and relief The Richard Middlemore Postgraduate Lecture delivered at the Birmingham & Midland Eye Hospital, 1896.

Hall & English, 1897. 22p.

LOBE, Johannes Petrus

Dissertatio medica inauguralis de oculo humano.

Samuel Luchtmans, Leyden. 1742. 53p.

A detailed description of the anatomy of the human eye. Includes frequent references to earlier writers in the field.

LOCKWOOD, R.M.

Frames and lenses. A practical treatise for optometrists.

Frederick Boger Pub. Co., New York, 1905. 87p. 9 ill.

LOCKWOOD, R.M.

The principles of optometry. An illustrated textbook with questions.

Frederick Boger Pub. Co. New York, 1903. 144p 83 ill.

LOCKYER, J. N.

Das Stereoskop und seine Anwendung eine Übersichtliche darstellung des gesammten gebietes der spectralanalyse.

George Westermann, Brunswick. 1874. 136p. 63 ill.

Description of the construction and use of the spectroscope. Discusses the different varieties and the basic principles of spectrum analysis.

LOHMANN, W.

Disturbances of the visual functions. Translated by Angus Macnab.

John Bale & Sons & Danielsson Ltd, London, 1913. 185p. 39. Ill.

Covers disturbances in vision caused by refractive conditions of the eye, abnormalities in central and peripheral vision. The sense of colour and binocular vision etc.

LOMMEL, Eugene

The nature of light with a general account of physical optics. 2nd edition.

E. Kegan Paul & Co. London, 1880. 356p. 189 ill.

The first 14 chapters are on the laws of reflection, refraction and the dispersion of light, demonstrated by experiments. Theories of light are discussed and the undulatory theory as explaining the phenomena of double refraction and polarisation.

Sir Thomas Longmore (1816-1895)

A military surgeon who, after training at Guy's Hospital joined the army and served in North America, the Crimea, India etc. In 1872 he was made Surgeon General and was knighted in 1886. Longmore was one of the founders of the Geneva convention (1864) and represented the British Government on several international conferences on aid to the sick and wounded in wartime.

LONGMORE, T.

The illustrated optical manual or handbook of instruction for the guidance of surgeons in testing quality and range of vision and in distinguishing and dealing with optical defects in general. 4th Edition

Longmans, Green & Co. London, 1888

LONGMORE, T.

The optical manual or handbook of intructions for the guidance of surgeons in testing the range and quality of vision of recruits and others seeking employment in the military services. 3rd edition

HMSO, London, 1885 184p.

L'optique comprenant la cognoissance de l'oeil, de la lumiere et des couleurs.

Francois Pelican, Paris. 1645. 15p. ill.

Edward Greely Loring (1837-1888)

An American ophthalmologist who studied medicine in Florence and Pisa before Harvard Medical School, he is best remembered for his works on the use of the

ophthalmoscope and for his invention of an improved version – the Loring ophthalmoscope.

LORING, Edward G.

Textbook of ophthalmoscopy part 1.. the normal eye, determination of refraction, diseases of the eye, diseases of the media physiological optics and the theory of the ophthalmoscope.

Henry Kimpton, London, 1892 274p. ill.

LORING, Edward G.

Textbook of ophthalmoscopy part 2. Edited by Francis B. Loring. Diseases of the retina, optic nerve and choroid, their varieties and complications.

Hirschfeld Brothers, London, 1891. 260p. 72 ill.

Joseph William Lovibond (1833-1918)

The inventor of the tintometer, a device widely used in the arts and for blood testing

LOVIBOND, Joseph W.

Light and colour theories, and their relation to light and colour standardisation.

E.& F. N. Spon Ltd., London, 1915. 90p. 22 ill.

A thesis to prove that the power of record and recovery of a definite colour is possible and depends only on the observance of a few natural laws. Methods of colour analysis and synthesis which have proved of practical value in establishing standards of purity in some industries are outlined.

LOVIBOND, Joseph W.

Measurement of light and colour sensations a new method of investigating the phenomena of light and colour by means of the selective absorption in coloured glass, graded into scales of equivalent colour value.

George Gill & Son, London, nd. 132p. 36 ill.

This provided reliable colour standards for manufacturing and scientific purposes.

Benjamin Thompson Lowne (1839-1925)

A surgeon and naturalist. He lectured on anatomy and physiology at the Middlesex Hospital Medical School from 1871-1895 and at the Royal College of Surgeons from 1876-1893. He was more interested in research in anatomy, physiology and embryology than in clinical medicine.

LOWNE, B. Thompson

A manual of ophthalmic surgery.

Smith, Elder & Co., London, 1876. 194p. 4 ill.

A short account of diseases and surgical procedures on the eyes, with chapters on lenses, the ophthalmoscope and refraction.

Philip Bennet Lucas (1804?- 1856)

British surgeon who wrote the first treatise on operation for strabismus and performed the first such surgery. He lectured at the Hunterian School of Medicine and was

president of the Harveian Society from 1843-1844 before losses in financial speculation forced him to flee to France, where he built up a very successful practice.

LUCAS, P. Bennett

A practical treatise on the cure of strabismus or squint by operation, and by milder treatment with some new views of the anatomy and physiology of the muscles of the human eye.

Samuel Highley, London 1840. 91p. ill.

LUCINO, Paullo

Opticae juxta Newtonianas leges.

In Aedibus Palatinis, Parmae, 1793. 119p.

Four books of Latin verse describing a considerably embellished form of Newton's Laws of Optics.

Johann Melchior Luther (1725-1788)

LUTHER, Johann Melchior

De inflammatione tunicarum oculi.

Johann Christoph Hering, Erfurt. 1753. 30p.

A doctoral dissertation on the inflammation of the conjunctiva.

LYMAN, Theodore

Spectroscopy of the extreme ultra-violet.

Longmans, Green & Co. London, 1914. 135p. 16 ill

MAC-CULLAGH, James

Memoire sur les lois de la reflexion et de la refraction cristallines

Paris, 1842. 49p. ill.

A mathematical expression of the laws of reflection of rays of light from a transparent medium. States and criticises the principles of Fresny and Cauchy.

MACFADDEN, Bernarr

Strong eye: how weak eyes may be strengthened and spectacles discarded.

Physical Culture Publishing Co., New York, 1901 112p. 27 ill.

William Mackenzie (1791-1868)

Studied medicine at the Royal Glasgow Hospital and ophthalmology in London, Paris, Vienna and Italy before setting up in practice in Glasgow. Together with George Monteith he founded the Glasgow Eye Infirmary in 1824 and from 1827-1868 taught ophthalmology at Glasgow University. He introduced the term 'asthenopia' and was the first to describe sympathetic ophthalmia as a distinct disease

MACKENZIE, William

The physiology of vision.

Longman, Orme, Brown, Green & Longmans, London, 1841. 292p. ill.

MACKENZIE, William

A practical treatise on diseases of the eye. 3rd edition. Longman, Orme, Brown, Green & Longmans, London, 1840. 953p. ill.

Regarded as one of the most important 19th Century books on ophthalmology. First published in 1830. An anatomical introduction explains a horizontal section of the human eyeball. Includes sections on pathology and treatment of the diseases of the eye, injuries to the eyeball etc. Also includes case histories.

MACKINNEY, Val H. and TAYLOR, Harry L.

Geometrical optics.

J & H Taylor, 1908

Brief treatise on the nature and properties of light, reflection and refraction, chromatic and spherical aberration, ocular refraction, thick lenses and lens systems, the position of corrective lenses and aids to normal vision.

Colin Maclaurin (1698-1746)

Scottish mathematician, educated at Glasgow University. He became professor of mathematics at Marischal College, Aberdeen from 1717-1722 and Edinburgh University from 1725-1746. He was a friend of Newton and a staunch supporter of his theories.

MACLAURIN, Colin

An account of Sir Isaac Newton's philosophical discoveries in four books.

A. Millar, London, 1750, 412p. ill.

MacLaurin was, after Newton, the outstanding British mathematician of the day. Some of his work has been held to be of similar importance to that of Archimedes. The final chapters were dictated on the author's deathbed and the first edition was published posthumously.

MACLAURIN, Richard C.

The theory of light: a treatise on physical optics. Part 1.

Cambridge University Press, Cambridge. 1908. 326p. 134 ill.

MACMILLAN, Angus

The eye an index of character, health and disease.

Whitaker & Co. London. 1864. 103p.

MACNAB, Angus

Ulceration of the cornea

Bailliere, Tindall & Cox, London. 1907. 196p. 20 ill

Nottidge Charles Macnamara (1832-1918)

After studying at King's College Hospital Macnamara served in India as a civil and military surgeon from 1854 to 1876 and from 1863-1876 he was professor of ophthalmic surgery at the Calcutta Medical College. In the 1870's he posited the theory that cholera was a waterborne infection but his work was ignored and later

Koch gained the credit for this discovery. He returned to England in 1876 and became surgeon to the Royal Westminster Ophthalmic Hospital

MACNAMARA, N. C.

Diseases and refraction of the eye. 5th ed.
J & A Churchill, London. 1891. 573p. 161 ill.

MACNAMARA, N. C.

A manual of the diseases of the eye.
John Churchill & Sons, London. 1868 571p. 67 ill.

Ernest Edmund Maddox (1860-1933)

Educated in Edinburgh he became surgeon at the Royal Edinburgh Infirmary and the Royal Victoria and West Hants Hospital. He invented the Maddox rod and the Maddox prism, devices for testing the deviation of the eye.

MADDOX, Ernest E.

The clinical use of prisms and the decentering of lenses.
John Wright, Bristol, 1889. 113p. 38 ill.

A series of aids to accuracy in the use of prisms, covering the properties of prisms, the testing and adjusting of the apex, the composition and resolution of prisms, the use of prisms in the diagnosis of heterophoria, prismatic aberration and the function of convergence.

MADDOX, Ernest E.

The clinical use of prisms and the decentering of lenses. 2nd edition
John Wright, Bristol, 1893. 170p. 69 ill.

MADDOX, Ernest E.

The clinical use of prisms and the decentering of lenses. 5th edition
John Wright, Bristol, 1907. 205p. 87 ill.

MADDOX, Ernest E.

Tests and studies of the ocular muscles. 2nd edition
The Keystone Publishing Co., Philadelphia, 1907. 261p. 110 ill.

MAGINI, Georgio Antonio

Breve instruttione sopra l'apparenze et mirabili effetti dello specchio concavo sferico.
Clemente Ferroni, Bologna. 1628. 39p. ill.

Experiments on the theory and practice of spherical mirrors, invented by Magini, an astronomer of the University of Bologna. They were used for a variety of purposes including discovering the different temperatures of the sun at different seasons. Explains and illustrates the construction of these mirrors and lenses and shows how they can benefit those with poor vision. He also calculates the size to which it is possible to magnify the image.

MAIGNAN, Emanuel

Perspectiva horaria, sive de horographia gnomonica tum theoretica tum practica.

Philippi Rubei, Rome, 1648. 705p ill.

Maignan was a priest belonging to the circle of experimenters in Rome (the group which included Kircher, Magiotti and Berti) and was once described by Bayle as ‘ one of the greatest philosophers of the seventeenth century) This text is a detailed discussion of sundials and also discusses a variety of optical and astronomical instruments, the theory and technique of lens grinding and telescope making in addition to presenting a detailed exposition of the theory of light.

Antoine Maitre-Jan (1650-1725)

Studied in Paris and then returned to his native Méry-Seine where he practiced as an ophthalmic surgeon. In the 1680’s he realised that the current theory that a cataract was a membrane that had formed behind the iris was incorrect and it was in fact a opacification and hardening of the crystalline lens, a theory which Brisseau had published two years earlier. He confirmed the accuracy of these observations by post-mortem examination.

MAITRE-JAN, Antoine

Traite des maladies de l’oeil et remedies propres pour leur guerison.
Laurent D’Houry, Paris, 1722. 672p.

Hirschberg described this as ‘the first nearly complete and systematic textbook of ophthalmology since the time of the classical Arabian authors. As well as his theory of cataract formation this work describes the use of chemical fixatives, the onion like structure of the lens, and the fibrous fluid consistency of the vitreous humour.

MALUS, E. L.

Theorie de la double refraction.
Garnery, Paris, 1810. 320p. ill.

Domenico Manni (1690-1788)

The Italian author of the first history of spectacles

MANNI, Domenico Maria

Degli occhiali da naso inventati da Salvino Armati.
Anton-Maria Albizzini, Firenze, 1738. 84p. ill.

The first part discusses the use of spectacles in antiquity and concludes that they were unknown to the ancients. The second part discusses varieties of lenses: concave, plano and convex and their use in magnifying objects etc. The particular interest is the author’s pride as a Florentine citizen that the invention of spectacles came from Florence. In chapter 7 Manni quotes Leopoldo del Migliore the memorial to Salvino degli Armati which describes him as the discoverer of spectacles.

Carlo Antonio Manzini (d.1687)

Astronomer of Bologna and one of the founders of the Accademia dei Vespertini.

MANZINI, Carlo Antonio

Dioptrica practica
Heirs of Benacci, Bologna, 1660. 260p. ill.

Probably the earliest practical account of grinding and polishing lenses.

Jean Paul Marat (1743-1793)

French scientist and, although born in Switzerland a major figure of the French Revolution. He lived and practised in London from 1760-1777. From 1792-1793 he was a leading member of the French National Convention. He was opposed by the conservative Girondin faction and was assassinated by one of its adherents, Charlotte Corday.

MARAT, Jean Paul

Decouvertes sur la lumiere constatees par une suite d'periences nouvelles.

Jombert, London, 1870. 141p.

Develops Newtonian theories, in particular on inflexion, attraction and decomposition of light and the phenomena of colour.

MARAT, Jean Paul

Memoires Academiques, ou Nouvelles decouvertessur la lumiere.

N. T. Mequignon, Paris, 1788. 324p. ill.

MARION, F.

L'optique,

Librairie de L. Hachette et Cie, Paris, 1867. 386p. 752 ill.

Deals with the principles of light and colour and visual illusions and games based on light.

MARION, F.

The wonders of optics. Translated and edited by C. W. Quin

Sampson Low, Son & Marston, London 1868. 248p. 74 ill.

Edme Mariotte (1620-1684)

Mariotte was a French physicist and priest who was born in Burgundy in 1620. He was Prior of St Martin-sous-Beaune and died in Paris in 1684. He is best known for his investigations of the blind spot. He was the first recorded person to investigate the visual function of the optic papilla and found that the optic end of the optic nerve was devoid of any sort of light perception. From his election in 1667 until his death he played a leading role in the work of the Paris Académie des Sciences.

MARIOTTE, Edme

Nouvelle decouverte touchant la veue. Extrait d'une lettre de M. l'Abbe Marriotte a M Pecquet.

Frederick Leonard, Paris, 1668. 27p. ill.

The first edition of Mariotte's work on his discovery of the blind spot, a discovery which involved him in much controversy.

MARIOTTE, Edme

Quatrieme essay de la nature des couleurs.

Etienne Michallet, Paris, 1681. 750p. ill.

Attacks Newton's theory of colour and describes the coloured rings around the sun and discusses major and minor halos

MARK, Leonard Portal

Art and medicine. Being the Presidential address delivered at the inaugural meeting of the West London Medico-chirurgical Society, Session 25.

Discusses pictures with medical interest, the representations of disease and illness.

MARRIAGE, Ernest

Elementary telephotography

Iiffe & Sons, London 1901. 117p. 49 ill.

MARSHALL, Percival

Practical lessons in metal turning, a handbook for young engineers and amateur mechanics.

Dawbarn & Ward Ltd., London. 166p. 193 ill

Benjamin Martin (1704-1782)

A self-taught scientific instrument maker who worked as a school teacher and travelling lecturer.

MARTIN, Benjamin

An essay on visual glasses (vulgarly called spectacles). 4th edition

The author, London. 1758. 24p. ill. Pamphlet

MARTIN, Benjamin

New elements of optics or the theory of the aberrations, dissipations and colours of light...

The author, London, 1759. 250p. ill.

Describes the nature, construction and use of optical instruments, the telescope, microscope, camera obscura, magic lantern etc. Also covers the structure of the eye, defects of vision and means of remedying them with glasses.

MARTIN, Benjamin

A new and compendious system of optics.

James Hodges, London, 1740. 295p. ill.

MARTIN, Benjamin

The young gentleman and lady's philosophy in a continued survey of the works of nature and of art, by way of dialogue. Volume 1.

W. Owen, London, 1759. 410p. ill.

MARTIN, Benjamin

The young gentleman and lady's philosophy in a continued survey of the works of nature and of art, by way of dialogue. Volume 2.

W. Owen, London, 1763. 412p. ill.

Contains 'instructive' dialogues on the sky, sun and stars.

Éleuthère Élie Nicolas Mascart (1837-1908)

MASCART, E.
Traite d'optique. Tome1.
Gauthier-Villars et fils, Paris.1889. 638p. 201 ill.

MASCART, E.
Traite d'optique. Tome2.
Gauthier-Villars et fils, Paris.1891. 643p.

MASCART, E.
Traite d'optique. Tome 3.
Gauthier-Villars et fils, Paris.1893. 692p.

Deals with the nature and properties of light, theories, interference, diffraction and polarisation.

Michel Julien Masselon (1844-1917)

French ophthalmologist , a pupil of de Wecker.

MASSELON, J.
Examen fonctionnel de l'oeil.
Octave Doin, 1882. 243p, 11 ill.

MATHESIPHILUS

Otis mathematica, seu opusculum tripartum. I. De horologiis Sciathericis. II. De optica delineatoria. III. De optica Mechanica, sive de arte tenendi vitra ad tubum serven.

Wolfgang Mauritius, Salisburgi 1719. 232p ill.

Covers the working of clocks, some of the principles of optics and different varieties of glass.

Burchard David Mauchart (1696-1751)

Studied medicine at Tübingen where he eventually settled, becoming court physician to the Duke of Württemberg and professor of anatomy and surgery.

MAUCHART, Burchard David
Ophthalmiatria
Hiob. FrankTubingae, 1726. 28p.

MAUCHART, D.
Dissertation on artificial eyes. 1749
Included as an appendix in HAZARD-MIRAULT, ' L'oeil artificiel'

Francesco (Franciscus) Maurolico (Maurolicus, Maurolycus) (1494-1575)

A Benedictine monk, mathematician, physicist and astronomer who taught mathematics at the University of Messina. He is chiefly remembered for 'Photisme de lumine et umbra' Venice, 1597 in which he overthrew the Gallenic doctrine that the essential organ of vision is the crystalline lens. His is the first recorded correct explanation of short sight and long sight, attributing these problems to the curving of the ocular lens.

MAUROLICO, Francesco

Theoremata de lumine et umbra, ad perspectivam, et radiorum incidentiam facientia. Bartholomaeus Vincentius, Lugduni, 1613. 94p. ill.

Ludwig Wilhelm Mauthner (1840-1894)

Studied at the University of Vienna where he lectured on ophthalmology from 1864-1869 and from 1877 to 1894. He was an authority on ophthalmoscopy, refraction, motor anomalies of the eye and is credited with the introduction of schlerotomy for the treatment of glaucoma.

MAUTHNER, Ludwig

Lehrbuch der Ophthalmoscopie

Viena 1868. 468p. 42 ill

Discusses the discoveries of Helmholtz and methods of examination with the ophthalmoscope.

MAYER, Alfred M. and BARNARD, Charles

Light. A series of simple entertaining and inexpensive experiments in the phenomena of light for the use of students of every age.

London, 1878. 89p. 29 ill.

MAYNARD, F.P.

Manual of ophthalmic operations.

Thacker, Spink & Co. Calcutta, 1908

MAYNARD, F.P.

Manual of ophthalmic operations. 2nd edition.

E & S Livingstone, Edinburgh, 1920. 316p. 143 ill.

MAYOU, M. Stephen

Diseases of the eye.

Henry Frowde, London, 1908. 388p. 127 ill.

MAYOU, M. Stephen

Diseases of the eye. 3rd edition

Henry Frowde, London, 1920. 326p. 151 ill.

A short practical manual dealing with methods of examination, elementary optics and refraction, diseases of the structures of the eye, disorders of the extra-ocular muscles, movements of the eye and operations.

MAYRAN, Dortous de

Dissertation sur la cause de la lumiere des phosphores et des noctiluques.
R. Brun. Academie Royale, Bordeaux. 1717. 54p.

This dissertation was awarded the prize of the Royal Academy of Bordeaux. It covers the propagation of light, different theories of light and the nature and cause of phosphorescence and the objects which give rise to it.

McCAW, W.

How to use a trial case of lenses for the proper adjustment of glasses to defective refraction.

Geneva, 1898. 97p. 30 ill.

McGREGOR-ROBERTSON, J.

The elements of physiological physics and outline of the elementary facts, principles and methods of physics, and their application in physiology.

Cassell & Co. London. 1844. 528p. 219 ill.

McKENDRICK, John Gray

Hermann Ludwig Ferdinand von Helmholtz.

T. Fisher Unwin, London. 1899. 299p. 1 ill.

McKENDRICK, John Gray & SNODGRASS, W.

The physiology of the senses. London 1893. 318p. 127 ill.

MEES, C.E.K.

The fundamentals of photography.

Eastman Kodak Company, 1928. 125p. ill

Aims to provide an elementary account of the theoretical foundations of photography.

MEISEL, Ferdinand

Atlas zum lehrbuch der Optik.

Bernhard Friedrich Voigt, Weimar, nd

MEISEL, Ferdinand

Lehrbuch der Optik. 3rd edition.

Bernhard Friedrich Voigt, Weimar, 1889. 500p.

MENSERT, W.

Nog iets over die brillen.

R. Stemvers, Amsterdam, 1846 92p.

MENSERT, W.

Verhandeling aangaande de uitvinding, het gebruik en het misbruik der brillen.

G. Portielje, Amsterdam, 1846. 199p.

Girolamo Mercurialis (1530-1606)

A famous physician and professor at Padua, Bologna and Pisa

MERCURIALI, Girolamo

Tractatus, de compositione medicamentorum. De morbis oculorum & aurium.
Juntas, Venetiis, 1601 102p.

This book contains treatises on medicaments and on diseases of the eye and ear. His knowledge of these subjects was derived from the ancients and Arabic scholars.

Père Marin Mersenne (1588-1648)

A close friend of Descartes, Gassendi and Roberval and a frequent correspondent of Galileo and Hobbes. His critical examination of other scientists' results made him an eminent figure in a circle of great men.

MERSENNE, Père Marin
L'Optique et la catoptrique.
F. Langlois, Paris. 1651 pp134

This posthumous publication is bound with Nicéron's work on perspective.

MERSIUS, Joannes, the elder & SPON, Jacob
J. Meursii Theseus, sive de ejus vita resque gestis liber postumus. Accedunt ejusdem Paralipomena de pages Atticus et excerpta ex V.CL Jacobi Sponii Itinerario de iisdem pages.
Ultrajecti, 1684

MERY, M.
De la cataracte et du glaucome.
France, 1708. 5p.

MÉTAXAS, Stavros-Jean
De l'exploration de la rétine, et des alterations de cette membrane visibles a l'ophthalmoscope.
L. Leclerk, Paris 1861. 166p. 3 engraved plates.

First edition of an early and uncommon work on the exploration of the retina by the ophthalmoscope, including many case histories. The two colour plates show 8 representations of the retina and the 3rd plate shows Follin's ophthalmoscope.

Édouard Meyer (1838-1902)

A German ophthalmologist who after three years study under von Graefe settled in Paris. He wrote extensively on the diseases of the eye and was for many years the editor of 'Revue Général d'Ophthalmologie'.

MEYER, E.
Handbuch der Augenheilkunde.
Hermann Peters, Berlin. 1883. 592p. 244 ill.

The third edition of a detailed description of the diseases of the eye.

MEYER, Edouard
Lecons sur la refraction et l'accommodation Edited by A. L. Roulet.
Librairie Chamerot et Lauwereyns, Paris, 1869. 270p. 56 ill.

MEYER, Edouard

A practical treatise on diseases of the eye. Translated by Freeland Fergus.
Charles Griffin & Co. London, 1887. 637p. 268 ill.

A detailed description of the diseases of the eye, their diagnosis and treatment, the principles of accommodation and refraction and their anomalies and the muscles of the eye.

Joannes Michaelius (1568-1651)

MICHAELIUS, Joannes

Oculi fabrica, actio, usus, seu de natura visus.

David Lopez de Haro, Lugduni Bataurum, 1649. 12op. Ill.

A complete treatise on the anatomy and physiology of the eye including the structure of the eye, the nature of light, principles of vision etc.

A.A. Michelson (1852-1941)

Awarded the 1907 Nobel prize in physics ‘for his optical precision instrument and the spectroscopic and metrological investigations he has carried out with it’. Also wrote ‘Studies in Optics’ (1927).

MICHELSON, A.A.

Light waves and their uses.

The University of Chicago Press, Chicago, 1907. 166p. ill.

A series of eight lectures, including papers on “Wave motion and interference”, “Application of interface methods to spectroscopy” and “Light waves as standards of length”. It was the author’s experiment showing that light travelled more slowly in water than in air that finally disproved Newton’s corpuscular theory of light.

Richard Middlemore (1840-1896)

Studied under Sir William Lawrence at St Bartholomew’s Hospital after which he returned to his native Birmingham and worked as assistant to the prominent surgeon Joseph Hodgeson for thirteen years before establishing his own practice, principally in ophthalmology. From 1828 he was surgeon to the Birmingham Eye Hospital. He was renowned both for his lectures and authoritative treatises on eye disease and for his benevolence.

MIDDLEMORE, Richard

A treatise on the diseases of the eye and its appendages. Vol.1.

Longman, Rees, Orme, Brown, Green & Longman, 1835.800p.

