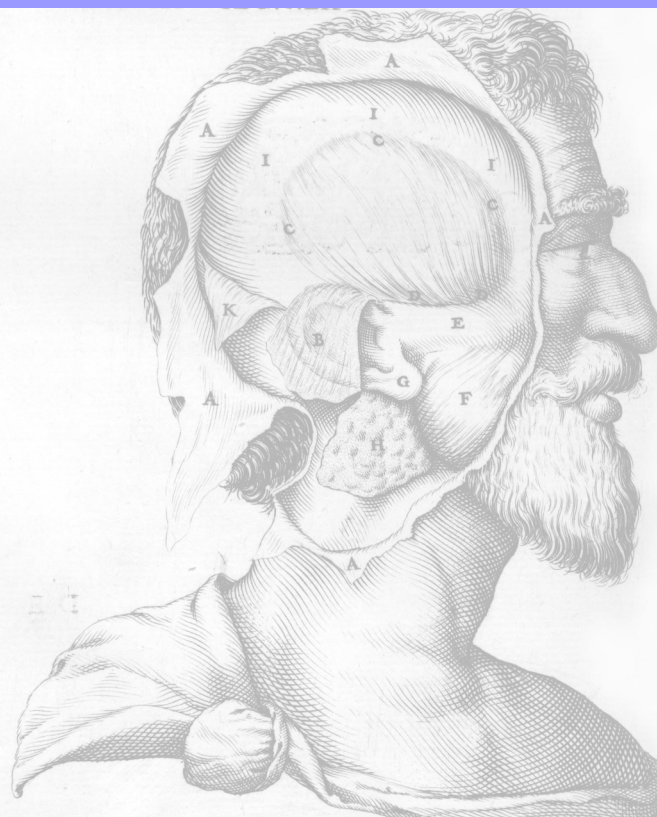


**An Annotated Bibliography of the
Dennis G. Pappas Otolaryngology Collection
at the Reynolds Historical Library**



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First Edition

Annotated by Dr. Dennis G. Pappas, Sr.

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Introduction

By Dr. Dennis G. Pappas, Sr.

Art has always been part of my life. As a teenager my attention was turned to impressionistic paintings which I admired through books. The impressionistic movement included, besides paintings, art-glass, architecture, and sculpture. Art-glass was affordable then, so I started my first collection.

Two important events occurred during the first year of my medical practice. My wife, Patti, gave me the Parke-Davis History of Medicine poster set, and a patient gave me with a mahogany box partially filled with medicines. Each was to affect me for life.

Patti could not find a complete poster set so she called the CEO of Parke-Davis, who indignantly told her that he only had three sets left. Needless to say she got one.

The mahogany box was found by my patient in a south Alabama flea market. It was cleaned and polished, and found to have brass hinges, lock and a cartouche. After hours of research, it was found to be dated to the Civil War era.

The poster set focused on the great books of medicine; the medicine box on medical technology of its day. I saw both as a bridge between art and science, and that, like other departments of human activity, such artifacts have taken their objective from the character of the thought of the times. Such books and instruments, never independent of the philosophy of its age, were not considered antiques, but works of art, history, and culture, that have faced the challenge of the past and can give insights to rewarding findings of the future.

With this multidisciplinary experience just described, it was important for the Ear Nose and Throat collection at the Reynold's Library to recognize and appreciate milestones that decisively influenced the evolution of the specialty. This is a road map plan. For Laryngology the event publications of Turck and Czermak are the discovery works. Road map books that led to the event books include Julius Casserius' "De vocis"...(anatomy); Conrad Schneider' "De catarrhis" (proved that the origin of nasal secretions were from the anterior and posterior nasal membranes rather than the cranial cavity, a dogma that existed for some twenty centuries); and Johannes Muller's book on the physics of generating specific sounds.

Diseases of the ear were studied by healing practitioners even before Christ, so there are numerous road map books that led to the event publications of William Wilde, Joseph Toynbee, and Adam Politzer.

There is typically a work, written after the event, enriched in anatomical detail, that is a road map book for the “joint chief of staff” or surgeon to take to the operating room and use as a “cookbook.” Emil Zuckerkandl provided this work for Rhinology; Herbert Lushka’s 1873 anatomy text may provide it for Laryngology; Jozsef Hyrtl for Otology.

Some volumes are scarce and hard to get. But the collection tends to grow with teaching books, that is the many books written after the event, and sometimes getting away from the game plan.

Aetius of Amida. *Aetij medici graeci Contractae ex veteribus medicinae tetrabiblos.* Lugduni: Ex officina Godefridi et Marcelli Beringorum fratrum, MDXLIX [1549]. Call # Oversize WB 100 AE97t 1549

Title translation: *The four books of medicine of Aetius, Greek physician, drawn from the ancients.*

Aetius of Amida (A.D. 502-575) may have been one of the first to mention ear polyps. His treatise, *Contractae ex veteribus medicinae tetrabiblos*, was probably the best of its time dealing with the treatment of ear, nose, and throat diseases. His otological remedies included softening hardened cerumen with a solution of saltpeter and vinegar, removing watery material from the ear canal by suction, and using heat to alleviate an earache.

Albinus, Bernhard Siegfried (1697-1770); Eustachi, Bartolomeo (d. 1574). *Bernardi Siegfried Albini medicinae doctoris ... Explicatio tabularum anatomicarum Bartholomaei Eustachii, anatomici summi.* Leidae Batavorum [Leiden]: Apud Joannem Arnoldum Langerak, et Joannem & Hermannum Verbeek ..., MDCCXLIV [1744]. Call # Oversize QS 17 AL14e 1744

Title translation: *Explanation of the anatomical plates of Bartolomeo Eustachi, most distinguished anatomist.*

Forty-seven copper plates of illustrations were drawn by Eustachius, and maybe his relative and assistant Pier Matteo Pini of Urbino. Only eight prints were published during Eustachius' lifetime. These are found in *Opuscula Anatomica* (Venice, 1564). Dutch editions of 1707 (Leyden) and 1726 (Delft) exist.

Thirty-nine plates were not printed by Eustachius. These drawings were inherited by Pini, but disappeared until the eighteenth century when the papal physician Lancisi found the plates in the Papal library. Eustachius died before publishing his work, "De dissensionibus ac controversiis anatomicis," for which the plates were intended. The text has never been found. Incidentally, one of the plates was engraved on each side.

The following editions are known:
Rome, 1714, Text by Lancisi

Amsterdam, 1722, Text same as 1714 edition
Rome, 1728, Lancisi text, adding a page containing comments on Eustachius
Lud. Bat. (Leyden), 1744, Explanation of plates by Bernardi Siegfried Albini
Lud. Bat. (Leyden), 1762, text only
Venice, 1769, Roman edition without changes
Roma, 1783, Text by Andrea Maximino (copper engravings)
Amsterdam, 1798, Text in Dutch by Andreas Bonn, a professor in Leyden (plates re-engraved)
Amsterdam, 1800, Revision of Bonn's edition by Amsterdam physician J. C. Krauss

There were other treatises (Rome, 1740) by a surgeon, Gaetano Petrioli (Lancisi died in 1720). (Choulant, pp. 200-204).

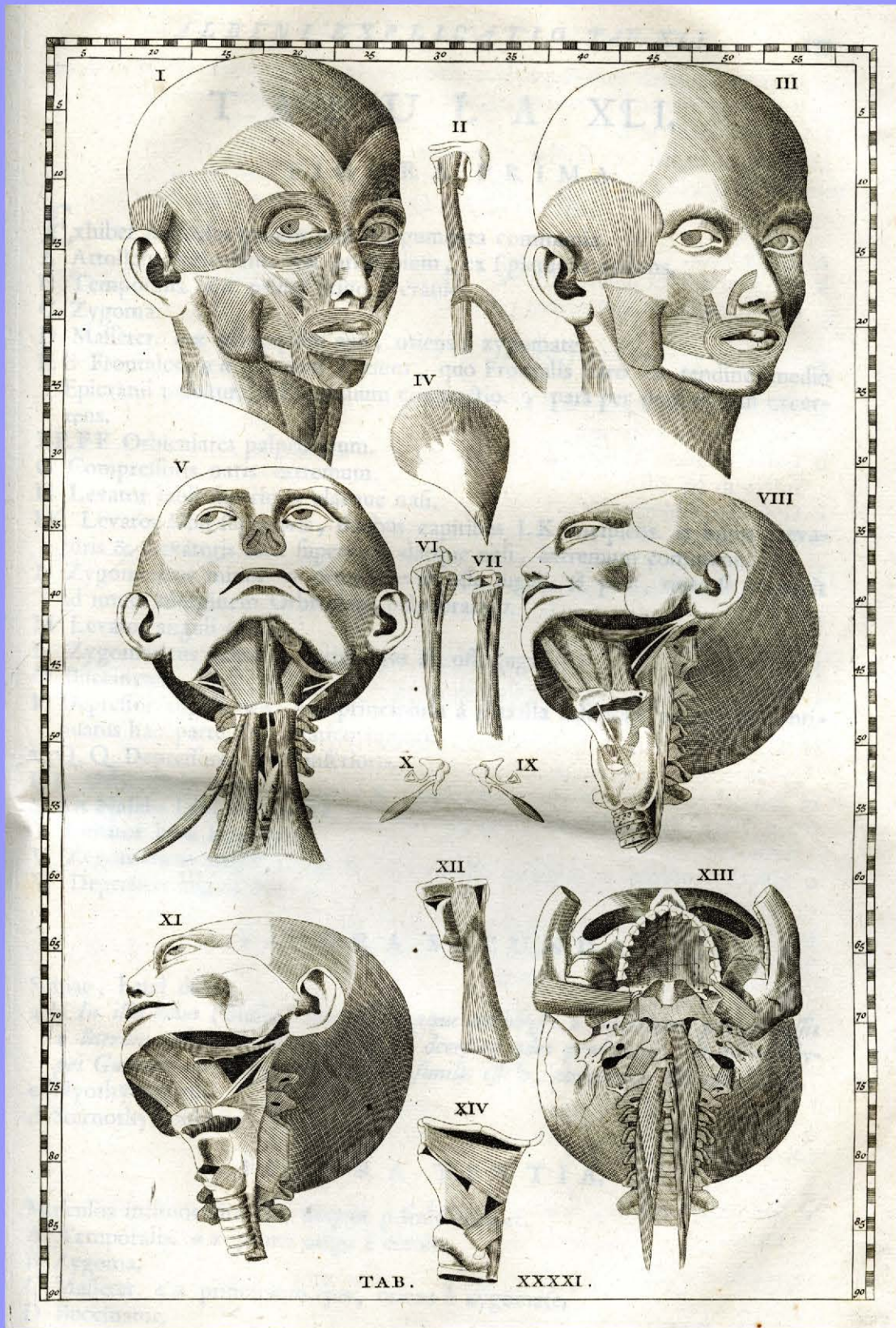
Allen, Peter (1826-1874). *Lectures on aural catarrh, or, The commonest forms of deafness and their cure: (mostly delivered at St. Mary's Hospital).* London: Churchill, 1871. Call # WV 210 AL54L 1871

Published in 1871, this book gave a clear account of otology of the time, especially of the use of the Eustachian tube. Allen was an assistant to James Yearsley, a British pioneer of otology.

American journal of otology: quarterly journal of physiological acoustics and aural surgery. Edited by Clarence J. Blake. New York: William Wood & Co., vols. 1-4, 1879-1882. Call # WV 200 AM35 1879-82

The first four volumes of this journal present articles by the pioneers of the specialty. Volume II has communications from Thomas Alva Edison ("A Resonant Tuning-Fork," p.3) and Alexander Graham Bell ("Experiments Relating to Binaural Audition," p. 169). The editor, Clarence J. Blake, M.D., of Boston, was a Politzer-trained otologist.

American Laryngological, Rhinological, and Otolological Society. *Transactions of the American Laryngological, Rhinological and Otolological Society, Inc.* New York: Rooney & Otten Printing Co., vol. 16, 1910. Call # WV 100 AM350t 1910



Eustachian anatomical table XXXXI, from Albinus's *Explicatio tabularum anatomicarum Bartholomaei Eustachii, anatomici summi* (1744).

American Medical Association. Section on Laryngology, Otology and Rhinology.

Transactions of the Section on Laryngology, Otology and Rhinology of the American Medical Association. 70th Annual Session (1919). Chicago: American Medical Association Press, 1914-1941. Call # WV 100 AM35t 1919

Antall, József. *Pictorial history of European medicine and pharmaceuticals.* [Budapest]: Corvina Kiadó, 1981. Call # WZ 17 AN86e 1981

Bacon, Gorham John. *A manual of otology.* New York: Lea Brothers & Co., 1900. Call # WV 200 B133m 1900

As a manual, this book is geared toward the student, particularly giving consideration to diseases of the ear and not so much to surgery. Every few years Bacon updated the book, and at least seven editions exist. Bacon practiced otology in New York and was associated with Cornell University.

Ballenger, William Lincoln (1861-1915) and A. G. (Adolphus George) Wippert (b. 1868). *Eye, ear, nose, and throat: a manual for students and practitioners.* Philadelphia: Lea Brothers & Co., c1900. Call # WV 100 B212e 1900

This book is a manual directed for teaching students and practitioners. Later editions evolved into a more comprehensive textbook.

Early on, Ballenger's nephew, Howard Ballenger, continued to edit the Ballenger book. It is still in publication, now having completed its 17th edition. In the early editions, A. G. Wippert, M.D., an ophthalmologist and otologist, was responsible for the eye section.

Ballenger was an early developer of otolaryngology in Chicago. He is famously known for his introduction of the swivel knife for resection of septal cartilage.

Beausoleil, R. *Revue statistique des maladies de la gorge, du larynx, du nez et des oreilles.*

Bordeaux: Féret et fils; Paris: Librairie O. Doin, 1893. Call # WV 140 B384r 1893

This book is a statistical review of the diseases of the throat, larynx, and ears, and their descriptive complications (title translation). Beausoleil was a physician on the faculty in the Bordeaux Clinic. J. Moure, a laryngeal pioneer in France, was his professor.

Bell, Charles (1774-1842). *The nervous system of the human body: embracing the papers delivered to the Royal Society on the subject of the nerves.* Washington: Stereotyped by D. Green, for the Register and Library of Medical and Chirurgical Science, 1833. Call # WL 100 B413n 1833-34

----- *A series of engravings, explaining the course of the nerves: with an address to young physicians on the study of the nerves.* Philadelphia: Published by Anthony Finley, 1818 (Philadelphia: William Fry). Call # WL 17 B413s 1818

Bell investigated the anatomy of the cranial and body nerves in a series of books, starting in 1803. These works introduced the specialty of neurology. Bell, of Edinburgh, spent his productive years in London. He was a surgeon, anatomist, teacher and writer. He studied at the Hunter School of Anatomy, and in 1812 bought the school for his own use.

Bernhardt, Paul. *Die Verletzungen des Gehörorgans besonders auch ihre Beziehungen zum Nervensystem: forensische Abhandlung.* Berlin: Verlag von August Hirschwald, 1903. Call # WV 200 B457v 1903

Title translation: *Injury to the hearing organs including involvement to the nervous system.*

This book was re-backed with imitation leather and original papers with titles attached to the front; new endpapers; 15.1 X 21.7 cm.; provenance with a brief 3 line paragraph on the front cover.

This instructional book covers complications following infections of the ear that result from meningitis, vascular thrombosis, and brain abscess. Bernhardt was a physician in Berlin.

Beyer, Hermann (b. 1868). *Der Operationskurs des Hals-, Nasen- und Ohrenarztes.* Leipzig: Kabitzsch, 1938-39. Call # WV 168 B468o 1938

----- *Der Operationskurs des Hals-, Nasen- und Ohrenarztes.* Leipzig: Barth, 1953-. Call # WV 168 B468o 1953-

Title translation: *Course on surgical treatment for the otolaryngologist.*

This book of manual size conveys through 317 illustrations the surgeries of the ear through 1938, which is prior to the introduction of the operating microscope. Beyer was a Berlin practitioner.

Bezold, Friedrich (1842-1908). *Über die funktionelle Prüfung des menschlichen Gehörorgans: gesammelte Abhandlungen und Vorträge.* Wiesbaden: Verlag von J.F. Bergmann, 1897-1909. Call # WV 272 B469u 1897, v. 1 & 3
Title translation: *The functional testing of human hearing: collected treatises and discourses.*

The audiometer is a 1940's tool. Prior to this, the whispered voice, tuning forks, Galton's whistle, and musical instruments were used to determine levels of hearing. Bezold, through these books, established diagnostic protocols for hearing loss. In 1893, Politzer first described otosclerosis, so it was becoming increasingly important to sort conductive from "nerve" hearing loss. Bezold gave a diagnostic protocol to differentiate these hearing losses.

Bezold rates with Toynbee, von Trötsch, and Politzer as one of the pioneers of otology. (See Pappas, *Otology's Great Moments*)

Billroth, Theodor (1829-1894). *Ueber die resection des oesophagus.* Berlin: Verlag von August Hirschwald, 1871. Call # WI 250 B497u 1871

Title translation: *Resection of the esophagus.*

Theodor Billroth became a pioneer in three fields of major surgery: esophagus resection (1871); laryngectomy (1873); and gastrectomy (1881).

Bishop, Seth Scott (1852-1923). *Diseases of the ear, nose, and throat and their accessory cavities: a condensed text-book.* Philadelphia: F.A. Davis Co., 1897. Call # WV 140 B541d 1897

This ear, nose, and throat "condensed" text book includes two excellent illustrations of the period examination room on page twelve. Bishop was an early developer of Chicago otolaryngology.

Black, George. *Hearing, and how to keep it.* London: Ward, Lock and Co., [1888]. Call # WV 270 H35105 1888

A layman's text on the ear.

Bonifacio, Giovanni (1547-1635). *L'arte de' cenni: con la quale formandosi favella visibile, si tratta della mvta eloqvenza, che non e' altro che vn facondo silentio: diuisa in dve parti ...* In Vicenza: Appresso Francesco Grossi, MDCXVI [1616]. Call # HV 2474 B641a 1616

Title translation: *Of the art of signs: on the extent to which they developed visible language by making signs with their hands.*

Only fragmentary glimpses of the "deaf" are seen before the late medieval and Renaissance period of European culture, and very little is known about the history of educating hearing-impaired children prior to the invention of the printing press. The mere concept of educating the hearing-impaired was long considered ludicrous and the course of its pursuit has been complicated by controversies and accusations. For centuries, physicians adhered to the negative philosophy toward instructing the "deaf" perpetuated by the church. Stimulated by the knowledge of the Chinese process of making paper and the subsequent invention of a practical process of printing, philosophies began to change toward more humanistic ideals around the mid-fifteenth century.

Later authors frequently referred to "Of the Art of Signs" (1616). Bonifacio was not particularly interested in the deaf, but remarked at one point on the extent to which they developed visible language by making signs with their hands (Bender, *Conquest of deafness*, p. 52).



Photo of an otolaryngologist's examination room, from Bishop's *Diseases of the ear, nose, and throat and their accessory cavities* (1897).

Breschet, Gilbert (1784-1845). *Recherches anatomiques et physiologiques sur l'organe de l'ouïe et sur l'audition. Dans l'homme et les animaux vertébrés.* [In: *Mémoires de L'Académie Royale de Médecine.* Paris: J. B. Bailliére, 1836, pp. 229-523]. 12 illustrations of the internal ear. Call # Oversize WV 250 B753r 1836

Title translation: *Anatomical and physiological researches on the organ and sense of hearing, in humans and vertebrates.*

In this treatise, Gilbert Breschet gave accurate descriptions of the utricle and saccule of the labyrinth. He named the helicotrema, differentiated perilymph from endolymph, and coined the word otoconia. At the time of Breschet, anatomical studies were being undertaken and developed in all parts of Europe –

Emil Huschka in Jena, Friedrich Arnold in Heidelberg, Joseph Hyrtl of Vienna.

Browne, Lennox (1841-1902). *The throat and its diseases.* London: Bailliére, Tindall and Cox, 1878. Call # WV 500 B817t 1878

This book went into five editions. According to R. Scott Stevenson and Douglas Guthrie's *History of oto-laryngology* (Baltimore: William & Wilkins, 1949, p. 89), diseases of the nasal sinuses were hardly discussed, and suppuration of the maxillary antrum was still associated with the teeth rather than the nose.

Browne was an assistant to Morell Mackenzie from 1865 to 1873. He was brilliantly clever yet somewhat unscrupulous, so Mackenzie never placed him on the staff of the throat hospital.

