

## Appendix 1

# Explanation of An Error

The year 1910 was used as a reference point for a 25th anniversary celebration in 1935. It seems that the anniversary was predicated on a misconception, since in announcing the celebration in 1934, the executive secretary-treasurer, William P. Wherry, said: "For those who do not know, in 1910, three small western societies were amalgamated at a meeting in Cincinnati into the American Academy of Ophthalmology and Otolaryngology. . . . "The Council thought it a very fitting occasion to celebrate the twenty-fifth anniversary of the actual formation of the Academy in the city where it was created" (*Trans Am Acad Ophthalmol Otolaryngol*, 1934, pp 486-487).

During the interim between 1934 and 1935, Hal Foster himself wrote, saying, "At the 1903 meeting the name Western was discarded and the name Academy was adopted"<sup>15</sup> and "I never knew of any other societies amalgamated with the Academy. . . . As far as I know there was never any other societies taken over by it."<sup>5</sup>

In no original documents is there mention of the merging of different societies to form the Academy. The transcripts of minutes from every meeting have been preserved with the exception of those for the 1896 and 1898 meetings, and these minutes substantiate one continuous organization from 1896 to the present. If, during the early years, any societies decided to join forces with the Academy (under its present name or while it was called "Western . . ."), such societies must have dissolved and their members must have applied for membership in the Academy and been elected through duly prescribed channels. It can be said with certainty that this did not occur in 1910, but it is conceivable, but pure conjecture, that this could have happened around the years 1901 or 1902 when Dr Ballenger was working so feverishly to expand the membership.

Apparently because more authentic facts were discovered between 1934 and 1935, the banquet program

from the 1935 celebration notes that it is the 25th anniversary of "The Greater Academy" and correctly lists adoption of the present name in 1903 but incorrectly attributes Academy adoption of a "program of nationalization" to the year 1910 and credits Christian R. Holmes and Derrick T. Vail as the instigators of nationalization. Regional limitations on membership were removed in 1900; the 1903 constitution specifically provided for nationalization, requiring only that a candidate be a member of the American Medical Association; and the Academy was quite thoroughly nationalized by 1910.

The efforts of Drs Holmes and Vail toward increasing the membership on a national scope took place well before 1910. More importantly, the listing of only Drs Holmes and Vail leaves out the name of the one man who did, indeed, initiate the first efforts for nationalization and was a prodigious worker in this endeavor and who, also, was one of the drafting committee which provided for internationalization in 1912—William L. Ballenger. It appears that at some point in the planning of the 1935 celebration, Drs Holmes and Vail were thought to be the founders of the Academy, since Max A. Goldstein (who gave a short, and on occasion erroneous, synopsis of the history at the 1935 meeting) wrote to President Wells P. Eagleton: "I think you are mistaken in your reference to Drs. Holmes and Vail. The original founders of the Academy were Kansas City men . . ." (Goldstein to Eagleton, Jan 16, 1935).

The entire minutes of the 1910 meeting are in Academy archives, and it was not a landmark year. The year 1935 was not the 25th anniversary of any major step in Academy history, and perhaps its observance as such can best be explained by some words from John L. Myers, who wrote in reference to the observation of the Academy's 50th anniversary in 1945: "One cannot depend on the memory of men, because each gives it as he remembers, and often their material is at variance" (Myers to William L. Benedict, Jan 2, 1945).

## Appendix 2

# Digest of Committee Work

## 1921-1978

*Opportunities for service in our Academy lie . . . in the several committee activities in which it may be engaged, and which contribute their portion to the progress of medicine and to the welfare of the public.*

JOHN E. BROWN  
THE PRESIDENT'S ADDRESS, 1916

*The American Academy is the largest special society, both in membership and capital, existing in organized medicine in this country. It is universally accepted that matters of interest to Ophthalmology and Otolaryngology are of interest to the Academy.*

WILLIAM P. WHERRY, 1931

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#### PUBLICITY AND SERVICE, 1921–1924

(Chairmen: Edward B. Heckel, 1921–1922, Edward C. Ellett, 1923–1924)

#### PUBLICITY, SERVICE, AND LEGISLATION, 1925–1933

(Chairmen: Lee Masten Francis, 1925–1926, Arthur J. Bedell, 1927–1933)

#### PUBLIC RELATIONS, 1933–1939 (under secretarial post, 1935–1969)

(Chairman: Ralph A. Fenton)

#### PUBLIC AND PROFESSIONAL RELATIONS,<sup>†</sup> 1970–1976

(Chairmen: Francis L. Lederer, 1970–1972, John W. Henderson [Rochester, Minn], 1973–1976)

See chapter 19, “Building Rapport.”