The anatomy and physiology of the eye and its adaptation for the purposes of vision. The abnormal conditions of the eye and its appendages with methods of relieving and curing them. Also, the diagnosis of errors of refraction.

MIDDLEMORE, Richard

A treatise on the diseases of the eye and its appendages. Vol. 2.

Longman, Rees, Orme, Brown, Green & Longman, 1835. 800p.

MIETHE, Johann Christoph

Kurtze Anweisung die Glaeser zu schleiffen und perspective zuzurichten.

The author, Dresden, 1689. 40p. ill.

MITCHELL, O. M.

The orbs of heaven, or the planetary and stellar worlds. A popular exposition of the great discoveries and theories of modern astronomy. 3rd edition.

London, 304p. 16 ill.

William F Mittendorf (1844-1917)

American ophthalmologist

MITTENDORF, W.F.

A manual on diseases of the eye and ear for the use of students and practitioners.

G. P. Putnam's Sons, New York, 1881. 445p. 11 ill.

A popular discourse on the development of knowledge in the field of astronomy including theories for explaining the motion of the stars, the law of gravitation and the discovery of new planets etc.

Abbé Francois Napoléon Marie Moigno (1804-1884)

A French mathematician and physicist who entered the order of Jesuits in 1822, and in 1836 settled in Paris where he taught mathematics and edited several scientific journals.

MOIGNO, Francois Napoleon Marie

Repertoire d'optique moderne ou analyse complete des travaux modernes relatifs aux phenomenes de la lumiere. Premier partie et deuxieme partie.

A.Franck, Paris, 1847 902p. ill.

MOIGNO, Francois Napoleon Marie

Repertoire d'optique moderne ou analyse complete des travaux modernes relatifs aux phenomenes de la lumiere. Vol. 2. Parts 3 & 4.

A.Franck, Paris, 1850 960p. ill.

A 2 volume, 4 part work on the results of research by Cauchy, Brewster, Newton, Wheatstone etc on the phenomena of light. Discusses polarisation, dispersion, colour, colour blindness, photography, reflection, refraction etc.

William Molyneux (1656-1698)

An Irish physicist and astronomer, educated at Trinity College, Dublin who was most famous for his political arguments for the autonomy of Ireland. Molyneux has some claim to being the founder of modern science in Ireland and, together with the works of Boyle, this is one of the earliest scientific works published by an Irishman.

MOLYNEUX, William

Dioptrica nova: a treatise of dioptriks in two parts. Wherein the various effects and appearances of spherick glasses, both convex and concave, single and combined, in telescopes and microscopes, together with their usefulness in many concerns of human life are explained.

Benjamin Tooke. London, 1692.

Discusses the nature of refraction and light, effectively summarising the state of optical knowledge in the 1690s and also contains diagrams of mathematical propositions. This is held to be the first treatise on optics published in English. It was intended as a complete and clear treatise of current optical knowledge independent of any current hypothesis concerning the nature of light. Edmund Halley helped to see the book's progress through the press and his theorem for finding the focus of a spherical lens is appended.

MONCKHOVEN, D. V.

Traite generale de photographie comprenant tout les procedes connus jusqu'a ce jour; suivi de la theorie de la photographie et de son application aux sciences d'obserations. 4th ed.

Libraire de Victor Masson et fils. Paris, 1863. 398p. 255 ill.

Alexander Monro (1733-1817)

The son of and the father of Alexander Monro, a dynasty of Edinburgh surgeons. He followed his father as professor of anatomy and surgery at the University of Edinburgh and, was in turn succeeded by his son. He described the foramen intraventriculare which is now known as the foramen of Monro.

MONRO, Alexander

Surgical lectures.

The author, Edinburgh, 1770-80. 404p. Manuscript

George Cunningham Monteath (or Monteith) (1788-1828)

The first recorded Scottish physician to devote himself entirely to diseases of the eye..

MONTEATH, George C.

A manual of diseases of the human eye. Edited by C.H. Weller. Vol.1.

R. Chapman for Reid & Henderson, Glasgow, 1821. 280p.

Robert C Moon (1844-1914)

Son of the inventor of the Moon system of embossed type for the blind. He emigrated to America where he was active in efforts to provide education for the blind.

MOON, Robert

Fresnel and his followers, a criticism to which are appended outlines of theories of diffraction and transversal vibration.

Macmillan, Barclay and Macmillan, Cambridge, 1849. 174p. ill.

Refutation of Fresnel's theories of optics and their implications. Criticisms of theories of rays, reflection, refraction etc put forward by different scientist. The author states his own theory of refraction.

William Moon (1818-1894)

The inventor of an embossed type for the blind. He gave up plans for a career in the Church when he became blind in 1840 and thereafter devoted himself to helping other blind people read, learn music and study the sciences. His philanthropic efforts enabled the opening of 80 schools for the blind in Great Britain and 14 in other countries.

MOON, William

A history of the origin and success of Moon's system of reading (embossed in various languages) for the blind.

Longmans and Co. London, 1877. 126p. 4 ill.

MOORFIELDS EYE HOSPITAL

Ophthalmic hospital reports and journal of the Royal London Ophthalmic Hospital
Vol. VIII.

J & A Churchill, London, 1876. 667p. 3 lithographic plates

During the Napoleonic era the epidemic of Egyptian ophthalmia overwhelmed the British medical establishment. Moorfields hospital opened in 1805 and was the first specialised eye hospital in the world. This volume contains contributions by many of the famous practitioners of the day, including; Jonathan Hutchinson, Edward Nettleship, John Whitaker Hulke, John Hughlings Jackson and Edmond Landolt.

Albert von Mooren (1828-1899)

Was educated in Berlin where von Graefe persuaded him into the field of ophthalmology. He became head of the ophthalmic hospital at Düsseldorf from 1862 to 1878 and his fame as an ophthalmic surgeon brought him patients from all over Europe and beyond.

MOOREN, A.

Die medicinische und operative Behandlung kurzsichtiger Storungen.

J. F. Bergmann, Wiesbaden, 1897. 135p.

MORGAN, Augustus de

Newton, his friend and his niece. Edited by S.E. De Morgan and A.C. Ranyard.

Elliott Stock, London. 1885, 161p.

Discusses the relationship between Newton, his niece Catherine Barton and Halifax.

John Morgan (1794-1847)

Served an apprenticeship under Sir Astley Cooper and from 1824 until his death was surgeon and director of ophthalmology at Guy's Hospital.

MORGAN, John

Lectures on diseases of the eye. Revised by John F. France 2nd edition.

Samuel Highley, London. 1848. 222p. ill.

Descriptions of some of the more common diseases with their symptoms, treatment and some discussion of surgical method.

MORGAN, Sylvanus

Horographia optica, dialling universall and articuler speculative and practicall together with ye description of the Court of Artes by a new method.

R. and W. Leybourn for Andrew Kemb and Robert Boydell, London, 1652. 144p. ill.

A seventeenth century philosophical treatise dealing with astronomy, optics and the construction of sundials.

Andrew Stanford Morton (1847-1925)

Scottish Ophthalmologist. His artistic ability can be seen in the coloured ophthalmoscopic drawings he made for the Transactions of the Ophthalmological Society. He was a founder member of the Ophthalmological Society. For many years he worked at Moorefield, but late in life he was appointed as Ophthalmic Surgeon to the Italian Hospital and because of his services to this hospital was made a Chevalier of the Crown of Italy. He is particularly known for his improvements to the ophthalmoscope.

MORTON, A. Stanford

Refraction of the eye, its diagnosis and the correction of errors with a chapter on keratoscopy. 2nd edition.

H.K. Lewis, London, 1882. 60p. 9 ill.

MORTON, A. Stanford

Refraction of the eye, its diagnosis and the correction of errors. 3rd edition.

H.K. Lewis, London, 1886. 67p. 9 ill.

MORTON, A. Stanford

Refraction of the eye, its diagnosis and the correction of errors. 5th edition.

H.K. Lewis, London, 1884. 72p. 8 ill.

MORTON, A. Stanford

Refraction of the eye, its diagnosis and the correction of errors. 6th edition.

H.K. Lewis, London, 1887. 74p. 9 ill.

MORTON, A. Stanford

Refraction of the eye, its diagnosis and the correction of errors. 7th edition.

H.K. Lewis, London, 1906. 960p. 9 ill.

MORTON, Francis

A manual of optics.

Robert Hardwicke, London, n.d. 95p. 59 ill.

An elementary account of the properties of light and the laws of vision.

Ernest Motais (1845-1913)

Was director of anatomical research and later (1904-1913) professor of ophthalmology at the Medical Institute in Angers. In 1910 he received the Légion d'Honneur and in 1912 became president of the Commission to Prevent Blindness. He was an authority on the motor apparatus of the eye and the inventor of a new procedure for the relief of ptosis.

MOTAIS, Ernest

Anatomie de l'appareil moteur de l'oeil de l'homme et des vertebres. Deductions physiologiques et chirurgicales (strabisme).

Adrien Delahaye et E. Lecrosnier, Paris, 1887. 304p. 33 ill.

MOTH, Francis Xavier

Über die Theorie de Lichtes nach einem Lithographirten Memoire des F.A.L. Cauchy. Carl Berold, Vienna, 1842. 120p.

MOXON, Joseph

Practical perspective or perspective made easy.

The author, London, 1670. 66p. ill.

Explains perspective using optics, catoptrics and dioptrics. Moxon was hydrographer to the King.

MUIRHEAD, Islay B.

Extra-ocular pressure and myopia.

John Balle, Sons & Danielsson, London 1916. 96p. 2 ill.

Expounds the theory that extra-ocular pressure is exerted mainly on the fundus of the eyeball rather than the sides. Refutes the idea that extra-ocular pressure is highest in myopia.

Claude Mydorge (1585-1647)

A wealthy aristocrat who was also a mathematician and physicist. He made important contributions to the study of dioptrics and conic sections. He was a friend of Descartes, Fermat and Mersenne. He was drawn to the study of optics by Descartes for whom he designed lenses.

MYDORGE, Claudius

Prodromi catoptrorum et dioptrorum.

Jean Dedin, Paris, 1641 308p. ill.

In this work the author originates the term 'parameter of a conic' and sets out a number of new theorems.

MYERS, Charles S.

An introduction to experimental psychology.

Cambridge University Press, Cambridge, 1912 156p. 22 ill.

Includes a chapter on colour vision and one on the Müller-Lyer optical illusions.

Albrecht Nagel (1833-1895)

Studied under von Graefe and from 1867 until his death he was professor of ophthalmology at Tübingen and from 1875 was also the director of the University Ophthalmic Hospital

NAGEL, Albrecht
Die Refractions und Accommodations Anomalien des Auges.
H. Laupp'schen, Tuebingen, 1866. 217p. 21 ill.

Humphrey Neame (1887-1968)

An English ophthalmologist who qualified in 1910 before serving as a surgeon in a hospital in Serbia during the Balkan war. During the first world war he served in the RAMC being awarded the Croix-de-Guerre. After the war he worked at the London Hospital, the Central London Ophthalmic Hospital and became Lang Research Scholar at Moorfields whilst also working at UCH. He retired from Moorfields in 1947 and UCH in 1952.

NEAME, Humphrey
Atlas of external diseases of the eye.
J. & A. Churchill, London, 1934 111p. ill

NEISSER, A.
Stereoskopischer medizinischer Atlas.
Leipzig, 1911. 20p 12 ill.

Twelve stereoscopic photographs illustrating eye diseases. Includes a short description of each case.

NELSON, Edward Milles
The theory of telescopic vision.
Dulau & Co. London, 1893. 24p. 2 ill.

An essay based on Fraunhofer's experiments on the undulatory theory of light. An explanation is given of the different theories of star discs and rings.

NERI, Antonio
De arte vitraria
Andreas Frisius, Amsterdam. 1668. 472p. ill.

Latin translation of the original Italian text

NERI, Antonio
The art of glass. Wherin are shown the ways to make and colour glass, pastes, enamels, lakes and other curiosities. Written in Italian by Antonio Neri and translated into English with some observations on the author.
Octavian Pulleyn, London 1662. 362p.

English Translation of the Original Italian work which gives instructions on the making and colouring of glass, the preparation of crystal, the construction of furnaces and the different instruments necessary. Includes a chapter on the author by C. Merrett and an account of glass drops contributed to the Royal Society by Sir Robert Moray.

NESBITT, Alexander

Glass. Edited by W. Maskell.
Chapman & Hall, London, 1888. 143p. ill.

Edward Nettleship (1845-1913)

Studied both human and veterinary medicine simultaneously at King's College and at the Royal Veterinary College, London. He decided on human ophthalmic surgery and worked under Jonathan Hutchinson at Moorfields Eye Hospital before becoming ophthalmic surgeon at St Thomas's. He was a founder of the Ophthalmological Society of the United Kingdom and was its president from 1895-97. He researched into the role of heredity in night blindness, retinitis pigmentosa and other eye diseases.

NETTLESHIP, Edward
Diseases of the eye. 5th Edition.
J. & A Churchill, London. 1890. 462p. 165 ill

NETTLESHIP, E.
On cases of accident to shipping and on railways due to defects of sight.
Adlard & Son, London 1913. 54p.

Cases collected from the home and foreign mercantile and the naval marine, and from the railway services, illustrating the risk of allowing men whose sight is defective, either for colour or form, to interpret coloured signals.

NETTLESHIP, E.
Guia practica de las enfermedades de los ojos. Translated by F.G. Molinasi. 3rd ed.
Bailly-Bailliere, Madrid, 1886. 469p. 154 ill.

Spanish edition of 'Diseases of the eye'.

NETTLESHIP, Edward
The student's guide to diseases of the eye.
J & A Churchill, London 1887. 448p 167 ill.

Sir Isaac Newton (1642-1727)

A farmer's son who had little education before he entered Trinity College Cambridge in 1661. He received his MA in 1668 and from 1669-1696 was the Lucasian Professor of mathematics. In 1696 he settled in London as warden of the Royal Mint and in 1703 was elected as president of the Royal Society. He held both of these posts until his death. He was knighted in 1705.

NEWTON, Isaac
Lectiones opticae
Guil. Innys, London, 1729. 291p. ill.

The substance of lectures delivered at Cambridge in 1670-1672 on the principles and measurement of refraction, the origin and phenomena of colour and the colour of light. The whole is worked out with experiments and theorems. Although Newton intended to publish the optical lectures immediately after his appointment as Lucasian Professor of Mathematics, this did not happen. They appeared in print only after his

death, firstly in an English translation of Part I only (1728), and then in this Latin edition of the entire *Opticae* (Parts I & II) a year later. The work constitutes an extensive treatise and informed his 'new theory about light and colours' first published in the *Philosophical Transactions* (1672) and given its 'definitive' statement in Book I of the *Opticks* (1704).

NEWTON, Isaac

The mathematical principles of natural philosophy to which is added Newton's system of the world; a short comment on and defence of the Principia by William Emerson, with the laws of the moon's motion according to gravity. 3rd Edition of Motte's English translation. Vol 1.

Sherwood, Neely & Jones, 1819 211p. ill.

NEWTON, Isaac

The mathematical principles of natural philosophy to which is added Newton's system of the world; a short comment on and defence of the Principia by William Emerson, with the laws of the moon's motion according to gravity. 3rd Edition of Motte's English translation. Vol 2.

Sherwood, Neely & Jones, 1819 321p. ill.

NEWTON, Isaac

The mathematical principles of natural philosophy to which is added Newton's system of the world; a short comment on and defence of the Principia by William Emerson, with the laws of the moon's motion according to gravity. 3rd Edition of Motte's English translation. Vol 3.

Sherwood, Neely & Jones, 1819 231p. ill.

Third edition of the first and only English translation of the principia until more than a century later. This edition is revised by the London bookseller and Mathematician William Davies.

NEWTON, Isaac

Optical lectures read in the publick schools of the University of Cambridge AD 1669. Never before printed. Translated into English out of the original latin.

Francis Fayram, 1728

2 copies

Essays on the "Different refrangibility of rays", "The measuring of refractions", "The refraction of planes" and "The refraction of curved surfaces".

NEWTON, Isaac

Optice, sive de reflexionibus, refractionibus, inflexionibus et coloribus lucis.

Translated by S. Clarke.

William & John Innys, London 1719. 415p. ill.

2 copies.

Newton, Isaac

Optices libri tres

Accedunt ejusdem lectiones opticae et opuscula omnia ad lucem colorespertinentia.
Joannem Manfre, Patavvi, 1749. 166p. ill.

Produced in Padua, twenty two years after Newton's death, this was the first printing of his optical works in Italy. It contains Newton's 'Opticks' (first published, 1704), his posthumous 'Lectiones Opticae' (1729), and his papers on optics published in the 'Philosophical Transactions' (1672-76).

NEWTON, Isaac

Opticks or a treatise of the reflections, refractions, inflections and colours of light.
William and John Innys. London 1704. 281p. ill.

1st edition. 2 Copies.

These experiments in light and colour caused considerable controversy among Newton's contemporaries. The work was completed in 1676 but publication was deferred until after the death of Hooke – one of Newton's severest critics. Newton believed in the corpuscular theory which supposed that light is composed of streams of imponderable particles emitted in straight lines from a luminous source. However since all known facts about light were not covered by this theory Newton combined it with the wave theory – anticipating modern beliefs.

NEWTON, Isaac

Opticks or a treatise of the reflections, refractions, inflections and colours of light. 2nd edition.
William and John Innys. London 1718. 382p. ill.

NEWTON, Isaac

Opticks or a treatise of the reflections, refractions, inflections and colours of light. 3rd edition.
William and John Innys. London 1721. 382p. ill.
2 copies

NEWTON, Isaac

Opticks or a treatise of the reflections, refractions, inflections and colours of light. 4th edition
William and John Innys. London 1730. 382p. ill.

NEWTON, Isaac

Philosophiae naturalis principia mathematica. Tomus primus.
Cl. & Ant. Philibert, Coloniae Allobrogum, 1760. 548p. ill.

NEWTON, Isaac

Philosophiae naturalis principia mathematica. Tomus Tertii pars 1.
Cl. & Ant. Philibert, Coloniae Allobrogum, 1760. 548p. ill.

Includes a detailed description of Newton's theory of gravity.

NICERON, Jean Francois

La perspective curieuse ou magie artificielle.
Pierre Billane, Paris 1638. 120p. ill.

Describes and illustrates the construction of mathematical figures. Derives principles of perspective from the laws of optics, dioptrics and catoptrics.

NICERON, Jean Francois
La perspective curieuse.
Pierre Billane, Paris 1663. 120p. ill.

Describes and illustrates the construction of mathematical figures, deriving the principles of perspective from the laws of optics, dioptrics and catoptrics.

NICERON, Jean Francois
Thaumaturgus opticus
Francisco Langois, Paris, 1646. 222p. ill.

First edition of this title – which is a considerably augmented translation of the first two books of Niceron's *La perspective curieuse* (1638). Divided into the traditional optics (direct light) catoptrics (reflected light) and dioptrics (refracted light). Concentrates primarily on the practical applications of perspective, catoptrics and dioptrics and the illusory effects which were at that time traditionally associated with natural magic. The whole work is based on geometrical lines. The author acknowledges his debt to Euclid and shows how the laws of geometry form the foundation of the study of optics.

NICHOLSON, William
An introduction to natural philosophy. Volume 1.
J. Johnson, London 1782. 382p. ill.

Discusses light, colour and optics, in particular the properties of light, reflection and refraction, refrangibility of rays of light, causes of opacity, the eye and vision, and the construction and use of optical instruments.

NIMIER, H. and DESPAGNET, F.
Traite elementaire d'ophthalmologie.
Paris, 1894. 944p. 432ill.

William Fisher Norris (1939-1901)

American ophthalmologist who began as an assistant surgeon in the Federal Army where he is said to have at one point operated and dressed wounds continuously for thirty six hours without food or rest. When the war ended (1865) Norris travelled to Europe where he studied ophthalmology under von Arlt, Jaeger and Mauthner. Under Stricker he studied the pathologic histology of the cornea and, when he returned to Philadelphia in 1870 he was appointed lecturer in ophthalmology and otology at the University of Pennsylvania.

NORRIS, William F. & OLIVER, Charles A. Editors

System of diseases of the eye by American, British, Dutch, French, German and Spanish authors. Vol.1. Embryology, anatomy and physiology of the eye.
J. B. Lippincott, Philadelphia, 1897. 670p. ill.

NORRIS, William F. & OLIVER, Charles A. Editors
System of diseases of the eye by American, British, Dutch, French, German and Spanish authors. Vol.2. Examinations of the eye, school hygiene, statistics of blindness and antisepsis.
J. B. Lippincott, Philadelphia, 1897. 556p. ill.

NORRIS, William F. & OLIVER, Charles Editors
System of diseases of the eye by American, British, Dutch, French, German and Spanish authors. Vol.3. Local diseases, glaucoma, wounds and injuries, operations.
J. B. Lippincott, Philadelphia, 1898. 962p.236 ill.

NORRIS, William F. & OLIVER, Charles Editors
System of diseases of the eye by American, British, Dutch, French, German and Spanish authors. Vol.4. Motor apparatus, cornea, lens, refraction, medical ophthalmology.
J. B. Lippincott, Philadelphia, 1900. 949p. ill.

Arthur Brigham Norton (1856-1919)
American homeopathic ophthalmologist.

NORTON, A. B.
Ophthalmic diseases and therapeutics.
Boericke & Tafel, Philadelphia, 1892. 555p. 56 ill.

NOTTINGHAM, J.
Practical observations on conical cornea and on short sight and other defects.
London, 1854. 270p.

Discusses the symptoms and physical characteristics of the conical cornea, its causes and treatment.

Henry Drury Noyes (1832-1900)
Studied in New York, England, France and Germany he set up a practice in New York, becoming surgeon at the New York Eye and Ear Infirmary and professor of ophthalmology and otology at the Bellevue Hospital Medical College. Noyes was one of the founder members of the American Ophthalmological Society and was its president from 1878 to 1884. He was the first person to investigate the retinitis associated with glycosuria, was an early investigator of the ocular fundus and invented several ophthalmic instruments. He was also one of the first ophthalmic surgeons to use cocaine as a local anaesthetic.

NOYES, Henry D.
A textbook on diseases of the eye.
William Wood & Co. New York, 1890. 733p. 244 ill.

Thomas Nunnley (1809-1870)

Studied at Guy's hospital under Key and Sir Astley Cooper and in Paris under Laennec's nephew. He became a surgeon at Leeds Eye and Ear Infirmary (1835-1864) and the Leeds General Hospital (1864-1870) and gained renown as a cataract surgeon.

NUNNELEY, T.

On the organs of vision, their anatomy and physiology.
John Churchill, London, 1858. 373p 177 ill.

Treatise on the laws of light, physiology of vision and the structure of the human eye and its appendages.

Edward L Oatman

Was surgeon at the Manhattan Ear, Eye and Throat Hospital in about 1913

OATMAN, Edward L.

Diagnostics of the fundus oculi. Vol.1.

The Southworth Company, New York, 1920. 303p. 234 ill. + index.

OATMAN, Edward L.

Diagnostics of the fundus oculi. Vol.2. Stereograms

The Southworth Company, New York, 1920. 35 stereograms

OATMAN, Edward L.

Diagnostics of the fundus oculi. Vol.3. Stereograms

The Southworth Company, New York, 1920. 34 stereograms

This three volume work has been described as one of the first of its kind.

OEHME, Jo Benedict Godofred

Die amaurosi

Ex officina Langenhemiana, Lipsiae, 1748. 28p.

Johann Nepomuk Oeller (1850-1932)

Studied at the University of Munich where he later became a lecturer on ophthalmology. He became professor of ophthalmology in Erlangen from 1900-1920. He was an enthusiastic painter and used his own paintings of the retina in his atlas.

OELLER, Johann Nepomuk

Atlas der Ophthalmoskopie Abtheilung A.B.C. Vol.1. English translation by A. H. Knapp. Text in both German and English.

J. F. Bergmann, Wiesbaden, 1896-1899. 159p. 75pl.

OELLER, Johann Nepomuk

Atlas der Ophthalmoskopie Abtheilung D.E.. Vol.2. English translation by A. H. Knapp. Text in both German and English.

J. F. Bergmann, Wiesbaden, 1896-1899.

OELLER, Johann Nepomuk

Atlas seltener ophthalmoskopischer befunde zugleich ergänzungstafeln zu dem Atlas der Ophthalmoskopie Part 5. English translation by Thomas Snowball. Text in both German and English.

J. F. Bergmann, Wiesbaden, 1896-1899. 159p. 75pl.

OHLEMANN, F.W. Max

Ocular therapeutics for physicians and students. Translated and edited by C. A. Oliver.

H. Kimpton, London. 1899. 274p.

Concentrates on possible treatments e.g. the use of cold and warm applications, bandages, antiseptics and the application of electricity.

Charles Augustus Oliver (1853-1911)

Studied at the University of Pennsylvania and spent his entire working life at the Wills Eye Hospital. He was a member of fifty six scientific societies in America and of thirty three abroad. He was also professor of ophthalmology at the Women's Medical College from 1897 until his death. He left his library to Harvard and the University Club of Philadelphia.

OLIVER, C.A.

Ophthalmoscopy, local diseases and functional disorders of the choroid, optic nerve and retina.

1890. 83p. 14 pl.

Covers the symptoms and treatment of malformations and abnormalities of the eye, traumatism, tumours of the choroids, optic nerve and retina. Includes the ophthalmoscopic appearance of the fundus in certain organic diseases.

ONODI, A.

The optic nerve and the accessory sinuses of the nose. Translated by J. Luckhoff. London, 1910. 101p. 50 ill.

A minute description, profusely illustrated, of the anatomy of the nasal accessory sinuses and their relations to the optic nerves. Includes the visual disturbances and blindness associated with disease of the accessory tissues.

Ophthalmic tracts.