Browne was a skilled artist who exhibited his works regularly and drew the illustrations for many of Mackenzie's works (Stevenson & Guthrie, p. 108).

Brühl, Gustav, b. 1871. *Atlas und Grundriss der Ohrenheilkunde.* München: J.F. Lehmann, 1901. Call # WV 17 B834a 1901

----- *Lehrbuch und Atlas der Ohrenheilkunde.* München: Lehmann, 1913. Call # WV 200 B834L 1913

Title translation: *Text and atlas of ear diseases.*

One of a series on medical subjects, this book is atlas-like and an extension of Politzer's previous work for inspecting the tympanic membrane, and normal combined with abnormal pathology. This book represents the third lesson or edition of similar treatises, so subjects are given a state of the art update that includes Bárány's work on the labyrinth.

Bruner, Frank G. (1874-?). *The hearing of primitive peoples: an experimental study of the auditory acuity and the upper limit of hearing of whites, Indians, Filipinos, Ainu and African pigmies.* New York: Science Press, 1908. Call # GN 275 B835h 1908

This is a study of the comparison of hearing of various primitive peoples, done with hearing tools of the period that tested high frequencies and "general" hearing acuity (the audiometer was a 1950's tool). Psycho-social factors are discussed. Bruner was a Chicago psychologist.

Bruns, Victor von (1812-1883). *Die erste Ausrottung eines Polypen in der Kehlkopfhöhle: durch Zerschneiden ohne blutige Eröffnung der Luftwege nebst einer kurzen Anleitung zur Laryngoskopie.* Tübingen: Verlag der H. Laupp'schen Buchhandlung (Laupp & Siebeck), 1862. Call # WV 520 B838e 1862-63

Title translation: *The first extirpation of a polyp in the laryngeal cavity through cutting without a bloody opening of the airway, with a short introduction to laryngoscopy.*

----- *Nachtrag zu meiner Schrift die erste Ausrottung eines Polypen in der Kehlkopfhöhle durch Zerschneiden ohne blutige Eröffnung der Luftwege.* Tübingen: H. Laupp, 1863. Call # WV 520 B838e 1862-63

In Tübingen in 1861, Victor von Bruns was the first to remove a laryngeal polyp, accomplished prior to the discovery of cocaine.

Bryan, Sharon A. *Pioneering specialists: a history of the American Academy of Ophthalmology and Otolaryngology.* San Francisco: American Academy of Ophthalmology; Rochester, Minn.: American Academy of Otolaryngology--Head and Neck Surgery, c1982. Call # WV 1 AM35b 1982

This history of the development of the academy of ophthalmology and otolaryngology includes the various operational departments of the organization, such as specialty boards, pathology registries, meetings, education and research, etc.

Buck, Albert Henry (1842-1922). *Diagnosis and treatment of ear diseases.* New York: William Wood & Company, 1880. Call # WV 200 B855d 1880

In this complete general textbook on the ear, Buck gives patient examples on diagnosis and treatments, both from his own cases and from those of other physicians. Illustrations were few for such a large volume. Other editions came out in 1889, 1895 and 1898.

Dr. Buck was a New Yorker and the son of a famous surgeon, Gurdon Buck (1807-1877). He was a Columbia graduate and later became an instructor in otology at this alma mater. He practiced aural surgery at the New York Eye and Ear Infirmary. As was typical of his era, Buck studied physiology of the ear in Europe, and he is considered a pioneer in American otology.

----- *A manual of diseases of the ear for the use of students and practitioners of medicine.* New York: William Wood & Co., 1889. Call # WV 200 B855m 1889

A text book in which the author has described ear diseases as they have appeared to him in his own

practice. His own treatments, efficient to him, are described. There are not many illustrations.

The specialty of otology was so young that many changes were occurring during these decades, as shown by the Buck books – text and manual. A. Buck was an early developer of otology in New York.

----- *Injuries and diseases of the ear*. [New York: W. Wood & Company, 1884]. Call # WV 210 B855i 1884

----- Four articles by Alfred H. Buck

- 1) *Stubborn inflammations of the external auditory canal*. [Philadelphia : J.B. Lippincott, 1891?] . Reprinted from *International clinics*, April, 1891., pp. 340-350. Call # WV 222 B855s 1891
- 2) *Goutiness in its relations to diseases of the ear*. Call # WV 200 B855g 1897
- 3) *The importance of treatment of aural diseases in their early stages, especially when arising from the exanthemata*. Philadelphia: [S.n.], 1877 (Philadelphia: Collins, printer). Extracted from the transactions of the *International Medical Congress*, Philadelphia, Sept. 1876. Call # WV 230 B855i 1877
- 4) *On the mechanism of hearing*. [New York : D. Appleton & Co.], 1874. In the *New York medical journal*, v. 19, no. 6 (June 1874). Call # WV 272 B855o 1873

This article (pp. 561-579) represents the prize essay of the Alumni Association of the College of Physicians and Surgeons, N. Y., March, 1874. The article is the lead paper of this journal, which appears to be intact, except for the cover, which is a plain plastic one.

Burnett, Charles Henry (1842-1902). *A text-book on diseases of the ear, nose and throat*. Philadelphia: J.B. Lippincott Company, 1901. Call # WV 140 B934t 1901

This book stresses anatomy and physiology, and includes medical and surgical treatments of the ear, nose, and throat. Burnett, a Philadelphian, was a developer of otology in that city.

----- *The ear, its anatomy, physiology, and diseases: a practical treatise for the use of medical students and practitioners*. Philadelphia: H.C. Lea, 1877. Call # WV 200 B934e 1877

----- *The ear, its anatomy, physiology, and diseases: a practical treatise for the use of medical students and practitioners*. Philadelphia: H.C. Lea's Son & Co., 1884. Call # WV 200 B934e 1884

Burnett also wrote these two editions (1877, 1884) of a treatise on the ear and its diseases. This is a textbook that reviews European otology. The second edition, seven years later, omits some material and gives an update in the science.

Burow, Ernst (1838-1885). *Laryngoscopischer Atlas: enthaltend 61 Figuren auf 10 Tafeln in Farbendruck nach der Natur gemalt und Erläutert*. Stuttgart: Verlag von Ferdinand Enke, 1877. Call # WV 505 B938L 1877

Title translation: *Laryngoscopic Atlas: containing 61 figures on 10 plates printed in color, delineated in accordance with nature and explained*.

This book is an atlas of ten colored plates that was published seventeen years after the birth of the specialty. This book is not commonly found in catalogs or histories. Burow practiced in Königsberg.

Hieronymus Capivacci (Girolamo Capivaccio) (1523-1589). *Hieronymi Capivaccii, professoris Patavini clarissimi, Medendi methodus universalis, tabulis comprehensa: in usum medicorum tum theoreticorum, tum practicum*. Francofurti: E Collegio Musarum Paltheniano, MDCVI [1606]. Call # Oversize WB 7 C172o 1603-06

Title translation: *A universal method of healing, contained on tables, useful for both theoretical and practical men of medicine*.

----- *Hieronymi Capivacci Medici olim Patavini clarrissimi, opera omnia: quinq[ue] section. comprehensa, qvarum I. Physiologica, II. Pathologica, III. Therapeutica, IV. Mista, V. Extranea*. Francofurti: E Paltheniana, curante Iona

Rhodio, MDCIII [1603]. Call # Oversize WB 7 C172o 1603-06

Title translation: *The complete works of Girolamo Capivaccio, including five sections: first, Physiology; second, Pathology; third, Therapeutics; fourth, Mixed topics; fifth, Extraneous topics.*

---- *Hieronymi Capivaccei Patavini, olim medici praeclearissimi, opera omnia, quinque sectionibus comprehensa: quarum prima, Physiologica; secunda, Pathologica; tertia, Therapeutica; quarta, Mista; quinta, Extranea.* Venetiis: Apud Sessas, MDCXVII [1617]. Call # Oversize WB 7 C172o 1617

Title translation: *The complete works of Girolamo Capivaccio, including five sections: first, Physiology; second, Pathology; third, Therapeutics; fourth, Mixed topics; fifth, Extraneous topics.*

If Capivacci was not the first to distinguish a conductive from a sensorineural hearing loss, he did introduce bone conduction testing to clinical otology. He had the patient grasp the end of an iron rod with the front teeth, the other end of the rod touching the strings of a zither. If sound was heard by the patient when the strings were plucked, Capivacci ascertained that the hearing loss was caused by a disease of the tympanic membrane (conductive); if no sound was heard, the hearing loss (he concluded) originated in the labyrinth (sensorineural).

Cassebohm, Johann Friedrich (d. 1743). *Tractatus quatuor anatomici de aure humana: tribus figurarum tabulis illustrate.* Halae Magdeburgicae: Sumtibus Orphanatrophei, MDCCXXXIV [1734]. [Bound with]: *Tractatus quintus anatomicus de aure humana: cui accedit tractatus sextus anatomicus de aure monstri humani: cum ... indice tam horum duorum, quam quatuor priorum tractatum ...* Halae Magdeburgicae: Sumtibus Orphanatrophei, MDCCXXXV [1735]. Call # WV 201 C272t 1734-35

Title translation: *Four anatomical treatises on the human ear.* [Bound with]: *A fifth anatomical treatise on the human ear, to which is added a*

sixth on abnormalities of the human ear, with an index of these two and the four prior treatises.

Cassebohm gave a detailed identification of the structures of the temporal bone. The second of his two volumes was the most descriptive account of it theretofore presented. He introduced the present-day vernacular of the relationship of the location of the semicircular canals of the cochlea, labyrinthine windows, and facial nerve (superior, inferior, and external).

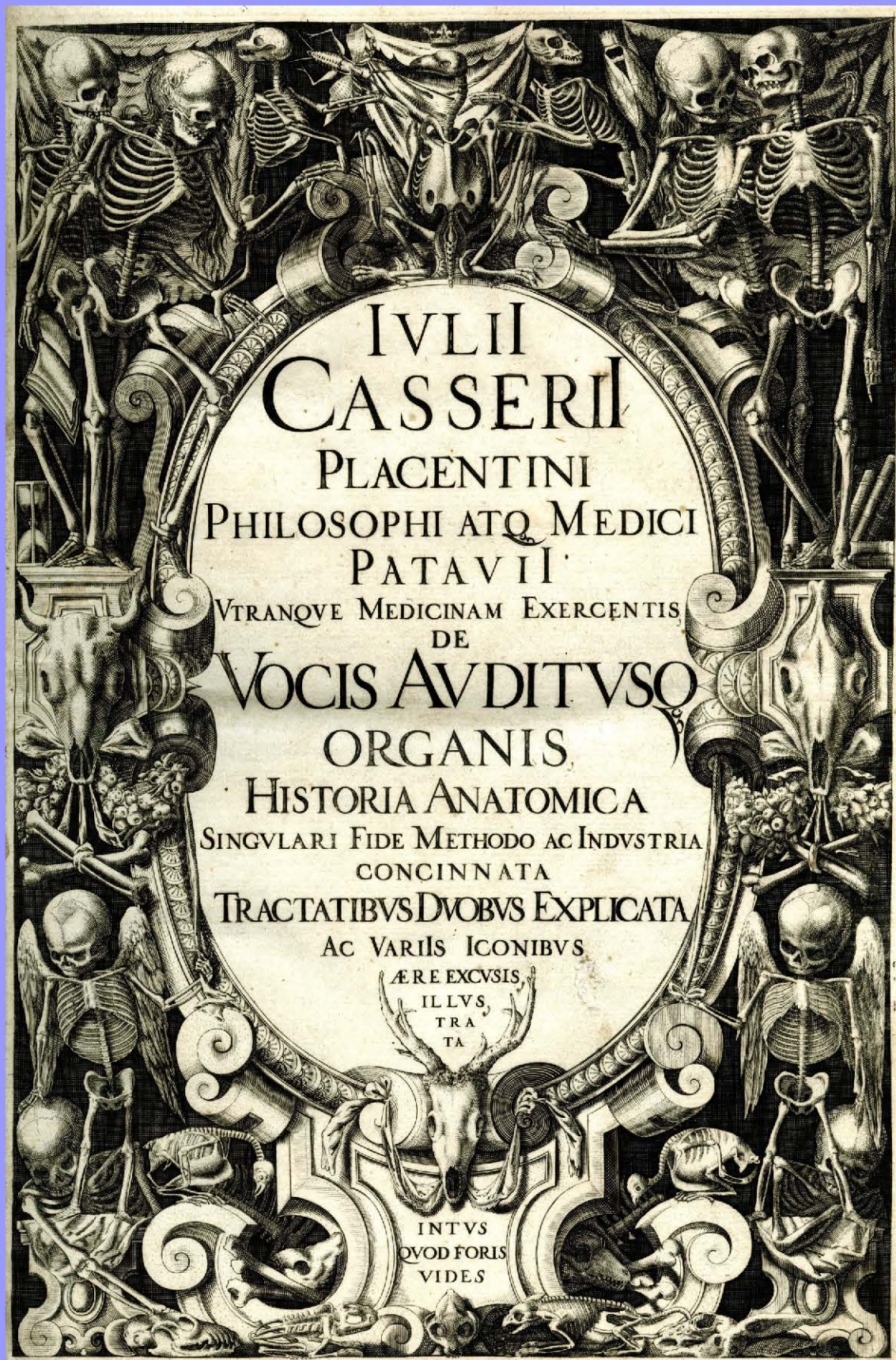
Cassebohm described the five openings of the semicircular canals correctly. His description of the cochlea was not entirely accurate, yet he was the first to describe the connection between the two scalae at the apex (Gilbert Breschet provided a more precise description nearly a century later, and took credit for it – the helicotrema). Cassebohm described the internal auditory canal in respect to the falciform ridge and its localization into compartments of the cranial nerves entering the canal.

Cassebohm (1699/1700 – 1743) was taught anatomy by Jakob Winslow, a student of Duverney. He served as professor of anatomy in Frankfort-on-Oder, Berlin, and in his native city of Halle. His detailed description of the structures of the temporal bone was included in these two volumes.

Casseri, Giulio Cesare (ca. 1552-1616). *Iulii Casserii Placentini philosophi atq[ue] medici Patauii ... De vocis auditusq[ue] organis historia anatomica: singulari fide methodo ac industria concinnata tractatibus duobus explicata ac variis iconibus aere excusis illustrata.* Ferrariae: Excudebat Victorius Baldinus ..., MDCI [1601]. Call # Oversize WV 101 C272d 1601

Title translation: *Anatomical account of the organs of speech and hearing, developed with unique conscientiousness, with method and effort in harmony, in two treatises and illustrated with various images, struck in copper.*

Part I contains a comparative anatomy of the larynx (human larynx compared to birds, amphibians, other mammals, even insects), contained in twenty-two anatomical representations of the vocal organs. Casserio recognized the larynx as the principal organ of



Title page, from Casseri's *De vocis auditus[ue] organis historia anatomica* (1601).

voice, gave the first precise description of the cricoid-thyroid muscles and accurately depicted the superior and inferior laryngeal nerves, which he correctly assumed to originate from cranial nerves (Norman, *Classics of medicine and science*, Catalogue 28, p. 25-26).

Part II, dealing with the ear and illustrated by twelve fine plates, provided the first clear descriptions of the ossicles, comparative studies of the auditory ossicles of various animals, and anatomical descriptions of the inner ear that were far more accurate than any given before, as well as a detailed account of the external ear muscles. (Grolier Club, *One Hundred Books Famous in Medicine*, p. 93).

For a biographical sketch of Casserio, see Dennis G. Pappas's *Otology's Great Moments*, pp. 75-76, and the Grolier Club's *One Hundred Books Famous in Medicine*, p. 93.

Cathcart, George Clark. *The treatment of chronic deafness by the electrophonoide method of Zund-Burguet.* 2nd edition. London; New York: H. Milford, Oxford University Press, 1931. Call # WV 276 C284t 1931

Original cloth boards, 4 illustrations, 5.2 X 7.3 in. Inscription: "Presented to the College of Physicians and Surgeons—Geo W Koch Phar D."

The purpose of this book was to bring forth a method of auditory re-education utilizing an apparatus invented by Dr. A. Zund-Burguet of Paris. In the preface one realizes that the author has many critics regarding the treatment. Dr. Cathcart was a reputable physician. The therapeutic method was that of hard core quackery—and here lies the importance of this book.

Catlin, George (1796-1872). *The breath of life, or, Mal-respiration, and its effects upon the enjoyments & life of man.* New York: John Bradburn, 1865. Call # WF 143 C289b 1865

"Mouth breathing" is based on Catlin's observations of the habits of North American Indians. George Catlin was an explorer and an artist.

Cheatle, Arthur H. (1867-1929). *Some points in the surgical anatomy of the temporal bone, from birth to adult life.* London: J. & A. Churchill, 1907. Call # WV 201 C514s 1907

This book is a temporal bone manual and atlas of its time. By 1907, the work on surgery of mastoid (infections) had been completed, and in progress was surgery for labyrinthine suppurations, a work that was being propelled in Vienna by Heinrich Neumann (1873-1939).

Cheatle was British; his work was done at King's College Hospital. He had a "charming personality, with somewhat inflexible opinions." [Stevenson & Guthrie, *History of otolaryngology*, p. 112]

Cheyne, John. *The pathology of the membrane of the larynx and bronchia.* Edinburgh: Mundell, Doig, and Stevenson, 1809. Call # WV 510 C429p 1809

This book was one of those pioneering efforts to describe diphtheria. Others in the eighteenth century to describe the condition were: John Fothergill (London) as "malignant angina," Francis Home (Edinburgh) as "croup," and Cheyne also described it as "croup."

A valuable work for differentiation of various laryngeal diseases was that of Armand Trousseau and J. H. Bellec, *Traité Pratique de la Phthisie Laryngée, de la Laryngite Chronique, et des Maladies de la Voix* (Paris, 1837). They described (1) simple or severe hypertrophic chronic laryngitis; (2) syphilitic; (3) cancerous; and (4)

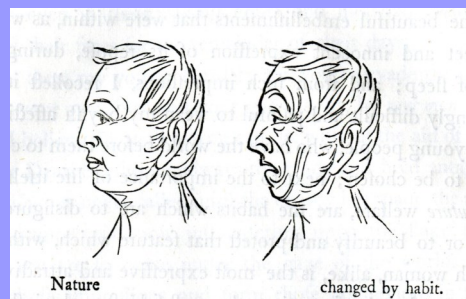


Illustration of the effects of open-mouth breathing, from Catlin's *The breath of life* (1865).

tuberculosis laryngeal phthisis. Their descriptions were somewhat confusing, but their differential diagnoses of the last two conditions were much in advance of any of their predecessors.

The real landmark in the history of throat diseases was the publication by Pierre Bretonneau, *Inflammations Spéciales du Tissu Muqueux et en Particulier de la Diphtérie* (Paris, 1826). He designated this phlegmasia by the name Diphtérie, which in Greek means a skin anevxuvium. [Stevenson & Guthrie, *History of Oto-laryngology*, pp. 82-83]

Coakley, Cornelius Godfrey (1862-1934). *A manual of diseases of the nose and throat*. New York: Lea Brothers & Co., 1899. Call # WV 140 C63m 1899

The author of this book stresses diagnostic investigations. The illustrations of instruments are worthy. Coakley, a New Yorker, was an early pioneer of sinus x-ray examination.

Cohen, J. Solis (1838-1927). *Diseases of the throat: a guide to the diagnosis and treatment of affections of the pharynx, oesophagus, trachea, larynx, and nares*. New York: Wood, 1872. Call # WV 410 C678d 1872

J. Solis Cohen was the first surgeon in America to perform a laryngectomy; he was one of the first laryngologists in America; and his book, *Diseases of the Throat*, was the first in America on this subject.

Colden, Cadwallader (1688-1776). *Extract from a letter from Cadwallader Colden, esq. to Dr. Fothergill, concerning the throat distemper: read Dec. 24, 1753*. London: T. Cadell, 1757. Call # WV 410 C673e 1757

In 1748, Fothergill wrote *An account of the sore throat attended with ulcers*. It seemed to be a new disorder of the time. Fothergill observed that methods of cure such as bleeding, purging, and medicines to treat inflammation were of no benefit. This has been called the first description of diphtheria, though some scholars think the disorder was a form of scarlet fever with tonsillitis.

Fothergill was the famous Quaker physician of London. He was a friend of the American colonists, and especially of Benjamin Franklin (Stevenson, *Famous illnesses in history*, p. 195). For an extensive description of Fothergill's classical account, see Stevenson and Guthrie's *History of oto-laryngology*, pp. 52-54.