#### STANDARDIZATION OF TUNING FORKS AND HEARING TESTS, 1921–1933

(Chairman: Robert Sonnenschein)

The Committee thoroughly studied functional tests of hearing and formulated a simple examination for school children. After investigating the character of various tuning forks, the Committee reported excellent results for new forks made of a rustproof, tarnishproof aluminum-magnesium alloy and for a c-5 sounding rod of the same material.

#### ETIOLOGY OF TRACHOMA, 1921–unknown

(Chairman: F. Park Lewis)

F. Park Lewis, who in 1906 suggested and headed the Academy’s first investigative committee to help with measures in prevention of ophthalmia neonatorum, was behind Academy participation in an international effort to determine the cause of trachoma. (Dr Lewis was a prodigious worker for the prevention of blindness and founded the New York State Society for the Prevention of Blindness, which later became the nucleus of the National Society for the Prevention of Blindness with Dr Lewis as president for many years.)

At the Committee’s request, the Academy adopted a resolution in 1923 urging the surgeon general of the Public Health Service to accept a Rockefeller Institute proposition to devote special time and effort to ascertaining the etiology of trachoma. In the 1930s the Academy made research contributions to the International League to Combat Trachoma.

#### OPHTHALMIC PATHOLOGY, 1923–1946 and 1952 to date

(Chairmen: Harry S. Gradle, 1923–1945, Brittain F. Payne, 1946, Michael J. Hogan, 1952–1975, Paul Henkind, 1976 to date)

#### OTOLARYNGIC PATHOLOGY, 1923–1946 and 1952 to date

(Chairmen: Ira Frank and Harry S. Gradle for an unspecified period, Joseph C. Beck, 1935–1941, Frank J. Novak, 1942–1946, Paul H. Holinger, 1952–1962, Ben H. Senturia, 1963–July 1973, John R. Stram, July 1973–1977, Harvey M. Tucker, 1978)

#### ADVISORY COMMITTEE TO THE REGISTRIES OF PATHOLOGY, 1947–1951

(Chairman: Brittain F. Payne)

See chapter 9, “Pioneering Pathology Registries.”

#### NOMENCLATURE, 1923–1933

(Chairman: Walter B. Lancaster)

As one constituent unit of the National Conference on Nomenclature of Disease (formed in 1928), the Committee prepared a dual classification of eye diseases (etiologic and topographic) which appeared in *A Standard Classified Nomenclature of Disease*, first published in 1932.

#### LYE LEGISLATION, 1923–1927

(Chairmen: Harris P. Mosher, 1923–1925, Joseph C. Beck, 1926–1927)

The AMA, with a committee headed by Chevalier Jackson, spearheaded efforts to secure legislation requiring proper labeling of household lye and other caustics. The Academy Committee assisted in what came to be called the

Standing and ad hoc committees are included in the digest, with ad hoc committees denoted by a dagger (†) after the committee name. In most instances, years expressed after the committee title indicate the annual meeting at which the committee was appointed and discharged. The designation “to date” indicates through the year 1978.

Committees appointed prior to 1921 are covered in text in part 1 and in Table 3 of chapter 6, “The Path to Prominence: 1913 to 1921.”

National Committee on Lye Legislation. Largely through these efforts, the Federal Caustic Poison Act was passed in 1927, although it only covered interstate and foreign commerce and commerce within the exclusive jurisdiction of the federal government.

Although officially discharged in 1927, the Academy Committee continued to work to secure state legislation until 1931, at which time 19 states had enacted legislation.