226p. ill.

OPPENHEIMER, E. H.

Abriss der brillenkunde.

Berlin 1905. 1906p. 66 ill.

A practical handbook on spectacles, discussing every aspect of their manufacture, construction, varieties etc. Includes chapters on the material used, the grinding of lenses, mounting and the different frames in use. The structure and use of bifocals, lorgnettes, protective glasses, coloured glasses etc.

OPPENHEIMER, E.H.

Theorie und praxis der Augenglaser.
August Hirschwald, Berlin. 1904. 200p. 180 ill.

Gives technical details of the manufacture of various forms of spectacles, pince-nez, protective glasses etc. includes information on different types of lenses, the testing, centring and de-centring of lenses and the methods of making out prescriptions. Also includes a brief survey of the development of the spectacle industry.

An Ophthalmic surgeon
Optician's handbook. Being an introduction to the study of the eye, its anomalies and their estimation and correction by means of glasses.
London. 129p. 55. ill

Optics, Comprising 1. A treatise on optics. 2. An account of Newton's optics; 3. Double refraction and the polarisation of light. 4. An account of optical instruments.
Baldwin & Cradoc, London., 1830. 256p. ill.

ORFORD, Henry
Lens work for amateurs.
Sir Isaac Pitman & Sons, Ltd, 1919. 213p. 231 ill.

Practical instructions, profusely illustrated for the manufacture, finishing and testing of lenses. Descriptions of the tools used for testing, turning, roughing etc.

ORFORD, Henry
Modern optical instruments and their construction.
Sir Isaac Pitman & Sons Ltd, 100p 88 ill.

An analysis of the construction and properties of the eye, its defects and aberrations. Methods of examining the eye by ophthalmoscopy and retinoscopy. Included illustrations of different types of spectacles and discusses the principles governing their use and selection.

ORFORD, Henry
Modern optical instruments and their construction.
Sir Isaac Pitman & Sons Ltd, 1896 100p 88 ill.

OSTWALT, F.
Periscope lenses. Translated and edited by A. W. Oxbrow.
Paris, 1900 typescript. 61p. 18. ill

A short account of meniscus lenses, the most favourable periscopic form of the different menisci, dispersive and convergent meniscus.

Giuseppe Ovio (1863-1957)

Italian ophthalmologist and historian. He was Director of the Eye Clinic in Padua and later in Rome.

OVIO, Giuseppe
L'espressione e il senso estetico dell'occhio

U. Hoepli, Milan, 1928.355p. ill

OCIO, Giuseppe

L'Occulista di Antonio Scarpa e due secoli di storia. Vol 1.

Casa Editrice Libreria V. Idelson, Naples

Filippo Pacini (1812-1888)

Italian histologist and anatomist who, while still a student, discovered the nerve corpuscles which bear his name. He discovered the cholera vibrio in 1854, but his published report was ignored and the credit for the discovery went to Koch some thirty years later. Pacini was also the first to describe the layers of the retina and his studies of the muscular mechanics of respiration led to his development of a method of artificial respiration.

PACINI, Filippo

Nuove ricerche microscopiche sulla tessitura intima della retina nell' uomo, nei vertebrati, nei cefalopodi, e negli insetti precedute da alcune riflessioni sugli elementi morfologici globulari del systema nervosa.

First separate edition.

Tipi Sassi nella Spaderie, Bologna, 1845. 82p.

The first correct description of the retina. An offprint from Nuovi Annali della Science Naturali di Bologna...

Hermann Pagenstecher (1844-1932)

The younger brother of Alexander Pagenstecher, he worked in his brother's famous eye clinic in Wiesbaden after studying in Würzburg, Griefswald and Berlin.

PAGENSTECHEER, HERMANN & GENTH, Charles

Atlas der pathologischen Anatomie des Augapfels.

C. W. Kriedel, Wiesbaden, 1875. 38 plates

Illustrates the pathological changes in the anterior segment of the eyeball, and the choroid, retina and intra-ocular end of the optic nerve. The text has German and English in parallel – possibly as a result of the four years Pagenstecher spent at Moorfields.

PAGENSTECHEER, HERMANN & GENTH, Charles

Atlas der pathologischen Anatomie des Augapfels. English translation by W.R. Gowers

C. W. Kriedel, Wiesbaden, 1875 10p 5pl.

An atlas on the pathological anatomy of the eyeball including a description of the five plates.

PALAZ, A.

A treatise on industrial photometry with special application to electric lighting.

D. Van Nostrand Co., New York, 1894. 322p. 92. ill

A compilation of facts and experiments aimed at students of electricity. Offers the results of research of the apparatus needed in practical photometry, the photometric principles of incandescent arc-lamps, the production of light and the best methods of measurement and distribution.

Natalis Guiseppe Pallucci (1719-1797)

A Florentine who studied medicine in Italy, practised in Paris and eventually settled in Vienna where he was appointed Imperial Surgeon. He was a famous lithotomist and cataract surgeon. He did not agree with the extraction method of dealing with cataract and invented an instrument to enable the depression operation consisting of a trocar-canula.

PALLUCCI, Natalis Giuseppe

Description d'un nouvel instrument a abaisser la cataract avec tout le succes possible. D'Houry, Paris. 1750. 22p. ill

Illustrates and explains the knife which the author invented to facilitate an alternative to the extraction method of dealing with cataract. A trocular canula was used so that with the trocar in place, the instrument would perforate the sclera. When the incision was made, the trocar was withdrawn into the tube and the blunt-ended canula was left in the scleral portion so that the operation might be completed without any risk of injury to the iris or ciliary body..

Photinos Panas (1832-1903)

Originally Greek he studied in Paris and took French citizenship. From 1864 until his retirement in 1901 he was surgeon to several Paris hospitals and in 1879 he became the first professor of ophthalmology at the University of Paris. He did much to reform the teaching and practice of the subject and also devised a new operation for congenital and paralytic ptosis.

PANAS, Photinos

Lecons sur la strabisme, les paraysies oculaires, le nystagmus, le blepharospasm etc. Paris, 1873.

PANAS, P.

Traite des maladies des yeux. Vol. 1. Paris 1894. 772p. 165 ill.

PANAS, P.

Traite des maladies des yeux. Vol. 2. Paris 1894. 514p. 165 ill.

Includes the anatomy and physiology of the eye, examination of the eye, the determination and correction of errors of refraction. Also includes detailed analysis of the diseases of separate structures.

Pierre Pansier (1864-1939)

Studied at Montpellier where he worked for some years as a clinical assistant in ophthalmology before returning to his native Avignon as ophthalmic surgeon.

PANSIER, P.
Histoire des lunettes.
A Maloine, Paris. 1901 134p. 25 ill.

A history of anachronisms, errors of refraction through the ages and different types of spectacles.

PANSIER, P.
Traite de l'oeil artificiel.
A Maloine, Paris. 1895. 132p. 9. Ill.

A monograph in which the author describes the development of the art of making artificial eyes, methods of construction. The qualities of a good artificial eye and the methods of fitting and extracting eyes.

PARDIES, Ignace Gaston
Discours du mouvement local avec des remarques sur le mouvement de la lumiere.
Widow of Edme Martin, Paris. 1674.191p. ill.

The second edition of a work by a Jesuit on the elements of light, in which the principles of Descartes are criticised.

Henri Parinaud (1844-1905)

Undertook his medical training in Paris where he established a free eye clinic for the poor which attracted students and practitioners from all over the world. He was the first to describe the disease later known as Parinaud's conjunctivitis. He was also a musician and composed under the pseudonym Pierre Erick.

PARINAUD, H.
Le strabisme et son traitement
Octave Doin, Paris, 1899. 197p. 2 ill.

The first part discusses the aetiology and pathogenesis of divergent and convergent strabismus; the second part deals with squint by either optical, unctional or surgical means. Also describes the use of the stereoscope in the treatment of strabismus.

PARINAUD, H.
La Vision
Octave Doin, Paris, 1898. 218p. 3 ill.

A physiological study, dealing with the functions of the retina and the functional relations of the two eyes, including binocular, simultaneous and alternating vision.

PARKER, George W
Elements of optics for the use of schools and colleges.
Longmans, Green & Co. London. 1915. 122p. 64 ill.

Aimed at students whose knowledge of mathematics is limited to basic geometry, the solution of simple algebraic equations and a few fundamental propositions in trigonometry.

PARKER, Henry Caldwell
Handbook of diseases of the eye.
F.A. Davies Company, 1910. 303p. 21 ill.

A basic textbook giving anatomy, physiology, the examination of the eye, the principles of refraction and the ætiology of ocular diseases and their treatment.

PARKINSON, S.
A treatise on optics.
Macmillan, London. 1866. 328p. ill.

PARSEY, Arthur
The science of vision.
Longman & Co. London, 1840. 142p. ill

PARSONS, H.
The House of Dolland.
16p. 8 ill.

Sir John Herbert Parsons (1868-1957)

One of the great British ophthalmologists. He completed much important research, particularly on the control of intraocular pressure and the innervation of the pupil. He was a world authority on ocular pathology. He was elected as a fellow of the Royal Society in 1921 and was the only ophthalmologist to become president of the Royal Society of Medicine (1936-38).

PARSONS, J. Herbert
Elementary ophthalmic optics including ophthalmoscopy and retinoscopy.
J & A Churchill, London, 1901, 162p. 66 ill.

PARSONS, J. Herbert
An introduction to the study of colour vision.
Cambridge University Press, Cambridge. 1915 308p. 76 ill.

PARSONS, J. Herbert
The pathology of the eye. Histology – part 1. Vol. 1.
Hodder & Stoughton, London. 1905. 1-388p, 285 ill.

Deals with the pathological histology of the lids, conjunctiva, cornea, sclerotic, iris and anterior chamber and ciliary body, together with the bacteriology of the conjunctiva.

PARSONS, J. Herbert
The pathology of the eye. Histology – part 2. Vol. 2.
Hodder & Stoughton, London. 1905. 389-770p

Deals with the pathological histology of the lens, vitreous, choroid, retina, optic nerve, orbit and lachrymal apparatus.

PARSONS, J. Herbert

The pathology of the eye. General pathology part 1. Vol. 3.
Hodder & Stoughton, London. 1905. 771-1128.

A detailed study of the congenital abnormalities of the structures of the eye, the incidence of myopia, hypermetropia and astigmatism. The author goes into some detail on the normal circulation and nutrition of the eye.

PARSONS, J. Herbert

The pathology of the eye. General pathology – part 2. Vol. 4.
Hodder & Stoughton, London. 1905. 1129-1427.

Includes injuries of the eye from various causes.

PASCOLO, Durus de [ie Eberhard von Weyhe]

Aulicos politicus diversis regulis vel, ut iavolenus loquitur, definitionibus selectis, proborum voto probe instructus, antemultos an nos sub nomine. Durus de Pasculo ablegatus variis acceptus & abonis exceptus nunc multis thesibus auctior et emendatior, ac repexus typis divulgatuus, Cura Eberarti de Weile.
Pptrum Kopffium, Frankofurti, 1640. 260p.

PEARSON, Sir Arthur

Victory over blindness. How it was won by the men of St. Dunstan's and how others may win it.
Hodder & Stoughton, London 1919. 322p. 7 ill.

PEARSON, Karl, NETTLESHIP, E. & USHER, C. H.

A monograph on albinism in man. Atlas. Part 1 Photographic plates A-Z and AA-ZZ.
Draper's Company Research Memoirs. Biometric Series VI
Dulau & Co. London, 1911.

PEARSON, Karl, NETTLESHIP, E. & USHER, C. H.

A monograph on albinism in man. Text Part IV appendices Appendix A: Descriptions of pedigree figures; Appendix b. Bibliography.
Drapers' Company Research Memoires Biometric Series IX.
Dulau & Co. London, 1913.

PEARSON, Karl, NETTLESHIP, E. & USHER, C. H.

A monograph on albinism in man. Atlas. Part 1 Text
Draper's Company Research Memoirs. Biometric Series VI
Dulau & Co. London, 1911.

PEARSON, Karl, NETTLESHIP, E. & USHER, C. H.

A monograph on albinism in man. Part II.
Draper's Company Research Memoirs. Biometric Series VI
Dulau & Co. London, 1913. Pp265-524

PEARSON, Karl, NETTLESHIP, E. & USHER, C. H.

A monograph on albinism in man. Atlas. Part II Photographic plates alpha- omega and alpha alpha to omega omega.

Draper's Company Research Memoirs. Biometric Series VIII
Dulau & Co. London, 1913.

PEARSON, Karl, NETTLESHIP, E. & USHER, C. H.
A monograph on albinism in man. Atlas. Part IV Pedigree I-LIV, Pedigrees 1-645,
extra pedigree plates LV, LVI, LVIII, and LIX. Pedigrees A-Z, AA-s
Draper's Company Research Memoirs. Biometric Series IX
Dulau & Co. London, 1913.

Alphonse Péchin (1851-1915)

French ophthalmologist, president of the General Syndicate of French Oculists

PÉCHIN, Alph
Maladies des yeux.
333p. 9pl. 117 ill.

John Peckham (or Pecham) (?1230-1292) Archbishop of Canterbury (1279-1292)

Was educated at Oxford and in Paris. He entered a Franciscan order in about 1250 and taught theology in England and Europe. He was a poet and the author of many scientific and theological treatise but is best remembered for his work in the field of optics.

PECKHAM, John & HARTMANN, George
Perspectiva communis
Njohann Petreius, Noremburgensem, 1542. 100p. ill.

The 1482 edition contained one of the first diagrams of the eye in a printed book – it is included in this edition. Archbishop Peckham's work was one of the most widely used optical texts of the 14th to 16th centuries. It includes an early description of concave refracting surfaces and the first mention of such glasses and a summary of the theories of Aristotle, Euclid, Augustine, Al hazen, Grossteste & Bacon. The 1542 edition, revised by Hartmann, is held to be a great improvement on earlier editions; it contains his diagrams illustrating the theory of reflection and refraction.

Guillaume Pellier de Quengsy (1750/51-1835)

The son and pupil of a distinguished surgeon and ophthalmologist in Bar-le-Duc and Metz he practised independently after 1772. In 1776 he settled in Montpellier where he became famous as a cataract surgeon. He invented a new surgical instrument, the ophthalmotome, which enabled him to make a cataract extraction in one swift manoeuvre.

PELLIER DE QUENGSY, Guillaume
Maladies qui attaquent l'oeil, recueil de memoires et observations.
Jean Martel Aine, Montpellier.
1783 549p. ill.

A collection of memoires which includes the author's early works on cataract extraction and the works of his father, his brother and other contemporary scientists.

PENDLEBURY, Charles

Lenses and systems of lenses treated after the manner of Gauss.
Deighton Bell & Co., Cambridge, 1884. 95p. ill.

PEPPER, J.H.

Cyclopaedic science simplified, embracing light, electricity, magnetism, pneumatics,
acoustics and chemistry
Frederick Warne & Co. London, 685p. 538 ill.

PEPPER, J.H.

Light, embracing reflections and refractions of light, light and colour spectrum
analysis – the human eye and polarised light.
Frederick Warne & Co. London, 126p. 137 ill.

The principles of light explained with an account of optical instruments whose
properties depend upon refraction.

Archibald Stanley Percival (1862-1935)

British Ophthalmologist who had a strong mathematical bent, thus most of his
writings dealt with optics.

PERCIVAL, A. S.

Optics, a manual for students.
Macmillan & Co. London. 1899. 400p. 131 ill.

A treatise which presupposes that the reader already has a good knowledge of
mathematics, on the principle of shadows, diffused light, colour, reflection, refraction,
thin lenses and on the structure of the human eye.

PERCIVAL, Archibald Stanley

Geometrical optics.
Longman, Green & Co. London, 1913. 132p. 59 ill.

Intended as a textbook for medical students with chapters on illumination, reflection,
refraction and lenses with questions at the end of each chapter.

PERCIVAL, Archibald Stanley

The prescribing of spectacles.
John Wright & Sons, Bristol, 1910. 159p. 24 ill.

PEREIRA, Jonathan

Lectures on polarised light, together with a lecture on the microscope. Edited by the
Rev. Baden Powell. 2nd edition.
Longman, Brown, Green & Longman, London. 1854. 311p. 103 ill.

A basic account of the phenomena of polarisation, includes the physical properties of
light, theories of light, forms of crystals, rotary polarisation etc.

PERKIN, F. Mollwo

The metric and British system of weights, measures and coinage.
Whittaker & Co., London, 1907. 83p. 17 ill.

The author advocates the use of the simpler metric system. Includes chapters on the measurement of length, area, weight, volume, temperature and money.

Luther C Peter (1970-1943)

American ophthalmologist who spoke on perimetry and squint at the Oxford Congresses of 1930 and 1932.

PETER, Luther C.

The principles and practice of perimetry.
Lea & Febiger, Philadelphia, 1916. 232p. 119 ill.

Petrus Hispanus (1226-1277)

Petrus Hispanus the only physician to become Pope, was the physician of Pope Gregory who made him a cardinal in 1773. Three years later he was elected Pope taking the name John XXI. He died as a result of injuries sustained by a falling wall at his palace at Viterbo.

PETRUS HISPANUS (Pope John XXI)

Die Ophthalmologie (liber de oculo) des Petrus Hispanus (Petrus von Lassabon, Später Papst JohannesXXI). Edited by Albrecht Maria Bergfer
Munich, 1899. 172p.

The ophthalmic works of Peter of Lisbon, translated into German and explained. Describes diseases in various parts of the eye, tumours, cancer of the eye, and cataracts and suggests cures for these problems.

Christoph Heinrich Pfaff (1773-1852)

Studied at Stuttgart and Göttingen and in 1801 became professor of medicine, physics and chemistry at Kiel.. In 1841 he was operated on by Jaeger for glaucomatous cataract with disastrous results.

PFAFF, C. H.

Über Newton's Farbentheorie, Herrn Von Goethe's Farbenlehre und den Gegensatz der farben ein versuch in der experimentalen Optik.
Fr. Chr. Wilh. Vogel, Leipzig, 1813. 182p ill.

PHELPS, Robert

An elementary treatise on optics.
E. Johnson, Cambridge 1835 224p. ill.
Bound with W.M. Higgins, 'Introductory treatise on the nature and properties of light.'

Phelp's work explains the principles of telescope construction.

PHILLIPS, Percy

The science of light.
T.C.& E.C.Jack, London n.d. 92p. 54 ill.

Richard Jones Phillips (1861-?)

American ophthalmologist who taught at the Philadelphia Polyclinic and College for Graduates in Medicine and was ophthalmologist to the Presbyterian orphanage.

PHILLIPS, R.J.

Spectacles and eyeglasses, their forms, mounting and proper adjustment. 2nd revised edition.

The Optician and Photographic Trades Review, 1900. 105p 49 ill.

Includes information on the proper placing of glasses in front of the eye and chapters on the patterns of frames and the inspection and adjustment of spectacles.

PHILLIPS, William

Studies in questions relating to eye training.

Blackie & Son Ltd., London 1914. 138p.

PICKEL, I.

Elementa opticae, catoptricae ac dioptricae

The author, Eichstadt. 1789. 418p ill.

A manuscript dealing with the principles of geometrical optics, the mechanisms of vision and the use of lenses. There are diagrams scattered throughout the text and crude folding plates illustrating the principles of vision at the end of the book. The author was a professor of mathematics, but little more is known of him.

PICKFORD, James H.

Conical cornea.

Hodges and Smith, Dublin, 1844. 35p. ill.

Describes the methods Pickford considers to be most successful in treating the disease.

Antoine Auguste, Chevalier de Piis (1755-1832)

A writer of satirical songs and dramatisations who enjoyed considerable popularity. Although he was a court favourite he survived the Revolution and later held various post in the city government of Paris.

PIIS, Antoine Augustin, Chevalier de

Cassandre oculiste ou l'oculiste dupe de son art, comedie-parade en un Acte en Vaudevilles.

Vente, Paris, 1780. 33p.

The text of an 18th century French comedy in which an oculist operates to restore the sight of a blind girl with unexpected results.

PILLEY, John J.

The South Kensington elementary physiology, an introduction to the study of hygiene adapted to the requirements of the Science and Art Department.

Geo. Gill & Son, London 1884. 212p. 88 ill.

PINTO, L.

Ottica fisica. Lezioni autografiche dettate.
Naples 1878-9. 296p. ill.

A treatise on physical optics including sections on the emission and wave theories of light; the principles of reflection, refraction, dispersion and diffusion of light; double refraction according to the theories of Cauchy and Fresnel; the phenomena of polarisation.

PIPER, C. Welborne

A first book of the lens. An elementary treatise of the action and use of the photographic lens.
Iliffe & Sons Ltd., London, nd. 170p. 68 ill.

Methods of producing images by a photographic lens with a preliminary account of the theories of light and optics and lens types.

PISKO, F. J.

Lichte und farbe, eine gemeinefaszliche Darstellung der Optik.
Munich, 1869. 439p. 130 ill.

A popular account of optics – the nature of light, mirrors and lenses, the science of colour, the structure of the eye, spectacles, optical instruments strength and velocity of light.

Charles H Pixley (1844-1919)

American optical expert who, together with F.A. Hardy perfected the Hardy ophthalmometer and other instruments.

PIXLEY, Chas. H.

An optical primer.
F. A. Hardy, Chicago, 1916. 304p. ill.

Articles on trial lenses, the fogging system, accommodation, errors of refraction and their estimation, visual acuity, test-types, varieties of lenses, spectacle fitting, ophthalmoscopy, retinoscopy, prism exercises and optical instruments.

PLATEAU, J.

Bibliographie analytique, des principaux phenomenes subjectifs de la vision depuis les temps anciens jusqu'a la fin du XCIII siecle, suivie d'une bibliographie simple pour la partie ecoulee de siecle actuel
1877. 266p.

A bibliography dealing with books written from the earliest times up until the end of the eighteenth century on retinal impressions, irradiation, phenomena of coloured shadows etc.

Vopiscus Fortunatus Plempius (or Plempius) (1601-1671)

He studied medicine at Leiden, Padua and Bologna before returning to his native Amsterdam to practice from 1624-1633. In 1633 he became professor of medicine at the University of Louvain. Initially he was a fierce opponent of Harvey's theory of the circulation of the blood, but later changed his mind and warmly supported the theory.

PLEMPIUS, Vopiscus Fortunatus
Ophthalmographia, sive tractatio de oculo.
Hieronymus Nempaci, Louvain, 1648. 240p.

First published in 1632, it supports Kepler's optical theories and speculates that the clouding of the lens might be the cause of cataracts. Describes the anatomy of the eye, the principles and problems of vision, the causes and treatment of the commoner diseases. Also draws comparisons between the theories advanced by Hippocrates, Aristotle, Galen & Pliny. This was the first treatise on ophthalmology published by a Dutch scholar.

Joseph Jacob Ritter von Plenck (1738-1807)

Studied in his native Vienna before lecturing in ophthalmology at the Universities of Tyrnau and Budapest. In 1783 he returned to Vienna as professor of chemistry and botany at the Joseph's academy.

PLENCK, Joseph Jacob, Ritter von
Doctrina de morbis oculorum.
Rudolf Graeffer, Vienna, 1777 299p.

Considered to be Plenck's best work – explaining the achievements of the renaissance of ophthalmology in the eighteenth century

POCKELS, F.
Beugung des Lichtes.
Johann Ambrosius Barth. Leipzig, 1906. 88p. 15 ill.

The principles of diffraction of light worked out with mathematical examples. Includes the theories of Huygens, Fresnel and Fraunhofer.

PODESTA, H.
Wandtafeln zur Prufung des Farbensinnes und Erkennung der Farbensinnstörungen.
L. Friederichsen, Hamburg, 1916. 12p. 8 pl.

Wallcharts for testing colour vision based on confusion colours. They are intended for testing many people at one time.

POGGI, G. P.
Della idiacoriride nell'occhio mano memoria anatomica.
Pavia, 1833. 51p. 1pl.

Describes the anatomy of the eye and in particular the choroids. A plate shows a section of an eye so dissected as to illustrate a portion of the iris adhering to the choroids.

POINCARÉ, H.

Electricité et optique, les théories de Maxwell et la théorie de l'électromagnétique
Leçons professées pendant le second semestre 1888-1889
Georges Carre, Paris, 1890. 314p. 39 ill.

POINCARÉ, H.

Electricité et optique, les théories de Helmholtz et les expériences de Hertz. Vol 2.
Georges Carre, Paris, 1891. 262p. 15 ill.

POINCARÉ, H.

Leçons sur la théorie mathématique de la lumière,
Georges Carre, Paris. 1889. 408p. 35 ill

The mathematical theory of light, dealing especially with theories advanced by earlier scientists, Huygens, Cauchy, Fresnel etc. Also includes theories of interference, diffraction and double vision.

POLE, William

On colour blindness.

Philosophical Transactions of the Royal Society

The Royal Society. London, 1859 17p. 1 ill.

Gift of the author to Charles Manby – letter to this effect bound into the front cover.
The author was himself colour blind and he describes his own sensations of colour and the stages by which he was led to realise that his vision was dichromic or compounded of only two elements, blue and yellow.

Charles Frederick Pollack

Scottish ophthalmologist, educated at Glasgow, Tübingen and Vienna. He was ophthalmic surgeon to the Royal Hospital for Sick Children, Glasgow

POLLOCK, C. F.

The normal and pathological histology of the human eye and eyelids.

J & A. Churchill, London, 1886. 272p. 100 ill.

The healthy structure of the eye and the changes resulting from morbid processes.

PONTON, Mungo

The great architect, as manifest in the material universe. 2nd edition.

T. Nelson & Sons, London. 1866. 276p. 11 ill.

One part on light and its cause dealing briefly with theories and principles of light and colour.