In this communication, Colden merely describes similar cases of this condition.

Cotugno, Domenico. *De aquaeductibus auris humanae internae anatomica dissertatio*. Neapoli, et Bononiae: Ex Typographia Sancti Thomae Aquinatis, 1775. Call # WV 250 C829d 1775

Title translation: *Anatomical dissertation on the internal aqueduct of the human ear*.

For some eighteen centuries it was believed that air filled the inner ear, a theory introduced by the Greek philosophers. Cotugno's dissertation established the fact that fluid fills the cavity. Cotugno's eighty-page thesis introduced concepts concerning the function of the fluid.

The inner ear fluid was first noted some twenty years earlier by Pyl. Cotugno may have given a more complete description of it, and besides, he was located in the center of anatomical discoveries – Bologna. The first edition of *De aquaeductibus* was published in 1761 in Naples, where he became Professor of Anatomy & Surgery. Cotugno was only twenty-four at the time of his discovery. Other copies were published from 1768-1778 (Bibl. Wellcome). Cotugno knew nothing of the membranous labyrinth (to be discovered some twenty years later by Antonio Scarpa). Therefore, he regarded the fluid as "an exhalation from the blood vessels."

Culpeper, Nicholas (1616-1654). *The English physician enlarged: with three hundred and sixty nine medicines, made of English herbs, that were not in any impression until this: being an astrologo-physical discourse of the vulgar herbs of this nation ...* London: Printed for W. Churchill, at the Black Swan in Pater-Noster Row, 1718. Call # WB 925 C899e 1718

Culpeper, an apothecary's apprentice, became a popular London astrologer-physician and a prolific medical writer. Culpeper's popular work on herbal remedies was the first "herbal" printed in America and the first full-length medical book published in North America (1708). It was the unauthorized English translation of a London pharmacopoeia (1649). A new edition was re-issued by Michael A. Flannery in 2007.

Curtis, John Harrison (1778-ca. 1860). *A treatise on the physiology and diseases of the ear.* 3rd Ed. London: Printed for Thomas and George Underwood, 1823.

----- *A treatise on the physiology and pathology of the ear.* 6th Edition. London: Longman, Rees, Orme, Brown, Green, and Longman, 1836. Call # WV 201 C944t 1836

----- *An essay on the deaf and dumb, shewing the necessity of medical treatment in early infancy: with observations on congenital deafness.* London: Printed for Longman, Rees, Orme, Brown, and Green, 1829. Call # WV 270 C944e 1829

John Harrison Curtis ruthlessly attempted to establish a reputation as an otologist by plagiarizing some of the works of his mentor, John Cunningham Saunders (Wilde, *Practical Observations in Aural Surgery*..., p. 36, 37). Possibly the best known of Curtis's publications was his *Treatise on the Physiology and Pathology of the Ear* (1817). In the section of this book on Euctachian tube obstruction, he paraphrases sentences to paragraphs from Saunders' *On the Anatomy and Diseases of the Ear*. Incidentally, he freely credits other authors. Considering the fact that it contained almost no physiology and uninformative pathology, but chiefly descriptions of patients with ear diseases, it is difficult to conceive that it had reached a sixth edition by 1836. Politzer's explanation was that Curtis fulfilled the desire for information of patients undergoing otological therapy (Poltzer, *History of Otology*, p. 274), since the period of time from 1800 to 1850 in England was void of otologic physicians and original contributions. Certainly, he also conveyed himself well in his writings. As the product of an affluent family, the husband of a well-bred lady, and the proprietor of an office in

fashionable Soho Square, Curtis was also admired by the lay-public and the medical press.

Despite his obvious plagiarism, Curtis's writings revealed a broad knowledge of past otological literature. He must also be given credit for founding in 1816 the first hospital in the world specifically intended for the treatment of otologic diseases. In 1845 he secured support from the Throne for the hospital, which eventually became known as the Royal Ear Hospital (now a part of the University College Hospital).

It was his ignorance of otology that Curtis displayed in an 1837 paper before the Medical Society of London that inspired Joseph Toynbee to "rescue aural surgery from the hands of quacks." (*Bib., History of Otol.*, Stevenson, S., & Guthrie, D., p 63). Although he was not esteemed by his colleagues, Curtis was appointed aurist to the Queen – not a small achievement for someone who began as a dispenser in the Royal Navy!

Cushing, Harvey. *Tumors of the nervus acusticus and the syndrome of the cerebellopontile angle.* Philadelphia: Saunders, 1917. Call # WL 358 C954tu 1917

Throughout his career, Cushing kept a complete set of statistics on his tumor cases, always with the intent to improve the figures each year with lower morbidity and mortality. This book is a model of how a record should be made. Also, when one considers the depressive mentality that settled upon the field of neurosurgery in the early 1900s because the end results were dismal, Cushing herein published some of the most optimistic results in brain surgery, thus advocating it as a safe field of surgery (GM 3896 via James Tait Goodrich, Summer 2011, cat P-71).

Cushing completed the acoustic monograph in May, 1917. Miss Louise Eisenhardt assisted in its preparation for press and she was in charge of seeing it through publication while Cushing was in France. The treatise was an outgrowth of a chapter on "endotheliomas of the cerebello-pontile angle," which was intended for the monograph on meningiomas (not completed until 1938). The monograph was important in that it was the first detailed account that he had given of a special group of intracranial tumors other than

the pituitary. Also it recorded the progress that had occurred in neurosurgical technique since 1908. [Fulton's Bibliography, p. 410, via Goodrich (see above)]

Cyon, Elie de (1843-1912). *Das Ohrlabyrinth als Organ der mathematischen Sinne für Raum und Zeit.* Berlin: Springer, 1908. Call # WV 250 C992o 1908

Title translation: *The inner ear as organ of the mathematical sense of space and time.*

Historically there were a number of rival theories to the functions of the semicircular canals (balance canals). The theory that took definite shape came from the works of Breuer (1874), Mach (1875), and Crum-Brown (1874). According to it, the semicircular canals serve for the perception of angular accelerations, or in variations in speed of rotation of the head and body. When a rotation occurs, the inertia of the endolymph causes it to move in the opposite direction and these currents in the endolymph bend the cilia on crests fixed to the wall of the canal. Deformation of sensitive hairs sets up nervous impulses which will be different according to which crest has been stimulated.

Breuer went on and drew a sharp distinction between the functions of the semicircular canals and the otolith structures; to the latter is attributed the perception of linear acceleration.

In direct conflict with the theory is that of de Cyon, who claimed that the semicircular canals were the peripheral organ of a sixth sense, the sense of space. De Cyon started his work in 1872. His purpose was to cause lesions of the semicircular canals and then observe the abnormal positions of the head. He concluded that divisions of eye muscles and corresponding head positions formed our notions of three dimensions, the sensations excited by each canal corresponding to one dimension.

Cyon was born Ilya Tsion in a small Jewish community in Lithuania near the German border. After receiving his doctorate in medicine and surgery he pursued studies in physiology in Paris, probably with Claude Bernard. He became professor at St. Petersburg. So much is shrouded in obscurity with his life, but in 1875 he

immigrated to Paris, called himself Elie Cyon and never returned to Russia.

In 1911 a French edition of this book was published (*L'Oreille organe d'orientation dans le temp et dans l'espace*), most probably translated by Cyon. The subject evidently was of great interest to him; in 1878 he had published a thesis, "Recherches experimentales sur les fonctions des canaux semi-circulaires et sur leur role dans la formation de la notion de l'espace."

Czermák, Johann Nepomuk (1828-1873)
Türck, Ludwig (1810-1868)

Laryngology as a specialty started in 1858 in Vienna. As a physical examination tool it was preceded by chest percussion (c. 1760), heart and lung auscultation (c. 1819), funduscopy (1850), and otoscopy (1857). During the colonial period (c. 1750-1825), the patient was treated by a symptomatological approach.

The Türckish War was a result of the priority dispute between Ludwig Türck (a Viennese internist) and Johann N. Czermak (a Prague-born physician-physiologist, most noted for his work on the vagus nerve, who had a close working relationship with Jon Purkinje). The controversy was most useful for the new branch of science; because of the notoriety of the arguments, laryngology was quickly recognized in the medical world.

In 1857, Türck used a self-made laryngeal mirror to examine the larynx. Sunlight was his source of light, and most of this work was done during the summer months. Czermak borrowed a mirror from Türck, and during that winter, observed his own vocal cords using artificial light. Czermak published his findings in the *Vienna Medical Weekly* (1858, pp. 196-198). It was a painful act for Türck to accept, but the controversy enlivened an otherwise slow working personality that lacked ease of expression to one that published and counter-published in efforts to prove his claim, which he did to the Society of Physicians on April 9, 1858. This time he was not to be denied. An adroit researcher, Türck discovered the principal of secondary degeneration (November 29, 1849), only to find he had been beaten by one week by A. V. Waller ("law of Wallerian degeneration");



Illustration of a throat examination, from Czermak's *Der Kehlkopfspiegel und seine Verwerthung für Physiologie und Medizin* (1860).

then his 1850s research on hemilateral lesions was published by Brown-Séguard in March of 1860.

Czermak was a different personality: outgoing, friendly, eloquent, and resourceful to the extent that he added new techniques to the specialty as artificial light, introduced posterior rhinoscopy, and started local laryngeal treatments. He traveled to other European countries to teach laryngoscopy, a reason why so many physicians considered him the soul founder of the specialty.

“The Türck War kept laryngology in suspense for a long time, finally ending by giving Türck the credit of introducing the specialty of laryngology and Czermak the credit of founder of laryngologic artificial light” (Taken from *Zur Geschichte der Oto-Rhino-Laryngology in Österrich* [*The history of otorhinolaryngology in Austria*]; Major, E. H., Skopec, M., 1885, pp. 53-58).

Note: See additional title listings under Ludwig Türck.

Czermák, Johann Nepomuk (1828-1873).
Gesammelte Schriften. Leipzig: Engelmann, 1879. Call # QT 7 C997g 1879 v. 1, pt. 1-2, v. 2

Title translation: *Selected monographs.*

This book contains Czermák’s classical works on the laryngoscope, his method of exploring the nose and nasopharynx with small mirrors and his discovery that mechanical pressure on a spot of the carotid triangle lowers the heart rate. There is also a biographical sketch of Czermák by Anton Springer.

Der Kehlkopfspiegel und seine Verwerthung für Physiologie und Medizin. Leipzig: Verlag von Wilhelm Engelmann, 1860. Call # WV 505 C997k 1860

(“On the laryngoscope and its employment in physiology and medicine”), translated into French in June of 1860 and English in 1861.

----- *Physiologische Untersuchungen mit Garcia's Kehlkopfspiegel.* Wien: Aus der K.K. Hof- und Staatsdruckerei, 1858. Call # Q 44.4 SI89 1858

Title translation: *Physiological investigations with Garcia's head mirror.*

----- “Ueber die inspektion des cavum pharyngo-nasale und der nasenhöhle durch die choanen vermillest kleiner Spiegel.” *Wien. Med. Wschr.*, No. 32, 6 August 1859, 518-520. Call # WV 300 C997u 1859

Title translation: “On the observation of the pharyngo-nasal cavity and of the nasal cavity through the choanae by means of small mirrors.”

By reversing the laryngeal mirror, Czermak visualized the vault of the nasopharynx and thus was credited with initiating the specialty of rhinology.

Czermák, Johann N., et al. *Selected monographs.* London: The New Sydenham Society, 1861. Call # WB 100 SE48 1861

Selected monographs represents articles of note taken from various medical journals in 1858 and 1859. An excellent overview of the laryngoscope is given by Czermák; at this time the laryngoscope had been in use briefly, only one to two years.

Contents: “On the practical uses of the laryngoscope,” by J. N. (Johann Nepomuk) Czermák; “On thrombosis of the cerebral sinuses,” by Theodor von Dusch; “Atrophy of the brain,” by J. L. C. (Jacobus Lodewijk Conradus) Schroeder van der Kolk; “On the application of statistics to medical enquiries,” by Professor F. W. Gustav Radicke; “On the uses of cold in surgical practice,” by Friedrich von Esmarch.

Dalby, Sir William Bartlett (1840-1918).
Lectures on diseases and injuries of the ear: delivered at St. George's Hospital. London: J. & A. Churchill, 1885. Call # WV 200 D15L 1885

Dalby’s book consists of his eleven lectures which he delivered at St. George’s Hospital (1873). It went through four editions. This was the pioneering time of mastoid surgery. Dalby’s teacher James Hinton had done mastoid surgery. Dalby adhered to the Wilde incision for mastoid disease followed by irrigation through the ear canal washing out the mastoid cavity. Dalby was not against mastoid surgery and advocated that it should be done. According to Stevenson and Guthrie, “the Listerian doctrines (1868) were in effect and possibly Dalby was too complacent for

change and besides it seems that he led a well rounded life of a Victorian sportsman” (Stevenson R. S., Guthrie D., *A History of oto-laryngology*, Edinburgh: Livingston, 1949: 112).

Dalby inherited the practice of Joseph Toynbee via James Hinton. Toynbee died in 1866 at the age of 52. Therefore, Dalby had the largest practice of any aural surgeon in England at the time.

Deiters, Otto (1834-1863). *Untersuchungen über die Lamina spiralis membranacea: ein Beitrag zur Kenntniss des inneren Gehörorgans.* Bonn: Henry et Cohen, 1860. Call # WV 250 D368u 1860

Title translation: *Investigations of the Lamina spiralis membrane: contributions to knowledge of the inner ear.*

The contribution of Otto Frederick Karl Dieters (1834-1863) to the understanding of the histology of nerve cells during his brief lifetime is nothing short of amazing. His research in Bonn convinced him that dendrites were quite different in their characteristics and were independent in function from axons (M. A. B. Brazier, *A History of Neurophysiology in the 19th Century*, pp. 137-138). By the age of twenty-six, in 1860, he had recognized that the rods described by Corti formed arches, and he realized their connection to the hair cells of the reticular membrane. He further revealed that there were supporting structures between the hair cells and the basilar membrane. Although these supports are known today as “Deiters’ cells,” it was actually J. P. Nuel who confirmed them to be cells in 1872.

Even though Deiters lived only to the age of twenty-nine, his work was noteworthy enough for another anatomical site, a vestibular nucleus in the pons, to bear his name as well.

Deleau, le jeune, Nicolas (1797-1862). *Introduction à des recherches pratiques sur les maladies de l'oreille qui occasionent la surdit : et sur le d veloppement de l'ou ie et de la parole chez les sourds-muets qui en sont susceptible.* Paris: Chez Mme Huzard, [1830]-1834. Call # WV 270 D377i 1830-34

Title translation: *Introduction to some practical researches on the ear diseases which cause deafness, and on the development of hearing and speech among deaf-mutes susceptible to them.*

Nicolas Deleau, the third in the trio of French scientists (Itard; Saissy), may have been the most talented clinically. Deleau had a great deal of experience in Eustachian tube catheterization, which was the topic of his notable treatise. Using Ren  Laennec’s stethoscope, he attempted to diagnose ear diseases by the variation in sounds made when air was introduced into the ear through a Eustachian tube catheter. He discarded Saissy’s and Itard’s method of irrigating the ear with water through the catheter and reintroduced the air douche for this purpose. In certain cases he would use medicated vapors instead of air, a practice that later became established throughout Europe.

Note: See more information about Deleau under the listing for Itard.

Dench, Edward Bradford (1864-1936). *Diseases of the ear: a text-book for practitioners and students of medicine.* New York: D. Appleton and Company, 1894. Call # WV 200 D411d 1894

----- *Diseases of the ear: a text-book for practitioners and students of medicine.* New York: D. Appleton and Company, 1900. Call # WV 200 D411d 1900

This book was written for the student and practitioner to be used as a clinical guide. Therefore, minute details in pathology are eliminated. It went through eight editions; this could mean that it was the student’s text of its time. Dench was a pioneer and developer of otology in New York.

Denker, Alfred (ed.). *Die Anatomie der Taubstummheit.* Wiesbaden: Bergmann, 1904-11. (2. Lfg. (Zur Anatomie der kongenitalen Taubheit by G. Alexander, 1905). Call # Oversize WV 270 AN16 1904-11

Title translation: *The anatomy of the deaf-mute.*

Denker is best known for his anatomical studies. One of his earliest publications consisted of a

folio of comparative anatomical studies of the hearing organ in the vertebrate, demonstrated by corrosive preparations of temporal bone sections. The excellent drawings, with good depth perception, show that Denker was a skilled anatomist.

Die Anatomie... is a publication on mutism and is one of three treatises by Denker that was noteworthy. The others were a monograph on otosclerosis and a report on the study of the hearing and speaking organs of the parrot (1907).

Denker was born in Rendsburg (Schleswig) and studied in Kiel, Tübingen and under Bezold in Munich. In 1902 he became professor at Erlangen, and in 1911 he followed Schwartz at Halle.

Deschamps, Jacques Louis (1740-1824). *Traité des maladies des fosses nazales et de leurs sinus.* Paris: Mme. Veuve Richard, An XII, 1804. Call # WV 300 D454t 1804

Title translation: *Treatise on the diseases of the nasal fossae and their sinus.*

The author emphasized the sense of smell, and that the sinuses were not organs of olfaction (as considered by Magendie in 1817). He described

nasal polypi as (1) fungous and vascular (2) mucous and lymphatic (3) scirrhou and (4) sarcomatous. He treated nasal polyps with (1) local astringents, (2) excision with a guarded bistoury, (3) avulsion by forceps, (4) the ancient knotted thread, (5) chemical caustics and even cautery, (6) and ligation with a waxed thread and silver wire.

Deschamps described the symptoms of frontal and maxillary sinusitis. He advised opening, for abscess, the maxillary sinus through the alveolus of a bad tooth, if present, or through an opening above the alveolar border large enough to introduce a finger. Deschamps was Parisian.

Du Verney, M. *Traité de l'organe de l'ouïe.* Paris: Estienne Michallet, 1683. Call # WV 200 D957t 1683

Title translation: *Treatise on the organ of hearing.*

Otology's first clinical primer, Du Verney's treatise exemplified the desire of the seventeenth century scientists, especially anatomists, to concentrate on specific organs and pursue investigations and descriptions of their minute details. He proceeded to discuss in a three-part format: (1) the anatomy of the ear, (2) the physiology of hearing, and (3) the pathology of

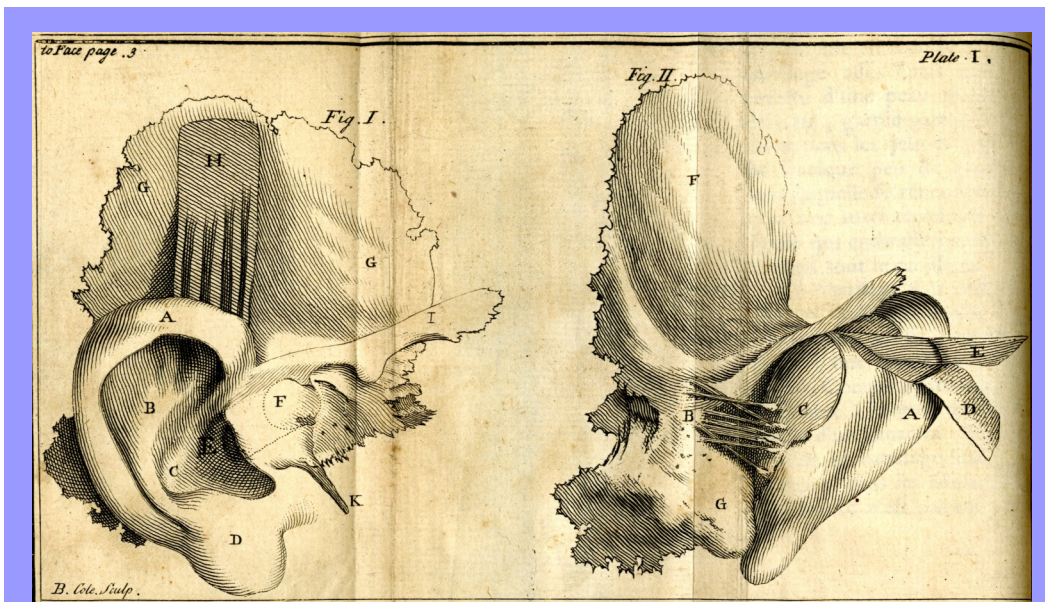


Illustration depicting the anatomy of the ear, from Du Verney's *Traité de l'organe de l'ouïe* (1683).

the organ of hearing. In essence, in this book he introduced the following features:

“Anatomy

- Osseous part of external canal originated from tympanic bone.
- Tympanic ring incomplete superiority. Communication between tympanic cavity & cells of mastoid.
- Division of labyrinth as back (semicircular canals) front (cochlea) & area between.