HARD OF HEARING (renamed PREVENTION AND AMELIORATION OF DEAFNESS in 1931, CONSERVATION OF HEARING in 1940, and HEARING AND EQUILIBRIUM in 1971)

(Chairmen: Horace Newhart, 1923–1942, Dean M. Lierle, 1943–1968, Howard P. House, 1969–1970, Bobby R. Alford, 1971–1976, Francis I. Catlin, 1977 to date)

With a vast array of projects and achievements spanning more than 50 years, what is now known as the Committee on Hearing and Equilibrium has been a major force in investigating, developing, and promoting practices which will aid in recognition and treatment of conditions that impair the hearing function. Committee-produced guidelines serve as the basis for virtually all hearing conservation programs in the country and for state regulations on occupational hearing loss. In terms of work on a national health problem and of original research, it has accomplished more than any Academy committee. Through its numerous subcommittees, the parent Committee has reached into so many areas in the field of hearing that only its major directions will be described.

When the Committee began work, measures to prevent hearing loss were nonexistent. However, in 1922, a year before the Committee was appointed, the first practical audiometer—the Western Electric 1A—was produced commercially. Hailed as an outstanding diagnostic tool, the audiometer was thought to be the mass screening device with the predictive power to single out those with ear and hearing problems. The audiometer opened up entirely new abilities in otology, and it was this developing technology which set off the movement to protect and conserve hearing.

The Committee began what would be a long-term campaign to promote routine audiometric testing of children and to stress the importance of early detection of hearing loss and of prevention, corrective care, and amelioration of hearing deficiencies. Members spoke before professional and lay audiences, presented exhibits and demonstrations, and delivered radio broadcasts at Academy meetings to impress the message that deafness prevention was possible—but only through early detection and treatment. Two representatives were appointed in each state to promote school hearing conservation programs, with emphasis on follow-up treatment and educational rehabilitation, and to develop hearing clinics where individuals with impaired hearing could receive a complete otologic examination.

As a guide to setting up uniform programs throughout the country, utilizing standardized techniques and criteria, the Committee in 1945 published the *Syllabus of Audiometric Procedures in the Administration of a Program for the Conservation of Hearing of School Children* (revised and published in 1952 as *A Manual for School Hearing Conservation Programs*). A film “The Right to Hear,” was produced, and other publications on hearing loss in children, testing techniques, organization of state and local programs, and rehabilitation followed.

Committee efforts in behalf of school hearing conservation programs were predicated on the ability of the audiometer to identify those children who needed further evaluation. In 1957, a Subcommittee on Hearing in Children, under chairmanship of Raymond E. Jordan, outlined a plan for a nationwide study of the prevalence and etiology of hearing disorders in children. The subcommittee actually carried out three studies: one, a pilot project in cooperation with the University of Pittsburgh to develop normative data, case-finding techniques, and methods for use in a national study (1957–1964); a second cooperative study on auditory screening of infants at Johns Hopkins University (1958–1965); and finally, the national study, for which the subcommittee consolidated its effort with the National Health Examination Surveys conducted by the National Center for Health Statistics (1963–1970).

In none of the studies did accepted testing techniques serve to identify a majority of those children who were potential candidates for hearing loss. In the Pittsburgh Study and National Survey, audiometric testing tagged only 40% of children with ear problems that warranted medical attention and closer evaluation. The finding was a blow to 40 years of work in public health programs to conserve hearing. The audiometer could not do the job alone. A thorough history and medical examination were shown to be the best predictors, but to some extent they take hearing conservation programs back to Square 1, since they are time-consuming and require highly skilled personnel. More recently, the combination of impedance bridge, which measures middle ear impedance, and pure-tone tests has proved an effective screening method for uncovering middle ear disease, which causes an estimated 50% or more of the hearing loss in children. Evaluation of auditory testing, both screening and diagnostic, continues to be a committee function.

In the study at Johns Hopkins, neonatal auditory screening techniques failed to detect those children who later manifested hearing loss. The subcommittee is working presently as part of the Joint Committee on Infant Hearing Screening to develop valid and dependable screening techniques.

From its inception, the Committee has kept a close eye on rapid progress in the technology of audiometers and hearing aids. Individual members and the Committee as a whole have participated in development of standards for audiometers and of medical and technical guidelines for the fitting of hearing aids. The Committee's most direct contribution has been in referring new pure-tone and screening audiometers to referee laboratories and listing those that meet the standards set by the American National Standards Institute. The Committee took over this task in 1958, three years after the AMA discontinued its program for testing instruments and approving those that conformed to the standards.