Giovanni Battista della Porta (1538-1615)

A natural philosopher from Naples who founded the Academia Secretorum Naturae at Naples (later closed by the Inquisition) and was a member of the Academia dei Lincei at Rome. He invented the camera obscura (1588), described opera glasses (1590) and was one of the founding fathers of optics. He wrote books on a wide variety of subjects, including optics, botany, agriculture and gardening. De refractione contains many ingenious optical experiments, many of which are not practical.

PORTA, Giovanni Battista della
De refractione optices parte.
Jo. Jacobum Carlinum, Naples, 1593. 230p. ill.

A 16th century account in nine books, dealing with the principles of refraction, the anatomy of the eye and its appendages, binocular vision, colour etc. The fifth book deals with perspective and contains an error when the author claims that the pupils of the elderly are large and those of the young small. The sixth book is filled with errors.

PORTAL, F.
Des couleurs symboliques.
Paris, 1857. 312p.

William Porterfield (1696-1771)

Educated at Rheims, by 1721 he had returned to his native Scotland and begun practising in Edinburgh. Although he was made a professor of Edinburgh University in 1724 (serving as Professor of the Institutes and Practice of Medicine 1724-26) he never taught but rather devoted himself to research on the physiology of vision. He invented the first Optometer.

PORTERFIELD, William
A treatise on the eye, the manner and phaenomena of vision. Vol. 1.
A. Miller, Edinburgh, 1759. 450p. ill.

PORTERFIELD, William
A treatise on the eye, the manner and phaenomena of vision. Vol. 2.
A. Miller at London & G. Hamilton and J. Balfour at Edinburgh, 1759. 435p. ill.

These two volumes were the first important British works on the anatomy and physiology of the eye. Volume 1 (page 423) includes a very early occurrence of the word 'optometer' (first coined by the same author in an essay of 1738).

Simone Portius (or Porzio) (1496-1554)

Taught philosophy in Pisa and then in his native Florence.

PORTIUS, Simon
De coloribus oculorum.
Laurentius Torrentinus, Florence, 1550. 57p

One of the earliest monographs in ophthalmology in which the author attempts to explain the causes of different eye colours. The author also discusses the position of the eyes and the opinions of Aristotle and Galen on the structure of the eye.

POSEY, William Campbell
Hygiene of the eye.
J.B. Lippincott, Philadelphia 1918. 344p. 120 ill.

Methods of conserving vision presented in non-technical language. Reviews the more common diseases of the eye, describes how the eye can be affected by general health and how health is influenced by eyestrain.

POSEY, William Campbell

The eye and nervous system; their diagnostic relations by various authors.

J.B. Lippincott Company, Philadelphia, 1906. 988p. 13 pl. 148 ill.

POSEY, William Campbell

A treatise on diseases of the eye, nose, throat and ear for students and practitioners by various authors. Vol.1.

Henry Kington, London. 1903. 685p. 19pl. 358 ill.

Percivall Pott (1714-1788)

Pott was apprenticed to a surgeon at St Bartholomew's from the age of 16 and remained in association with Bart's until his retirement in 1787. One of the great general surgeons of his day he published important treatises on hernia, head injuries, hydrocele, anal fistulae, fractures and dislocations, caries of the vertebrae (now known as Pott's disease). Pott was opposed to cataract extraction, and used discission as a regular means of treatment for soft cataract. This was a method first discussed by Celsus, but until Potts time was only used as a temporary device.

POTT, Percivall

Observations on that disorder of the corner of the eye, commonly called fistula lachrymalis. 2nd edition.

L. Hawes and Co., London. 1763. 70p.

First published in 1758

Richard Potter (1799-1886)

Largely self-taught until he entered Queen's College Cambridge when he was in his thirties, graduating in medicine in 1841. From 1841 to 1865 he was professor of natural philosophy and astronomy at University College, London.

POTTER, Richard

An elementary treatise on optics containing all the requisite propositions carried to first approximations; with the construction of optical instruments.

Taylor & Walton, London, 1847. 163p. ill.

A simple explanation of the principles of optics and the construction of optical instruments.

POTTER, Richard

An elementary treatise on optics containing all the requisite propositions carried to first approximations; with the construction of optical instruments. Part 1. 2nd edition

Taylor, Walton and Maberly, London, 1851. 166p. ill.

POTTER, Richard

An elementary treatise on optics containing all the requisite propositions carried to first approximations; with the construction of optical instruments. Part 11.

Taylor, Walton and Maberly, London, 1851. 198p. ill.

POTTER, Richard

Physical optics containing or the nature and properties of light. Part 1 a descriptive and experimental treatise.

Walton and Maberly, London, 1856. 119p. 101 ill.

POTTER, Richard

Physical optics containing or the nature and properties of light. Part 2. the corpuscular theory of light: discussed mathematically

Deighton, Bell & Co., 1859. 101p. 3 ill.

Henry Power (1828-1911)

Studied at St Bartholomew's hospital and became surgeon to the Royal Westminster Ophthalmic Hospital and ophthalmic surgeon to St George's and St Bartholomew's Hospitals and a founding member of the Ophthalmic Society of the United Kingdom. He was the President of this latter organisation for three years.

POWER, Henry

Illustrations of some of the principle diseases of the eye, with a brief account of their symptoms, pathology and treatment.

John Churchill & Sons, 1867. 631p. ill.

The 12 lithograph plates are taken from Power's own watercolours.

POWER, Henry, FIELD, George and BRISTOWE, John S.

The management of the eye ear and throat

Cassell & Company, London. N.d. 124p. 9 ill.

One section on the eye dealing with its functions and power, the principles of colour blindness, the prevention of myopia and squint.

Johann Joseph Ritter von Prechtl (1778-1854)

PRECHTL, Johann Joseph, Ritter von

Praktische Dioptrik als vollstandige und gemeinfaszliche An leitung zur verfertigung achromatischer Fernrohre.

J. G. Heubner, Wien. 1828. 296p. ill.

How to make an achromatic telescope. Also describes the functions of a telescope and the principles of light refraction.

PRENTICE, Chalmers

The eye in its relation to health.

John Wright & Co. Bristol, 1895. 214p. 3 ill.

The effect of eyestrain on general health is stressed. The author describes remarkable cures which have followed the correction of defects in and about the eyes.

Charles F Prentice (1854-1946)

PRENTICE, Charles F.

Ophthalmic lenses: a treatise on simple and compound lenses, their refraction and dioptric formulae.

James Prentice and Sons, opticians, New York, 1886. 41p. 36 ill.

PRENTICE, Charles F.

Ophthalmic lenses: dioptric formulae for combined cylindrical lenses. The prism dioptry and other optical papers.

The Keystone publishing Co. Philadelphia, 1900. 192p. ill.

PRENTICE, Charles F.

Ophthalmic lenses: dioptric formulae for combined cylindrical lenses. The prism dioptry and other optical papers.

The Keystone publishing Co. Philadelphia, 1907. 192p. ill.

Includes tables of crossed cylinders and their sphero-cylindrical equivalents.

Joseph Priestley (1733-1804)

A scientist and theologian Priestley was intended for the dissenting ministry. He was mostly employed as a preacher or schoolteacher and was persecuted for his anti-establishment political and religious views. After emigrating to America in 1794 he became a friend of Thomas Jefferson. He made important discoveries in the fields of electricity, optics and the chemistry of gases.

PRIESTLEY, Joseph

The history and present state of discoveries relating to vision, light and colours.

J. Johnson, London 1772. 812p ill.

This book was intended to be the first volume in a multi-part work on all branches of experimental science. It contains chapters on the construction and development of optical instruments, especially telescopes and microscopes.

“...this work presents one of the earliest historical accounts of theories of vision, light, and colour. Its value lies chiefly in its distillation and narration of the works of others. Priestley (1733-1804), a supporter of the corpuscular theory of light, sought to provide direct experimental proof for this hypothesis in opposition to the wave theory. Priestley's knowledge of mathematics was inadequate for the task which he had set; the book was a financial failure; and he abandoned his scheme to write a multivolume theory of science”

PRIESTLEY, Joseph & KLUEGEL, G. S.

Geschichte und gegenwartiger Zustand der optik.

Johann Friedrich Junius, Leipzig. 1776. 568p. ill.

PROCTOR, Richard A.

Lessons in elementary astronomy, with an appendix containing hints for young telescopists.

Longmans, Green & Co., London. 144p 47 ill.

PRONGER, C. Ernest

Slight errors of refraction and their influence on the nervous system. Two papers read before the Harrogate Medical Society.

Harrogate, 1903 and 1905

Louis de Puget (1629-1709)

A naturalist and student of the properties of magnets who, being independently wealthy was able to devote himself to scientific research and collecting magnets and microscopes. He was also interested in classical literature and translated many of Homer's odes into French.

PUGET, Louis de

Observations sur la structure des yeux de divers insects.

Leonard Plaignard, Lyons, 1706. 160p. ill.

Two letters to the Reverend Per Lamy, a Benedictine describing microscopical observations of the eyes of flies, grasshoppers, crayfish and butterflies etc.

Johann (Jan) Evangeliste Purkinje (Purkyne) (1787-1869)

Studied medicine at the University of Prague. He became professor of physiology at Bresslau from 1823 to 1850 and from 1850 until his death at Prague. He made important discoveries about subjective sensory phenomena and he explored new methods of determining the physical properties of the sensory organs such as perimetry and the examination of the interior of the eye in light reflected into it by a concave lens (thus anticipating Helmholtz). He laid the foundations for modern research into vestibular and cerebellar nystagmus and discovered the eponymous Purkinje – Sanson images.

PURKINJE, J.

Beitraege zur Kenntniss des Sehens in subjectiver Hinsicht.

J. G. Calve'schen Buchandlung, Prague, 1823. 176p. ill

The author's doctoral dissertation on subjective visual phenomena. The author describes the subjective visual figures, especially those obtained by galvanic stimulation, the recurrent images, the dependence of brightness of colour upon the intensity of the light etc.

RABL, Carl

Uber den Bau und die Entwicklung der Linse.

Wilhelm Engelmann, Leipzig, 1900. 324p 135 ill.

The comparative anatomy of the lens among vertebrates, amphibians, reptiles, birds and animals.

RADICKE, F.W.G.

Handbuch der Optik mit besonderer Ruckicht auf die neuesten Fortschritte der Wissenschaft. Vol. 1.

Der Nicholaischen Buchandlung, Berlin, 1839. 467p. ill.

An analysis of the nature of light with special reference to the undulatory movement of light rays.

RADICKE, F.W.G.

Handbuch der Optik mit besonderer Ruckicht auf die neuesten Fortschritte der Wissenschaft. Vol. 2.

Der Nicolaischen Buchandlung, Berlin, 1839. 481p.

The principles of reflection and refraction, absorption, the elements of physiological optics and the construction of optical instruments.

Eduard Rähmann (1848-1917)

After studying medicine at Würzburg, Halle and Strasbourg Rähmann became Alfred Graefe's assistant at Halle and the professor of ophthalmology at Dorpat. He wrote on a wide range of ophthalmic issues but specialised in the physiology of colour vision. He also published anatomical papers on the histology of the cornea, trachoma, the movement of the eyes and the physiological meaning of the width of the opening of the pupil as well as dependence of the blood flow in the retina from general blood circulation.

RÄHLMANN, E.

Über Trachoma Histologie, ultramikroskopische Beiträge zur entzündungslere. Hamburg and Leipzig, 1905. 84p. 7 ill.

Andrew Maitland Ramsay (1859-1946)

Ramsay was a prominent Glasgow ophthalmic surgeon of the time.

RAMSAY, A.M.

Atlas of external diseases of the eye.

Glasgow, 1898 195p 48 pl.

The text is taken from Ramsay's cases at the Glasgow Eye Infirmary. The illustrations (30 chromolithographs and 18 photogravure plates) were used to illustrate his lectures on eye disease at Queen Margaret College. The chromolithographs are from photographs taken and coloured from life by A.H. Geyer under the author's personal supervision and the photogravure plates are the work of the well known Glasgow firm of T & R Annan.

RAMSAY, A, Maitland

Diathesis and ocular diseases.

Bailliere, Tindall and Cox, London, 1909. 184p. 17 ill.

Post graduate lectures delivered at Glasgow Ophthalmic Institution, giving the author's personal clinical experience, The importance of the influence of diathesis on the causation and treatment of diseases of the eye.

RAMSAY, A Maitland

Eye injuries and their treatment.

James Maclehose and Sons, Glasgow, 1907. 210p. 25 ill.

Methods of treating superficial injuries, wounds and burns of the conjunctiva, contusion, penetrating wounds with retention of a foreign body, sympathetic ophthalmic etc. Surgical methods are given.

RAMSAY, Andrew Maitland, GRANT, J. Dundas, WHALE, H. Lawson, WEST, Charles Ernest
Injuries of the eyes, nose throat and ears.
(Oxford War Primers)
Henry Frowde, London, 1915. 65p

RAMSEY, A. S.
Elementary geometrical optics. 2nd Ed.
G. Bell & Sons, London. 1920 173p. 131 ill.

RAMUS, Peter
Opticae libr quatuor (novissimo per F. Risnerum)
Wilhelm Wessel, Cassel. 1606. 259p. ill.

Ambrose Loomis Ranney (1838-1905)

Studied and then settled in New York where he practised general medicine giving particular attention to neurology and, towards the end of his career, ophthalmology. He was professor of anatomy at the University of New York and professor of nervous and mental diseases at the University of Vermont.

RANNEY, Ambrose L.
Eyestrain in health and disease with special reference to the amelioration or cure of chronic nervous derangements.
The F.A. Davis compny, Philadelphia. 1897. 321p. 38 ill.

The effects of eyestrain on the development of headache, neuralgia, sleeplessness, chorea, epilepsy, nervous prostration and insanity with special reference to the amelioration or cure of chronic nervous derangement without the use of drugs. Describes the various stages during the examination of the eyes for errors of refraction and of the ocular muscles for anomalies of adjustment of the eye.

RASKOP, E.
Leitfaden zur Brillenbestimmung.
Hermann Meusser, Berlin, 1927. 192p. 172 ill

RASMUSSEN, O. D.
Old Chinese spectacles.
North China Press, Tientsin. 1915. 33p. 8 ill.

RATTON, J. A.
On the nature and cure of strabismus by operation.
Union Press, Madras, 1842. 137p. ill.

Describes the author's method of tenotomy in squint operations, including several case reports

Sir William Read (d.1715)

A London tailor or cobbler who set up in business as an oculist in about 1694 who achieved some celebrity with the publication of his 'Treatise of the eye' in 1706. He was knighted by Queen Anne and appointed ophthalmologist to King George I in 1714.

READ, Sir William

Practical observations on the diseases of the eyes.

London, 1700. 42p.

Bound with READ, W, 'A treatise of the eyes'.

Francesco Redi (1626-1698)

Naturalist and physician who was the first to offer a conclusive refutation of the doctrine of spontaneous generation and the creator of an apocryphal account of the invention of spectacles that was accepted for over two centuries. He is renowned for his toxicological studies.

REDI, Francesco

Osservazioni intorno alle Vipere. Also contains Lettera intorno all'invenzione degli occhiali. 1678.

Pietro Matini all'Insegna del Leone, Florence, 1678. 66p. + 32p. +14p.

First methodical work on snake poison in which Redi showed that to be effective the poison must be injected under the skin.

Includes a first edition of the 'Letter on the invention of Spectacles' of great importance in the history of spectacles. Although Redi was unable to cite the original inventor, he was sure that Alessandro da Spina re-invented them. He quotes from a sermon of Giordano da Rivalto given in 1305 when Rivalto says, 'It is not yet 20 years since the art was discovered of making eye glasses, which give the power to see distinctly, which is one of the best and necessary arts which the world possesses'. He also republished what is probably the first reference to the use of spectacles a passage from a manuscript dated 1289.

REGNAULT, V.

Cours d'optique.

Paris, 1843. 491p. ill.

Gregor Reisch (c.1467-1525)

Carthusian monk and Humanist, correspondent with Erasmus, Beatus and Rheanus. Prior of the Charterhouse of St John the Baptist near Freiburg-im-Breisgau from 1503 to 1525 and confessor and counsellor to the Emperor Maximilian I. He was educated at the University of Freiburg where he received the degree of magister in 1489 and also taught there. The Margarita philosophica seems to have been conceived as a textbook for his students at Freiburg, among whom were many influential figures of the German Renaissance, notably the theologian Johann Eck.

REISCH, Gregorius
Margarita philosophica.
Jo. Schottus, Basle, 1508 ill.

The Philosophical Pearl was written by 1496 and first published by the Strasbourg printer Schottus in 1503 (who moved his press to Freiburg for the task). It was intended to contain encyclopaedic articles of a depth considered reasonable for an educated man. Optics is one of the subjects covered. A 2nd edition was issued in 1504 and this is a copy of the 3rd edition. The Margarita contains a number of remarkable depictions of the human body, including what is thought to be the earliest schematic diagram of the human eye in print and a widely reproduced woodcut depicting the brain.

RETTIE, R.

On the necessity of employing one universal system of Marine night signals for preventing collision at sea and shewing distress, with a description of Rettie's code of signals for steam and sailing vessels; steering lamps, signals of distress etc.
Trelawney, Wm Saunders, London, 1847. 50p. ill.

Carlo Reymond (1833-1911)

Italian ophthalmologist who became professor of ophthalmology in Turin in 1876. He was among the first to apply antiseptic principles to eye surgery in Italy.

REYMOND, Carlo
Opere Part 1.
G. Testa, Biella. 1911. 436p ill.

REYMOND, Carlo
Opere : ristampate per festeggiarne il cinquantesimo anno di vita universitaria dai colegi discepoli – ammiratori. Part 2.
G. Testa, Biella. 1911. 437-911p.

The collected papers of an Italian ophthalmic surgeon. The structure of the eye; treatment of strabismus; effect of tobacco and alcohol on the eyes; the use of atropine; the correction of astigmatism etc.

RHODIUS, Ambrosius
De crepusculis.
L. Seuberlich for Samuel Seelfisch, Wittenberg, 1611 64p ill.

An investigation into the nature and varieties of twilight and dawn

RICCO, A.
Relazione fra il minimo angolo visuale e l'intensita luminosa.
1877. 114p. 4 pl.

RICHARD, Petrus, NOBLET, Nicolaus, CREIL, Nicolaus de & CLERC, Joannes de
Cuncta intuenti oculo has ex universa optice delibatas propositiones.
Nicolaus Constant, Rheims, 1629. 24p.

RICHARDSON, J.

Specification of the patent granted to Mr John Richardson of the parish of St Giles in the Fields, optician, for his invention of a machine applied to glasses and pebbles of every description for the use of sights in general.

London, 1779. 2p.

RISNERUS, Friedrichus

Vittellonis Thuringopoloni opticae libri decem.

Officina Episcopiana, Basle, 1572. 474p ill.

Bound with ALHAZEN 'Opticae thesaurus'.

A very early treatise on Optics based on Alhazen's work. The principles of light, the anatomy of the eye, and the laws of vision are set out in a series of theorems and propositions.

ROBERTS, Charles

The detection of colour blindness and imperfect eyesight by the methods of Dr Snellen, Dr Daae and Professor Holmgren.

David Bogue, London 1881. 16p.

Albert Robin (1847-1928)

Lectured in Paris from 1883 and became professor of clinical therapy in 1905.

ROBIN, Albert

Des troubles oculaires dans les maladies de l'encephale.

J-B Bailliere et Fils, Paris. 1880. 601p. 47 ill.

The author's thesis on the connection between eye problems and diseases of the brain.

ROBISON, John

On the motion of light as affected by refracting and reflecting substances which are also in motion.

1790. 29p.

A short account of an experiment performed by Boscovich on the aberration of light to prove that if a telescope is constructed with its tube filled with water, and if it is directed to a terrestrial object, it will be found to deviate from that object by a certain determined quantity every day. The author suggests that the results which Boscovitch expected from this experiment are invalidated by an oversight.

ROCHE, E.

Note sur la lumiere du soleil

18p.

Bound with FOUCAULT, 'Vitesses relatives de la lumiere'.

ROEMER, Paul

Textbook of ophthalmology in the form of clinical lectures. Translated by M. L. Foster. Vol. 1.

Rebman Ltd., London 1912. 275p. 59 ill.

ROEMER, Paul

Textbook of ophthalmology in the form of clinical lectures. Translated by Mattias L. anckto Foster. Vol. 2.

Rebman Ltd., London 1912. 277-571p.

ROEMER, Paul

Textbook of ophthalmology in the form of clinical lectures. Translated by Mattias L. anckton Foster. Vol. 3.

Rebman Ltd., London 1913. 573-896p.

A popular textbook illustrated with examples from cases treated by the author, Includes chapters on injuries of the eye, paresis of the ocular muscles, the neurology of the eye and the functional testing of the eye.

ROGERS, G. A.

The shadow test in ocular diagnosis without prejudice as to method, mirror, distance or instrument.

The Optic Press, Chicago. 1905. 110p. 16 ill.

A correspondence course giving the primary facts and principles of mirrors and lenses; the properties, varieties and uses of mirrors and lenses and details of spherical mirrors, optometric lenses and the focal length system.

ROGERS, G. A.

Skiascopy – a treatise on the shadow test in its practical application to the work of refraction 2nd edition

The keystone, Philadelphia, 1903. 219p. 73 ill.

ROGERS, George A.

Lenses and mirrors. Part 1.

The Author, Chicago, 1918.

ROGERS, George A.

Lenses and mirrors. Part 2. Modified lens values.

The Author, Chicago, 1918.

New Correspondence Courses in the theory and practice of optometry. Special course.

ROHR, Moritz von

Die bilderzeugung optischen instrumenten vom standpunkte der geometrischen Optik.

Die Theorie der optischen Instrumente.

Julius Springer, Berlin, 1904. 587p.

ROHR, Moritz von

Die binokularen instrumente Nache Quellen bearbeitet.

Julius Springer, 1907. 223p. 90 ill.

ROHR, Moritz von

Eyes and spectacles. Translated by Harold Levy.

The Hatton Press. 130p. 1 pl. 84 ill.

ROLLAND, L.

L'élevage de l'oeil du liseur avant et pendant la lecture
Toulous, 1909 150p. 31 ill

Methods of preserving the eyes in childhood. M. Rolland states that the hypermetropic eye has advantages over emmetropic and myopic eyes and suggests that before a child begins reading parents ought to prevent the deformation of the anterior segment of the eye and after the child begins to read should prevent the deformation of the posterior section of the eye.

Daniel Bennett St John Roosa (1838-1908)

American ophthalmologist, one of the founders of the New York Post-Graduate Medical School of which he was the president for many years

ROOSA D. B. St. J.

A clinical manual of diseases of the eye including a sketch of its anatomy.
William Wood & Co., New York. 1894. 621p. 181 ill.

Information based on the author's experience in hospital and private practice.

ROOSA D. B. St. J.

Defective eyesight, the principles of its relief by glasses.
The Macmillan Company, New York., 1899. 193p. 37 ill.

Discusses the principles of dispensing glasses including the estimation of visual power, the apparatus required for testing vision, the treatment of presbyopia, myopia and hypermetropia, corneal astigmatism and asthenopia.

Anton Rosas (1791-1855)

For a time Rosa was assistant to Beer in Vienna and then became professor of ophthalmology at Padua.

ROSAS, Anton

Breve saggio sull' ottalmia.
Francesco Andreola, Venice. 1824. 51p.

ROSPINI, C. J.

Brille und Fernrohr in ihren Wirkungen auf gesunde und geschwachte Augen
Vienna, 1855. 148p 3 ill.

Spectacles and telescopes, with their effect upon weak and impaired eyes. Sections on the principles of optics, the human eye, defects and diseases of the eye and optical instruments.

ROTH, A

Die Krankheiten des Sehorgansin der Armees.
Leipzig, 1900. 138p. 9 ill.

Diseases of the visual organs with special reference to the German army. Includes the principles of optics, methods of examining eyes, errors of refraction, the causes of amblyopia, blindness etc.

ROTH, A

Verwechselungs-Sehproben.

Leipzig, 1906. 2p. 2 ill.

Two pages of test types – a series of E's turned in different directions.

ROUSE, R.

Scientific and practical geometry for self-instruction, and making the study easy, interesting and extensively useful giving, with much other original matter a range finder to 4000 yards for field artillery to upwards of 6 miles for coast defence.

London, 1879. 304p. 8pl.

ROUYER, J.

Coup d'oeil retrospectif sur la lunetterie precede de recherches sur l'origine du verre lenticulaire et sur les instruments servant a la vision.

Paris. 1901.

A resume of the invention and use of optical instruments. Includes a section on the spectacle making industry and the regulations governing it.

William Rowley (1743-1806)

An English obstetrician and ophthalmologist

ROWLEY, William

A treatise on the principle diseases of the eye.

F. Newbery, London, 1773. 159p.

The author claims to be the first author of an ophthalmological work to possess a thorough knowledge of both medicine and surgery. Deals mostly with inflammation of eyes and cites many case studies.

ROWNING, J.

A compendious system of natural philosophy. Part III. Optics.

Sam. Harding, London, 1743. 212p. ill.

Includes a dissertation on the phenomenon of the horizontal moon

RUGGIERI BUZZAGLIA, Filippo

Dissertazione sopra il quesito: se gli esperimenti del Mariotte nel suo Trattato del movimento dell'acque...vagliano a provare in alcuni canali esservi maggiore velocità alla superficie, che sotto ad essa, etc.

Mantova, 1773 59p.

Bound in front of FOSSOMBRONI – Ricerche sull' intensita del lume.

RUTHERFORD, William

Outlines of practical histology. 2nd edition.
J. & A. Churchill, 1876. 194p. 65 ill.

RUTHERFORTH, T.

A system of natural philosophy. Vol.2.
J. Bentham for W. Thurlbourn, Cambridge. 1748. 609p. ill.