Embryology

- Dissimilarities between anatomy of fetus and adult.

Pathology

- Draining ear did not originate in brain.

Clinical

- Fault of hearing loss may be in hearing organ or nerve.
- Tinnitus a symptom!

Theory

- Resonance theory (two centuries before Helmholtz)” (Quoted from: Dennis G. Pappas’s *Otology’s Great Moments*, p. 14, table 13).

The publication of *Traite* took place when the author was 35 years old. Du Verney was born in Feurs-en-Forez, a small village in the center of France. At the age of fourteen he was sent to study medicine at Avignon, and in five years he received his medical degree. He was particularly attracted to anatomy, and on that account, when he went to Paris he found his greatest opportunities as a teacher and investigator and never had an extensive practice. Du Verney became part of a group of anatomists that included Claude Perrault, who regularly performed dissections on a wide variety of animals from the royal menagerie at Versailles for the curious and fashionable. In 1679, he was appointed to the chair of anatomy at the Jardin du Roi. His knowledge was extensive; his presentations were eloquent, animated, and enthusiastic. Crowds of students gathered for Du Verney, who raised anatomy experiments to new levels.

Claude Perrault’s *Essai de physique* (1680) included a section on anatomy of the ear. Du Verney sensed many omissions that prompted him to write *Traite*. He died in September of 1730 at the age of 82.

Ebstein, Wilhelm (1836-1912). *Einige Bemerkungen zur Lehre vom Ohrenschwindel.* [Leipzig: Verlag von F.C.W. Vogel, 1897]. Call # WV 255 EB79e 1897. Offprint.

Title translation: *Some observations on instruction about vertigo.*

Eneroth, Carl-Magnus. *Histological and clinical aspects of parotid tumours.* Stockholm: Kungl. Boktryckeriet P.A. Norstedt & Söner, 1964. Call # WI 230 EN27h 1964

Faloppio, Gabriele (1523-1562). “Observationes Anatomicae.” [In] *Gabrielis Falloppij Mutinensis, physici ac chirurgici praeclarissimi ... Opera quae adhuc extant omnia.* Francofurti: Apud haeredes Andreae Wecheli, MDLXXXIII [1584]. Call # Oversize WB 7 F194o 1584

Title translation: *Anatomical observations.*

This is the only work by Falloppio published in his lifetime. Other material was edited for publication from his lecture notes. This is not a treatise on anatomy; it is a detailed critical commentary on what is probably the most famous anatomical work ever published, *De Fabrica*, by Andreas Vesalius. Nevertheless, Falloppio made many new discoveries himself.

Fitch, Samuel Sheldon (1801-1876). *Six discourses on the functions of the lungs, and causes, prevention, and cure of pulmonary consumption, asthma, and diseases of the heart: on the laws of life, and on the mode of preserving male and female health to an hundred years.* New-York: S.S. Fitch, 1853. Call # WF 300 F555s 1853

Forbes, Litton. *Diseases of the nose and nasopharynx.* 2nd Ed. London: Henry Renshaw, 1891. Call # WV 300 F744d 1891

Forbes’s book, with original cloth backs and illustrations, is an overview of the subject at a time when the specialty was in its infancy. The author, of British descent, was both an eye and an

ear physician. His curriculum vitae shows an interest in geography and anthropology, including subject matter from the islands of Fiji and Samoa.

Frank, Martell (1810-1886). *Practische anleitung zur erkenntniss und behandlung der ohrenkrankheiten*. Erlangen: Enke, 1845. Call # WV 200 F851p 1845

Title translation: *Practical guide to the knowledge and treatment of diseases of the ear.*

Frank's book is known for its illustrations of early tools for otological examinations. The effectiveness of early instruments for ear examination must be considered in view of the fact that they were dependent on direct sunlight, and were consequently inadequate on cloudy or rainy days, and at night. The instruments using a candle as their light source presented a problem in that the flame would flicker and present variations in the image of the tympanic membrane seen by the examiner.

There is some debate as to who invented the tool for examining the tympanic membrane. Archibald Cleland (c. 1790) introduced a primitive otoscope (p. 45), which was dependent upon proper positioning of the patient's head and using a glass lens three inches in diameter attached to a handle that held a candle. In 1825, Thomas Buchanan (1782-1853) of Hull, England, invented an early form of the otoscope, the "Inspector Auris" (p. 47). Wilhelm Kramer's (1801-1876) apparatus is shown on p. 48.

The precursor of the head mirror was introduced in 1841 by Friedreich Hoffmann, Jr. (p. 49). It was hand held. Hoffmann, a general practitioner, used it for rectal and gynecological examinations. It became universally the tool for examining the ear, nose, and throat.

Frankl-Hochwart, L. von (Lothar) (1862-1914). *Der Ménière'sche Symptomencomplex; die Erkrankungen des inneren Ohres*. Wien: Alfred Hölder ..., 1895. Call # WV 250 F854m 1895

Title translation: *The Ménière symptom complex; Diseases of the inner ear.*

This book was published thirty years after P. Ménière described the triad of symptoms. Frankl-Hochwart gives an overview that describes all features (etiology, symptomatology, psychology, etc.), of the condition.

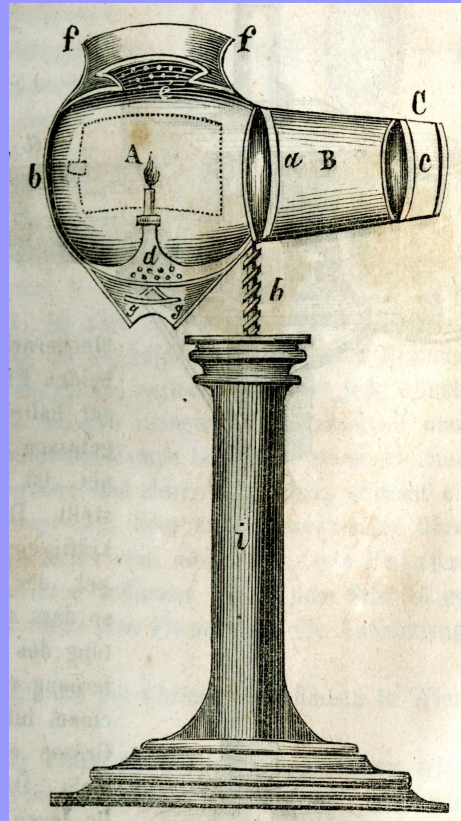


Illustration of Thomas Buchanan's "Inspector Auris," from Martell Frank's *Practische anleitung zur erkenntniss...* (1845).

Gesell, Robert (1886-1956). *Studies on the submaxillary gland*. Reprinted from the *American Journal of Physiology*, Vol. XLVII, No. 4, January, 1919. 5 reprints.

- I. Electrical Deflections in General: 411-427.
- II. Automatic and Bloodless Method of Recording the Volume-Flow of Blood: 428-436.
- III. Some Factors Controlling the Volume-Flow of Blood: 438-467.

IV. A Comparison of the Effects of Hemorrhage and of Tissue-Abuse in Relation to Secondary Shock: 468-506.

V. An Automatically Filling and Recording Spirometer: 507-511.

Research to gain more date on the significance of electrical deflections of living tissue.

Gibb, George Duncan, Sir (1821-1876). *On diseases of the throat, epiglottis, and windpipe: including diphtheria, nervous sore-throat, displacements of the cartilages, weakness of the voice and chest: their symptoms, progress and treatment.* London: John Churchill, 1860. Call # WV 400 G353o 1860

This work gives the status of pharyngeal diseases at the time of introduction of the specialty. Gibb was an early colleague in England of Morell Mackenzie. In 1861, Gibb translated Czermak's treatise (*On the laryngoscope*).

Gile, Ben Clark (1873-1940). *The nose, throat and ear, their functions and diseases: a treatise upon the breath-road, food-road, and accessory organs.* Philadelphia: Blakiston, c1915. Call # WV 100 G39n 1915

This book is more of a manual of otolaryngology than a text as proposed by the author. Dr. Gile was a Philadelphia practitioner.

Gillies, Harold Delf (1882-1960). *Plastic surgery of the face: based on selected cases of war injuries of the face, including burns.* London: H. Frowde, 1920. Call # WE 705 G415p 1920

This original issue of a classic text was for so long generally unavailable. It includes a description of the tubed pedicle flap which was introduced by Gillies in 1907. Gillies standardized the techniques of rhinoplasty, skin grafts, and facial reconstructions that had been practiced for centuries, thus establishing the discipline of "plastic surgery." Gillies was a New Zealander.

Gottstein, Jacob (1832-1895). *Diseases of the larynx.* Translated and added to by P. M'Bride.

Edinburgh: W. & A.K. Johnston, [1885]. Call # WV 500 G717k 1885

Jakob Gottstein of Breslau was a well-rounded otolaryngologist. He introduced the adenoid curette (1885). He was among the first to successfully use suction and the topical anesthetic cocaine in endoscopy, though he did not introduce it. He also gave one of the first reports on pharyngeal speech following laryngectomy.

Gottstein studied otology with Politzer and then became a Privatdozent at Breslau. He replaced the creative scientist, Rudolph Voltolini (1819-1899), and continued the latter's work on the fine detail of cochlear organ cell form and structure. In his dissertation (1871), Gottstein describes the organization of the bony periotic capsule and its development by dissolution of the cartilaginous capsule. It comprises, furthermore, a complete histological description of the cochlea, coming about twenty years after the epoch-making findings of Alfonso Corti.

Green, Horace. *A treatise on diseases of the air passages.* New-York: Wiley and Putnam, 1849. Second edition of the first book by an American on the diseases of the throat. Call # WF 140 G822t 1849

---- *Observations on the pathology of croup: with remarks on its treatment by topical medications.* 1st Edition. New York: John Wiley, 1849. Call # WV 510 G822o 1849

---- *On the surgical treatment of polypi of the larynx, and oedema of the glottis.* New York: Putnam, 1852. Call # WV 540 G822o 1852

Green was the first American to specialize in treatment of disorders of the throat and is now considered the founder of the specialty of laryngology in America. A pupil of Trousseau, Green was the first to describe laryngeal cysts and tumors before the introduction of the laryngoscope, and his *Treatise on Diseases of the Air Passages* (1846) was one of the first monographs on the subject.

Green became interested in diseases of the throat as a country physician in Vermont. Pursuing this interest, he traveled to teaching institutions in this country and in Europe. In London, Sir James

Johnson remarked that success in the treatment of laryngeal diseases would depend upon direct application of medication to the membrane of the larynx. Such an idea was impressive to Green, who in 1838, in New York, began treatment of laryngeal and throat diseases by application of a silver nitrate solution (40-80 grains per ounce) to the larynx by means of a sponge-tipped probang. In 1840, his method was presented before the New York Medical-Surgical Society. He was severely criticized, in fact he was ostracized. In 1846 he published his treatise on diseases of the air passages and was threatened with expulsion from the New York Academy of Medicine. His claims were investigated by a committee who reported that the procedure was anatomically impossible, and therefore, unwarranted. The report was tabled, and later Green demonstrated, on a tracheotomized patient that his application did reach the larynx.

Green removed a laryngeal tumor before invention of the laryngoscope. As a patient opened his mouth widely and coughed, a cherry-sized round white tumor arising from the larynx was seized with a forceps and removed with a knife (Stevenson & Guthrie, pp. 86-87). Green's work occurred before mirror demonstration of the larynx (laryngoscopy) by fourteen years.

Green was one of the founders of the New York Medical College in 1850.

Gruber, Josef (1827-1900). *Lehrbuch der Ohrenheilkunde mit besonderer Rücksicht auf Anatomie und Physiologie.* 2nd edition. Wien: Gerold, 1888. Call # WV 200 G921L 1888

This excellent, rare book includes 150 illustrations, 2 chromolithographs, and is covered in 3/4 leather with original boards. 7 X 10.5 in.

Josef Gruber emphasized in this text the anatomy and physiology of the hearing mechanism. The first edition was published in 1870. The 1888 edition was translated into English by Edward Law, who studied under Gruber and Politzer.

Along with Politzer, Gruber pioneered the specialty of otology. In 1862 he was given space at the University of Vienna for an ear clinic. Politzer joined him in 1873. Gruber's educational background was strong in pathoanatomy, and he

used it well in teaching practical diagnosis to his students. He produced more than 150 publications.

Gyser, Ernst Gottfried (fl. 1770). *Dissertatio inauguralis medica de fame lethali ex callosa oesophagi angustia: cum detectis in quibusdam abdominis visceribus attentione dignis phaenomenis ...* Argentorati: Ex prelo Jonae Lorenzii ..., MDCCLXX [1770]. Call # WI 250 G999d 1770

Title translation: *Medical inaugural dissertation on the fatal hunger, caused by callous narrowing of the esophagus, with phenomena worthy of attention which are detected in certain abdominal viscera.*

In this eighteenth century overview of how the esophagus functions, the morbidity of several patients with cancer of the esophagus is presented.

Morell Mackenzie reviews this manuscript in the June 17, 1876 issue of the *Medical Times and Gazette*.

Hartmann, Arthur (1849-1931). *Die Krankheiten des Ohres und deren Behandlung.* Berlin: Fischer, 1892. Call # WV 200 H255k 1892

----- *Die Krankheiten des Ohres und deren Behandlung.* Berlin: Fischer's Medic. Buchhandlung, H. Kornfeld, 1908. Call # WV 200 H255k 1908

Title translation: *The diseases of the ear and their treatment.*

This book went through many editions, this being the fifth; the first appeared in 1881. In the late 1800s, physicians in Europe were actively pursuing new discoveries. Hartmann, a student of the internist Adolf Kussmaul and the surgeon Vincent Czerny, studied the effects of increased external pressure on the Eustachian tube, utilizing a manometer and pressure chamber.

No doubt Hartmann had an interest in engineering. He pioneered a prototype of the

audiometer, and it is estimated that there are some twenty-two instruments named after him.

In 1911, Hartmann suddenly retired from practice, but remained active, especially during World War I with his army troop train and hospital work. He was a teetotaler, a vegetarian (a bread was named after him) and he founded an anti-alcohol organization.

All editions of his *Die Krankheiten...* are comparatively short works, intended for the general practitioner. This plan gave him the opportunity to leave out matters of doubt and subjects of discussion in otological literature.

Hastings, John (b. 1805). *Treatise on diseases of the larynx and trachea: embracing the different forms of laryngitis, hay fever, and laryngismus stridulus.* London: Longman, Brown, Green, and Longmans, 1850. Call # WV 510 H279t 1850

This book describes laryngology as known and practiced prior to the introduction of the laryngoscope, i.e. when diagnosis and treatment were made and applied without visualization of the larynx. Hastings practiced in London.

Heath, Charles Joseph (1856-1934). *An address on the treatment of deafness in persons who hear best in a noise (paracusis willisii): the mechanism of aural accommodation, the regulation of labyrinthine fluid tension, the tightening of relaxed drums and joints...* [London]: Printed by Good, Ltd., 1911. Call # WV 270 H35104a 1911

Helmholtz, Hermann (1821-1894). *Die Mechanik der Gehörknöchelchen und des Trommelfells.* Bonn: Cohen, 1868. Call # WV 201 H369m 1868

----- *Die Mechanik der Gehörknöchelchen und des Trommelfells.* Bonn: Cohen, 1869. Call # WV 201 H369m 1869

Title translation: *The mechanics of the ossicles of hearing and eardrum.*

Helmholtz's study of the mechanism of the ear elucidated the process of human audition. Helmholtz is known for his contributions both to

physiology and to physics. Trained in medicine, he spent his life as a professor and researcher. The ophthalmoscope was the result of Helmholtz's demonstration that when the human eye is made to glow with reflected light, the light emitted from the pupil follows the same course it took upon entering the pupil. It occurred to Helmholtz that the light could be brought to a focus and the details of the retina made visible.

Helmholtz was keenly devoted to music, so he later turned his attention to the sense of hearing. At this time the anatomical work of the ear by Corti (1851), Reissner (1851), Böttcher (1856), Hensen (1863), and Dieter (1860) was completed. Helmholtz's resonance theory for hearing became the classic work from which all research for hearing evolved.

----- *The mechanism of the ossicles of the ear and membrana tympani.* New York: W. Wood & Co., 1873. New York: W. Wood & Co., 1873. Call # WV 201 H369m 1873

This is the first edition in English of Helmholtz's report on the investigations of the role of the ossicles in the transmission of sound. The work, along with Helmholtz's principal contributions to physiological acoustics, is "an important study of the mechanism of the tympanum and ossicles of the middle ear" (Garrison, *History of Medicine*, 533).

Herzog, Heinrich (1875-1938). *Labyrintheiterung und Gehör.* München: Lehmann, 1907. Call # WV 250 H449L 1907

Title translation: *Labyrinthine inflammation and hearing.*

A prevalent and pioneering subject of the early 20th century was inflammation of the labyrinth and intracranial extensions. This book is an early study of the microscopic pathology of the inner ear. Heinrich Herzog was an assistant of Bezold at Munich.

Hessler, Hugo. *Die otogene Pyämie.* Jena: Fischer, 1896. Call # WV 200 H468o 1896

New cloth boards and back; endpapers replaced; 16.5 X 24.2 cm; illustrated with 7 figures and 26 tables; library stamp and book label.

This book is a comprehensive text on the subject of otitic infectious complications that includes normal and pathological anatomy, symptomatology, bacteriology, diagnosis and treatment. Hessler also gives a 32 page review of such cases from the worldwide literature.

Hugo Hessler was a staff member at Halle, where, in 1873, Hermann Schwartz introduced the simple mastoidectomy for chronic otitis media.

Hinton, James (1822-1875). *The questions of aural surgery.* London: Henry S. King & Co., 1874. Call # WV 200 H565q 1874

James Hinton was a rare and exceptional man. He possessed a remarkable memory that no doubt facilitated his studies of languages, history, philosophy, and medicine. *The Questions of Aural Surgery* and an *Atlas of the Diseases of the Membrana Tympani* embodied the outcome of his professional work. His philosophical writings demonstrated his intellectual acumen; the best known of these are *The Mystery of Pain* (Boston: DeWolfe, Fiske, 1890), *Man and His Dwelling Place* (New York: Redfield, 1859), and *Life in Nature* (London: Smith, Edler, 1862).

Hinton was a close friend of Joseph Toynbee, and he edited the second edition of Toynbee's *Diseases of the Ear* (1868), adding a number of his own original observations in the supplement of this volume.

Philosophical warnings abound in his *Questions of Aural Surgery*: "Otology is a young field of medicine, so much is still unknown, therefore some points need to be cleared up." Also, "Knowledge is so limited that an outline is more useful."

Huxham, John (1692-1768). *A dissertation on the malignant, ulcerous sore-throat.* London: Printed for J. Hinton, at the King's-Arms in Newgate-Street, 1757. Call # WI 200 H981d 1757

John Huxham wrote this account of what apparently was true diphtheria. He was the first to notice that diphtheria was sometimes followed by paralysis of the soft palate.

Huxham studied in Leyden under Boerhaave at a period of time in which that university was the epitome of repute. He practiced at Plymouth and became one of Britain's great physicians on the basis of his volume, *Treatise on Fever* (1750). He recommended the use of a cider and vegetable diet as a means of preventing scurvy earlier than Lind, who did not claim to be the first for the suggestion (D. Guthrie, *A History of Medicine*, p. 234).

International medical and surgical survey. Section 08. Ophthalmology, otology and rhinology. New York: American Institute of Medicine, 1921-1922. Call # WV 100 IN8 1921-22

Includes copies of v. 3, no. 1-6, and the subject indexes to v. 3; also includes v. 4, no. 1, 2, 4, & 6.