Probably the Committee's most internationally recognized work has been in the field of measuring noise and determining its potential hazard to the specific biologic function of hearing. This work was carried out by a Subcommittee on Noise in Industry (later Subcommittee on Noise) appointed in 1947 and chaired for most of its 20 years by Howard P. House, with Aram Glorig as director of the subcommittee's Noise Research Center in Los Angeles.

Almost nothing was known about the effect of noise on hearing when this subcommittee began investigating. Although World War I had prompted some interest in the concept of acoustic trauma, it was the number of aural casualties in World War II which put the problem of noise on the agenda of targets for conserving hearing. During the war the hearing committee worked with the Veterans Administration in the rehabilitation effort and produced a *Manual for Program Outline for the Rehabilitation of Aural Casualties Both Military and Civilian* by Walter Hughson and Harold Westlake. By war's end, traumatic hearing loss from overexposure to noise was an established problem and the hearing committee looked to the worst offender in civilian life—industry.

The Subcommittee on Noise in Industry embarked first on an educational campaign to inform insurance carriers and manufacturers that noise was a problem and to advocate audiometric testing of employees. Next, with a \$6,000 grant from the Council, Douglas E. Wheeler, PhD, was appointed to do research on just what the problem was—as expressed by Dr Wheeler, “how much noise, of what type, for how long, produces how much hearing loss in how many people?”

Dr Wheeler began field research in airplane plants on the West Coast. Almost immediately, the subcommittee's work attracted attention from the insurance carriers who contributed financial support. The subcommittee's educational material, including a 1950 film, “Your Ear and Noise,” helped open doors to industrial plants for research purposes. Additionally, in 1948 a legal precedent was set by a case in which the claimant, although he had suffered no loss of earnings, was awarded compensation for hearing loss caused by industrial noise. Claims began coming in by the carload, and pulling in the reins on this trend, by acquiring valid information on the cause-effect relationship between noise and hearing loss, became a matter of survival for industry and insurance carriers.

In 1950, four members of the subcommittee and four members of the AMA Council on Physical Medicine and Rehabilitation formed what was called the Committee of Eight. Their job was to determine a valid formula for evaluating and measuring the percentage loss of hearing in Workmen's Compensation cases, in effect, how much hearing loss represented how much disability. The work would be done by the staff in the subcommittee's research center.

The Noise Research Center began in 1951 when Surgical Mechanical Research of Los Angeles constructed an underground, sound-treated room and made it available for the subcommittee's work. Field research on noise and its effect on human hearing was coordinated with laboratory research.

By 1957, with grants from the insurance carriers, the National Institutes of Health, private industry, and the Academy, the subcommittee was operating with a yearly budget of more than \$122,000. Meanwhile, the research center had been moved to expanded quarters, and the full-time research staff had been beefed up to eight, including audiologists, biostatisticians, and an acoustic physicist. Indeed, the center had become a gold mine of information on noise measurement, had 50,000 audiograms (supplied by industry) filtering through computers for analysis and breakdown, and had acquired an international reputation for its work.

The task of refining specific noise and its specific effect on human hearing to a measurable entity required discovery and definition of all the variables to be considered in the noise source and the human recipient. The questions posited and studied by those at the research center were numerous. At what decibel level did noise become hazardous to hearing? And how long did an individual have to be exposed to a constant or intermittent noise for it to represent a potential biologic hazard? How could you predict what persons would be most susceptible to hearing loss from noise? What was the temporary threshold shift caused by noise in different industrial processes, the recovery times, and when could a hearing loss be considered permanent? How did hearing loss in the industrial population compare with hearing loss in the non-industrial population? What kind of protection could be provided for the worker?

There were other questions from a medicolegal angle. How many workers had hearing loss at the time of employment? What was a valid way to estimate disability resulting from noise-induced hearing loss? For long-time employees, how much hearing loss was from presbycusis and how much from noise exposure?

Work by the investigators at the Los Angeles laboratory and by members of the subcommittee resulted in a prolific amount of literature. Guides for industry, for industrial physicians, for audiometry, for evaluation of hearing impairment, and the *Guide for Conservation of Hearing in Noise* helped shape present-day laws regulating industrial noise and spark the latest vintage of public concern with controlling environmental noise.