Theodor Saemisch (1833-1909)

Studied in Berlin and was the student and assistant first of von Graefe and then of Pagenstecher. In 1862 he settled in Bonn and practiced as an ophthalmologist. In 1867 he became professor of ophthalmology and in 1873 the director of the University Eye Clinic. He investigated diseases of the cornea, sclera and conjunctiva and together with Alfred von Graefe he published the monumental Graefe-Saemisch 'Handbook der gesamten Augenheilkunde'

SAEMISCH, Theodor (Editor)

Handbook der gesamten Augenheilkunde Pathologie und Therapie. Zwolfter Band, zweiter teil.
Wilhelm Engelmann, Leipzig, 1899. 419p.

Gathers together the work of some of the greatest ophthalmologists in nineteenth century Germany.

Charles de St Yves (1667-1733)

Entered the College of St Côme, Paris where he studied and practised ophthalmology for more than 25 years. In 1707 he became the first person to extract a cataract en masse. It had become dislocated into the anterior chamber. In 1711 he established his own clinic for treating eye diseases where he practised until his death in 1736.

SAINT-YVES, Charles de

A new treatise on the diseases of the eyes. Translated by J. Stockton.
Society of Booksellers, 1741. 310p. (suppl 19p.)

SAINT-YVES, Charles de

Nouveau traite des maladies des yeux. Translated by Cantwel.
Arkstee and Merkus, Amsterdam, 1767. 316p.

SALOM, Salom Henry

An essay on the physiology of the eye.
Salom & Co. London 1873. 115p 1 ill.

An examination of the various parts of the eye and their functions.

SALZER, Fritz

Leitfaden zum Augenspiegelkurs.
J. F. Lehmanns, Munich, 1905. 107p. 54 ill.

A brief introduction to ophthalmology including a resume of optical principles, the refraction of the eye, the theory of the ophthalmoscope and the methods of using it.

Maximilian Salzmänn (1862-1954)

Studied medicine in his native Vienna and worked as Ernst Fuchs assistant before becoming professor of ophthalmology in Vienna in 1906 and Graz in 1911. He was the editor of the 13th to 15th editions of Fuch's 'Lehrbuch der Augenheilkunde'.

SALZMANN, Maximilian

The anatomy of the human eyeball in the normal state its development and senescence. Translated by E.V. L. Brown
Chicago, 1912. 232p. 9 pl. 5 ill.

The anatomy of the eye considered as a whole – its form, surface, structure and asymmetry. The anatomy of each structure is illustrated with photocolotype plates. Shows the physiological changes experienced throughout life.

SALZMANN, Maximilian

Durchschnitt durch das menschliche Auge.
Breslau, 1899. 16p. 2pl.

A short description of a horizontal section of the eye with 2 large plates illustrating the structure of the eye and its formation.

SANG, Edward

Progressive lessons in applied science. Part 3: Trigonometry, vision, surveying instruments,
F. & F. N. Spon, London. 1875. 155p ill.

SANTINI, Giovanni

Teorica degli stromenti ottici destinati ad estendere I confini della visione naturale.
Vol. 2.
Nella tipografia del seminario, 1828. 225p. ill.

SARCEY, Francisque

Mind your eyes! Advice to the short-sighted, by their fellow sufferers. Translated by R. E. Dudgeon.
Bailliere, Tindall & Cox, London. 1886. 87p.

Describes the precautions the myopic should take to avoid contracting a serious disease of the eyes. The author relates his own sufferings which culminated in cataract surgery.

SARTORIUS, Joannes

Disputatio physica de luce coloribus.
Samuel De Tournes, Geneva, 1674. 13p.

A pamphlet describing the principles and nature of light and colour.

John Cunningham Saunders (1773-1810)

English ophthalmologist who in 1804, being much moved by the plight of English soldiers suffering from ophthalmia on the expedition to Egypt, founded the Royal

London Ophthalmic Hospital or Moorfields. The original title of the institution was "The London Dispensary for the Relief of the Poor Afflicted with Eye and Ear Diseases". In its first year 600 patients were treated, but it soon had to be restricted to ophthalmic patients who in 1821 numbered 5,00, in 1862 1200 and by 1914 to more than 42,000.

SAUNDERS, John Cunningham

A treatise on some practical points relating to the diseases of the eye.
Longman, Hurst, Rees, Orme and Brown, London, 1811. 216p. ill.

Giles Christopher Savage (1854-1930)

American ophthalmologist who became professor of ophthalmology at the Vanderbilt University Tennessee in 1886.

SAVAGE, G. C.

Nervo –muscular mechanism of the eyes, and routine in eye work.
Nashville, Tenn. 1916 70p. 7 ill.

Describes the action of the ocular muscles and the law of monocular motion. The second part of the book deals with routine examination of the eye.

SAVAGE, G. C.

New truths in ophthalmology, 3rd edition.
The Author, 1896, 270p. 58 ill

A collection of papers discussing the functions of the oblique muscles, insufficiencies of the oblique muscles and their correction, rhythmic exercises as the proper method of developing the ocular muscles, and operative and non-operative cases of heterophoria.

SAVAGE, G. C.

Ophthalmic myology, a systematic treatise on the ocular muscles.
Tennessee, 1902. 509p. 67 ill.

SAVAGE, G. C.

Ophthalmic myology, a systematic treatise on the ocular muscles. 2nd Edition.
Tennessee, 1911. 685p. 90 ill.

The 2nd edition gives the diagnosis and treatment of orthorhopia, esophoria, exophoria, heterophoria, cyclophoria, paralysis and paresis of the ocular muscles. Also discusses the fundamental principles of ocular rotations.

Antonio Scarpa (1752-1832)

A Venetian who has been described as one of the greatest anatomists and surgeons of all time. He studied in Padua under Morgagni and was professor of anatomy and theoretical surgery in Modena from 1772 (when he was aged only 20) and professor of anatomy at Pavia from 1783-1812. Among his many discoveries are the membranous labyrinth, the nasopalatine nerve and the eponymous triangle.

SCARPA, Antonio

Practical observations on the principal diseases of the eyes. Translated from the Italian, with notes, by James Briggs. 2nd Edition.
T. Cadell and W. Davies, London. 1818. 536p. ill.

Case studies from the author's own experience

SCARPA, Antonio

Traite pratique des maladies des yeux ou experiences et observations sur les amaladies qui affectant ces organes. Translated from the Italian by J.R.F.Leveille.
Adolphe Delahays, Paris, 1855. 526p.

French edition of Saggio di osservazioni e d'esperienze sulle principali malattie degli occhi published in 1801 which was the first systematic ophthalmologic textbook in Italian.

SCHÄFER, Edward Albert and THANE, George Dancer Editors

Quain's elements of anatomy in three volumes. Embryology. Vol.1. Pt.1. 10th edition.
Longmans, Green & Co. London. 1896 169p. 200 ill.

SCHÄFER, Edward Albert and THANE, George Dancer Editors

Quain's elements of anatomy in three volumes. General anatomy or histology. Vol.1. Pt.2. 10th edition.
Longmans, Green & Co. London. 1893. 431p. ill.

SCHÄFER, Edward Albert and THANE, George Dancer Editors

Quain's elements of anatomy in three volumes. Organs of the senses. Vol.3. Pt.3. 10th edition.
Longmans, Green & Co. London. 1894. 165p. ill.

SCHÄFER, Edward Albert and THANE, George Dancer Editors

Quain's elements of anatomy in three volumes. The spinal chord and brain. Vol.3. Pt.1. 10th edition.
Longmans, Green & Co. London. 1895 219p. 139 ill.

SCHÄFER, Edward Albert and THANE, George Dancer Editors

Quain's elements of anatomy in three volumes. The nerves. Vol.3. Pt.2. 10th edition.
Longmans, Green & Co. London. 1897 403p. 102 ill.

SCHÄFER, Edward Albert. BRYCE, Thomas Hastie and SYMINGTON, Johnson Editors

Quain's elements of anatomy in four volumes. Embryology. Vol.1. 11th edition.
Longmans, Green & Co. London. 1896 275p. ill.

SCHÄFER, Edward Albert, SYMINGTON, Johnson and BRYCE, Thomas Hastie Editors

Quain's elements of anatomy in four volumes. Neurology: the descriptive anatomy of the peripheral nerves and of the organs of special sense. Vol.3. Pt.2. 11th edition.
Longmans, Green & Co. London. 1896 384p. ill

Carl Hermann Schauenburg (1819-1876)

German practitioner of medicine and ophthalmology who was also a poet and dramatist.

SCHAUENBURG, Carl Hermann

Ophthalmiatrik; nach den neuesten forschungen fur das studium und die praxis.
J. H. Geiger, Lahr. 1856. 272p. ill.

Hermann Schaeffler (1820-1903)

Educated at the technical college of his native Braunschweig and in 1846 went to work for the government railway system. He published many papers on mathematics, physics, mechanics, philosophy and economics as well as physiological optics.

SCHEFFLER, H.

Eine Darstellung der Gesetze dez Auges und der Sinnesthatigkeiten uberhaupt.
Brunswick. 1865. 1039p 523 ill.

SCHEFFLER, H.

Die Gesetze des raemlichen sehens.
Schulbuchhandlung, Braunschweig. 1866. 194p. 10. Ill.

Bound with SCHEFFLER, H. 'Gesetze des Auges'.

SCHEFFLER, Hermann

The theory of ocular defects and of spectacles, Translated by R. B. Carter.
Longman, Green & Co. 1869.240p. 86 ill.

Christoph Scheiner

A Jesuit astronomer who was a pioneer in physiological optics. He demonstrated how images fall on the human retina, noting the change in the curvature of the lens during accommodation, and devised the eponymous pinhole test to illustrate accommodation and refraction. His schematic diagram of the eye was the first scientifically accurate representation of the human eye making a great leap forward from the ancient Galeic conception of the eye. He studied philosophy and mathematics at Ingolstadt between 1600 and 1603 and in 1610 returned there when he was appointed professor of Hebrew and mathematics.

SCHEINER, Christoff

Oculus hoc est fundamentum opticum
Cornelius Bee, London, 1652 254p. ill.

One of the most important works in the history of optics

SCHELLBACH, K.

A series of figures illustrative of geometrical optics. Edited by W. Hopkins.
Cambridge, 1851. 56p.

The plates by F. Engel which seem to be a major feature of this work are missing

Heinrich Schiess (1833-1914)

Swiss ophthalmologist who, having studied first at the University of Basel, continued his studies in Berlin under von Graefe before returning to Basel as professor of ophthalmology. He was the founder, and for the first thirty years the director of Basel's first eye hospital and was the author of many monographs on the pathology of the eye.

SCHIESS, Heinrich

Kranke augenin, 30 bildern., makroskopisch dargestellt und beschreiben fur Artze und Studirende.

Basel, 1876. 118p 30 ill.

Diseases of the eye depicted in 30 large-size illustrations with descriptions. Includes examples of sarcoma, cataract, staphyloma and cyclitis.

SCHIESS, H.

Leitfaden der refraktions-und Akkommodations-Anomalien eine leicht fassliche anleitung zur brillenbestimmung fur practische artze unde studierende.

J. F. Bergamann, Wiesbaden, 1912. 71p. 30 ill.

SCHIFFERMULLER, I.

Versuch eines Farbensystems.

Augustin Bernard, Wien, 1772. 82p ill.

Deals with the theory of colour, methods of colour mixing, the colours which are useful for painting, enamelling etc. The author attempts to grade different colours. He illustrates 36 different shades of blue and proceeds to classify them. He also criticises the naming of colours. Includes a full-page illustration of a hand-coloured spectrum.

SCHMIDT, J.C.E.

Lehrbuch der analytischen Optik.

Dieterischen Buchhandlung, Goettingen, 1834 628p. ill.

A handbook explaining the outlines of dioptrics and catoptrics, the properties of light, laws of reflection and refraction, colour and the principles of optical instruments.

SCHMIDT, Johann Andreas

Coecus de colore iudicans sub auspiciis oculiomnia videntis.

Litteris Krebsianis, Jenae. 1703. 24p.

This is a monograph on colour in which the author makes reference to colour-blindness. At that time no scientific investigation into the defect had been undertaken. Schmidt discusses the origin of colour and decides that colour is possibly derived from white and black mixed in certain proportions. He considers the connexion between colour and light, and on the formation of opaque colour. Includes a section on the history of colour and another on hypotheses concerning colour, referring to the work of Kepler, Vitello, Plempius, Keckermann and Aristotle.

Gaspar Schott (1608-1666)

A Jesuit who studied under Athanasius Kircher and was appointed Professor of Moral Theology and Mathematics in Palermo and then Professor of Mathematics in his

home town of Würzburg. One of his most interesting contributions to the study of optics is held to be his description of the phenomena of the Fata Morgana. Whilst at Palermo he corresponded with Guericke, Huygens and Boyle collecting and publishing their reports of new discoveries and inventions in a series of compilations.

SCHOTT, Gaspar

Magia universalis naturae et artis sive recondita naturalium et artificialium rarum scientia. Opus quadripartum. Pars 1 Optica.

Johann Godefrid Schoenwetter, Wuerzburg, 1657. 688p.ill.

Schott's magnum opus on the wonders and marvels of science and technology and the application of science and mechanics to art, music the theatre and cryptography etc. The first volume is entirely optical dealing with the structure of the eye, the nature of colour and light and the use of spectacles, perspective, illumination, projection, optical illusions, the camera obscura, the telescope and the microscope. Includes full page illustrations of optical experiments

SCHOTT, Gaspar

Magia universalis naturae et artis sive recondita naturalium et artificialium rarum scientia. Opus quadripartum. Pars 2 Acoustica.

Johann Godefrid Schoenwetter, Wuerzburg, 1657.

SCHOTT, Gaspar

Magia universalis naturae et artis sive recondita naturalium et artificialium rarum scientia. Opus quadripartum. Pars 3& 4 Mathematica et physica

Johann Godefrid Schoenwetter, Wuerzburg, 1658

SCHOTT, Gaspar

Magia universalis naturae et artis sive recondita naturalium et artificialium rarum scientia. Opus quadripartum. Pars 4 physica

Johann Godefrid Schoenwetter, Wuerzburg, 1659

SCHOTT, Gaspar

Pantometrum kirkerianum, hoc est, instrumentum geometricum novum.

J. Hertz, Herbipolis, 1660 408p. ill.

Describes an instrument designed by the author

SCHOUTE, C.J.

De zorg voor de oogen

Amsterdam, 1904. 154p.

Paul Julius Schröter

German ophthalmologist who established a practice in Leipzig in 1872, became a lecturer at the University in 1873 and professor in 1890.

SCHRÖTER, Paul

Das Auge und seine Pflege im gesunden und kranken Zustande nebst einer Unweisung über Brillen von F.M. Henman. 3rd edition.

Leipzig, 1887. 202p.

George Edmund de Schweinitz (1858-1938)

Studied at the University of Pennsylvania and practised ophthalmology in his native Philadelphia. He made important advances in the study of toxic amblyopias and pathology and changes in the intraocular circulation.

SCHWEINITZ, George Edmund de

'One hundred cases of astigmatism contrary to the rule, and the associated symptoms' bound together with 'Perimetric observations on the influence of eserine and iridectomy in chronic glaucoma'

Transactions, American Medical Association, Section on Ophthalmology, at the 42nd meeting, held at Washington D.C. May 5- 8, 1891 pp147-202; 355-380

Two essays by the famous Philadelphia ophthalmologist George De Schweinitz on astigmatism and glaucoma.

SCHULZ, Elia

Optische Erquickungen.

George Peter Ronath, Frankfurt und Leipzig, 1767. 30p ill.

Eighteenth century description of optical illusions. Explains how to make a camera obscura, and with simple apparatus shows how to represent a man with a horse's head, a man flying, a man carrying his head on a sword etc.

SCHUSTER, Arthur

An introduction to the theory of optics. 2nd edition.

Edward Arnold, London. 1909. 352p. 185p. ill

Part 1: A basic treatment avoiding the use of higher mathematics.

Part 2: An introduction to the more complex issues including the nature of light and its propagation, the diffraction of light, the theory of optical instruments and the interference of polarised light.

SCHWALENBERG, A.U. & MEIBOM, Henrico

De fluxu humorum ad oculos naturali et praeternaturali hujusque curatione.

Georg Wolfgang Hamm, Helmstadt, 1687. 22p.

This is Schwalenberg's doctoral thesis submitted to Professor Meibom

SCHWARZBACH, B.

Consumption: how to avoid it; and Weak eyes. Two lectures.

Digby, Long and Co, London, 1897. 107p.

SCHWEIGGER, C.

Clinical investigations on squint. A monograph. Translated by E.J. Robinson, ed. By G. Hartridge.

J & A. Churchill, London. 1887. 141p. 3 ill.

Covers varieties of squint: convergent, periodic convergent, divergent and dynamic squint, the consequences of insufficiency of the interni and muscular asthenopia,

binocular vision in squint and visual acuteness of the squinting eye and the cure of squint.

Karl Ernst Theodor Schweigger (1830-1905)

German ophthalmologist, the son of Johan Salomon Christoph Schweigger, professor of physiology at the Halle University. He qualified as a private docent for ophthalmology at Berlin University in 1860 and after study in Holland England and America he returned to Germany where he was made professor extraordinary of ophthalmology at Göttingen and director of the newly founded Ophthalmic Hospital.

SCHWEIGGER, K.

Vorlesungen über den Gebrauch des Augenspiegels.

Berlin. 1864. 147p. 24 ill.

SCHWERT, F.M.

Die Beugungserscheinungen aus den Fundamentalgesetzen der Undulationstheorie analytisch entwickelt und bildern dargestellt.

Schwann und Goetz'schen Hofbuchhandlung, Mannheim, 1835. 143p. ill.

Kenneth Mackenzie Scott (?-1918)

Professor of ophthalmology at the Egyptian Medical School in Cairo. When he moved to London he became assistant Ophthalmic surgeon to the West London Hospital and consulting ophthalmic surgeon to St Mary's Hospital for Women and Children.

SCOTT, Kenneth

Refraction and visual acuity.

Rebman Ltd, London, 1911. 191p. 17 ill.

The elements of the refraction of the eye and the correction of errors – the examination of vision, the prescribing of spectacles, the principles of the ophthalmoscope and methods of testing colour blindness. Contains additional sections on the medical inspection of the eyes and eyesight of schoolchildren and on the standards of vision required in public and other service.

SCRINI et FORTIN

Manuel pratique pour le choix des verres de lunettes et l'examen de la vision.

Vigot Frères, Paris. 1906 233p. 24 ill.

A practical manual on the choice of spectacles and the examination of vision. Includes information on the varieties of lenses, errors of refraction and methods of testing for them and the principles of ophthalmometry and skiascopy.

SEABROOK, H.H.

Heterophorias and insufficiencies: a clinical study.

The Knickerbocker Press, 1900. 106p.

The diagnosis of the different phorias and methods of testing.

SELVA, Domenico

Esposizione delle comuni, e nuove spezie di cannocchiali, telescopi, microscopi etc

Giambatita Pasquali, Venice. 1761. 78p. ill.

An eighteenth century discourse on the formation and on defects of vision, on the usefulness and abuse of spectacles and the various kinds of telescopes, microscopes and lenses.

SELVA, Lorenzo
Sei dialoghi ottici teorrico-practici.
Somone Occhi, Venice. 1787. 184p ill.

SENF, Carl Eduard
Experimentelle und theoretische untersungen uber die gesetze Doppelten Strahlenbrechung und Polarisation des Lichts in den krystellen des zwei-undeingheddrige sytems.
J.C. Schuemann for C.C. Kluge, Dorpat, 1837. 112p. ill.

An experimental and theoretical examination of the laws of double refraction and the polarisation of light. Includes an account of refraction through crystals based on mathematical formulæ.

Henri Auguste Serre (1802-1870) also known as Serre D'Uzès and Serre D'Alais
Studied ophthalmology in Paris before returning to his native Uzès to practice. He later settled in Alais. He invented an instrument for measuring visual distances called an opsiometer.

SERRE, Henri A.
Essai sur les phosphenes ou anneaux lumineaux de la rertine consideres dans leurs rapports avec la physiologie et la pathologie de la vision.
Victor Masson, Paris 1853 472p.

Although the great German physiologist Johannes Mueller (1801-58) is held to be the first person to describe retinal phosphates (in 1826) Henri A Serre d'Uzez (1802-70) is credited with coining the term and being the first to study thoroughly this phenomenon. Phosphenes are coloured images produced when the closed eyelid is depressed. Serre not only described these, but tried to relate them to ocular physiology and pathology.

SHASTID, Thomas Hall
The description of an ophthalmoscope being an English translation of von Helmholtz's "Beschreibung eines Augenspiegels".
Cleveland Press, Chicago, 1916. 33p. 3 ill,

SHASTID, Thomas Hall
Ophthalmic jurisprudence. A reprint from the American Encyclopaedia of ophthalmology.
Cleveland Press, Chicago. 1916. 147p

Explains the court systems of different countries and the expert witness which practitioners may be called upon to give. Includes tests for detecting the simulation or

exaggeration of ocular injuries, diseases or amblyopia. Gives details of the ocular indications of death, poisoning, burning etc and also gives a resumé of the laws which have been enacted for the prevention of injuries to, and diseases of the eye in England, America, France, Germany and Italy.

Cecil Edward Shaw (1864-1913)

Irish ophthalmologist who studied in London, Vienna and Paris and became a lecturer in ophthalmology at Queen's University.

SHAW, Cecil Edward

Diseases of the eye, a practical handbook for the use of general practitioners and students.

J. & A. Churchill, London. 1885. 103p. 5 ill.

Analyses affections of the eye in relation to other diseases and also includes a test card for colour blindness.

SHEARD, Charles

Dynamic ocular tests.

The Lawrence Press, Columbus, 1917. 143p. 33 ill.

A routine eye examination is described with various subjective dynamic methods of investigating convergence as associated with accommodation and functional convergence. There is a section on dynamic skiametry.

SHEARD, Charles

Dynamic skiametry and methods of testing the accommodation and convergence of the eye, being an essay contributed to the American Encyclopaedia of Ophthalmology.

Cleveland Press, Chicago. 1920. 1920. 108p. 18 ill.

A monograph from the American Encyclopaedia of Ophthalmology dealing with the author's dynamic skiametry method and its application and advantages.

SHEARD, Charles

Physiological optics.

Cleveland Press, Chicago. 1918. 513p. 250 ill.

An essay contributed to the American Encyclopaedia of Ophthalmology dealing with catoptrics, monocular and binocular vision and retinal and chiasmal images.

Jules Sichel (1802-1868)

Received his MD in Berlin in 1825 and went on to study internal medicine under Schoenlein at Würzburg, and ophthalmology in Vienna under Jaeger before settling in Paris where in 1832 he founded the city's first eye hospital. He struggled to establish that ophthalmology was not the exclusive property of surgeons but was inextricably linked with internal medicine.

SICHEL, Jules

Traite de l'ophthalmie, a la cataracte et la amaurose pour servir de supplement au traite des maladies des yeux de Weller.
Germer-Bailliere, Paris, 1837. 750p. ill.

Noteworthy for the detailed classifications and descriptions of various types of ocular inflammations, discussion of mercury treatments and the rational classification of amauroses into retinal, ophthalmic, optic, cerebral spinal and ganglionic. There are colour plates illustrating the different types of ophthalmias and different kinds of cataract.

SICHERER, Otto von
Hygiene des Auges, im gesunden und Kranken Zustande.
Ernst Heinrich Mortitz, Stuttgart, 1903p. 18 ill.

SILBERSTEIN, Ludwik
Elements of the electro-magnetic theory of light.
Longmans, Green & Co. London. 1918. 48p. 2. Ill.

States the advantages of the theory together with its mathematical principles.

SILBERSTEIN, Ludwik
Elements of vector algebra.
Longmans, Green & Co. London. 1919. 42p. 12. Ill.

SILBERSTEIN, Ludwik
Simplified method of tracing rays through any optical system of lenses, prisms and mirrors.
Longmans, Green & Co. New York. 1918. 37p. 6. Ill.

A method of treating the geometrical optics of any given system intrinsically by vectorial method.

SIMMS, Frederick W.
A treatise on the principal mathematical drawing instruments employed by the engineer, architect and surveyor together with a description of the theodolite by Henry James Castle and instructions in field work compiled for the use of students. 2nd edition.
John Weale, London, 1845. 130p. ill.

Includes information on methods of adjusting the telescope.

SIMMS, Frederick W.
A treatise on the principal mathematical drawing instruments employed in surveying, levelling and astronomy; explaining their construction, adjustments and use: with an appendix and tables.
Troughton & Sims, London, 1849. 153p. ill.

SINGER, Charles
Studies in the history and method of science.
Clarendon Press, Oxford. 1917 304p. ill.

Skiascopy. A treatise on the Shadow Test in its practical application to the works of refraction

The Keystone Press, Philadelphia, 1899. 221p. 4 pl. 63 ill.

See also ROGERS, G.a. for 2nd edition.

SLADE, W.W.

The making of a mechanical optician. A treatise on the equipment and mechanical work of optometrists and opticians.

The Keystone Publishing Co. Philadelphia, 1918. 188p. 204 ill.

Information on operating and care of the machinery, the marking, cutting and grinding of lenses, the marking of prisms, drilling and mounting, surface grinding, soldering and repairing.

Sir Hans Sloane (1660-1753)

Born in Ireland, he studied medicine and botany at Paris and Montpellier, received his MD at the University of Orange in 1683 and settled in London in 1689 where he became a fashionable practitioner. In 1727 he became first physician to George II and succeeded Sir Isaac Newton as president of the Royal Society. Upon his death his library of some 50,000 volumes and 3560 manuscripts was acquired for the nation for some £20,000 and this collection formed the basis of the British Library.