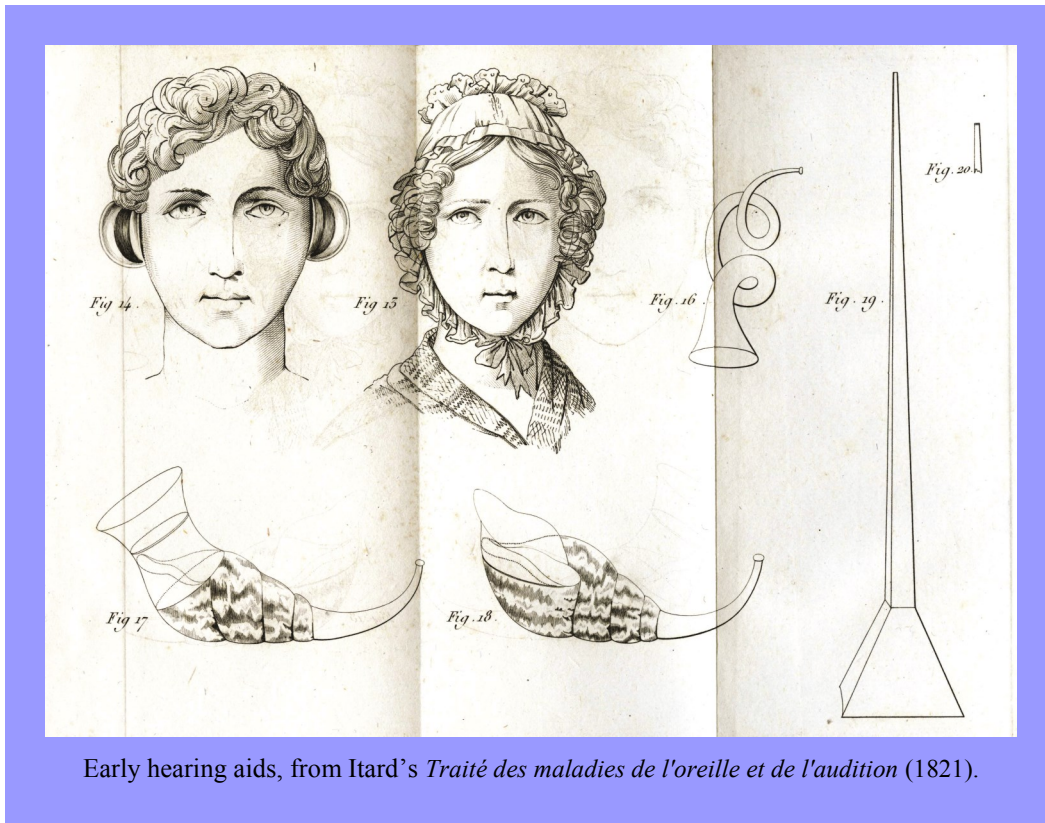
International survey of ophthalmology, otology, and rhinology. New York, N.Y.: American Institute of Medicine, c1923-25. Call # WV 100 IN8 1923-25

Includes copies of v. 5, no. 2, 3, and 5; v. 6, no. 2, 3, 5, and 6; and v. 7, no. 1 and 5.

Itard, Jean Marc Gaspard (1775-1838)
Saissy, Jean Antoine (1756-1822)
Deleau, le jeune, Nicolas (1797-1862)

By 1800, there had been isolated otological discoveries, such as Eustachian tube catheterization myringotomy, removal of a foreign body from the ear canal, and education of the deaf mute. Such treatments were administered by various physicians. These therapeutic achievements, along with the fundamental works of the great anatomists, were revitalized by three Frenchmen, Jean Marie Gaspard Itard, Antoine Saissy, and Nicolas Deleau. They inaugurated otology as a clinical and surgical specialty.

Itard, Jean Marc Gaspard (1775-1838). *Traité des maladies de l'oreille et de l'audition.* Paris:



Early hearing aids, from Itard's *Traité des maladies de l'oreille et de l'audition* (1821).

Mequignon-Marvis, 1821. Call # WV 200 IT1t 1821

Title translation: *Treatise on the diseases of the ear and of hearing.*

This two-volume treatise of Jean Marie Gaspard Itard on the maladies of the ear and hearing brought about a new phase in otology. Volume one deals with the anatomy, physiology, and pathology of the ear, and volume two with diseases of the ear. Itard took great care while examining his patients, and meticulously presented, in volume two, their histories together with an analysis of the appearance of the pathology he saw involving the external auditory canal and tympanic membrane. These two volumes, along with his famous two-part case report on the "wild boy" of Aveyron (H. Lane, *The Wild Boy of Aveyron*, Cambridge: Harvard University Press, 1979), developed for Itard an international reputation and a lucrative private practice. However, he became deeply concerned about the predicament of deaf-mutes, and eventually relinquished his private patients, some

of whom were of the nobility, to become resident physician at the Royal Institute for the Deaf and Dumb.

Assuming that if his patients' hearing could be improved that speech would follow, Itard attempted to increase the hearing acuity of the patients at the Institute by exercising it with sounds from different sources, such as bells, presented at different intensities and distances over various periods of time. After realizing the futility of this method, he advocated the use of visual and tactile aids, such as lip-reading and touching the larynx of the speaker. He objected to the use of sign language, which he believed jeopardized (if not precluded) the acquisition of speech and delayed (if not prevented) the acquisition of reading skills.

Jansen, Albert (1859-1933) and Franz Kobrak. *Praktische Ohrenheilkunde für Ärzte.* Berlin: Springer, 1918. Call # WV 200 J266p 1918

Original boards; 6.5 X 9.6 in.; 104 illustrations; provenance of seller—Wilh. Maudrich, Vienna. Many pages marked by underlining with red pencil, but otherwise it is a very good copy.

Albert Jansen became prominently known for his introduction of a surgical procedure for purulent labyrinthitis (1895). In this text Jansen chiefly addresses the diagnostic-surgical aspects of otology, and Franz Kobrak wrote on diagnostic-clinical subjects. It contains a very limited bibliography, and is essentially a report on the experiences of the authors.

Killian, Gustav (1860-1921). *Die Schwebelaryngoskopie und ihre praktische Verwertung.* Berlin: Urban & Schwarzenberg, 1920. Call # WV 505 K555s 1920

Title translation: *Suspension laryngoscopy and its practical applications.*

This volume contains a book-length account of suspension laryngoscopy, which Killian introduced in 1912. This method was hailed as a great advance in technique because it allowed both hands to be free. The original discovery appeared in 1912 in the *Arch. Laryn. Rhin.* (Berlin). At Freiburg in 1896, Killian devoted his whole time to endoscopy and developed direct examination of the trachea extending to the bronchi (bronchoscopy).

Kmoch, Karel M. (1839-1913). *Beiträge zur Geschichte des Prager Privat-Taubstumm-Institutes aus Anlass der Feier des 100jährigen Bestehens desselben.* Prag: Selbstverlage des Prager Privat-Taubstumm-Institutes, 1886. Call # HV 2730.3 K719b 1886

Title translation: *Contributions towards the history of the Prague Private Institute for Deaf-Mutes, on the occasion of the celebration of its 100th anniversary.*

Konigsmark, Bruce W. (1928-1973). *Dominant midfrequency hearing loss.* [Saint Louis: Annals Publishing Company], c1970. Call # WV 270 K836d 1970

Körner, Otto. *Lehrbuch der Ohrenheilkunde und ihrer Grenzgebiete: nach klinischen Vorträgen für Studierende und Ärzte.* Wiesbaden: J.F. Bergmann, 1906. Call # WV 100 K742L 1906

Title translation: *Textbook of otology and the limits of its scope.*

“Another of Körner’s significant publications was his monograph on otitic complications of the brain and sigmoid sinus [“Die otitischen Erkrankungen des Hirns... (Frankfurt am Main: Johannes Alt, 1894)], in which he presented the fundamentals of otitic extension, brain involvement, and diseases of the meninges. This was the work that distinguished him as a pathfinder and leader in clinical otology. A paragraph on page eight appears to reveal the origin of the eponym ‘Körner’s septum’.” See Pappas, *Otology’s Great Moments*, pp. 120-121.

Kramer, Wilhelm (1801-1876). *The aural surgery of the present day.* London: New Sydenham Society, 1863. Call # WV 200 K86o 1863

Up to the 19th century much otological information consisted of variations of the same theme. Instead of continuing this verbose redundancy, Wilhelm Kramer injected original thoughts into the process of diagnosing and treating diseases of the ear. He tried to display acumen developed from practical observations, but his premise was fragile, based on symptomatology rather than pathophysiology or anatomy. In fact, a subsequent publication on aural surgery by Kramer was denounced in 1864 because it contained his assertion that knowledge of anatomy and physiology was useless in the practice of aural medicine.

In the period between 1800 and the formation of the specialty of otology in the 1850s, Kramer was one who greatly influenced the practice of otology (Poltizer, *History of Otology*, p. 291).

Kramer’s practice of otology was based on the skillful use of the Eustachian tube catheter. In what may have been an inadvertent revelation that he had carefully studied their work, Kramer vehemently criticized physicians who did not practice by the same principles.

----- *Traité des maladies de l'oreille*. Paris: Baillière, 1848. Call # WV 200 K86e 1848

Title translation: *Treatise of the diseases of the ear*.

Wilhelm Kramer's essay on chronic hearing loss (written in 1833; expanded and published in 1836) was translated into English by Bennett (1837) and into French by Prosper Menière (1848). It was in his French translation that Menière added his well known footnote concerning the "swooning" episodes he observed in a young lady during a carriage ride.

Krause, Fedor (1857-1937). *Surgical operations of the head: illustrated by clinical observations, for physicians and surgeons*. New York: Allied Book Company, [191-?]. Call # WE 705 K868s 191-?

This volume is the first of the Krause-Heymann system of operative surgery in English. Emil Heymann was Krause's assistant. Though Krause was a founder of neurosurgery (with Cushing and Macewan), he avoided specialization in surgery and was capable in the same day of performing a mastoidectomy as well as a gynecological procedure.

Law, Frederick Manwaring (b. 1875). *Mastoids Roentgenologically considered: sixty-eight Roentgen ray studies on thirty-five plates and twelve text illustrations*. New York: P.B. Hoeber, 1929. Call # WE 705 L411m 1929

In 1913, Frederick M. Law introduced a lateral oblique projection of the mastoid process on the conventional x-ray. Between the time of the discovery of the x-ray by Röntgen (1895) and the introduction of computerized scanning (1970s), conventional x-rays dominated the scene of diagnostic radiology. Principal positions of the sinuses were complemented by the names of the men who introduced them: the occipito-frontal (Caldwell) position, the occipito-mental (Waters) position (1915), and the submento-vertical position (E. J. Hirtz, 1922).

The lateral projection of the mastoid process was introduced by Arthur Schuller (1905); an oblique

posterior-anterior projection was introduced by H. W. Stenvers (1917). E. G. Meyer modified F. M. Laws' lateral oblique projection in 1923.

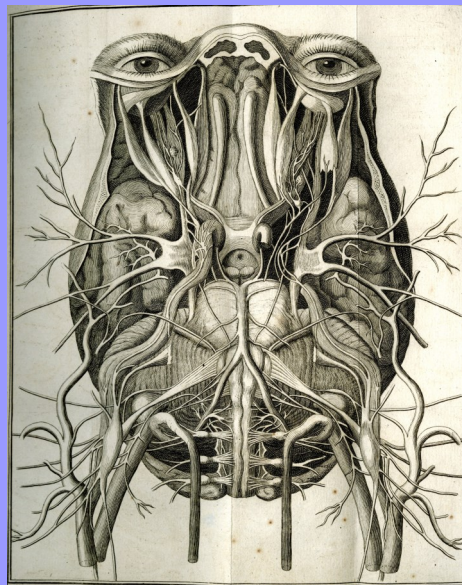
Le Cat, Claude-Nicolas (1700-1768). *Traité des sensations et des passions en général, et des sens en particulier: ouvrage divisé en deux parties*. Paris: Chez Vallat-La-Chapelle ..., MDCCLXVII [1767]. Call # WL 702 L494o 1767

Title translation: *Treatise on senses and emotions in general, and of sense in particular: a work divided into two parts*.

----- *La théorie de l'ouïe: supplément a cet article du traité des sens: ouvrage qui a remporté le prix triple proposé pour 1757 par l'Académie de Toulouse*. Paris: Chez Vallat-La-Chapelle ..., MDCCLXVIII [1768]. Call # WL 702 L494o 1768

Title translation: *The theory of hearing: supplement to the article on the treatise on sense*.

Only edition, 3 vols. 32 engraved plates (mostly folding). Engraved head and tail ornaments.



The base of the brain, showing the nerves, from Le Cat's *Traité des sensations et des passions en général*, v. 2 (1767).



Frontispiece from Le Cat's *Traité des sensations et des passions en général*, v. 1 (1767).

Le Cat was interested in the physiology of the nervous system. A contemporary of Haller, Le Cat incorrectly believed, contrary to Haller, that the dura mater and the arachnoid were the seats of sensation. It was Haller who first clearly localized the functions of sensation and motion in the brain and determined that sensation and muscular contraction were mediated by the nerves. (Le Cat, in keeping with the theories of his day, postulated that the nerve force was a fluid which passed through canals within the nerves).

The book's six sections include an introduction to touch, taste, smell, hearing, and vision, which constitutes the major portion of the text.

Nicolas Le Cat was a man of many interests. He was one of France's foremost surgeons and researchers, and a skilled lithotomist.

Lempert, Julius (1891-1968). *Lempert fenestra nov-ovalis with mobile stopple: a new advance in the surgical treatment for clinical otosclerosis evolved as a result of a research study of one thousand cases in which fenestration has been performed during the last seven years.* Chicago: American Medical Association, c1945. Call # WV 265 L544L 1945

This is an offprint of the original article from the *Archives of Otolaryngology* (January 1945, vol. 41), in which Lempert makes the case for using cartilage to cover the newly made semicircular canal fenestra. He points out that the foot plate of the oval window is made of cartilage. Therefore, he felt that the "stopples" was physiologically sound and that it could prevent regeneration of the fenestra.

L'Epee, Charles Michel de, l'Abbe. *Institution des sourds et muets, par la voie des signes methodiques.* Paris: Chez Nyon l'aine, 1776. Call # HV 2430 L556i 1776

Title translation: *Education of the deaf and mutes using methodical signs.*

The Abbe, a genial and portly monk, seems to have created the signing methods that we know today. He was probably very familiar with the oral success of his predecessors and he was convinced that the spoken language was the most

perfect form of communication. Nonetheless, he saw no value in teaching speech to his students. Abbe l'Epee emphasized the development of sign language to acquaint the hearing-impaired not only with words, but also their meanings. At the start of his course, and in conjunction with signing, he used finger spelling to facilitate his students in learning to write. For example, a simple word, such as "door" was written on the black board and the students spelled out the letters on their fingers. They were then shown the door of the classroom and taught to write out the word.

Among the astonishing stories regarding the Abbe is one that suggests that he may have learned his method of signing from bali dancers who attended the king's court. Another story suggests that his first student was a "deaf" Parisian "street urchin" who had been ostracized from a family of nobility (this incident later became the basis of M. Bauilly's drama, "L'Abbe de l'Epee").

Abbe l'Epee was the first to make education of hearing impaired children a matter of public concern and available to the poor. In pursuit of perfecting a system of instructing the hearing-impaired, to which he committed his life and fortune, The Abbe established the Royal Parisian Institute.

There are two editions, 1776 and 1784, and the latter edition described sign language in depth as an independent language.

Lint, Jan Gérard de (1867-1936). *Atlas of the history of medicine: anatomy.* New York: Paul B. Hoeber, 1926. Call # Oversize QS 11.1 L656a 1926

Loeb, Hanau W. *Operative surgery of the nose, throat, and ear.* St. Louis: C. V. Mosby, 1917-1919. Call # WV 168 L822o 1917-19

Hanau W. Loeb (1865-1927) was contributor and editor of this two volume set dealing, in atlas form, with operative procedures. Instrumentation is shown. By 1917, the chief part of our knowledge of such procedures came from Europe (especially from German speaking countries) with liberal contributions from America. Loeb was from St. Louis. Four years after the start of the "Annals" (1896), Loeb continued the journal.

Love, James Kerr (1858-1942). *Diseases of the ear: for practitioners and students of medicine.* Bristol [England]: Wright, 1904. Call # WV 200 L941d 1904

This work provides the general practitioner with the knowledge to deal comprehensively with middle ear suppuration and its complications. It is one of a few books of otology illustrated by stereoscopic photographs.

Historically, Itard (1821) took an interest in the education of “deaf-mutes”. Later, otologists Love of Britain and Max A. Goldstein (1870-1942) of St. Louis had an interest in the subject. Love was especially interested in the problems of education and welfare and wrote much on “deaf mutism” (Stevenson & Guthrie, p. 72).

Luc, Henry. *Leçons sur les suppurations de l'oreille moyenne et des cavités accessoires des fosses nasales et leurs complications intracrâniennes.* Paris: Baillière, 1900. Call # WV 232 L962L 1900

Title translation: *Lessons on the suppuration of the middle ear and the accessory cavities of the nasal fossae and their intracranial complications.*

In 1897, Henry Paul Luc (1855-1927) published his *Nouvelle méthode opératoire pour la cure radicale et rapide de l'empyème chronique du sinus maxillaire*. It was unknown to him that, in 1893, George Walter Caldwell (1866-1918) had published the same method which involved enlarging the opening in the canine fossa so that the whole of the antral lining could be visualized and making a counter opening into the nose beneath the inferior turbinate (to drain and irrigate the antrum). Furthermore, in 1894, Robert Scanes Spicer (1857-1926) of London published a similar procedure, except that he made his counter opening beneath the middle turbinate. Luc was so eminently known in Europe that it became known as the Caldwell-Luc procedure. Scanes Spicer, were he alive today, could find no solace in the fact that after one hundred years it is now a middle turbinate counter opening (Weir, N. *History of otolaryngology*, p. 139).

Luschka, Hubert von (1820-1875). *Der Schlundkopf des Menschen.* Tübingen: Verlag der H. Laupp'schen Buchhandlung, 1868. Call # WV 401 L975s 1868

Title translation: *The human pharynx.*

Von Luschka played an important role in the recognition of the naso-oropharyngeal structures by describing the medial and lateral recesses of the pharyngeal tonsil. He was a professor of anatomy at Tübingen, and he was a leader in his field. This book was one of his major works.

Timeline of important developments in the recognition of the naso-oropharyngeal structures:

Kölliker (1852) described faucial tonsils and mentioned similar tissues in the nasopharynx.

Henle (1866) insisted that “pharyngeal bursa” (Tornwaldt’s bursa) was a normal structure.

Czermak & Voltolini (1859-1861) introduced post rhinoscopy.

Luschka (1868) described the medial and lateral recesses of the pharyngeal tonsil.

Meyer (1868) first described the adenoids (Stevenson & Guthrie, pp. 92-3).

Macewen, Sir William (1848-1924). *Pyogenic infective diseases of the brain and spinal cord: meningitis, abscess of brain, infective sinus thrombosis.* Glasgow: James MacLehose and Sons, 1893. Call # WL 300 M159p 1893

Macewen was a principle architect of the aseptic system of surgery. (Lister is considered the sole architect of the antiseptic system). When this work was published in 1893, it represented ten years of achievement of central nervous system surgery.

Macewen was a neurosurgical pioneer: he was among the first to localize lesions for diagnosis; he was also among the first to localize and remove lesions.

Mackenzie, Morell, Sir (1837-1892). *Diseases of the pharynx, larynx, and trachea.* New York: William Wood, 1880. Call # WV 140 M199d 1880

The specialty of laryngology had its origins in 1860. Mackenzie spent post-graduate time with Czermak. Mackenzie became Britain's most noted laryngologist. He was a master of intralaryngeal operations even before the advent of topical laryngeal anesthesia. His reputation spread throughout the world.

Mackenzie's observations of upper and lower respiratory diseases began in 1862. His writings became authoritative. Such a book of diagnostic descriptions of lesions of the pharynx and larynx would have been widely received.

----- *The use of the laryngoscope in diseases of the throat: with an essay on hoarseness, loss of voice, and stridulous breathing, in relation to nervo-muscular affections of the larynx.* Philadelphia: Lindsay & Blakiston, 1869. Call # WV 505 M199u 1869

Manhattan Eye, Ear, and Throat Hospital. Committee on Nurses. *Nursing in diseases of the eye, ear, nose, and throat.* Philadelphia: W.B. Saunders Company, 1915. Call # WY 158 M314n 1915

The purpose of this book was to show instruments of the period (up to 1915) in the specialty.

McBride, Peter. *Diseases of the throat, nose, & ear.* Philadelphia: P. Blakiston, 1892. Call # WV 100 M122d 1892

In the late 1800s it was difficult to distinguish between chronic laryngitis, syphilis, tuberculosis and malignancy of the larynx, even for the experienced laryngologist (Stevenson & Guthrie, *History of Oto-laryngology*, p. 114).