Much information on hearing in the general population came out of two hearing surveys made at the 1954 and 1955 Wisconsin State Fair. The surveys, conducted under carefully controlled conditions, included a medical, nonmedical, and personal history for each subject, an otologic examination, and auditory testing. One hope was to devise a formula—a combination of factors—which would make it possible to predict expected hearing loss. Unfortunately, no practical predictive test has yet been developed that will label those most liable and those most immune to hearing loss.

In 1959, the subcommittee recommended a formula for evaluating hearing impairment in Workmen's Compensation cases. In terms of the present ANSI audiometric standard, the formula is as follows: For every decibel that the average hearing level at 500, 1,000, and 2,000 Hz exceeds 25 dB, allow 1.5% up to the maximum of 100%. This maximum is reached at 92 dB. If the average hearing level at 500, 1,000, or 2,000 Hz is more than 92 dB, the impairment for hearing and understanding everyday speech is considered total. Presbycusis is judged to be accounted for by the 25-dB allowance before impairment begins, and no allowance for it is necessary in calculating the percentage of hearing handicap.

The formula was endorsed by the AMA and many government agencies, and most state laws or regulations regarding occupational hearing loss either incorporate the formula or are based on it.

The present International Standards Organization standards for noise in relation to hearing loss are based principally on the work of the research center. Director Aram Glorig chaired the ISO committee that developed the standards.

The Subcommittee on Noise was phased out in 1967. However, conservation of hearing in noise continues to be one aspect of the parent committee's work, although the emphasis has shifted from basic research to collecting and providing information.

In the late 1950s, a Subcommittee on Research began encouraging research on inner ear pathology by publishing working drafts on the techniques for acquiring and preparing the human temporal bone. The Deafness Research Foundation (founded 1958) became interested in the effort and elevated it to a project under the name Temporal Bone Banks Program for Ear Research (TBBPER). The program was chartered by the Academy and the DRF to mobilize a national effort—a wide network of cooperating laboratories, a coordinating center, and eventually, a national repository—for obtaining, processing, and studying the temporal bone.

An important accomplishment of TBBPER was to demonstrate that the obstacles to procuring temporal bones (middle and inner ears) from the deafened could be overcome by nationally disseminating appropriate information to the deafened and by initiating the system whereby they could pledge their bones for use in research after their death.

A Temporal Bone Bank Center was set up on a trial basis at the University of Chicago in 1961 under the direction of John R. Lindsay. It served as a clearinghouse and furnished information and legal forms for pledging temporal bones and brains and kept the donation records. Three additional centers were set up in the West, East, and South, and in 1965, the Registry of Otolaryngic Pathology at the Armed Forces Institute of Pathology was designated as the national repository.

In 1971, the four temporal bone bank centers were amalgamated into one center, the National Temporal Bone Bank Center of the Deafness Research Foundation, located at the Johns Hopkins Hospital in Baltimore. Successful "banking" of temporal bones opened the door for otologic tissue transplantation, and there are now ear tissue banks, similar to eye banks. The Academy Committee is helping to develop guidelines for transplantation of otologic tissue.

During the 1970s, the hearing committee was reorganized and its sphere of activity extended to include vestibular disorders. The Committee established criteria for diagnosis and management of Meniere's disease. It also added the function of evaluating vestibular testing equipment.

OPTOMETRY, 1926–1927 (now AMERICAN COMMITTEE ON OPTICS AND VISUAL PHYSIOLOGY, 1927 to date)

(Chairman: William H. Wilder, 1926–1927)

The Optometry Committee was partially a reaction to President Horace Newhart's 1925 address in which he stressed better understanding between the profession and the laity and touched briefly on specific issues, one of which was the optometrists' attempt to force ophthalmologists to pass the optometry examination before prescribing glasses. Like so many ophthalmology committees, this one was appointed to cooperate with similar committees of the American Ophthalmological Society and the Section on Ophthalmology of the AMA, and the frequent result was a combined effort.

The Academy Committee in 1927 requested and received permission to establish a permanent national committee under the present name with representatives of the three societies. Education of the medical profession and the public as to the requirements of proper eye care and the relation of ocular diseases to general health was deemed a primary purpose.