SLOANE, Hans

An account of a most efficacious medicine for soreness, weakness, and several other distempers of the eyes.

Dan. Browne, London. 1765. 17p.

Asserts the healing powers of an ointment made from pig fat, zinc oxide, iron oxide and aloe which the author claimed removed corneal scars and eased eye pain.

SLUDER, Greenfield

Concerning some headaches and eye disorders of nasal origin.

Henry Kimpton, London. 1920. 272p. 115 ill.

Discusses the nasal factors of headaches and eye lesions.

Alfred Smee (1818-1877)

Studied medicine at King's College London and St Bartholomew's Hospital and then established a practice in general ophthalmic surgery, however he also wrote on electro-metallurgy and electro-biology. His greatest claim to fame is as the inventor of a battery ('Smee Cell', 1840) made with zinc, silver and sulphuric acid. This single fluid cell was widely used on the railways. Elected FRS 1841.

SMEE, Alfred

The eye in health and disease. With an account of the optometer for the adaption of glasses for impaired, aged or defective sight. Being the substance of lectures delivered at the Central London Ophthalmic hospital. 2nd edition.

London. 1854. 99p. 52 ill.

Mostly the same information as in the author's 'Vision in Health & Disease' but with additional chapters on Stereoscopes binocular perspective and rules for the preservation of sight and choice of spectacles.

SMEE, Alfred

Rules for the preservation of sight. Extracted by permission from 'The eye in health and disease'

Horne, Thornthwaite & Wood, London. nd 12p.

Discusses the means of attaining healthy vision, including diseases of the eyes, the wearing of spectacles, long and short sight, squint and the effect of light upon the eyes.

SMEE, Alfred

Vision in health and disease. The value of glasses for restoration and the mischief caused by their abuse: being the substance of lectures delivered at the Central London Ophthalmic Hospital.

Horne, Thornthwaite and Wood, London, 1847. 64p. ill.

SMETHWICK, Francis

An account of the invention of grinding optick and burning glasses of a figure not sphericall.

Philosophical Society No. 33., London. 1667-8. 4p. ill.

SMITH, David

Three lectures on preservation of sight.

Robert Hardwicke, London. 1871 92p. 36 ill.

Lectures on the elementary principles of optics, errors of refraction and improper illumination as a cause of impaired.

Joseph Priestly Smith (1845-1933)

Trained at the Queen's Hospital Birmingham, the London Hospital and Moorfields he became ophthalmic surgeon at Queen's and also lectured in ophthalmology at the University of Birmingham where he became professor from 1900-1916. Smith invented a perimeter and a tonometer and, in 1888, founded the Ophthalmic Review of which he was co-editor until 1909.

SMITH, Priestley

On the pathology and treatment of glaucoma being a revised treatment with additions of the Erasmus Wilson Lectures delivered at the Royal College of Surgeons of England, in March 1891.

London, 1891. 55p. 40 ill.

Robert Smith (1689-1768)

Smith was educated at Trinity College Cambridge and spent the rest of his life there, holding the Plumian professorship in astronomy from 1716 to 1760.

SMITH, Robert

A compleat system of opticks in four books viz a popular, mathematical, mechanical and philosophical treatise to which are added remarks upon the whole. Vol. 1 Books 1&2.

The Author, Cambridge. 1738. 288p. ill

SMITH, Robert

A compleat system of opticks in four books viz a popular, mathematical, mechanical and philosophical treatise to which are added remarks upon the whole. Vol. 2 Books 3&4.

The Author, Cambridge. 1738. 288p. ill

Described as perhaps the most influential optical textbook of the eighteenth century, this work helped establish the particulate theory of light.

SMITH Robert

Cours complete d'optique contenant la theorie, la pratique et les usages de cete science. Tome premier, livre 1 & 2.

La veuve Girard, Avignon. 1767. 472p. ill.

SMITH Robert

Cours complete d'optique contenant la theorie, la pratique et les usaages de cete science. Tome seconde, livre 3 & 4.

La veuve Girard, Avignon. 1767. 536p. ill.

SMITH, Robert

The elementary parts of Dr Smith's 'Complete system of opticks' selected and arranged for the use of students at the Universitie: to which are added in the form of notes some explanatory propositions from other authors.

T. and J. Merrill, J. Woodyer, J. Nicholson, Cambridge, 1778. 119p. ill.

SMITH, Robert

Traite d'optique traduit de l'Anglais et considerablement augmente.

Romain Malassis, Brest. 1767. 739p. ill.

SMITH, Robert and KAESTNER, Abraham Gotthelf

Vollstaendiger Lehrbegriff der optik mit aenderungen und Zusatzen.

Der Richterischen Buchhandlung, Altenburg. 1755. 482p. ill.

Simeon Snell (1851-1909)

Was educated at Leeds, Guy's Hospital and the Royal London Ophthalmic Hospital before settling in Sheffield as an ophthalmologist and working as an ophthalmic surgeon at the Sheffield Royal Infirmary. Snell was one of the founders of Sheffield University and its first professor of ophthalmology. He was an authority on miner's nystagmus, the prevention of industrial eye injuries and the extraction of intraocular foreign bodies.

SNELL, Simeon

The electro magnet and its employment in ophthalmic surgery with special reference to the detection and removal of fragments of steel or iron from the interior of the eye.

J. & A. Churchill, London. 1883 94p. 1 ill.

SNELL, Simeon
Eyesight and school life.
John Wright & Co. Bristol, 1895. 70p. 16 ill.

Advice to parents and teachers on the steps they should take to ensure good vision for their children. Analyses the causes of eyestrain and gives information on correct illumination, the positioning of desks etc.

SNELL, Simeon
Eye-strain as a cause of headache and other neuroses.
Simpkin, Marshall, Hamilton, Kent & Co., London. 1904. 57p. 4 ill.

An analysis of the characteristics and situation of headache with its relation to errors of refraction. Cites a number of cases in which the correction of the refractive error caused a cessation of headaches, giddiness etc.

SNELL, Simeon
A practical guide to the examination of the eye for students and junior practitioners.
Young J. Pentland, Edinburgh. 1898. 177p. 89 ill.

Hermann Snellen (1834-1908)

Studied under Donders at the University of Utrecht. From 1877-1899 he was professor of ophthalmology in Utrecht and in 1884 he succeeded Donders as director of the Netherland Ophthalmic Hospital. He improved or invented many surgical procedures and is probably best known for his invention of the test-types.

SNELLEN, H.
Bijdrage tot des geschiednis der oogziekte.
J. Greven, Utrecht. 1865. 100p.

SNELLEN, Hermann
Probuchstaben zur Bestimmung der sehscharfe vierte ausgabe.
Hermann Peters, Berlin. 1873. 13p. 2. Ill.

SNELLEN, Hermann und LANDOLT, Edmund
Optometrologie. Die functionsprüfungen des Auges.
1874. 248p. 79 ill.

SNELLEN, H.
Optotypi. Edited by H. Snellen Jr. 13th edition.
Hermann Peters, London 1896.

39 test charts.

SNELLEN, H.
Optotypi. Edited by H. Snellen Jr.
Hermann Peters, London 1908.

A series of Snellen type tests in various languages.

SNELLEN, H.
Optotypi. Edited by H. Snellen Jr. 13th edition.
Hermann Peters, London 1911.

SNELLEN, H.
Test-types for the determination of the acuteness of vision.
Utrecht, 1864. 9p. 17 test charts.

A collection of various test types including standard letters, lines squares, circles, test dots, coloured letters etc.

SNELLEN, H.
Test-types for the determination of the acuteness of vision. 2nd edition
Official War Office Edition.
Utrecht, 1864. 9p. 15 test charts.

SOUS, G.
Traite d'optique, considérée dans ses rapports avec l'examen de l'oeil. 2nd ed.
Octave Doin, Paris, 1881. 512p. 127 ill.

A practical treatise. Covers the fundamental laws of optics, ophthalmoscopic examination of the eye and the properties of lenses and prisms etc.

SOUTHALL, James P.C.
Mirrors, prisms and lenses. A textbook of geometrical optics.
The Macmillan Company, New York. 1918. 579p.

SOUTHALL, James P.C.
The principles and methods of geometrical optics especially as applied to the theory of optical instruments.
The Macmillan Company, 1913. 626p. 170 ill.

Connected exposition of the principles and methods of geometrical optics, especially those which are applicable to the theory of optical instruments. Has sections on the fundamental laws of geometrical optics, characteristic properties of rays of light, the geometric theory of optical imagery and the theory of spherical aberrations and colour phenomena.

SOWERBY, James
A new elucidation of colours, original prismatic and material, showing their concordance in three primaries, yellow, red & blue and the means of measuring and mixing them with some observations on the accuracy of Sir Isaac Newton.
Richard Taylor & Co, London, 1809. 51p ill.

SPERLINGEN, M. Johann
Theoria lucis et luminis.
Johann Roehner, Wittenburg, 1640. 15p.

A definition of light, shadow and the incidence of rays of light and colour etc.

SPIELMAN, M.H.

The iconography of Andreas Vesalius (Andre Vesale) anatomist and physician 1514-1564.

John Bale and Sons & Danielsson Ltd. 1925. 243p.

SPITTA, Edmund J.

Microscopy. The construction, theory and use of the microscope. 3rd edition

John Murray, London. 1920. 534p. 283 ill.

SPOTTISWOODE, William

Polarisation of light.

Macmillan & Co., London. 1874. 129p. 31 ill.

SPRY, Edward

A remarkable case of morbid eye.

1755. 4p.

STACK, Rev John

A short system of optics principally designed for the use of undergraduates in the University of Dublin.

University Press, Dublin, 1787. 179p. ill.

A handbook intended for Dublin University undergraduates on the laws of reflection and refraction, the nature of vision and the construction of telescopes and microscopes.

STACK, Rev John

A short system of optics principally designed for the use of undergraduates in the University of Dublin. 3rd edition

University Press, Dublin, 1820. 179p. ill.

STANLEY, William Ford

Surveying and levelling instruments theoretically and practically described. 4th ed.

E. & F. Spon Ltd. 1914. 606p. 433 ill.

STASSEN, M.

La fatigue de l'appareil visuel chez les ouvriers mineurs.

Liege, 1914-1919. 233p. 20 ill.

A clinical study of miner's nystagmus giving the results of research into the prevention and treatment of visual troubles.

STEINHEIL, Adolph und VOIT, Ernest

Applied optics. The computation of optical systems. (Handbuck der angewandten optik) Vol 1. Translated and edited by James Weir French.

Blackie and Son, London. 1918. 207p. 27 ill.

STEINHEIL, Adolph und VOIT, Ernest

Applied optics. The computation of optical systems. (Handbuck der angewandten optik) Vol. 2. Translated and edited by James Weir French. Blackie and Son, London. 1919. 207p. 27 ill.

A detailed practical study of optics that offers a clear impression of optical systems.

STEINMETZ, Charles Proteus
Radiation, light and illumination. A series of engineering lectures delivered at Union College. Compiled and edited by J LeRoy Hayden. 3rd edition
Mcgraw-Hill Book Co., New York. 1918. 305p. 128 ill.

Carl Stellwag von Carion (1823-1904)

An Austrian ophthalmologist who is particularly important for advancing understanding of refractive errors.

STELLWAG, Carl
Treatise on the diseases of the eye including the anatomy of the organ. Translated and edited by D.B. St. J. Roosa, C.S. Bull and C.E. Hackley. 4th edition.
William Wood & Co. New York. 1873. 915p. 124 ill.

Includes sections on inflammation and its consequences, cataract and functional diseases.

STEPHENSON, Sydney
Contagious ophthalmia, acute and chronic.
Bailliere, Tindall & Cox, London, 1900. 84p. 5 ill.

A monograph on the diagnosis of ophthalmia. Gives an account of acute and chronic ophthalmia and the treatment necessary in both instances.

STEPHENSON, Sydney
Epidemic ophthalmia, its symptoms, diagnosis and management.
Young J. Pentland, Edinburgh. 1895 278p. 26 ill.

Discusses the means by which the infection is spread and the preventative steps which should be taken.

STEPHENSON, Sydney
Eye strain in everyday practice
The Ophthalmoscope Press, London. 1913. 139p. 80 ill

A collection of articles on the detection of eyestrain, ocular headaches, unusual forms of migraine in children and cases of eyestrain simulating grave organic disease of the central nervous system.

STEPHENSON, Sydney
Ophthalmia neonatorum with especial references to its causation and prevention.
George Pulman & Sons, London, 1907 258p.

Covers the aetiology, symptoms, histology, diagnosis, prognosis, prevention and treatment.

STEPHENSON, Sydney

Ophthalmic nursing.

The Scientific Press, London. 1894. 229p. 80 ill

STEPHENSON, Sydney

Ophthalmic nursing. 3rd edition

The Scientific Press, London. nd. 229p. 80 ill

George Thomas Stevens (1832-1921)

American ophthalmologist who started in general practice but during the Civil War was called into military practice. In 1870 he was appointed professor of Physiology and Diseases of the Eye in the Albany Medical College, the Medical Department of Union University. He was still performing eye surgery at the age of 86. He introduced new words into the ophthalmic terminology: orthophoria, heterophoria, esophoria, heterotropia, esotropia, exotropia, hypertropia, anophoria, catophoria and declination. Stevens also introduced the phorometer, the tropometer and the clinoscope.

STEVENS, George T.

A treatise on the motor apparatus of the eyes embracing an exposition of the anomalies of ocular adjustments and their treatment with the anatomy and physiology of the muscles and their accessories.

F.A. Davies, Philadelphia, 1906. 496p. 184 ill

Detailed exposition of the anatomy and physiology of the motor muscles of the eyes and their accessories. Anomalous conditions of the motor muscles of the eyes (a) consistent (b) inconsistent, with the physiological state.

John Stevenson (1778-1846)

In about 1810 he established a cataract clinic which he called: 'A Dispensary for Cataractous Patients'. In 1823 it became known as the 'Ophthalmic Institute for the Cure of Cataract'. He was highly regarded and became oculist and surgeon to the Duke of York and to the King of Belgium.

STEVENSON, John

Cataract: a familiar description of its nature, symptoms and ordinary modes of treatment, particularly with reference to the operations performed by the author at the Royal Infirmary for cataract.

Hatchard & Sons, London, 1834 128p.

STEVENSON, John

A practical treatise on cataract. 2nd edition.

Longman, Hurst, Rees, Orme and Brown, London. 1814. 224p. ill.

STEVENSON, John

A practical treatise on the morbid sensibility of the eye.

commonly called weakness of sight.

2nd edition

Callow. London. 1813. 114p.

The second edition of a nineteenth century account of the symptoms and causes of weakness of sight and the methods of curing the affliction. Describes a case where the patient shows no pathologic changes but is sensitive to light and other external stimuli. The author attributes this to a sensitivity of the retina or a chronic inflammation of either the retina or the choroids. The suggested treatments include leeches, purges, warm compresses and use of opium.

STEVENSON, John

A practical treatise on the morbid sensibility of the eye commonly called weakness of sight. 3rd edition.

Callow, London, 1819. 150p.

STEVENSON, John

A practical treatise on the morbid sensibility of the eye commonly called weakness of sight. 4th edition.

Highley, London, 1834. 150p. +++

Mark Delimon Stevenson (1876-1915)

Canadian ophthalmologist who died young when a scratch inflicted when scrubbing up for an operation became inflicted during the operation causing fatal septicaemia.

STEVENSON, Mark D.

Photscopy (skiascopy or retinoscopy).

W. B. Saunders Company, Philadelphia, 1906. 126p. 37 ill.

The author explains the reasons of the phenomena observed before he describes the practical application of the test with the plane mirror. Describes the examination routine in the estimation of the different refractive errors.

STEWART, E. Wallace

Heat and light problems.

W.B. Clive, London. 1895. 106p. 3 ill.

STEWART, G. N.

A manual of physiology with practical exercises. 5th edition.

Bailliere, Tindall & Cox, London. 1906. 911p. 397 ill.

Jakob Stilling (1842-1915) a German ophthalmologist, the son of Benedict Stilling an anatomist and surgeon, was a professor at the University of Strasbourg and was a teacher, researcher and clinician, contributing to the understanding of the tear passage and the antiseptic effect of aniline dyes. He was the first person to create pseudoisochromatic charts for colour vision testing and made the distinction between high myopia due to chorioretinitis and growth myopia.

Jakob Stilling (1842-1915)

The son of Benedict Stilling, he studied ophthalmology and followed his father into practice in Kassel. In 1877 he introduced a system of pseudoisochromatic plates for testing colour vision and also published important studies on colour vision, myopia and perimetry.

STILLING, J.

Grundzüge der Augenheilkunde.

Urban & Schwarzenberg, Vienna. 1897. 368p. 113 ill.

STILLING, J.

Die prüfung des Farbennnes beim Eisenbahn und Marinepersonal.

Cassel, 1878. 11p. 6 pl.

Tests for the colour vision of railway and naval servants, principles of colour vision, the sight of the colour blind, red-green, blue-yellow and total colour-blindness. Includes charts for examining the colour blind.

STIRLING, William

Outlines of practical physiology being a manual for the physiology laboratory including chemical and experimental physiology with reference to practical medicine. 3rd edition.

Charles Griffin & Co. London. 1895. 402p. 289.ill.

STOKES, Sir George Gabriel

On light. Burnett Lectures in three courses, delivered at Aberdeen in November 1883, December 1884, November 1885.

Macmillan & Co, London 1892 347p.

A course of lectures on the nature of light, light as a means of investigation and the beneficial effects of light.

STONE, G. Johnstone

Monograph on microscopic vision.

Taken from the Philosophical Magazines for October, November and December 1896. 68p. 28 ill.

States the fundamental problems of microscopic vision, working them out in a series of propositions. Discusses the manner in which the standard image is formed.

STONE, G. Johnstone

Telescopic vision.

Taken from the Philosophical Magazine for August, November and December 1908. 68p. 10 ill.

STRATFORD, Samuel John

A manual of the anatomy, physiology and diseases of the eye and its appendages.

Longman, Rees, Orme, and Green, London. 1828. 199p. ill.

A survey of the structure of the eye, the diseases of each structure and the means of treatment. Coloured illustrations show the effect of acute conjunctival inflammation,

inflammation of the cornea, paralysis of the eyelid, and tumours of the eyelid with capsular cataract.

STRICKER, Louis

The crystalline lens system. Its embryology, anatomy, physiological chemistry, physiology, pathology, diseases, treatment operations and after changes with a consideration of aphakia.
Cincinnati, 1899. 599p.

STRUTHERS, John

Anatomical and physiological observations. Part 1
Sutherland & Knox, Edinburgh. 1854. 239p. 41 ill.

Collected papers from medical journals including, The Nerves of the Orbit and Branches from the Fifth Nerve to the Muscles of the Eye

SUFFOLK, W. T.

On microscopical manipulation being the subject matter of a course of lectures delivered before the Quekett Microscopical Club, January – April 1869.
Henry Gilman, 1870. 227p. 66 ill.

SULZER, D.E.

Extrait de l'encyclopédie Française d'ophtalmologie.
579p. 567 ill.

SURGEON, J.S.

Dr Taylor, couched for cataract, wherein the absurdity of his new treatise on the diseases of the chrySTALLINE humoour as likewise his theory of the causes of cataract are fully demonstrated.
John Cooper, London, 54p.

SUTER, William Norwood

Handbook of optics for students of ophthalmology.
The Macmillan Company, New York. 1899. 209p. 54 ill.

A non-technical statement of the main facts of technical optics.

SUTER, William Norwood

The refraction and motility of the eye for students and practitioners.
Sidney Appleton, London. 1904 390p. 105 ill.

SWAN, Joseph

On the origins of the visual powers of the optic nerve.
Longman, Brown, Green & Longmans. London, 1856, 45p. 9 pl.

Sir Henry Rosborough Swanzy (1844-1913)

Received his MD at Dublin in 1865 and continued his studies in Berlin under von Graefe before setting up an ophthalmic practice in Dublin. From 1897-9 he was President of the Ophthalmological Society of the United Kingdom and from 1906-1908 President of the Royal College of Surgeons.

SWANZY, Henry R.

Eye diseases and eye symptoms in their relation to organic diseases of the brain and spinal cord.

Reprint from Vol. iv. Norris and Oliver's 'Diseases of the Eye'
J. B. Lippincott Company, 1899. 106p. 4. Ill.

Chapters on diffuse eye symptoms of intracranial tumour, localising eye symptoms of focal brain diseases.

SWANZY, Henry R.

A handbook of the diseases of the eye and their treatment. 3rd edition
H.K. Lewis London. 1890. 508p. 158 ill.

Detailed exposition describing each structure of the eye, the diseases to which the eye is liable and the method of treatment. Information on the optical structure and functional examination of the eye, the principles of the ophthalmoscope, abnormal refraction and accommodation, and the orbital muscles and their arrangement.

SWANZY, Henry R.

A handbook of the diseases of the eye and their treatment. 7th edition
H.K. Lewis London. 1900. 633p. 166 ill.

SWANZY, Henry R.

A handbook of the diseases of the eye and their treatment. 8th edition
H.K. Lewis London. 1903. 678p. ill.

SWANZY, Henry R. and WERNER, Louis

A handbook of the diseases of the eye and their treatment. 9th edition
H.K. Lewis London. 1907. 744p. ill.

SWANZY, Sir Henry R. and Werner, Louis

A handbook of the diseases of the eye and their treatment. 10th edition
H.K. Lewis London. 1912. 634p.

William George Sym (? – 1938)

Scottish ophthalmologist who was actively concerned with the Eye Department of the Royal Infirmary of Edinburgh from the date of his graduation for the next 34 years. In 1911 he took a leading role in forming the Scottish Ophthalmological Club and was its Secretary for twenty two years.

SYM, William George

Diseases and injuries of the eye, a textbook for students and practitioners.
Adam & Charles Black, 1913. 493p. ill.

SZILI, Adolf

Augenspiegel-Studien zu einer Morphographie des Sehnerven-Eintrittes im menschlichen.

J.F. Bergmann, Wiesbaden. 1901. 92p. 27 ill.

A series of fundus illustrations in colour and black and white, showing different types of disease. Each plate has a short case report.

TACQUET, Andreas

Opera mathematica

Jacobum, Meursium, Antverpiae, 1669, 357p (Geometria 132p, Optica 212p, Catoptica 164p Architectura Militaris 267-303, Cylindrica Annularia 142p Dissertio physico-mathematica circulorum volutionibus 145-169) plates.

Peter Guthrie Tait (1831-1901)

Scottish physicist and mathematician who was educated at Cambridge and later became professor of mathematics at Queen's College, Belfast. Best known for his mathematical research he also published treatises on light, heat and the properties of matter.

TAIT, P. G.

Light

Adam & Charles Black, London. 1900. 294p. 54 ill.

The third edition of a treatise on optics and the undulatory theory with allusions to the connection of light with electro-magnetism.

Charles Bell Taylor (1829-1909)

English ophthalmologist famed for his dexterity in removing cataracts.

TAYLOR, Charles Bell

Lectures on diseases of the eye. 3rd edition.

London, 1891. 140p. 41 ill.

Describes the diagnosis and treatment of cataract, squint, glaucoma and optico-ciliary neurotomy. Discusses vision defects which can be remedied by spectacles, and eye troubles in general practice.

TAYLOR, H. Dennis

A system of applied optics. Being a complete system of formulae of the second order and the foundation of a complete system of the third order, with examples of their practical application.

Macmillan & Co. London. 1906. 353p. 123 ill.

Sections on achromatism, coma at the foci of eccentric oblique pencils, distortion and the rectilinearity of images, equivalent focal lengths and the principal points of thick lenses and lens systems.

TAYLOR, Harry L. & BAXTER, William S.

The key to sight testing. A supplement to the practical optician's guide.

J. & H. Taylor, Birmingham. 1902 355p. 115 ill.

Includes information on the perception of colour, ocular muscles, movement of the eyes, retinoscopy and ophthalmoscopy.

TAYLOR, Harry L.
The manipulation and fitting of ophthalmic frames.
J. & H. Taylor, Birmingham. 1907. 117. 33 ill.

TAYLOR, Harry & MACKINNEY, V. H.
The key to sight testing. 2nd edition.
J. & H. Taylor, Birmingham. 1908. 436p 142 ill.
In five sections: geometrical and physical optics, physiological optics, vision and lenses, the testing room and the workshop.

TAYLOR, Harry L.
The practical optician's guide: an elementary course for opticians.
Birmingham 1897. 102p. 31 ill.

TAYLOR, J. Traill
The optics of photography and photographic lenses.
Whittaker & Co. 1892. 244p. 68 ill.

TAYLOR, Jean
Le mecanisme ou le nouveau traite de l'anatomie du globe de l'oeil.
Michel-Etienne David, Paris, 1738. 413p. ill.

TAYLOR, Jean
Traite sur les maladies de l'organe immediate de la vue. 2nd edition.
Prault Fils, Paris, 1735. 52p.
Bound after Mr Ward's practice of physick as it relates to the publick, impartially considered in a letter to Thomas Carew, Esq. M.P., London 1791.

10th International Congres D'Ophthalmologie. Section B – Communications Scientifiques.
Lucerne, 1904. 204p. 21 ill.

10th International Congres D'Ophthalmologie. Section C – Discussions, Demonstrations, Expositions.
Lausanne, 1904.

TENNANT , John A Editor
Telephotography.
New York, 1901 36p. 17 ill.

TENNANT, & MITCHELL, Walter
Minerology and crystallography, being a classification of crystals according to their form and an arrangement of crystals after their chemical composition.
Charles Griffin & Co., London. 299p. 396 ill.

Felix Terrien (1872-1940)

Studied at the Paris Faculté where he then became a lecturer in ophthalmology and later, professor of clinical ophthalmology. Designer of the eponymous refraction ophthalmoscope.