Peter McBride was a Scottish pioneer of laryngology, having completed his post graduate studies in Vienna in the late 1870s. Besides this book, he translated Gottstein's *Diseases of the Larynx*, and in retirement he wrote books on

philosophy and psychology. In 1884, he wrote a *Guide to the Study of Ear Disease*.

McKenzie, Dan (1870-1935). *Diathermy, medical and surgical, in oto-laryngology.* New York: Macmillan, 1930. Call # WV 168 M199d 1930

The author was a pioneer in the use of diathermy in malignant disease of the throat. Diathermic treatment consisted of generation of heat in the tissue by electric currents (used for medical or surgical purposes). This interest was followed by some for a time with exaggerated zeal.

McKenzie had a distinguished career as a literary writer and in medicine, serving for several years as editor of the *Journal of Laryngology and Otology*.

The Medical and Surgical Reporter: A Weekly Journal. Vol. XXXVI, No. 18. Philadelphia: James A. Moore, 1877.

Presented are two very brief and interesting communications, one laryngeal, and the other historical. On page 406 is given the statistics of the first nine cases of the "formidable operation", laryngectomy. An excellent summary of medical practice in ancient Rome starts on page 409.

Mercuriale, Girolamo (1530-1606). *Hieronymi Mercurialis medici hac tempestate clarissimi tractatus, De compositione medicamentorum; De morbis oculorum & aurium.* Venetiis: Apud Juntas, MDCI [1601]. Call # WV 200 M539t 1601

Title translation: *On the composition of medicines; On the diseases of the eyes and ears.*

A native of Forli, in the Romagna province of Italy, Mercurialis studied in Bologna but received his medical degree in Padua. He served as a professor in Padua until 1587, at which time he accepted a similar position in Bologna. In 1599 he moved to Pisa. It is obvious from the scope of the medical specialties covered in his many publications that Mercurialis maintained a large medical practice. In all likelihood he was as well known as Paracelsus.

Mercurialis addressed the medical treatment of diseases of the eye and ear in his published lectures, *De Compositione Medicamentorum* (Frankfurt: I. Wechelus, 1591), which is considered to be the first clinical manual for otology. His previous writings and later texts dealt primarily with the structure and function of the ear. The treatments he proposed were empirical and extracted from the Arabic period rather than the Renaissance. According to Mercurialis, defective hearing and deafness may be congenital or acquired, and are caused by pathology in the brain or in the organ of hearing. He mentioned external causes of hearing loss, such as loud noises, foreign bodies, cold water, and some medications and fumes; recognized that some illnesses may produce a hearing loss; and mentioned intrinsic causes, which he stated always result in a bilateral hearing loss. In the elderly, Mercurialis attributed hearing loss to infrequent or weak neural messages from the brain to the ear. He explained the frequency of congenital deafness on the basis that the ear *in utero* is open and exposed, rendering it more susceptible to injury; it is hollow, which makes it more susceptible to blockage; and the auditory nerves are more open to injury because they are situated so close to the brain. He believed congenital and chronic hearing losses to be incurable. To prevent hearing loss, Mercurialis recommended avoiding strong vapors, loud noises, and excessive heat or cold. He also cautioned against overindulgence in food or drink. He believed that loud sounds would expel stagnant humors, and he recommended the use of an ear trumpet to treat deafness. Mercurialis included inflammation of the tympanic membrane (which he thought was caused by dilation of minute veins) in his category of otalgias. Earaches, he maintained, were associated with the tactile sense rather than the organ of hearing, may be secondary to external or internal conditions, may be constant or intermittent, and may or may not be accompanied by itching.

Mercurialis's treatment for ear diseases depended on whether he thought they could be cured or if suppression of the symptoms was all that could be achieved. He recommended primarily the use of small quantities of lukewarm preparations of various strengths, depending on the ear disease, to be used as instillations or plasters. Tinnitus he attributed to an accumulation of vapors, believing

that moisture would clog the ear and become transformed into vapors. He recommended that tinnitus be treated with narcotics, strong drugs, and even caustics. His method of removing foreign bodies from the ear was consistent with that of his predecessors and peers; that is, if the object cannot be removed with instillations of water, a probe or cotton soaked with turpentine must be used. [Poltzer, *History of Otology*, v. 1, pp. 82-83]

Mikulicz-Radecki, Johann von (1850-1905). *Zur operativen Behandlung des Empyems der Highmorshöhle*. Berlin: L. Schumacher, [1886?]. Call # WV 345 M589z 1886

Title translation: *The operative treatment of abscess on the maxillary sinus*.

In this article, Mikulicz proposed puncture of the inferior meatus with a trocar (shown in a plate), thus introducing the concept of intranasal antrostomy for drainage of the maxillary sinus. He made the opening flush with the floor of the nose (Garrison-Morton 3297).

In 1881, Mikulicz, a disciple of Billroth, succeeded in perfecting the first technically useable esophagoscope. It was an inflexible straight tube, and following Edison's introduction of the electric light bulb (1886), it became the first useable esophagoscope.

Mittendorf, William F. *A manual on diseases of the eye and ear: for the use of students and practitioners*. New York: G. P. Putnam's Sons, c1881. Call # WW 140 M697m 1881

This dissertation to students and general practitioners is illustrated with colored lithographs and woodcuts. According to the author, the source of his information was from his own lectures, given at the New York Eye and Ear Infirmary and at Bellevue Medical Center.

Müller, Johannes (1801-1858). *Über die Compensation der physischen Kräfte am menschlichen Stimmorgan*. Berlin: Hirschwald, 1839. Call # WV 501 M914u 1839

Title translation: *On the compensation of physical force with respect to the human vocal organ.*

This book furnished important contributions to the nature of the human voice (Rothschuh, *History of Physiology*, p. 202).

Nitchie, Edward B. *Lip-reading: principles and practice.* New York: Frederick A. Stokes Company, 1912.

The purpose of this book is to aid the use of speech through the mechanics of lip reading. Nitchie was principal of the New York School for the Hard-of-Hearing.

Pappas, Dennis George (1931-). *Otology's great moments: illustrations & annotations.* [S.l.: s.n., 2000]. Call # WV 11.1 P198o 2000

A review of some of the great events and individuals in otology.

Passow, Adolf & Claus, Hans (1873-1938). *Anleitung zu den operationen am gehörorgan, an den tonsillen und in der nase.* Leipzig: Ambrosius Barth, 1923. Call # WV 168 P268a 1923
Title translation: *Introduction to the operations of the hearing organ, and the tonsil and the nose.*

A surgical remedy for conductive hearing loss was doggedly pursued by some otologists. Approaching the oval window for this purpose was generally abandoned in favor of adjacent sites. Adolf Passow was the first to fenestrate the cochlea. Using some type of drill, he made an opening adjacent to the oval window (in the promontory of the membranous cochlea, obviously). He reported improved postoperative hearing that dissipated to preoperative levels in a manner of weeks, no doubt following osteogenic closure ("Die operative..." *Verh. Dtsch. Oto. Ges.* 6 (1897), 143). Adolf Passow was a military man and later a professor in Berlin.

Pfeifer, Richard Arwed (b. 1877). *Myelogenetisch-anatomische Untersuchungen über das kortikale Ende der Hörleitung.* Leipzig: B.G. Teubner, 1920. Call # WL 307 P476m 1920

Title translation: *Myelogenous anatomical investigation on the cortical end of the hearing nerve.*

An overview of what was known of the central end organ of the hearing nerve.

Pilcher, George. *A treatise on the structure, economy and diseases of the ear.* Philadelphia: Ed. Barrington & Geo. D. Haswell, 1843. Call # WV 200 P641t 1843

A treatise that is of considerable importance from the clinical standpoint, Pilcher devotes much attention to comparative anatomy, "deals very fully with the structure of the ossicles in various birds and mammals, and he gives one of the earliest accounts of the otoliths in fishes... The surgical principles applied by Pilcher and other surgeons to otology ensured progress on scientific lines" (Stevenson & Guthrie, p. 62).

The first edition was published in 1838. The present edition contains considerable alteration and addition to the text.

Politzer, Adam (1835-1920). *Atlas der Beleuchtungsbilder des Trommelfells im gesunden und kranken Zustande für praktische Ärzte und Studierende.* Wien: Braumüller, 1896 (Wien: Friedrich Jasper). Call # WV 225 P759a 1896

Title translation: *Pictures of the tympanic membrane in health and disease...*

The specialty of otology was in its infancy when the first edition of this book was written in 1865. Politzer "made constant reference to the findings of Toynbee, Wilde, and Troltsch, expanding, correcting, or confirming these, and a standard work was created for the diagnosis of ear diseases on the basis of innumerable new observations" (Lesky, *The Vienna Medical School of the 19th Century*, p. 384). He thought it imperative that students and practitioners recognize diagnostically significant changes in the tympanic membrane, which he depicted in this atlas. The English edition was translated by A. Mathewson and H. G. Newton and came out in 1869. The work was rewritten by Politzer in 1896.

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N.d.Nat.gem.v.Dr.Politzer, chromolith.v.Dr.C.Heitzmann.

Lith.Anst.v.F.Koke

Chromolithographs showing diseases of the eardrum, from Politzer's *The membrane tympani in health and disease* (1869).

----- *The membrana tympani in health and disease: clinical contributions to the diagnosis and treatment of diseases of the ear, with Supplement.* New York: Wm. Wood, 1869. Call # WV 225 P759a 1869

This book is the result of Politzer's excellent use of the extensive material that he was exposed to as an otologist to the people of Vienna for thirty years. From his observations, he made sketches of the various aspects of diseases of the tympanic membrane. From this work, Carl Heitzmann (1836-1896) drew the chromolithographs. It was Politzer's goal that changes in the tympanic membrane would enable the physician to diagnose pathological processes in the middle ear, in the Eustachian tube, and in the mastoid process. Such a result more realistically occurred in the rewritten 1896 version (*Atlas der Beleuchtungsbilder...*), which was expanded to include more chromolithographic reproductions of the tympanic membrane.

----- *Die anatomische und histologische Zergliederung des menschlichen Gehörorgans im normalen und kranken Zustande: für Anatomen, Ohrenärzte und Studierende.* Stuttgart: Enke, 1889. Call # WV 201 P759a 1889

Title translation: *The anatomical and histological dissection of the human ear, in the normal and diseased condition.*

This text discusses the preparation of anatomical specimens of the hearing organs. Politzer enumerates the techniques of dissection, types of instruments to be used, methods of preservation, precautions against septic poisoning, and the manner in which the pathological and anatomical sections could be mounted.

Also, an 1892 English version appeared (obviously of the 1889 text).

----- *History of otology* / by Adam Politzer; an English translation by Stanley Milstein, Collice Portnoff, Antje Coleman. Phoenix, Ariz.: Columella Press, 1981-. Call # WV 11.1 P759g 1981

This is Stanley Milstein's translation of Adam Politzer's *History of otology* (1907), volume I. Volume two has not been translated. Volume one

provides biographical sketches of important figures in the history of otology.

----- *Lehrbuch und Atlas der Ohrenheilkunde.* München: Lehmann, 1913. Call # WV 200 B834L 1913

Title translation: *Textbook and atlas of otology.*

For more information on this title, see the listing for Gustav Brühl.

----- *A text-book of the diseases of the ear for students and practitioners* / by Adam Politzer; translated at the personal request of the author and edited by Milton J. Ballin and Clarence L. Heller. 4th Ed. Philadelphia: Lea, 1903. Call # WV 200 P759L 1903

"Politzer's contributions to the literature on ear diseases were exceptional. He published in excess of 100 works, one of which, his *Lehrbuch der Ohrenheilkunde*, was the most outstanding textbook of the last half of the nineteenth century. (The first edition, published in 1878, was translated into English and edited by a former student of Politzer, James Patterson Cassell, aural surgeon and lecturer at the Glasgow Hospital.) Politzer continually revised and updated the text of this work to accommodate the expanding knowledge of ear pathology and the rapid progress being made in the medical and surgical treatment of ear diseases. By 1908 the book had undergone five editions and had been translated into English, French, and Spanish" (Pappas, *Otology's Great Moments*, p. 38). The above title is an the 4th edition of the English translation. The translated sixth edition (1926) considerably amplified otological literature with a number of discussions on the labyrinth. For more information on Politzer, see *Otology's Great Moments*, pp. 76-79.

----- *Politzer's text-book of the diseases of the ear for students and practitioners.* 6th Ed. Revised and rewritten by Milton J. Ballin. Philadelphia : Lea & Febiger, 1926. Call # WV 200 P759L 1926

The first edition of this work, published in 1878, was translated into English. Politzer continually revised and updated the text to accommodate the expanding knowledge of ear pathology and the rapid progress being made in the medical and

surgical treatment of ear diseases. By 1908 it had undergone five editions and had been translated into French and Spanish, besides English. The translated 6th edition (1926) considerably amplified otological literature and added a number of discussions on the labyrinth.

----- *The anatomical and histological dissection of the human ear, in the normal and diseased condition.* London: Baillière, Tindall and Cox, 1892. Call # WV 201 P759a 1892

Pomeroy, Oren Day (1834-1902). *The diagnosis and treatment of diseases of the ear.* New York: Bermingham & Co., 1883. Call # WV 200 P771d 1883

----- *The diagnosis and treatment of diseases of the ear.* 2nd Ed. New York: Appleton, 1886. Call # WV 200 P771d 1886

There were several more editions of this work that came out after these two. Historically it is more utilized for its instrument illustrations than for its contents.

An important figure in otological surgery, Pomeroy practiced at the Manhattan Eye and Ear Hospital, and later became full-time director.

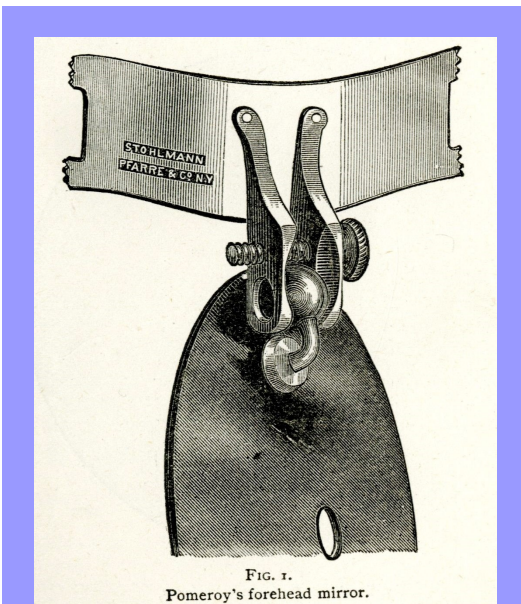


Illustration of Pomeroy's forehead mirror from the 1883 edition of his book.

Porter, William H. *Observations on the surgical pathology of the larynx and trachea.* London: Sherwood, Gilbert, and Piper, 1837. Call # WV 500 P835o 1837

Written in the early 1800s, Porter's book reflects the pathological knowledge of the times. The main achievement of the period was the differentiation of the various kinds of ulceration of the larynx, especially that of tuberculosis and syphilis. Matthew Baille (1793), Gaspar Bayle (1810), Laennec (1823, English translation), and Richard Bright had given descriptions of laryngeal tuberculosis.

Pratt, Loring W. (1918-), et al. *A century of excellence: a 100th anniversary history of the American Academy of Otolaryngology-Head and Neck Surgery and its predecessor organizations.* Alexandria, Va.: American Academy of Otolaryngology-Head and Neck Surgery Foundation, c1996. Call # WV 1 AM35p 1996

This book is an overview of organizations and personalities of the American Academy of Otolaryngology-Head & Neck Surgery Foundation.

Randall, Burton Alexander (1858-1932). *Further studies as to the axis of the external auditory canal, based on 500 crania.* [New Bedford, Mass.: s.n.,] 1912. Call # WV 222 R158f 1912

----- *The operations for mastoid empyema and caries.* Detroit, Mich.: E.G. Swift, publisher, 1913. Call # WV 233 R158o 1913

----- *A skull trephined for mastoid caries and lateral sinus thrombosis by the late Dr. Samuel Ashurst of Philadelphia some forty years ago.* [New Bedford, Mass.: s.n.,] 1913. Call # WV 233 R158s 1913

----- *A study of the surgical relations of the facial canal in five hundred crania.* [New Bedford: Mercury Publishing Company, 1903?]. Call # WL 330 R158s 1903

Randall, a native of Maryland, was the first head of the department of otolaryngology at the University of Pennsylvania. He had studied otology under Politizer in Vienna.

Réthy, Leopold (1857-1924). *Die Laryngitis haemorrhagica.* Wien: W. Braumüller, 1889. Call # WV 510 R314L 1889

Title translation: Hemorrhagic laryngitis.

Retzius, Magnus Gustaf (1842-1919). *Das Gehörorgan der Wirbelthiere: morphologisch-histologische Studien.* Stockholm: Gedruckt in der Centraldruckerei, in commission bei Samson & Wallin, 1881-84. Call # Oversize QL 948 R316g 1881-84

Title translation: *The hearing organ of vertebrates: morphological-histological studies.*

Retzius's two-volume, atlas-like publication on the internal ear of vertebrates is considered a masterpiece and classic in medical literature. Most of the drawings were executed by Retzius himself, and his histological work on the end-organs and on this part of the nervous system has yet to be surpassed. Included among his many discoveries are the following: the cochlear nerve enters the sacculle from the modiolus; the ductus reuniens measures one millimeter in length and one-half millimeter in width; and the terminal filaments of the cochlea nerve form a fine network that surrounds the hair cells without communicating with them. There were copious other contributions.

Retzius descended from a long line of scientists and grew up literally surrounded by skeletons and specimen jars. It was for his father, the anatomist and ethnologist Anders Retzius, that several anatomical structures were named. Gustaf, provided with every stimulus and opportunity to cultivate an interest in science, not infrequently followed his father on professional visits to such eminent colleagues as Johannes Müller, Ernst Heinrich Weber, and others.

Retzius's marriage to the affluent Anna Elizabeth Hierta was uniquely compatible. Her father, Lars Hierta, was the founder of a profitable newspaper, the Stockholm *Aftonbladet*. It was the generosity

of his father-in-law that allowed Retzius the opportunity to publish his works without the expense of printing. Additional writings by Retzius, besides the two-volume atlas, are to be found in the eighteen folio volumes of his *Biological Researches*. He had no need to sell these folios and chose instead to autograph them and give them to friends and colleagues.

It did not take long for Retzius to become editor-in-chief of the *Aftonbladet*. Most likely it was while in that position that he translated into Swedish a portion of Robert Burn's work. He also published a volume of his own poems, and revealed his music talent in cantatas honoring the botanist Carolus Linnaeus and the chemist Jöns Jakob Berzelius, his fellow countrymen. With what appears to be an endless supply of talent and energy, he also wrote fifty biographical sketches of eminent biologists, and published volumes of pictures made on his travels to Egypt, Sicily, and North America.

The work of Retzius was closely followed by the nearly comparable works of Hans Held (1902). Considering the state of technology and the knowledge of their time, their accurate descriptions of the organ of Corti are truly remarkable.

Roosa, Daniel Bennett St. John (1838-1908). *A practical treatise on the diseases of the ear: including the anatomy of the organ.* New York: William Wood & Co., 1878. Call # WV 200 R676p 1878

This early comprehensive American text of otology is a complete and scientific overview of that particular time. It presents an excellent review of progress in the specialty starting with ancient times. Roosa was a New Yorker and a pioneer of American otology who also practiced ophthalmology.

----- *The coming medical man: an anniversary discourse delivered before the New York Academy of Medicine, December 8, 1874.* New York: D. Appleton and Co., 1874. Call # W 9 R676c 1874

Roosa, Daniel Bennett St. John and Beaman Douglass. *A textbook of the diseases of the ear, nose and pharynx.* New York: Macmillan, 1905. Call # WV 140 R676t 1905



Illustration of the membranous hearing organ of the pig, from volume II of Retzius's *Das Gehörorgan der Wirbelthiere* (1884).

This is a general text that may differ from others by its treatment of various aspects of diseases. Roosa's co-author, Beaman Douglass, was a laryngologist in New York.

Rumbold, Thomas Frazier (1830-1901). *A practical treatise on the medical, surgical and hygienic treatment of catarrhal diseases of the nose, throat, and ears...* St. Louis: Medical Journal Publishing Company, 1888. Call # WV 140 R864p 1888

This text dwells on the inflammatory diseases of the ear, nose and throat. Rumbold contends that throat and ear disease are secondary to nasal inflammation. Rumbold was a developer of otolaryngology in St. Louis.