Since its inception, the optics and visual physiology committee has been involved in visual acuity research, concentrating during its early years on investigating accurate and reliable visual tests. It has throughout the years investigated and reported on ophthalmic instruments, equipment, and apparatus of all types used in the field of ophthalmology.

Other Committee activities range broadly over topics and problems which were the current ones for their day. Subjects for Committee attention have included motor anomalies and orthoptic training, illumination, ocular examinations of the school child, education of optometrists, and education in optics and visual physiology. The Committee investigates, reports, and subsequently serves in an advisory-consulting capacity in matters pertaining to optics and visual physiology.

#### INVESTIGATE TREATMENT OF INCIPIENT CATARACT, 1927-1933 (Chairman: Allen Greenwood)

The Committee acted as a fact-finding agency to determine the merit of reports purporting nonsurgical "cures" for incipient cataract. Daniel B. Kirby, an Academy research fellow, did most of the work. With none of the substances which he tried was Dr Kirby able to effect a disappearance of lens opacities, and the Committee concluded that after a study of the literature, they had failed to find scientific proof that medical treatment of lens opacities could restore the lens to normal transparency.

The Committee's final report stopped short of disclaiming the benefits of all medical treatment and stated that some members believed attention to the patient's general physical and local eye condition could in some cases cause regression of, or check progression of, the density of opacities. However, the Committee consensus was that no patient could be promised a cure of cataract by nonsurgical methods.

#### EXTRAMURAL GRADUATE INSTRUCTION, 1930-1935 (Chairman: William V. Mullin)

The barrage of attendance at the Academy's instruction courses indicated a great appetite, not to mention need, for short, intensive courses in which the practitioner could refresh his knowledge of the basics and obtain knowledge of the latest advances in his field. The time was ripe, reasoned leaders of the Academy courses, for medical schools and societies to offer similar extramural courses so they would be easily available to practitioners throughout the country, and the Academy experience in planning courses could be of help.

The Committee sent out questionnaires to members with teaching experience and compiled a rather extensive registrar of willing instructors, their topics, and the time of year they could participate in a postgraduate course. The posture of the Committee was that of a voluntary bureau for providing assistance and a potential faculty of instructors for organizations planning courses. It was not a bad idea, but the services of the Committee went virtually unused, and it was discharged.

#### TEACHERS' SECTION, 1931-1942

(Albert D. Ruedemann, Sr, secretary in charge, 1935-1942)

#### TEACHERS' SECTION: OPHTHALMOLOGY, 1950-1964

(Chairman: Albert D. Ruedemann, Sr)

#### TEACHERS' SECTION: OTOLARYNGOLOGY, 1950-1964

(Chairmen: Lawrence R. Boies, 1950-1953, Gordon D. Hoople, 1954-1957, James H. Maxwell, 1958, John A. Kirchner, 1959-1961, Eugene L. Derlacki, 1962, John E. Bordley, 1963-1964)

#### TEACHERS' SECTION IN OTOLARYNGOLOGY, 1968 to date

(Chairmen: Walter P. Work, 1968-1970, Frank N. Ritter, 1971 to date)

See chapter 21, "The Teachers: Working Through the Possibilities," and chapter 25, "Concerns During the Fifties."

## NATIONAL OTOLARYNGOLOGICAL LIBRARY, 1932-1937

(Chairman: Burt R. Shurly)

Distribution of the literature of otolaryngology was so random 40 years ago that of the 250 medical libraries listed by the AMA,\* only 51 received the *Archives of Otolaryngology* and only 45 received the *Annals of Otolaryngology* and the *Laryngoscope*. How many received the TRANSACTIONS is not known, but in 1929 the Council discontinued the policy of sending the book gratis to all medical libraries and to the national libraries in Washington, DC, in favor of selling it to libraries at \$2.50 a volume.

A joint committee of the national otolaryngological societies was formed with the intent of concentrating books and periodicals at a central location from which they could be made available. Financial depression put a crimp in early hopes for establishing a specialty library in a midwestern city financed by the national societies. The Committee settled on the surgeon general's library, housed with the Army Medical Museum in Washington, DC, as the logical place to centralize literature, and their decision was reinforced with establishment of the Registry of Otolaryngic Pathology at the museum. There would be a national collection of material pertaining to otolaryngology.