TERRIEN, F. & HUBERT
Traitement adjuvant du strabisme.
G. Steinheil, Paris. 1912. 292p. 137 ill.

Samuel Theobald (1846-1930)

American ophthalmologist from a distinguished medical family. He studied under Arlt and Jaeger in Vienna

THEOBALD, Samuel
Prevalent diseases of the eye. A reference handbook especially adapted to the needs of the general practitioner.
W. B. Saunders, 1906. 551p. 202 ill.

Full of helpful suggestions to the general practitioner as well as the ophthalmologist. Many of the external diseases of the eye are illustrated in colour by the author's son.

Mark Mitouflet Thomin (1707-1752)

THOMIN, Marc Mitouflet
Instruction sur l'usage des lunettes ou conserves pour toutes sortes de vues.
Claude Lamesle, Paris, 1746. 130p.

An eighteenth century treatise on the preservation of sight and the use of spectacles for the correction of long and short sight. Describes the application of convex and concave lenses.

THOMIN, Marc Mitouflet
Traite d'optique mechanique. Avec une instruction sur l'usage des lunettes ou conserves pour toutes sortes de vûes.
Jean-Baptiste Coignard, Paris, 1746. 372p. ill.

A treatise on mechanical optics containing rules and proportions for making all varieties of spectacles and microscopes and also on the use of glasses to correct different defects.

THOMPSON, Sir Benjamin (Count of Rumford)
An enquiry concerning the chemical properties that have been attributed to light.
1799. 11p.

THOMPSON, James
On certain appearances of beams of light. Proceedings of the Royal Society. A Paper presented to the Royal Society on 16th June 1892. Pp70-74.
The Royal Society, London. 1892. 175p. 1 ill.

A Royal Society paper explaining why beams or ladders of light are seen above or below a lamp flame when it is viewed with partially closed eyelids.

THOMPSON, Sir William
Notes of lectures on molecular dynamics and the wave theory of light.
1884. 328p. ill.

Twenty lectures dealing with the wave theory of light, motion of elastic solid, electromagnetic theory of light, double refraction, sources of light and refraction and reflection.

THOMSON, Arthur

The anatomy of the human eye as illustrated by enlarged stereoscopic photographs. Oxford, 1912. 131p 67 ill.

THOMSON, H. A.

Dr Thomson's 1895 correspondence course in optics. (facsimile edition). Professional Press, 1975

THOMSON, James

On certain appearances of beams of light.
A paper presented to the Royal Society on 16th June 1892.
The Royal Society, London. 1892.

THOMSON, Silvanus P.

The life of William Thomson, Baron Kelvin of Largs. Vol.1.
Macmillan & Co. London. 1910. 584p. 19 ill

THOMSON, Silvanus P.

The life of William Thomson, Baron Kelvin of Largs. Vol.2.
Macmillan & Co. London. 1910. 585-1297p.

THOMSON, Silvanus P.

Optical tables and data for the use of opticians. 2nd edition
E. & F.N. Spon London. 1907. 130p.

THOMSON, Silvanus P.

Light. Visible and invisible. 2nd edition
A series of lectures given at the Royal Institute of Great Britain.
Macmillan & Co. London 1928 382p 198 ill.

THOMSON, Spencer

The structure and functions of the eye, illustrative of the power, wisdom and goodness of God.
Groombridge and Sons, London. 1857. 272p. 41 ill.

THOMSON, W. Hanna

Brain and personality, the physical relations of the brain to the mind.
New York, 1906. 335p. 5 ill

A psychological account of the structure and function of the brain and a description of the evolution of the nervous system.

James Thorington (1858-1944)

After receiving his MD at Jefferson Medical College. Philadelphia he spent several years in Panama as surgeon to a railroad company before returning to Philadelphia as

an ophthalmologist. For many years he was professor of ophthalmology at the Philadelphia Polyclinic. He developed the Thorington Ophthalmoscope built by Wall and Ochs, a Schematic eye for studying ophthalmology and the Thorington Asbestos Chimney.

THORINGTON, James

The ophthalmoscope and how to use it with coloured illustrations, descriptions and treatment of the principle diseases of the fundus.

Rebman Ltd, 1906. 298p. 85 ill.

The ophthalmoscope and its optic principles; also the optic principles and anatomy of the eye, including descriptions of the symptoms and treatment of the principle diseases of the fundus.

THORINGTON, James

Prisms, their uses and equivalents.

P. Blakiston's Son & Co. Philadelphia, 1913. 144p. 114 ill.

A simple explanation of the properties of prisms, their optical effect, their numbering, the results of combining them, methods of testing muscular anomalies with them and prim treatment for heterophoria and heterotropia.

THORINGTON, James

Refraction and how to refract including sections on optics, retinoscopy, the fitting of spectacles and eyeglasses.

Rebman Ltd, 1900. 301p. 200 ill.

Includes sections on optics, retinoscopy, ophthalmoscopy, and the fitting of spectacles and eyeglasses.

THORINGTON, James

Retinoscopy (or shadow test) in the determination of refraction at one meter distance with the plane mirror. 3rd edition.

H. Kimpton, London. 1899. 67p. 54 ill.

THORINGTON, James

Retinoscopy (or shadow test) in the determination of refraction at one meter distance with the plane mirror. 5th edition.

H. Kimpton, London. 1906. 67p. 54 ill.

THORNTON, John

Advanced physiography.

Longmans, Green & Co. 1890. 342p. ill.

A treatise on the physical and chemical constitution of the heavenly bodies. Includes chapters on light, astronomical instruments and spectrum analysis.

THORNTON, John

Human physiology. 2nd edition.

Longmans, Green & Co. London. 1896. 454p. 271 ill.

Includes one chapter on the eye and sight.

Flavel Benjamin Tiffany (1846-1918)

An American ophthalmologist who enlisted to fight in the Civil War at the age of seventeen.

TIFFANY, Flavel B.

Anomalies of refraction and the muscles of the eye.

Hudson Kimberley Pub. Co. 1896 307p. 200 ill.

Includes chapters on the anatomy and accommodation of the eye, spectacles and the examination of the eye. Also has biographical sketches of Helmholtz, Donders and Landolt.

TIMPLERUS, M. Clemente

Opticae systema methodicum.

Petrus Antonius, Hanover, 1617. 128p.

A two volume work on optics. The first part deals with the nature of optics and its dependence on mathematics, the principles of vision, colour, light and shadow, the laws of perspective, rays of vision, the anatomy of the eye and the conditions essential for good vision. The second book covers reflection and refraction and varieties of vision. There is an appendix containing a treatise on human physiology.

Joseph Francois Tôchon D'Annecy (1772-1820)

Educated as a lawyer he became a numismatist interested in the study of ancient Roman, Greek and middle eastern coins.

TÔCHON d'ANNECY, Joseph Francois

Cachet antiques des medecins oculistes

L.G. Michaud, Paris 1816 73p. 3pl.

The author deciphers the inscriptions placed on ancient jars of ointments, medicines etc. by oculists

TOPHAM, W.H.

Elementary light: theoretical and practical.

Edward Arnold, 1911. 212p. 77 ill.

TÖROK, Ervin and GROUT, Gerald H.

Surgery of the eye a handbook for students and practitioners.

Baillière, Tindall & Cox, London, 1913. 507p. 511 ill.

An analysis of the stages in eye operations, with a list of the necessary optical instruments. Various diseases are discussed and suggestions are made for the post-operative care of patients.

Louis Henry Tosswill (1843-1922)

A Cambridge graduate who was an original member of the Ophthalmological Society and a member of council from 1896-99. In 1907 he was President of the Ophthalmological Section of the British Medical Association.

TOSSWILL, Louis H.

The general practitioner's guide to diseases and injuries of the eye and eyelids. J.A. Churchill, London. 1884. 147p.

TRABAUD, M.

Le mouvement de la lumiere ou premiers principes d'optique. Durand, Paris, 1753 344p. ill

An account of the movement of light and the first principles of optics. Contains an analysis of the properties of vision, reflection and refraction of light. Lists varieties of spectacles, telescopes and microscopes.

Benjamin Travers (1783-1858)

Studied under Astley Cooper. In 1810 he became surgeon to the London Eye Infirmary (Moorfields) and working with William Lawrence who joined the staff four years later he elevated the science of ophthalmic surgery to new heights. He improved the extraction method for cataract, popularised the use of mercury for iritis (and introduced its use for non-specific iritis) and successfully ligated the common carotid artery in a case of aneurism by anastomosis in the orbit. He was appointed surgeon to Queen Victoria in 1837 and Prince Albert in 1840.

TRAVERS, Benjamin

A synopsis of the diseases of the eye and their treatment; to which are prefixed, a short anatomical description and a sketch of the physiology of that organ. Longman, Hurst, Rees, Orme and Brown, London, 1820. 425p ill.

The first systematic treatise on eye diseases written in English. The anatomy and physiology of the eye and its appendages. Discusses the pathology of the membranes and humours and diseases of the appendages.

Travers, Benjamin see Adams, Sir William

Transactions of the eighth International Ophthalmological Congress held in Edinburgh, August 1894. Edited by George A Berry. Edinburgh University Press, Edinburgh. 1894. 352p.

Joseph Louis Troüssart (1806-1870)

TROÜSSART, J.

Recherches sur quelques phénomènes de la vision précédés d'un essai historique et critique des théories d'la vision, depuis l'origine de la science jusqu'a nos jours. Eduard Anner, Brest 1854. 363p. 2 ill

A resume of historical theories of vision. Discusses the multiplicity of images with extracts from different authors who have written on the subject from earliest times to the nineteenth century.

Hermentaire Truc (1857-1929)

Lecturer in surgery at the University of Montpellier from 1886-1891 and then professor of ophthalmology from 1891-1927. He was an authority on the history of ophthalmology.

TRUC, H. et CHAVERNAC, P.

Hygiène oculaire et inspection des écoles.

A. Maloine, Paris. 1911. 244p. 35 ill.

The author advocates visiting mines, offices, shops railways etc to examine the workers eyes with the intention of conserving and protecting their vision. The second part discusses conditions of lighting, protective apparatus and the third, accidents at work, ocular diseases caused by certain trades, the detection of simulation and dissimulation and the fourth the workers own options for visual protection, by social organisation, by regulations and by inspection.

TRUC, H., VALUDE, E. et FRENKEL, H.

Nouveaux éléments d'ophtalmologie. 2nd edition.

A. Maloine, Paris. 1908. 981p 298 ill.

Includes sections on anatomy, physiology, the examination of the eye, refraction, ophthalmoscopy, general and special pathology, therapeutics, hygiene and the legal aspects of medicine. Also contains illustrations of operations and clear descriptions of plastic surgery.

TRUC, H. et PANSIER, P.

Histoire de l'ophtalmologie a l'école de Montpellier du XII au Xxe siècle.

A. Maloine, Paris. 1907. 414p. 29 ill.

Marius Hans Erik Tscherning (1854-1939)

TSCHERNING, M.

Hermann v. Helmholtz et la theorie de l'accomodation.

Octave Doin, Paris. 1909. 104p. 21 ill.

A criticism of Helmholtz hypotheses on accommodation, including a discussion of various other ophthalmologists opinions on the subject.

TSCHERNING, Marius

Physiological optics, dioptrics of the eye, functions of the retina ocular movements and binocular vision. Translated by Carl Weiland.

The Keystone, Philadelphia, 1900. 354p. ill.

TSCHERNING, Marius

Physiological optics, dioptrics of the eye, functions of the retina ocular movements and binocular vision. Translated from the French by Carl Weiland.

The Keystone, Philadelphia, 1904. 353p. ill.

Alexander Turnbull (1794?-1881)

Received his MD at Edinburgh in 1820 and thereafter practiced in London.

TURNBULL, A.

Treatment of the diseases of the eye by means of prussic acid vapour and other medicinal agents.

John Churchill, London, 1843. 89p. ill.

The author claims to have cured cases of staphyloma, amaurosis and cataract by exposing the eye to hydrocyanic acid vapours and similar beneficial effects from the instillation of almond and castor oils.

TURNLEY, Joseph

The language of the eye. The importance and dignity of the eye as indicative of general character, female beauty, and manly genius.

Partridge and Co. London, 1856. 118p. 12 ill,

Offers a theory of judging character based upon the colour, shape and size of the eye and eyebrows. Suggests ways of preserving eyesight in youth, middle and old age.

John Tyndall (1820-1893)

Began his working life as a civil engineer before beginning studying mathematics, chemistry and physics at the University of Marburg in 1848. Settled in London and researched a wide variety of subjects including the absorption and radiation of heat and light by gases and liquids and also the effects of the atmosphere upon sound. He became professor of natural philosophy at the Royal Institution in 1853 and in 1867 succeeded Michael Faraday as superintendent.

TYNDALL, J.

Six lectures on light delivered in America in 1872-1873.

Appleton & Co., 1873. 277p. 60 ill.

TYNDALL, J.

Six lectures on light delivered in America in 1872-1873. 2nd edition.

G. Appleton & Co., 1877. 272p. 61 ill.

TYNDALL, John

On radiation. The Rede lecture delivered in the senate house before the University of Cambridge.

Longman, Green, Longman, Roberts and Green, London. 1865. 62p.

Frederick Tyrell (1793-1843)

Apprenticed to Sir Astley Cooper in 1811 and became MRCS in 1816.

TYRELL, Frederick

Diseases of the eye and their treatment, medically, topically and by operation. Vol 2. London, John Churchill, 1840. 566p. 18 ill.

Contains 143 detailed case histories.

Francis Valk (1846-1919)

A surgeon at the Manhattan Eye and Ear Infirmary and ophthalmic surgeon to the New York Dispensary and professor of ophthalmology at the New York Post-graduate Medical School. Valk invented various ophthalmic instruments including twin strabismus hooks and the needlepoint cystostome.

VALK, Francis

Errors in refraction and their correction with glasses. Lectures delivered to the New York Post Graduate Medical School with illustrative cases from private and clinics. 3rd edition.

H. P. Putnam's, New York, 1893. 257p. 98 ill.

Lectures on the diagnosis and treatment of all errors of refraction with case illustrations

VALK, Francis

Errors in refraction and their correction with glasses. Lectures delivered to the New York Post Graduate Medical School with illustrative cases practice both practical and clinical. 5th edition.

I. P. Putnam's, New York, 1897. 257p. 98 ill.

VALK, Francis

Strabismus or squint. Latent and fixed. A supplement to the errors of refraction. G. P. Putnam's, New York, 1904. 171p. 22 ill.

Cites the author's personal experiences in the examination and correction of the imbalance of the eye muscles.

Giorgio Valla (1447-1500)

VALLA, Giorgio

De natura oculorum. Item: Aristotelis problemata quae ad oculos pertinent. Henricum Sybold, Strassburg, 1529

The first separate edition. This compilation of ophthalmology taken from classical sources comprises a very early monograph on the subject. The excerpts from the pseudo-Aristotleian 'Problemata' which occupy the last 8 leaves are in the version of Theodor of Gaza. Very rare.

VALOIS, G.

Les borgnes de la guerre prothese chirurgicale et plastique. Masson et Cie, Paris. 1918. 227p. 44 ill.

Plastic surgery for those blinded in one eye during WW1.

VAUGHAN, William

Directions for health, naturall and artificiall: derived from the best physicians as well moderne as antient whereunto is annexed two treatises concerning the preservation of eyesight. The first written by Dr Baily, sometime of Oxford: the other collected out of the two famous physicians, Fernolius and Riolanus.

T. Harper for J. Harison, London, 1633. 167p. & 38p.

7th edition, reviewed by the author. Section 2 is on the subject of Food and Nourishment.

Clarence Archibald Veasey (1895-1960)

American ophthalmologist perhaps best remembered for his popular course, 'On the dissatisfied refraction patient' at the American Academy of Ophthalmology and Otolaryngology.

VEASEY, Clarence A

Ophthalmic operations as practised on animal's eyes.

The Edwards & Docker Co. Philadelphia, 1896. 99p. 56 ill.

Marcel Émil Verdet (1824-1866)

Lecturer in physics at the Parisian Ecole Normale and later a professor of physics at the Ecole Polytechnique he conducted important experiments on the effects of a magnetic field on plane-polarised light.

VERDET, E.

Leçons d'optique physique. Vol.1.

Victor Masson et Fils, 1869. 584p. 106 ill.

VERDET, E.

Leçons d'optique physique. Vol.2.

Victor Masson et Fils, 1869. 648p. 106 ill.

Two volumes covering reflection, refraction, interference, the polarisation of light and a resume of geometrical optics.

VERLE, Joanne Baptiste

Anatomia artificialis oculi humani inventa & recens fabricata.

Henri Westen, Amsteldami. 1680. 63p. ill.

The original Italian version was published in Florence the previous year.

John Vetch (1783-1835)

After obtaining his MD in Edinburgh in 1840, Vetch worked for some years as an army medical officer before settling in London to practice dermatology.

VETCH, John

A practical treatise on the diseases of the eye.

G. and W. B. Whittaker, London, 1820 267p ill.

Concentrates on the ophthalmias and includes thorough descriptions of the transmission and treatment of his speciality, trachoma. Divided into two parts a) general ophthalmic inflammation and b) chemical analysis.

VIERORDT, Karl

Die Anwendung des Spectralapparates zur Photometrie der Absorptionsspectren und zur quantitativen chemischen Analyse.
H. Laupp'shen, Tübingen, 1873. 169p. 6 pl.

Discusses the use of spectral apparatus for the photometry of absorption spectra and for quantitative chemical analysis.

VIGNES, L.

Technique de l'exploration oculaire introduction a l'etude de l'ophthalmologie.
A.Maloine, Paris. 1896 419p. 213 ill.

The anatomy and physiology of the eye and adjacent organs, the functions of binocular vision etc.

Vitello (Vitelo, Vitellio, Witelo) c. 1230-c.1275

Studied in Paris and Padua.

VITELLO

[Per optikes] De natura, ratione et proiectione radiorum visus, luminum, colorum atque formarum.

Jo. Petreius, Norimbergae, 1535. 297p. ill.

Probably written about 1270 using Alhazen's 'optics' as its chief source.

A rare first edition of the thirteenth century work by the Polish mathematician. He summarises contemporary knowledge on optics. His original research on the twinkling of stars is due to the motion of the air and that the effect is intensified if the star is viewed through water in motion. He also refutes Aristotle's theory that the rainbow is formed by reflection alone saying that it is a combination of reflection and refraction. Book 1 deals with mathematical principles, book 2 deals with the nature and propagation of light and colour, book 3 covers the physiology, psychology and geometry of monocular and binocular vision and book 4 the perception of qualities other than light and colour, books 5-9 concentrate on catoptrics and book 10 on the refraction of light.

Alfred Vogt (1879-1943)

Vogt devised the thin beam and improved the arrangement of lenses.

VOGT, Alfred

Lehrbuch und Atlas der Spaltlampmikroskopiedes Lebenden Auges. Erster Teil: Technik und Methodik, Hornhaut und Vorderkammer.
Springer, Berlin, 1930

VOGT, Alfred

Lehrbuch und Atlas der Spaltlampmikroskopiedes Lebenden Auges. Zweiter Teil: Linse und Zonula.
Springer, Berlin, 1931

Third volume of this major work missing.

VOLKMANN, P.
Vorlesungen über die Theorie des Lichtes.
Leipzig, 1891. 432p. 47 ill.

Isaac Vossius (1618-1689)

A Dutch theologian who spent part of his life as a canon of the royal chapel in Windsor.

VOSSIUS, Isaac
De lucis natura et proprietate.
Ludovic and Daniel Elzevir, Amsterdam, 1662. 85p.

A controversial treatise attacking Cartesian theories on the properties of light.

VUIBERT, H,
Les anaglyphes géométriques. 3rd edition.
Paris, 32p. 8 ill.

WAGENMANN, A.
Bericht über die neununddreissigste Versammlung der Ophthalmologischen
Gesellschaft, Heidelberg, 1913
J. F. Bergmann, Wiesbaden, 1913. 500p ill.

WAGENMANN, A.
Bericht über die siebenundvierzigste Zusammenkunft der Deutschen
Ophthalmologischen Gesellschaft, Heidelberg, 1928
J. F. Bergmann, München, 1929. 503p ill.

WAGSTAFF, C.J.L. and BLOOMER, G. C.
Light and heat.
W. Heffer & Sons, Cambridge. 1903. 79p.

The second of a three year course in physics based on the results of experiments performed by the boys in the laboratory of Bradford Grammar School.

George Edward Walker (1840-1909)

After studying at University College, London Walker became clinical assistant to Bowman at Moorfields before settling in Liverpool in 1870 as a surgeon and ophthalmologist. In Liverpool he founded the St Paul's Eye and Ear Hospital and was its Director until his death in 1909. It grew from two rooms to a hospital with 50 beds, treating about 10,000 patients a year.

WALKER, George Edward
Essays in ophthalmology.
J. and A. Churchill, 1879 239p.

The diagnosis and treatment of glaucoma, exophthalmos, gonorrhœal ophthalmia, neuroretinal atrophy and sympathetic ophthalmia, with descriptions of many operations performed by the author.

WALKER, Gertrude A.
Students' aid in ophthalmology.
P. Blakiston, Son & Co. Philadelphia, 1895. 183p. 33 ill.

John Walker ((1803?-1847)

Was a surgeon at Manchester Eye Infirmary and an instructor in anatomy, physiology and ophthalmology at the Manchester Royal School of Anatomy and Medicine.

WALKER, John

The philosophy of the eye, being a familiar exposition of its mechanism, and of the phenomena of vision, with a view to the evidence of design.

Charles Knight and Co., London, 1837. 300p. ill.

Argues that the perfection of the mechanism of vision is proof of the existence of God.

WALKER, John

The oculist's vade mecum: a complete practical system of ophthalmic surgery.

Longman, Brown, Green & Longmans, London, 1843. 400p. ill.

Practical information on the principal diseases of the eye with illustrations of the major diseases

WALKER, Obadiah

Propositions concerning optic-glasses with their natural reasons, drawn from experiments.

Sheldonian Theatre, Oxford. 1679. 46p. ill.

Commonly held to be by Obadiah Walker, but sometimes attributed to Abraham Woodhead and Robert Cooper. Describes the principles of convex and concave lenses. Very rare.

WALLACE, James

Oculist's vade mecum, comprising all the important methods of testing the eyes which have been devised by leading ophthalmic surgeons in Philadelphia; besides many valuable tables on the properties of lenses and methods of procedure in the examination of the eyes.

Daniel W. Weston, Philadelphia, 1898. 64p. 8 ill.

William Clay Wallace

A nineteenth century American surgeon and ophthalmologist who studied under William MacKenzie and George Monteath at the Glasgow Eye Infirmary before practising in New York City.

WALLACE, William Clay

A treatise on the eye, containing discoveries of the causes of near and far sightedness, and of the affections of the retina, with remarks on the use of medicines as substitutes for spectacles. 2nd edition

Samuel Colman, New York, 1839. 88p. ill.

An expanded version of the earlier 'The structure of the eye with reference to natural theology. Describes the action of the ciliary muscles and their role in accommodation.

Henry Haines Walton (1816-1889)

Trained at St Bartholomew's Hospital, London he gained his MRCS in 1839 and went on to a residency at Moorfields before opening his own eye clinic which eventually grew into the Central London Ophthalmic Hospital.

WALTON, H. Haynes

A treatise on operative ophthalmic surgery.

John Churchill, London. 1853. 628p. 169 ill.

WALTON, H. Haynes

A treatise on operative ophthalmic surgery. 2nd edition

John Churchill, London. 1861. 686p. 172 ill.

WALTON, Haynes

A practical treatise on diseases of the eye. 3rd edition.

J & A Churchill, London, 1875. 1188p. 301 ill.

James Wardrop (1782-1869)

Began his career by serving an apprenticeship under his Uncle who was an Edinburgh surgeon and continued studying under Abernethy, Cline and Cooper in London and Beer in Vienna. He was admitted to the College of Surgeons in Edinburgh in 1804 and four years later settled in London as a general surgeon. He was an active lecturer and author, but alienated many of his colleagues by publishing personal attacks against them.

WARDROP, James

Essays on the morbid anatomy of the human eye. Vol 1.

George Ramsey and Co. Edinburgh, 1808. 157p. ill.

WARDROP, James

Essays on the morbid anatomy of the human eye. Vol 2.

Archibald Constable & Co, London. 1818. 274p. ill.

The volumes were the first to classify inflammations of the eye according to the structures attacked. The first use of the term 'keratitis'.

WARDROP, James

Essays on the morbid anatomy of the human eye. Vol 2. 2nd edition

John Churchill, 1834. 291p. col. Ill.

James Ware (1756-1815)

Served an apprenticeship to a surgeon in his native Portsmouth before moving to St Thomas' Hospital in London where, after further training, he became an assistant and then a partner with Jonathan Wathen 1777-1791 specialising in diseases of the eye. In 1800 he founded the London School for the Indigent Blind modelled on the Liverpool institution which had been founded in 1790. Ware has been described as, 'a major force in rescuing ophthalmology from the hands of quacks'. He was the first

'bare oculist' to be elected as a Fellow of the Royal Society, a honour which did much to establish the scientific respectability of ophthalmic surgery.

WARE, James

Chirurgical observations relative to the eye Vol.1. 2nd Edition.
J. Mawman, London, 1805. 527p ill

Deals with the structure of the eye, varieties of inflammation, their causes and treatment. Also covers the treatment of epiphora and fistula lachrymalis.

WARE, James

Chirurgical observations relative to the eye Vol.2. 2nd Edition.
J. Mawman, London, 1805. 477p ill

WARE, James

Remarks on the ophthalmia, psorophthamy and purulent eye. With methods of cure considerably different from those commonly used, and cases annexed, in proof of their utility: also the case of a Gutta Serena cured by electricity. 2nd edn.
Charles Dilly, London 1787. 156p

Ware's first book, originally published in 1780. He discusses the transmission of and therapies for venereal ophthalmia in both adults and neonates. He inaccurately ascribes the neonatal infection to colds but corrected this misapprehension in his 3rd edition published in 1795.