Ruttin, Erich (1880-1940). *A clinical study of the serous and purulent diseases of the labyrinth.* New York: Rebman Co., c1914. Call # WV 250 R939c 1914

Erich Ruttin was a student of Politzer, and it was in the setting of his teacher's clinic that he "studied otitic complications of the central nervous system and mastoid surgery and performed his original work on the vestibular system" (Dennis G. Pappas, *Otology's Great Moments*, pp. 94-95).

Saissy, Jean Antoine (1756-1822). *An essay on the diseases of the internal ear*, Translated from the French by Nathan R. Smith. Baltimore: Hatch & Dunning, 1829. Call # WV 200 SA28e 1829

Saissy described a Eustachian bougie; he was probably the first to use this instrument. Besides dealing with the labyrinth, his book discusses diseases of the tympanum and Eustachian tube (Stevenson & Guthrie, p. 59).

Note: See more information about Saissy under the listing for Itard.

Sajous, Charles Eucharist de Medicis (1852-1929). *Lectures on the diseases of the nose and throat: delivered during the spring session of*

Jefferson Medical College. Philadelphia: F.A. Davis, 1886. Call # WV 140 SA28L 1886

---- *Lectures on the diseases of the nose and throat: delivered during the spring session of Jefferson Medical College.* Philadelphia: F.A. Davis, 1890. Call # WV 140 SA28L 1890

This text of the nose and throat is of significance because of its colored illustrations. The first edition was published in 1885. Sajous was a Philadelphian.

Saunders, John Cunningham. *The anatomy of the human ear: illustrated by a series of engravings of the natural size...* London : Phillips, 1806. Call # Oversize WV 200 SA87a 1806

---- *The anatomy of the human ear: illustrated by a series of engravings of the natural size...* Philadelphia: Benjamin Warner, 1821. Call # WV 200 SA87a 1821

John Cunningham Saunders, a student of Sir Astley Cooper, in his 1806 publication, reemphasized the principles of myringotomy. He advised paracentesis in cases of acute otitis media, but learned very quickly that myringotomies did not cure hearing loss in many cases (as was the rage and thinking of the day).

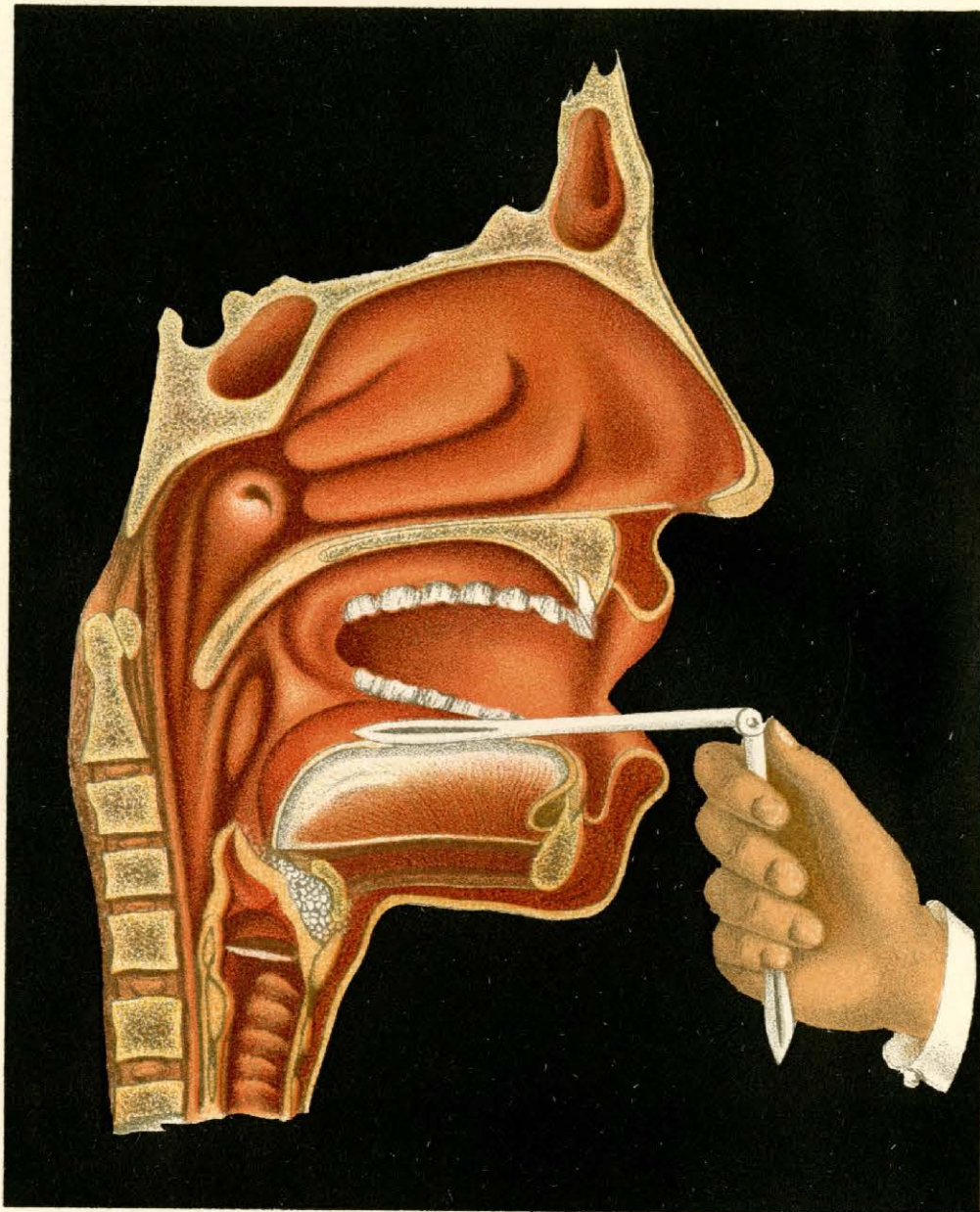
In 1805 Saunders established the London Dispensatory for Curing Diseases of the Eye and Ear, the first hospital to specialize in the treatment of specific diseases.

Scarpa, Antonio (1752-1832). *Anatomicae disquisitiones de auditu ed olfactu.* Mediolani: In typographeo Josephi Galeatii ..., anno MDCCXCIV [1794]. Call # Oversize WV 201 SCA76a 1794

Title translation: *Anatomical inquiries on the senses of hearing and smell.*

Scarpa's discovery of the membranous labyrinth was the ultimate evidence that the labyrinth contained fluid (Since ancient times air was thought to be involved – the so called air implantus theory of hearing.). In 1783, Scarpa became professor of anatomy at Pavia, and from

Plate I.



*VERTICAL ANTERO-POSTERIOR SECTION OF THE
NASAL CAVITIES, MOUTH, PHARYNX AND LARYNX.*

Colored lithograph, from Sajous's *Lectures on the diseases of the nose and throat* (1886).

that position he published, in 1789, the first edition of his description of the membranous labyrinth. The second edition was published in 1794, and the same eight copper plates (five of which relate to zoology and three to human anatomy) were used to illustrate both editions. An accomplished artist, Scarpa provided the drawings from which the plates were made. [See *Otology's Great Moments*, p. 16]

Schelhammer, Gunther Christoph. *Guntheri Christophori Schelhammeri, med. doct. ... De auditu liber unus.* Lugduni-Batavorum: Apud Petrum de Graaf, MDCLXXXIV (1684). Call # WV 272 SCH26d 1684

Title translation: *One book on hearing.*

The ancient theory that hearing was produced by sound vibrations through air entrapped at birth in the petrous occipital bone (the *aer implantus* theory) began to be seriously questioned from the mid-seventeenth to the early eighteenth centuries. Several scientists began to challenge this theory, including the eminent physician and professor at Leipzig, Johannes Bohnius (1640-1718). However, it was Gunther Christoph Schelhammer (1649-1712) who, making a measurement of the velocity of sound, took the decisive position that it had no physiological significance. His pioneering work, which preceded descriptions of inner ear fluids, proved that sound conveyed through the teeth was transmitted by the cranial bones and not by the Eustachian tube. Schelhammer was a native of Jena, Germany, and was a chemist and anatomist. In addition to teaching at the university in his hometown, he also was a faculty member in Helmstadt and Kiel.

Schneider, Konrad Victor (1614-1680). *Conradi Victoris Schneideri Liber de catarrhis specialissimus.* Wittebergae: Impensis Haered. D. Tobiae Mevii & Elerdi Schumacheri: Typis Matthaei Henckelii, anno MDCLXIV [1664]. Call # QS 532.5.M8 SCH58L 1664

Title translation: *Highly detailed book on types of catarrhs.*

Galen's theory that nasal secretion was a "purging of the brain" existed through the middle of the seventeenth century. Willis, and even Malpighi,

held this belief. Willis believed nasal catarrh was secreted by the brain and that the nerves carried the fluid to different parts of the body. This error was cleared by Konrad Victor Schneider in his classical treatise on the membranes of the nose, "De catarrhis" (1660). He showed that the nasal mucous membranes excluded this mucous and that the brain was not affected at all. Schneider, however, did not discover the microscopic mucous glands in the nasal membranes [Steno (1662) was probably the discoverer].

Schwartz, Hermann Hugo (1837-1910). *Handbuch der Ohrenheilkunde.* Leipzig: Vogel, 1892-93. Call # WV 200 SCH95h 1892-93

Spine and corner repairs; 3/4 leather; original boards; 6.7 X 9.7 in.; 133 illustrations; provenance: book plate of the library of George Arthur Piersol; good condition; rare.

This book contains fifteen concise articles by prominent otologists regarding all aspects of the specialty. Hermann Schwartz participated in otology at a period of time when otoscopic examination provided more accurate diagnoses, yet it was not enough. Scrupulous prerequisites for surgery were still needed. When he went to Wurzburg to accept a position at the otology clinic at Halle, he continued to work on criteria for myringotomy in cases of acute otitis media, and began to develop criteria and surgical procedure (known today as a simple mastoidectomy) for cases of chronic otitis media. Historically, Schwartz is eminently known for his re-introduction of paracentesis and mastoid surgery.

Semeleder, Friedrich (1832-1901). *Die Rhinoskopie und ihr Werth für die ärztliche Praxis: ein monographischer Versuch.* Leipzig: Engelmann, 1862. Call # WV 150 SE52rh 1862

Title translation: *Rhinocopy and its worth for physician practice: a monographic trial.*

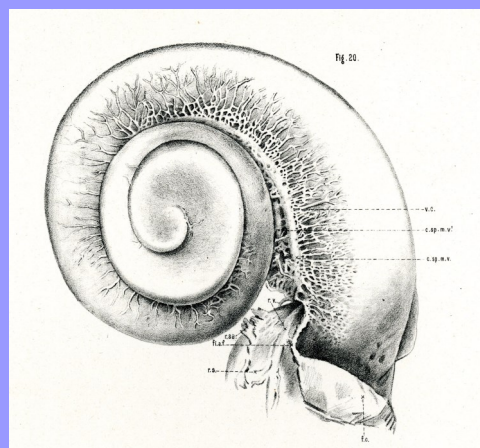
----- *Rhinocopy and laryngoscopy: their value in practical medicine.* Translated from the German by Edward T. Caswell. New York: Wood, 1866. Call # WV 150 SE52r 1866

Semeleder was part of the team of Türck, Czermak and Stoerk when the specialty of laryngology was born. He was taught by Czermak and was a close friend of Stoerk from Türck's department. Semeleder was especially interested in rhinoscopy. Czermak utilized the "laryngeal" mirrors to examine the nasopharynx. Semeleder came up with the idea of a reflector mirror attached to a pair of glasses to reflect light to the subject, the larynx or nasopharynx. With such a setup, both hands were free. Czermak had advised holding the mirror in the mouth by a handle, but later the forehead reflector was introduced by Türck into laryngeal practice.

Sexton, Samuel (1833-1896). *The ear and its diseases: being practical contributions to the study of otology.* New York: Wood, 1888. Call # WV 200 SE91e 1888

The author chose to write on subjects that involved his practice, mainly catarrh of the upper air tract, dentition, sea bathing and infections of the auditory canal, injuries of the ear, damage from noise, and tinnitus. Sexton was a New York otologist.

Siebenmann, Friedrich. *Die Korrosions-Anatomie des knöchernen Labyrinthes des menschlichen Ohres.* Wiesbaden: J.F. Bergmann, 1890. Call # Oversize WV 250 SI15k 1890



The spiral canal of modiolus, from Siebenmann's *Die Korrosions-Anatomie des knöchernen Labyrinthes des menschlichen Ohres* (1890).

Title translation: *The corrosions anatomy of labyrinthine bones of the human ear.*

Siebenmann presented his experience with the use of celloidin-corrosion techniques that included eleven colored drawings of the cochlea.

Siebenmann was born in the Swiss village of Aargau and died in Basel of carcinoma of the bladder. After extensive training throughout Europe, he spent some ten years as a country doctor; his formal training in otology and laryngology was done with Bezold in Munich. His primary interest was normal and pathological anatomy of the ear. For more information see Dennis G. Pappas's *Otology's Great Moments*, pp. 138-140.

Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der kaiserlichen Akademie der Wissenschaften.

Neunundzwanzigster Band ... [no. 12]. Wien: Aus der K. K. Hof- und Staatsdruckerei, in Commission bei Karl Gerold's Sohn, 1858. Call # Q 44.4 SI89 1858

Title translation: *Report of the meeting of the Mathematical and Natural Scientific Society of the Imperial Academy of Sciences.*

On page 557 is Czermak's article, "Physiologische Untersuchungen mit Garcia's Kehlkopfspiegel" ("Physiological Investigation with Garcia's Head Mirror"), in which he describes laryngeal examination. There are three plates with multiple illustrations.

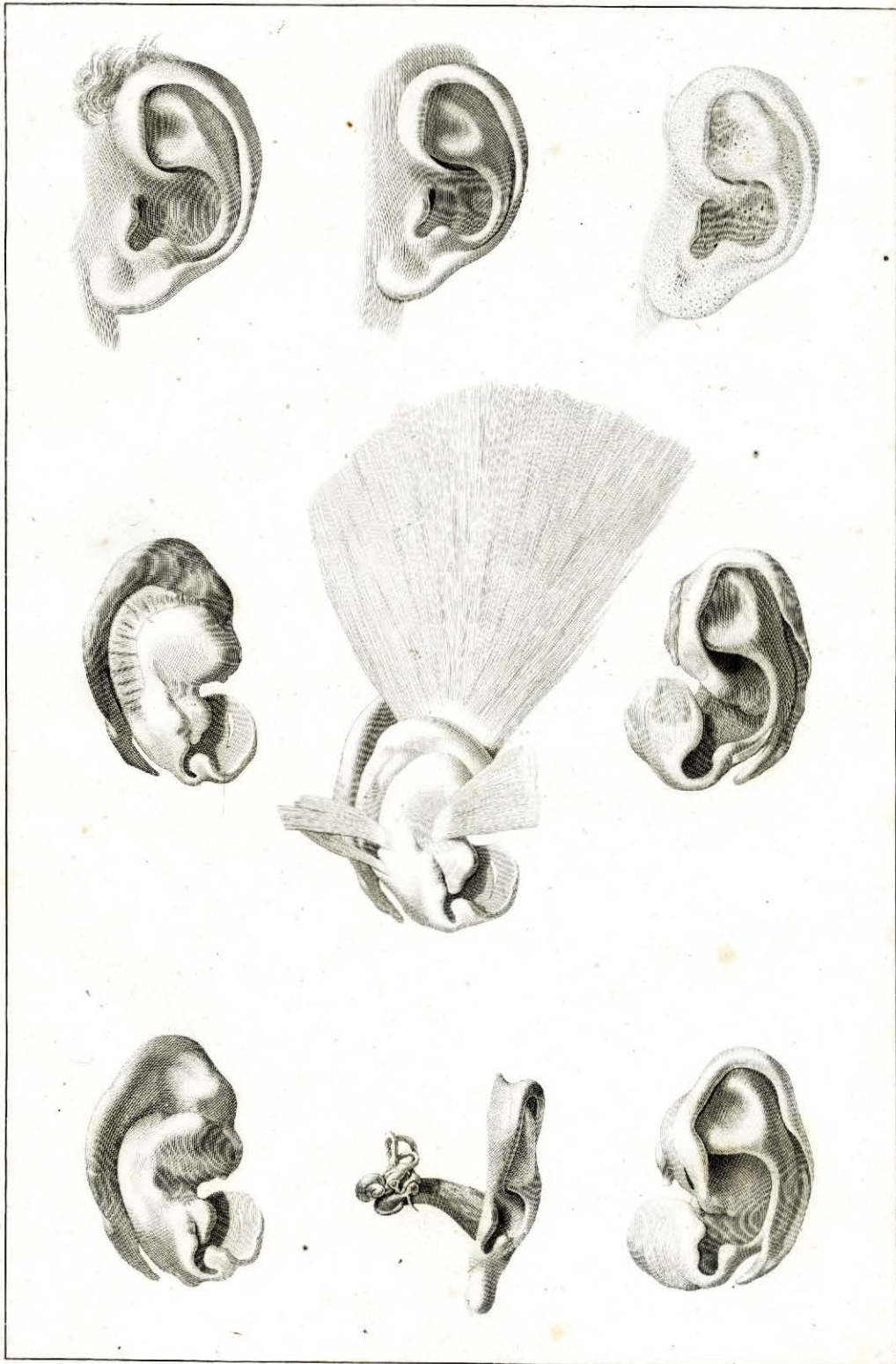
Soemmerring, Samuel Thomas von.

Abbildungen des menschlichen Hoerorganes. Frankfurt am Main: Varrentrapp und Wenner, 1806. Call # Oversize WV 17 SO21ah 1806

Title translation: *Illustrations of the human ear.*

Samuel Thomas von Soemmerring (1755-1830), the son of a physician, was born in the East Prussian town of Thorn, where Copernicus was born some three hundred years earlier. His father wished that he would become a general practitioner. His medical education was at Göttingen, and here he studied with the great

TABULA PRIMA



C. Heek pinx.

S. TH. SOEMMERRING ICONES ORGANI AUDITUS

P. Richter sculp.

Illustrations of the ear, from Soemmering's *Abbildungen des menschlichen Hoerorganes* (1806).

anatomist, Heinrich August Wrisberg (1739-1808), then he trained with Petrus Camper in Holland, with John Hunter in London and with Alexander Monro in Edinburgh, who taught him to use the microscope.

Soemmerring's anatomical atlas of 1806 was doubtless the most prominent influence on anatomy in Germany during the nineteenth century. It was the result of a request by Professor Lichtenberg at Göttingen for human ear illustrations for lectures in physics. Soemmerring provided Lichtenberg with enlarged plaster casts and models of the ear that were produced with the aid of Christopher Köck, a stucco worker and draftsman. Some of the illustrations in his atlas are of these models.

Soemmerring insisted on presenting the ear in its natural state, undisturbed by disease or injury. He strove to represent only the most perfect specimens, those without distortion. These remarkable illustrations were so accurate that they could very well be used today. Soemmerring gave the first correct description of the ligament of the incus posterius, as well as that of the superior ligament of the malleus. He was the first to use chemical erosion in anatomical studies of the temporal bone.

----- *Abbildungen der menschlichen Organe des Geruches*. Frankfurt am Main: Varrentrapp und Wenner, 1809. Call # Oversize WV 17 SO21a 1809

Title translation: *Illustrations of human olfactory organs*.

This is the first edition of a study on the olfactory organs with nine plates. The first plate, representing a cross section of the skull and the throat, and extending below the larynx, is an especially instructive fundamental picture, not only of the olfactory organ, but also all other sense organs (Choulant, *History & Bibliography...*, p. 309). See Pappas, *Otology's Great Moments*, pp. 23-24.

Stein, Stanislav von. *Die Lehren von den Funktionen der einzelnen Theile des Ohrlabyrinths*. Jena: Fischer, 1894. Call # WV 250 ST34u 1894

Title translation: *Instructions on the functions of the individual parts of the inner ear*.

This volume is the German edition, translated from Russian by C. von Krzywicki, and it is the only one in a western language. In Russian, a second volume exists that has never been translated (Webb Dordick, Catalog 59, p. 93).

In essence, Stein studied the functions of the labyrinth in this book. Stein worked in Moscow and trained in otology under Politzer.