Joseph Warner (1717-1801)

Studied medicine and surgery under Samuel Sharp whom he succeeded as principal surgeon at Guy's Hospital in 1745. He was the first to tie the common carotid artery (1775) and devised a widely used cataract knife in 1754.

WARNER, Joseph

A description of the human eye and its adjacent parts.
Lockyer Davis, 1775. 109p ill.

Shastid, writing in the American Encyclopedia and Dictionary of Ophthalmology, says that although this work contains no new discoveries it is the "earliest clear, extensive, and sensible work on ophthalmology composed by an English writer".

Jonathan Wathen (1729-1808)

A successful London surgeon and ophthalmologist, he was the teacher and later partner of James Ware.. He was an eager proponent of the extraction operation for cataract against the disagreement of many influential physicians.

WATHEN, Jonathan

A dissertation on theory and cure of the cataract in which the practice of extraction is supported; and that operation in its present state is particularly described.
T. Cadell & C. Dilly, London. 1785 166p.

Alexander Watson (later Watson-Wemys) (1799-1879)

A surgeon, ophthalmologist and authority on forensic medicine, Watson was surgeon to the Royal Infirmary (Edinburgh) and in 1831 founded the Royal Eye Infirmary. He retired in 1846 when he inherited a large country estate.

WATSON, Alexander

A compendium of the diseases of the human eye. 2nd Edition.

Maclachlan & Stewart, Edinburgh, 1828. 194p ill

The first edition, published in 1822, was the first compendium of ophthalmology written in English. The illustrations are from the author's own drawings.

WATSON, E. R.

Colour in relation to chemical constitution. Edited by E. Thorpe.

Longmans, Green & Co. 1918. 197p. 66 ill.

The main theories proposed on the nature of the vibrations to which ordinary colour is due.

William Spencer Watson (1836-1906)

After studying at King's College, London he became surgeon to the Central London Ophthalmic Hospital and also the South London Ophthalmic Hospital.

WATSON, W. Spencer

The anatomy and diseases of the lachrymal passages.

H.K.Lewis, 1892. 55p. 11 ill.

The anatomy and functions of the lacus lachrymalis, the caruncle and lachrymal passages; with an account of the diseases of the lachrymal passages.

WATSON, W. Spencer

Eye-ball tension its effect on the sight and its treatment.

H.K.Lewis, 1879. 70p. 4ill.

The causes of glaucoma with the analysis and treatment of cases taken from the author's own experience and an explanation of the author's preference for sclerotomy as opposed to iridectomy.

WEBB, Thomas William

Optics without mathematics.

Society for Promoting Christian Knowledge, London. 124p. 35 ill.

The properties of light, the anatomy of the eye and the eye in relation to light.

Ernst Heinrich Weber (1795-1878)

WEBER, Ernest Heinrich und WEBER, Wilhelm

Wellenlehre auf Experimente gegründet über die Wellen tropfbarer Flüssigkeiten mit Anwendung auf die Schall-und Lichtwellen.

Gerhardt Fleisher, Leipzig, 1825 575p ill.

Experiment on the wave theory of light, describing the theories of Boisson, Gerstner, Laplace and Newton.

Louis de Wecker (1832-1906)

Received his MD at Würzburg in 1855 and continued his studies under Arlt, Jaeger, von Graefe, Desmarres and Sichel before setting up in an ophthalmological practice in Paris. He invented a pince-ciseaux for the division of after cataract, and a double strabismus hook. He advised sclerotomy for the treatment of glaucoma, devised the capsular advancement procedure for strabismus in 1883 and also devised a new method of enucleation.

WECKER, Louis de

Etude ophthalmologiques: traite theoretique et pratique des maladies des yeux. Tome premier.

J-B Bailliere et fils, Paris 1863. 936p. ill.

De Wecker invented a pince- ciseaux for the division of after cataract and a double strabismus hook, devised the capuscular advancement procedure for strabismus and invented a new method of enucleation.

WECKER, Louis de

Etude ophthalmologiques: traite theoretique et pratique des maladies des yeux. Tome second. 2nd edition

Adrien Delahaye, Paris 1868. 936p. ill.

WECKER, L. de

Manuel d'ophtalmologie guide pratique a l'usage des étudiants et des médecins. Paris, 1889. 991p. 576 ill.

WECKER, L. de

Ocular therapeutics. Translated and edited by L. Forbes. London, 1879. 552p. 35 ill.

A translation from the German of a treatise on ophthalmology intended for general practitioners. The diseases of the structures of the eye are analysed and there is a section on refraction and accommodation.

WECKER, Louis de et JAEGER, E. de

Traite des maladies du fond d'oeil et atlas d'ophtalмосcope.

Adrien Delahaye, Paris, 1870. 439p. 118 ill.

In the first half de Wecker discusses the use of the ophthalmoscope and the appearance of the diseases of the optic nerve, the retina and the choroids. The second half consists of 29 lithographed coloured plates, principally of the fundus, with a full description of each case by Jaeger.

WECKER, L. de & MASSELON, J.

Echelle metrique pour mesurer l'acuite visuelle, le sens chromatique, et le sens lumineux.

Paris, 1925.

Georg Wolfgang Wedel (1645-1721)

Educated at Jena where, from 1673 until his death, he was professor of medicine.

WEDEL, Georg Wolfgang & LAUB, Christian

De amaurosi.

Litteris Krebsianis, Jena. 1705. 30p.

WEDEL, Georg Wolfgang & SAUBER, Phillip Adam Guolfgang

De nyctalopia.

Litteris Krebsianis, Jena. 1693. 27p.

A doctoral dissertation on nyctalopia

WEDEL, Georg Wolfgang & SCHNETTER, Christian Ludovic

De amaurosi.

Christophori Krebsii, Jena. 1713. 28p.

A doctoral dissertation on blindness

Carl Wedl (1815-1891)

Austrian histopathologist.

WEDL, C. und BOCK, E.

Atlas zur pathologischen anatomie des Augen.

Carl Gerol's Sohn, 1886. 33p. ill.

The summary of Wedl's research on the pathology of the eye written with Stellwag's assistant Emil Bock

WEEKS, John Elmer

A treatise on the diseases of the eye.

London, Henry Kimpton. 1911. 944p. 553 ill

WELLS, Edward

The young gentleman's trigonometry, mechanicks and opticks. 2nd ed.

J. J Knapton, London, 1731. 420p. ill.

Contains a section on opticks which explains the principles of reflection and refraction, the workings of optical instruments and a definition of perspective. Dr Wells his reasons for writing the treatise as, ' As Vision or Sight is the most Useful and Pleasant Sensation of the Body, so Opticks must consequently be very Useful and Pleasant, as not only explaining the Manner of Vision in a Geometrical Way, but also by the same Principles teaching how to supply or remedy the several Defects of the Sight, by the help of proper Instruments such as Spectacles, Microscopes, Telescopes etc. Add hereto, that this Science is owing the Invention of Several Instruments, which serve to please and divert the Mind, by Curious and Surprising Operations; such as are the Dark-Chamber, the Magick-Lantern etc. All of which are accounted for in the following treatise.'

John Soelberg Wells (1834-1879)

In 1856 Wells received his MD from Edinburgh and then spent several years in Berlin as student of and assistant to von Graefe. In 1860 he joined the staff at Moorfields and in 1865 became professor of ophthalmology at King's College London.

WELLS, J. Soelberg

On long, short and weak sight and their treatment by the scientific use of spectacles. John Churchill, London, 1862. 112p. 11 ill.

WELLS, J. Soelberg

On long, short and weak sight and their treatment by the scientific use of spectacles. John Churchill, London, 1862. 248p. 30 ill.

WELLS, J. Soelberg

A treatise on the diseases of the eye. 3rd edition
John Churchill, London, 1869. 797p. 124 ill.

Includes chapters on glaucoma and amblyopia and the use of an ophthalmoscope.

WELLS, J. Soelberg

A treatise on the diseases of the eye. 2nd edition
John Churchill, London, 1870. 797p. 124 ill.

William Charles Wells (1757-1817)

Received his MD from the University of Edinburgh in 1780. Four years later he settled in London, becoming physician to St Thomas' Hospital.

WELLS, William Charles

Two essays: one upon single vision with two eyes; the other on dew etc.
Archibald Constable and Co., London, 1818. 117p.

Contains the essay on single vision first published in 1792 which attempts to explain the principles of binocular vision, with theories advanced by Galen, Alhazen, Newton, Robert Smith as well as the author's own experiments. Also contains an essay on dew which proved that dew is the result of condensation and an important essay on skin colour which anticipated Darwin's theory of natural selection.

WEHE, Eberati de

Discursus de speculiorigine usu et abusu.
Petrus Kopffius, Frankfurt. 1615. 72p.

Louis Werner (1859-1937)

Irish ophthalmologist who studied in Alsace before settling in Dublin.

WERNER, Louis Editor

Swanzy's handbook of the diseases of the eye and their treatment. 12th ed.
H.K. Lewis & Co Ltd. London. 1919. 671p. 273 ill.

WEST, Francis

To all who value sight. A familiar treatise on the human eye: containing practical rules that will enable all to judge what spectacles are best calculated to preserve their eyes to extreme old age... with three correct diagrams of the human eye.

3rd Edition

The author, London, 1829. 46p. ill.

Includes descriptions of normal, short sighted and long sighted eyes and the lenses necessary to correct errors of refraction.

WHALLEY, W.

A popular description of the human eye with remarks on the eyes of inferior animals.

J.A. Churchill, London. 1874 121p. 40 ill.

WHEATSTONE, C.

The scientific papers.

Taylor and Francis, London, 1879, pp380p. 46 ill

Contains articles on 'Light and Audition' and 'Phenomena of Binocular Vision' and experiments on the successive polarisation of light.

WHEWELL, William

Astronomy and general physics considered with reference to natural theology.

William Pickering, London. 1833. 381p.

The Bridgewater Treatises on the power wisdom and goodness of God as manifested in the Creation.

WHITEHEAD, Richard H.

The anatomy of the brain. A textbook for medical students.

Henry Kimpton, London. 1902. 96p. 41 ill.

Deals with the divisions, surface anatomy, internal anatomy and conducting paths of the encephalon.

WHITMELL, Chas. T.

Colour, an elementary treatise.

Wm. Lewis, Cardiff. 1888. 238p. 6 ill.

Treated from scientific and especially general and artistic aspects including nature, production, constants and mixture of colour, complementary colours, theories of colour, colour blindness etc.

WHITEWELL, A.

On the best form of spectacle lenses.

Articles from the Optician and Photographic Trade Journal, London 1913-15. 180p.

WIJ, Gerrit Jan van

Nieuwe Manier van cataract of staarsnijding.

W. Troost and Son, Arnhem, 1792, 64p. ill

WILDE, Emil

Geschichte der Optik vom Ursprung dieser Wissenschaft bis auf die gegenwärtige Zeit. Vol 1. Von Aristotle zu Newton.

Rucker und Puchler, Berlin. 1838. 352p. ill.

A history of optics traced through the work of famous scientist like Roger Bacon, Vossius, Descartes, Maurolycus, Huygens etc.

WILDE, Emil

Geschichte der optik vom Ursprunge dieser Wissenschaft bis auf die gegenwärtige Zeit. Zweiter Teil: von Newton bis Euler.

Rucker und Puchler, Berlin, 1843. 407p.

Most of this volume is devoted to the work of Newton.

Henry Willard Williams (1821-1895)

Studied medicine at Harvard and in Paris and Vienna. He established an ophthalmological practice in Boston and was professor of ophthalmology at Harvard from 1871-1891. Williams made several significant advances, including the treatment of iritis without mercury and he was an advocate of suturing the flap after cataract extraction. He was also one of the first surgeons to use ether anaesthesia routinely for cataract surgery.

WILLIAMS, Henry W.

The diagnosis and treatment of the diseases of the eye,
Houghton, Mifflin and Company, Boston, 1881. 464p. 43 ill.

Analyses the diseases of the separate structures of the eye and discusses methods of examining the eye.

WILLIAMS, Henry W.

Our eyes, and how to take care of them.

William Tegg, London, 1871. 89p.

Advice for laymen.

WILLIAMS, Henry W.

A practical guide to the study of the diseases of the eye: their medical and surgical treatment.

Ticknor & Fields, Boston. 1862. 311p.

WILLIAMS, Henry W.

Recent advances in ophthalmic science: the Boylston prize essay for 1865.

Ticknor & Fields, 1866. 166p. 28 ill.

John Williams (?1790- c.1830)

Williams has been described as an English quack practising in Paris, who, although he did not perform cataract surgery himself, sold a medication which he claimed prepared the patient for surgery and made it safer.

WILLIAMS, J.

Compte rendu des cures faites sur des maladies des yeux réputées incurables.
Royer, Paris, 1815. 60p

WILKINS, William Noy

Visual art, or nature through the healthy eye with some remarks on originality and
free trade artistic copyright and durability.

William H. Allen & Co. London 1879. 144p. 22 ill.

William Holland Wilmer (1863-1936)

American ophthalmologist – founder of the Wilmer Ophthalmological Institute of
Johns Hopkins University

WILMER, William Holland

Atlas fundus oculi.

Henry Kimpton, London, 1934. 139p. 100 col ill.

George Wilson (1818-1859)

Received an MD from the University of Edinburgh in 1839 but never practised
medicine, devoting himself rather to research in chemistry and the history of science.

WILSON, George

Researches on colour blindness with a supplement on the danger attending the present
system of railway and marine coloured signals.

WILSON, Henry

Lectures on the theory and practice of the ophthalmoscope.

Fannin & Co. 1868. 148p. 31 ill.

WILSON, James

Biography of the blind, including the lives of all who have distinguished themselves
as poets, philosophers, artists etc. 2nd edition.

The Author, Birmingham. 1833. 300p. ill.

The author was himself a blind poet who lost his sight because of smallpox. Includes
brief accounts of famous blind people: Homer, Milton, Euler, Moyes and anecdotes of
blind people.

WINSLOW, Forbes

Light, its influence on life and health.

Longmans, Green, Reader & Dyer, London. 1867. 301p.

The effects of light on the animal and vegetable kingdoms and the effects of the
absence

WINTERSTEINER, Hugo

On partial, stationary cataracts. English edition of 'Augenaerztliche unterrichtstafeln.

Edited by Professor H. Magus.

Breslau, 1898. 32p. 20 ill.

The first part describes the morphology, topography and ætiology of the various forms of cataract. Includes 20 coloured plates illustrating different types of cataract.

WISEMAN, Eugene G.

A treatise on blood pressure in ocular work with special reference to factors of interest to refractionists.

John P. Smith Printing Company, New York. 1916. 267p. 25 ill

Discusses the necessity of opticians being able to recognise the presence of various diseases which predominate among the causes of ocular afflictions. Includes descriptions of ocular manifestations of diseases and the detection of these by determining the blood pressure.

WISER, Graf.

Die erhaltung des Augenlichtes Die Gefahren der Kurzsichtigkeit und deren Verhütung durch sach gemäße Behandlung.

Berlin, 156p. 26 ill.

John Reisberg Wolfe (1824-1904)

German born ophthalmologist who was educated at Glasgow University and practised in Glasgow for much of his life. He was a skilled and inventive cataract surgeon and the deviser of new methods for blepharoplasty and keratoplasty. He also invented a refracting ophthalmoscope.

WOLFE, J. R.

An improved method of extraction of cataract with the results of 107 operations.

John Churchill & Sons, London. 1868. 71p. 8 ill.

Describes the method of removing a cataract by iridectomy and a small corneo-conjunctival flap and estimates the advantages and disadvantages of this method.

WOLFE, J. R.

On diseases and injuries of the eye.

J. & A. Churchill, London. 1882. 452p. 167ill.

A course of clinical lectures illustrated with chromo-lithographic plates.

Casey Albert Wood (1856-1942)

Wood's chief importance was as editor of the American Encyclopaedia and Dictionary of Ophthalmology. His last twenty years were devoted to ornithology and a collection of important ophthalmological texts.

WOOD, Casey Albert

The commoner diseases of the eye, how to detect and treat them.

G.P. Engelhard & Company, 1904. 499p. ill.

Ophthalmology considered from the GP's viewpoint. Describes the detection and treatment of errors of refraction, cataract, headaches etc.

WOOD, Casey Albert

The fundus oculi of birds, especially as viewed by the ophthalmoscope: a study in comparative anatomy and physiology.
The Lakeside Press, Chicago, 1917. 181p. 61 pl. 145 ill.

A detailed study illustrated by black and white drawings and coloured plates.
Describes the collection and preparation of the material and the methods of examining both dead and living specimens.

WOOD, Casey Albert
Lessons in the diagnosis and treatment of eye disease.
George S. Davis, 1891. 154p. 33 ill

WOOD, Casey Albert
A system of ophthalmic therapeutics being a complete work on the non-operative treatment, including the prophylaxis of diseases of the eye.
Cleveland Press, Chicago. 1909. 926p. 1 pl. 27 ill.

WOOD, Casey Albert
The toxic amblyopias their symptoms, varieties, pathology and treatment.
The author, Chicago. C. 1895. 84p.

A monograph on the various drugs and beverages said to cause defects of vision.
Covers the aetiology, predisposing causes, symptoms, diagnosis and treatment of the toxic amblyopias.

WOOD, David Ward
Theoretical and practical optics.
Hazlitt & Walker, Chicago, 1904. 79p. 73 ill

WOOD, James
The elements of the optics. 4th edition
J. Smith for Deighton and Sons, Cambridge, 1818 250p ill.

WOOD, R.W.
Physical optics.
New York, 1911. 705p.

WOOD, R.W.
Physical optics.
New York, 1924. 705p. 410 ill.

WOODHEAD, Abraham
See Obadiah Walker

WOODWARD, Charles
A familiar introduction to the study of polarized light with a description of, and instructions for using, the table and hydro-oxygen polariscope and microscope.
J. Van Voorst, London. 1861 54p. 27 ill.

WOODWORTH, Joseph V.

Grinding and lapping tools, processes and fixtures.
Hill Publishing Company, New York. 1907. 162p 137 ill.

Precision grinding and grinding processes, the preparation and use of abrasives, lapping processes and methods, the construction and use of laps and the design, construction and application of fixtures for grinding, accurate repetition parts of steel and iron.

Claud Alley Worth (1869-1936)

English ophthalmologist who was on the consulting staff at Moorfields and ophthalmic surgeon to the West Ham Hospital. His pioneering work on squint made him world renowned.

WORTH, Claud

Das Schielen, Ätiologie, Pathologie und Therapie. Translated by E. H. Oppenheimer.
Julian Springer, 1905. 134p. 25 ill

WORTH, Claud

Squint, its causes, pathology and treatment.
John Bale, Sons and Danielsson Ltd, London. 1903 229p. 31 ill.

WORTH, Claud

Squint, its causes, pathology and treatment. 3rd Edition
John Bale, Sons and Danielsson Ltd, London. 1906

Chapters on binocular vision, varieties of squint, methods of investigating and treating squint, the method of training the fusion sense, operations on the external ocular muscles.

John Westley Wright (b.1842)

WRIGHT, John W.

A textbook of ophthalmology. 2nd edition.
P. Blakiston's Sons and Co. Philadelphia, 1901. 378p 117 ill.

WRIGHT, Lewis

Light, a course of experimental optics chiefly with the lantern.
Macmillan & Co. London, 1882. 367p 190 ill

WRIGHT, Lewis

Optical projection. A treatise on the use of the lantern in exhibition and scientific demonstration. 3rd edition
Longmans, Green & Co., 1895. 438p. 237 ill.

Describes the manipulation of the lantern, the construction of its parts, and the use of the projection microscope. Includes a recapitulation of the main principles of geometric optics.

WRIGHT, Lewis

Optical projection. A treatise on the use of the lantern in exhibition and scientific demonstration. New impression revised by Russell S Wright.
Longmans, Green & Co, 1911. 450p. 244 ill.

WRIGHT, Lewis

Optical projection. A treatise on the use of the lantern in exhibition and scientific demonstration. In two parts. Part 1. The projection of lantern slides 5th. Edition Re-written and brought up to date by Russell S. Wright.
Longmans, Green & Co., 1920. 438p. 237 ill.

WRIGHT, Mark R.

Sound, light and heat. 2nd edition.
Longmans, Green & Co. London. 263p. 162 ill.

A basic introduction aimed at students entering for matriculation.

WÜLLNER, A.

Einleitung in Die Dioptrik des Auges.
B. G. Teubner, Leipzig. 1866. 92p. 19 ill.

Sir Michael Thomas Yarr (1862-1937)

An Irishman who was ophthalmologist to the British Army Medical Service,

YARR, M. T.

Manual of military ophthalmology for the use of medical officers of the Home, Indian and Colonial Services. 2nd edition.
Cassell & Company Ltd., London, 1909. 228p. 40 ill.

A concise account of eye injuries and diseases and the commoner eye operations, plus instructions for sight testing and the examination of refractive errors.

Thomas Young (1773-1829)

English physician, physicist and Egyptologist largely self-taught in natural philosophy and in at least a dozen ancient and modern languages. He studied medicine in London, Edinburgh and Göttingen and settled in London in 1800 and practised medicine there until his death. He showed that the accommodation of the eye is due to the curvature of the crystalline lens (1793); gave the first description of astigmatism (1801), put forward a wave theory of light (1801-3) and demonstrated its application to crystalline refraction and dispersion phenomena (1809). His translation of the demotic characters on the Rosetta stone were crucial in the discovery that Egyptian hieroglyphics were symbolic rather than alphabetic.

YOUNG, Thomas

A syllabus of a course of lectures on natural and experimental philosophy.
W. Savage for press of the Royal Institution, London, 1802. 193p. ill.

Covers the properties of light, dioptrics and catoptrics, optical instruments, physical

YOUNG, Thomas

On the mechanism of the eye. The Bakerian lecture, delivered on November 27, 1800.

Philosophical Society, 1801. 66p. ill.

YOUNG, Thomas

Ophthalmologisches oevres, translated by M. Tscherning.
Andre.-Fred. Höst & Sön, Copenhagen, 1894. 248p. 99 ill.

Johann Zahn (1641-1707)

A German philosopher who belonged to the Premonstratensian Order at Herbipolis (Würzburg).

ZAHN, Johann

Oculus artificialis teledioptricus sive telescopium.
Quirinius Heyl, Wuerzburg, 1685. 218p. ill.

This first edition includes the first complete history of early microscopes and contains many plates and woodcuts. Shows a detailed knowledge of vision, the structure of the eye and the principles of light in so far as they were known in the seventeenth century. The author describes the grinding and polishing of concave and convex lenses, the application of such lenses and ingenious invention for the grinding of lenses.

ZANDER, Adolph

Der Augensiegel seine formen und Gebrauch. 2nd edition.
C. F. Winter'sche, Leipzig. 1862 214p. 65 ill.

The 1859 edition was the first textbook on ophthalmology. This is a later, enlarged edition.

ZANDER, Adolph

The ophthalmoscope and its use. Translated by R. Brudenell Carter
Robert Hardwicke, 1864. 225p. 70 ill.

Includes a section on forensic medicine.

ZEEMAN, P.

Researches in magneto-optics with special reference to the magnetic resolution of spectrum lines.
Macmillan & Co. Ltd, London. 1913. 219p. 49 ill.

Johann Gottfried Zinn (1727-1759)

Zinn was a famous anatomist who discovered the annular ligament of Zinn and after whom the zonula of Zinn is named. He was born at Ansbach in 1727 and studied at Göttingen where he graduated in medicine in 1749. From there he went to Berlin and studied anatomy and botany and in 1753 he returned to Göttingen where he held the chair of medicine and the directorship of the Göttingen botanical gardens. He died in Göttingen in 1755.

ZINN, Johann Gottfried

Descriptio anatomica oculi humani.
Adram Vandenhoeck, Goettingen, 1755. 272p. ill.

This has been described as Zinn's masterpiece. It is the first complete anatomy of the eye and, given that it was impossible to examine the interior of the living eye at this time the descriptions are remarkable for their precision and accuracy. A new and enlarged edition was published in 1780.

Lotharius Zumbach von Koesfeld (27.8.1661 Trier – 29.7.1727 Kassel)

He attended the Jesuit high school in Trier before spending two years (1674-1676) with his father in Luxembourg. Completing a course in philosophy at Trier in 1678, he moved to Cologne, where initially he continued to learn among the Jesuits, but later turned to mathematics. He then studied medicine at the University of Cologne, alongside his parallel studies in mathematics and music. In 1685 he was appointed by the Elector Maximilian Heinrich of Cologne as the Electoral mathematician and musician (until 1688 when he moved to Leiden). In 1692 Zumbach received his medical doctorate and lectured also in astronomy. In 1708 his reputation was such that he was appointed by Karl, Landgrave of Hesse-Kassel, to the post of Professor of mathematics at the Collegium Carolinum in Kassel where he also supervised the Princely art chamber, and an observatory stood for his use.

ZUMBACH von KOESFELD, Lotharius

Diss. de iride ac de colorum vulgo apparentium essentia*.

Jacobus Stevens Britannus/Henrici Harmes, Kassel 1712. iii + 60p. ill.

*Note the College copy is actually entitled *de colorum vulgo apparentium dictorum essentia, ac de natur iridis utriusque disquisitio physicomathematica* but appears to be the same as the above known work.

Bound together with

ZUMBACH von KOESFELD, Lotharius

Exercitatio Physicomathematica de vero mundi systemate.

Jacobus Stevens Britannus/Henrici Harmes, Kassel 1713. vi + 44p. ill.