Stevens, Stanley Smith (1906-1973) and Hallowell Davis (1896-1992). *Hearing, its psychology and physiology*. New York: J. Wiley & Sons, Inc., 1938. Call # WV 272 ST47h 1938

The purpose of this book was to provide students of psychology, physiology, acoustics and otology with an inventory of the recent discoveries in the psychophysiology of hearing, and to find to what extent auditory research is able to yield a consistent point of view.

Stevens and Davis were auditory researchers at Harvard University.

Stoerk, Carl (1832-1899). *Klinik der krankheiten des kehlkopfs, der nase und des richens*. Stuttgart: Verlag von Ferdinand Enke, 1880.

Carl Stoerk was first and chief assistant to Turck in the department of the birthplace of laryngology. Stoerk was historically the first to practice and dedicate all his time to this specialty. He worked out numerous techniques for examining the larynx, for performing operations inside the organ, including local therapy. A variety of laryngeal instruments emerged, and their illustrations are shown in this volume.

In *The Vienna Medical School of the 19th Century*, Lesky writes, "It has been said in criticism of Stoerk's handbooks and textbooks that the subject matter of the speciality is presented in an uneven manner, that in areas where the master could quote from his own experience he overwhelmed the reader with original remarks and with a flood of casuistry, whereas other sections, which did not interest Stoerck at the time of writing, were kept short,

without reference to the contemporary literature, and were in an arbitrary and apodictic style. His passionate and temperamental nature did not submit to the rules of academia even in his literary production. He was arbitrary, witty, argumentative and impulsive. In essence he was a natural enemy of all attempts at systemization” (pp. 370-1).

Tobold, Adelbert (1827-1907). *Chronic diseases of the larynx: with special reference to laryngoscopic diagnosis and local therapeutics.* New York: W. Wood & Co., 1868. Call # WV 500 T556c 1868

This book was translated by George M. Beard of New York just ten years after the introduction of the laryngoscope. Many publications attended the specialty in that decade and this is one that attempted to update new findings in diagnosis and treatment. Tobold practiced in Berlin.

Tod, Hunter F. (1871-1923). *Diseases of the ear.* London: Frowde, 1913. Call # WV 200 T565d 1913

Tod's book, with original cloth backs and illustrations, is a teaching book aimed at medical practitioners.

Tonndorf, Juergen. *Cochlear prostheses: a state-of-the-art review.* St. Louis: Annals Pub. Co., 1977. Call # WV 274 T615c 1977

Tornwaldt, Gustavus Ludovicus. *Über die Bedeutung der Bursa pharyngea für die Erkennung und Behandlung gewisser Nasenrachenraum-Krankheiten.* Wiesbaden: Bergmann, 1885. Call # WV 410 T633u 1885

Title translation: *On the significance of the bursa pharyngea for the identification and treatment of certain nasopharyngeal diseases.*

Tornwaldt attributed symptoms from inflammatory changes in the nasopharynx specifically to a diverticulum-like structure that he called a nasopharyngeal bursa.

Toynbee, Joseph. *The diseases of the ear: their nature, diagnosis, and treatment.* London: John Churchill, 1860. Call # WV 200 T668d 1860b

In this classic book, the London physician Joseph Toynbee stated that not one dissection of a diseased ear had been done prior to 1800, although thousands of dissections had been done on most other organs of the body. He proceeded to remedy this situation by dissecting more than two thousand temporal bones, and was thus able to correlate the gross and microscopic pathology with the patient's symptoms. Of course, histochemical procedures were not available for a close study of the cochlea, but Toynbee did describe cases of molluscos tumors (later recognized as cholesteatomas), ten cases of osteoid tumors, and ankylosis of the stapes to the oval window. The latter condition he referred to as “catarrhal sclerosis”; decades later it was recognized as otosclerosis.

Transactions of the first Pan-American Medical Congress: held in the city of Washington, D.C., U.S.A., September 5, 6, 7, and 8, A.D. 1893; in two parts. Washington: Government Printing Office, 1895. Call # WB 100 P191t 1893

This volume contains the first report of otosclerosis, a new syndrome defined by Politzer. During the 19th century, “dry middle ear catarrh” was the vague designated term for the condition. In 1889, at the autopsy of a patient observed for years, he noted that there was no change in the middle ear, but instead new bone formation on the inner surface of the stapes and adjacent to the oval window. Politzer had by 1893 collected ten more specimens. In his Washington report he said that “dry middle ear catarrh” was not due to a disease of the mucosa of the middle ear but a primary disease of the capsule of the labyrinth.

Tröltzsch, Anton Friedrich, Freiherr von (1829-1890). *Anatomische Beiträge zur Lehre von der Ohren-Eiterung.* Würzburg: Stahel, 1869. Call # WV 200 T749a 1869

Title translation: *Anatomical foundation of ear suppuration for the instructor.*

Anatomische Beiträge zur Lehre von der Ohren-Eiterung is an off-print from the *Archiv für*

Ohrenheilkunde. Von Trötsch was one of the founders of that journal. For more information, see Dennis G. Pappas's *Otology's Great Moments*, pp. 101-104.

In 1861, Anton von Trötsch published an important paper on a young lady with mastoiditis. In 1873, Schwartz and Eysell followed with an article that formed the foundation of the mastoidectomy. For more information, see Dennis G. Pappas's *Otology's Great Moments*, pp. 40-41.

----- *The diseases of the ear: their diagnosis and treatment: a textbook of aural surgery in the form of academical lectures*. New York: William Wood & Co., 1864. Call # WV 200 T749t 1864

This was the most prominent of the early books on the specialty. According to the translator (D. B. St. John Roosa), the work is founded on pathological investigation. See Pappas's *Otology's Great Moments*, pp. 101-104.

----- *The surgical diseases of the ear* / by Prof. von Trötsch. *The mechanism of the ossicles and the membrana tympani* / by Prof. Helmholtz. London: New Sydenham Society, 1874. Call # WV 200 T749s 1874

From von Trötsch's talents emerged several books. The compilation of his lectures into a text went through seven editions and five languages between 1862 and 1881, and it was a springboard for new aims and roads in otology (See Pappas's *Otology's Great Moments*, pp. 101-104). Helmholtz's study of the mechanism of the tympanum and ossicles of the middle ear did much to elucidate the phenomenon of audition. The original offprint was published in Bonn in 1869.

Türck, Ludwig (1810-1868). *Klinik der Krankheiten des Kehlkopfes und der Luftröhre: nebst einer Anleitung zum Gebrauche des Kehlkopfrachenspiegels und zur Localbehandlung der Kehlkopfkrankheiten*. Wien: Braumüller, 1866. Call # WV 500 T843k 1866

Title translation: *Clinical instruction on the diseases of the larynx and trachea: along with an introduction to the use of the laryngoscope and local treatment of laryngeal diseases*.

Türck established the clinical pathological facts of the larynx in this book. It appeared with an atlas by Elfinger and Heitzmann. The two were standard works on the subject for decades.

----- *Atlas zur Klinik der Kehlkopfkrankheiten*. Wien: Wilhelm Braumüller, 1866.

Title translation: *Atlas of clinical laryngeal diseases*.

This volume consists of 24 chromolithographic tables by Dr. A. Elfinger and Dr. C. Heitzmann, with explanatory text by Turck.

----- *Praktische Anleitung zur Laryngoskopie*. Wien: Braumüller, 1860. Call # WV 505 T843p 1860

Title translation: *Practical introduction to laryngoscopy*.

Note: See more information on Türck under the listing for Czermak.

Turnbull, Alexander (1794 or 5-1881). *A treatise on painful and nervous diseases: and on a new mode of treatment for diseases of the eye and ear*. London: John Churchill, 1837. Call # WL 704 T849t 1837

Is this an early example of quackery in otology? Stevenson & Guthrie (p. 62) select it as so. Turnbull omits anatomy and diagnosis and adheres to application to the mastoid region of an ointment by means of a special "friction sponge". This third edition is the first with this title, a change from *An investigation into the remarkable medicinal effects resulting from the external application of veratria*.

Urbantschitsch, Victor (1847-1921). *Lehrbuch der Ohrenheilkunde*. Wien: Urban & Schwarzenberg, 1884. Call # WV 200 UR1L 1884

Title translation: *Textbook of otology*.

This is a general ear text. In this second edition appeared a prototype of an electric audiometer, which Urbantschitsch was developing. Although this device received some recognition, it did not

receive widespread clinical application. For more information, see Dennis G. Pappas's *Otology's Great Moments*, pp. 84-86.

Valsalva, Antonio Maria. *De aure humana tractatus.* Bononiae: Typis Constantini Pisarii ..., MDCCIV [1704]. Call # WV 201 V248d 1704

Title translation: *Treatise on the human ear.*

The six chapters of this book, which was considered an authoritative text for more than a century, are equally divided into a section on ear anatomy followed by a section on its physiology. In this work, he added to existing knowledge of muscular and vascular structures of this organ; described sebaceous glands of the canal for the first time; masterfully described the anatomy of the Eustachian tube and recognized the importance of its function to hearing acuity; designated the entire inner ear as the labyrinth; and divided, for the first time, the ear into the sections of "outer ear," "middle ear," and "inner ear."

Valsalva's best portion of the book may have been that of the inner ear. He discovered and described two channels in the cochlea, called *scalae* (ladders), that were divided by the septum. One channel, the *scala tympani*, was connected (he said) to the tympanum by way of the *fenestra rotunda*; the other channel was connected with the vestibulum by way of the orifice situated at the side of the *fenestra ovale*.

Vesalius, Andreas (1514-1564). *Andreae Vesalii Bruxellensis, scholae medicorum Patauinae professoris, De humani corporis fabrica libri septem.* [Nieuwendijk (N.B.), Netherlands: De Forel, 1975]. Call # Oversize QS 4 V63d 1543F

This is an excellent facsimile reprint of the first edition. The time was ripe for change, and Vesalius corrected the age-old errors of Galen (multi-lobed liver, segmented sternum, horned uterus) that arose from his having dissected animals only. Vesalius described what he actually saw. He truly reformed anatomy. See Pappas's *Otology's Great Moments*, pp. 69-70.

Voltolini, Rudolf (1819-1889). *Die Anwendung der Galvanokaustik im Innern des Kehlkopfes und Schlundkopfes: nebst einer kurzen Anleitung zur Laryngoskopie und Rhinoskopie.* Wien: Braumüller, 1867. Call # WV 540 V889a 1867

Title translation: *The use of galvanocautery within the pharynx and larynx in addition to a short introduction to rhinoscopy and laryngoscopy.*

Voltolini, a professor at Breslau, was the first to use galvano-cautery in laryngeal surgery (Garrison & Morton 3275), and this occurred some ten years following the pioneering reports of Türck and Czermak.

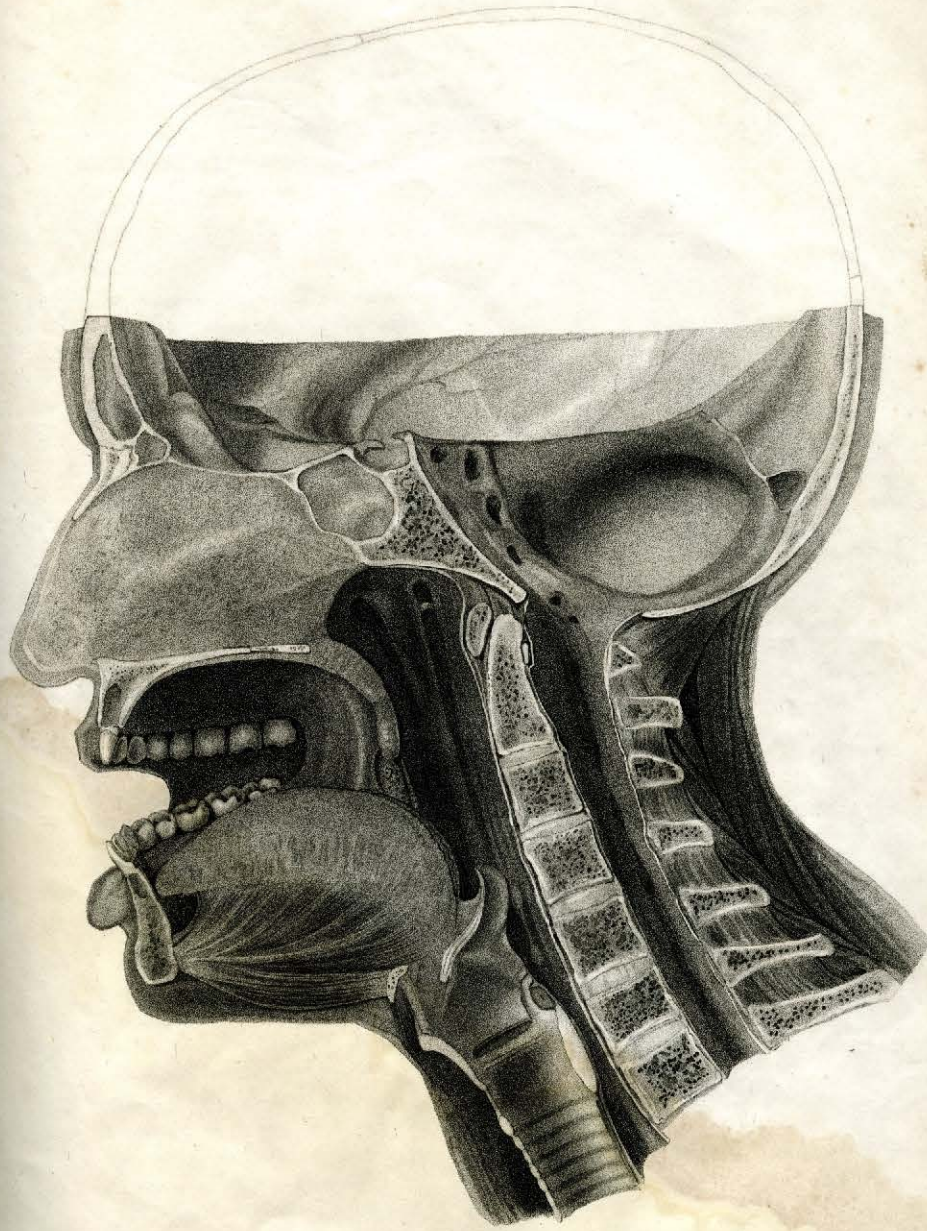
The first laryngeal operation through the mouth with external illumination was performed by Voltolini in 1889 (Garrison & Morton 3302).

Voltolini's disease was described as an acute, painful inflammation of the internal ear, followed by fever, delirium, and loss of consciousness (Garrison & Morton 3379).

Watt, John James. *Anatomico-chirurgical views of the nose, mouth, larynx, & fauces: with appropriate explanations, and references to the parts.* London: Printed for the author; and sold by S. Highley and J. Murray, 1809. Call # Oversize WV 17 W34a 1809

The anatomy of the larynx had been correctly portrayed by Casserio and others. In 1802, Xavier Bichat of Paris stressed the importance of the physiology and pathology of specific tissues as opposed to studying diseases according to their mere anatomical situation, such as the head, the abdomen, and so on. Bichat had a considerable influence on Watt, who, in 1809, published this work. The anatomy is accurate. Watt wrote the explanatory text for the plates. The anatomist and surgeon Sir William Lawrence contributed the description of the mouth, nose, larynx and pharynx on pp. 15-34. Some copies had colored plates, and others did not.

Weber, Ernst Heinrich (1795-1878). *De aure et auditu hominis et animalium. Pars I, De aure animalium aquatiliu.* Lipsiae: Apud Gerhardum Fleischerum, 1820. Call # WV 201 W388d 1820



T. Doxator del. ad nat.

J. J. Watt delin.

J. Hignwood sculp.

Published as the Act directs, Oct. 27. 1809, by S. Highley, 24. Fleet-Street, London.

The right half of the head, showing the cavities of the nose, mouth, larynx and pharynx, viewed laterally, from Watt's *Anatomico-chirurgical views of the nose, mouth, larynx, & fauces* (1809).

Title translation: *On the ear and hearing of humans and animals. The first part on the ear of aquatic animals.*

“A comparative embryological and paleontological study that led to the discovery of the intermediary stages between the primitive structures of the splanchno-cranium and the middle ear auditory ossicles of mammals – a brilliant step in demonstrating the links between isolated facts and continuity in the evolution of structure and function” (Dictionary of Scientific Biography 14:199).

Weber was an investigator who applied laboratory physics to physiological problems. His brother, Eduard Friedrich, was a collaborator. Among their discoveries was the tuning fork test that distinguished nerve from conductive hearing loss.

Whistler, William Mac Neill (1836-1900). *Notes on operations in syphilitic strictures of the larynx: with an account of two cases operated upon by means of a new cutting dilator.* London: Pardon & Sons, printers, 1881. Call # WV 540 W579n 1881

Wilkinson, George (1867-1956). *The mechanism of the cochlea: a restatement of the resonance theory of hearing.* London: Macmillan and Co., limited, 1924. Call # WV 250 W659m 1924

This work is an analytical discussion of Helmholtz’s resonance theory of hearing. The anatomical ground for this work was provided by Gray of Glasgow; the physiology by Wilkinson of Sheffield.

Provenance signature: “R. S. Creed, New College Oxford, July 30, 1930.”

Wittmaack, Karl. *Die Otosklerose auf Grund eigener Forschungen.* Jena: Fischer, 1919. Call # WV 265 W786o 1919

Title translation: *Otosclerosis, on the basis of my own researches.*

In 1919, Wittmaack published this monograph on otosclerosis in which he described the anatomical

foundation of the disease, its pathological process and clinical manifestations, and the results of his experimental works on this condition. He had discovered that he could produce otosclerosis-like lesions in the cochleae of hens by blocking the venous drainage around the otic capsule. For more information, see Dennis G. Pappas’s *Otology’s Great Moments*, pp. 130-131.

----- *Über die normale und die pathologische Pneumatisation des Schläfenbeines: einschliesslich ihrer Beziehungen zu den Mittelohrerkrankungen.* Jena: Fischer, 1918. Call # WV 230 W786u 1918 c. 2

Title translation: *On the normal and pathological pneumatization of the temporal bone, including its relationship to middle ear diseases.*

These two volumes represent a study taken from Wittmaack’s vast temporal bone collection. The normal pneumatization of the recesses, antrum, pneumatic cells and pneumatic cell systems are shown. Also, the cause of pathological pneumatizations is enumerated. See Pappas’s *Otology’s Great Moments*, pp. 130-131.

Yearsley, James (1805-1869). *Deafness practically illustrated: being an exposition of the nature, causes and treatment of diseases of the ear.* London: John Churchill, 1863. Call # WV 270 Y33d 1863

This edition was enlarged by some sixty pages, and is, in the author’s words, “revised with much care, and is so enlarged as almost to be entitled to be considered a new work on the subject” (Preface).

A pioneer of oto-laryngology, Yearsley was the first to practice as an ear, nose and throat specialist as opposed to a surgeon. He was an aurist and oculist, and he also founded the first ENT hospital in the world. Yearsley was known for his enduring efforts to raise the standard of medical practice, being the co-founder of the “Medical Directory,” which recorded the names of all recognized practitioners.

----- *Throat ailments: more especially the enlarged tonsil and elongated uvula in connexion with defects of voice, speech, hearing, deglutition, respiration, cough, nasal obstruction, and the*

imperfect development of health, strength, and growth, in young persons. London: John Churchill, 1859 (London: Savill and Edwards). Call # WV 400 Y33t 1859

This work was first published in 1842; the first four editions were entitled "A Treatise on Enlarged Tonsils." Yearsley performed tonsillectomies, and this work did much to spread knowledge concerning a range of common and debilitating conditions.

Zuckermandl, Emil (1849-1910). *Über das Riechcentrum: eine vergleichend-anatomische Studie.* Stuttgart: Verlag von Ferdinand Enke, 1887. Call # WV 301 Z83u 1887

Title translation: *On the olfactory center: a comparative anatomical study.*

A Hungarian, Zuckermandl was a pupil of Hyrtl, and he spent his life working at the anatomical institute of Vienna. *Über das Riechcentrum...* is a comparative anatomy of the olfactory center.

----- *Normale und pathologische Anatomie der Nasenhöhle und ihrer pneumatischen Anhang.* Wien: W. Braumüller, 1882-92. Call # WV 300 Z83n 1882-92 v. 1

Title translation: *Normal and Pathological Anatomy of the Nasal Cavity and its Pneumatic Appendices.*

This work by Zuckermandl was instrumental in forming the science of rhinology.

Zwislocki, Jozef J. (1922-). *Acoustic impedance of pathological ears.* Washington: American Speech and Hearing Association, 1970. Call # WV 272 Z99a 1970