Lack of space precluded creation of specialty sections of the surgeon general's library, and the Committee's goal became a new building for the library. While Congress authorized new buildings for the library and museum, no funds were appropriated, and in 1938 the Academy passed a resolution urging Congress to provide funds for immediate construction. Although officially discharged in 1935 and again in 1937, the Committee continued to work in support of a new library building and eventually entrusted this task to the Committee on Otolaryngic Pathology. The museum and library continued to share the same building until 1955.

## PRENATAL SYPHILIS, 1933-unknown

F. Park Lewis was the instigator of the committee to control prenatal syphilis, which cooperated with similar committees from other societies.

## ORTHOPTICS, 1936-1938

(Chairman: Grady E. Clay)

In 1932, the first orthoptic clinic in the country was organized and conducted by LeGrand Hardy and Elizabeth Stark in the Fifth Avenue Hospital in New York City. While the use of orthoptics spread, many ophthalmologists remained unconvinced of its value. There was in the field no unanimity of opinion on methods and procedures and no standards for training. As so often happened with a new entry on the horizon of medicine, it quickly fell prey to those who would exploit it for commercial gain.

Exaggerated, false, and misleading claims soon put a stigma on the whole field of orthoptic therapy in the minds of many ophthalmologists. A smaller number of ophthalmologists recognized that orthoptics had a place in ophthalmic practice but believed there was a need to elevate and standardize this form of therapy and to develop policies relative to orthoptic training and practice.

The Academy Committee on Orthoptics helped to found the American Orthoptic Council in 1938, composed of representatives from the AMA Section on Ophthalmology, the American Ophthalmological Society, and the Academy, with three orthoptic technicians as associate members. Four years later, a fourth orthoptist was added to the council.

The Orthoptic Council undertook regulation of the teaching and practice of orthoptics, certification of orthoptic technicians, sponsored creation of the American Association of Orthoptic Technicians in 1942 (now American Association of Certified Orthoptists), and guided development of the principles and application of orthoptics that have made it a respected discipline in the field of ophthalmology.

Since 1940, the Academy has made arrangements for a special scientific program of the Orthoptic Council and orthoptic technicians. Reports presented were first published in the TRANSACTIONS. From 1951 through 1978, the Academy published and subsidized the *American Orthoptic Journal*, the official organ of the American Association of Certified Orthoptists.

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\*For comparison, in 1973 there were 2,984 medical libraries in the country, excluding libraries with less than 500 bound volumes, less than 25 subscriptions, and without personnel (Crawford S, Dandurand G [eds and comps]: *Directory of Health Science Libraries in the United States*, 1973. Chicago, American Medical Association, 1974).

#### COMMISSION ON HANDICAPPED SCHOOL CHILD, 1937-1939

(Cochairmen: LeGrand H. Hardy and Horace Newhart; coordinator: Burt R. Shurly)

Burt R. Shurly in 1936 called on the Academy to start a movement in behalf of children with vision and hearing defects. The Commission on Handicapped School Child, consisting of an ophthalmology and otolaryngology component, was appointed to find ways and means for nationwide detection and corrective care programs.

The Commission recommended the Academy sponsor a preliminary survey to determine the incidence of vision and hearing defects and a promotional campaign to interest local and state societies, boards of education, and government agencies in a coordinated effort. Realizing the financial burden of such an effort, and the fact that detection programs were useless without corrective care, the Council passed a resolution urging foundations and appropriate agencies to provide funds for carrying out adequate detection programs and for furnishing medical treatment, through the cooperation of qualified specialists, for indigent and underprivileged children afflicted with handicaps.

Medicine had to cooperate in large-scale programs, most particularly at the treatment end. Some directors of school health were disenchanted by what they saw as noncooperation in private medicine. The family practitioner appeared either unable or unwilling to evaluate handicaps after they had been detected by screening, and specialists insisted on full charges for treatment. At least one article in the *Academy Bulletin* advised specialists that economic adjustment, as a group procedure and under the control of local medical associations, should be made for treating handicapped children whose parents could not afford the full cost of treatment.

#### ADVISORY COMMITTEE TO EYE HEALTH COMMITTEE OF STUDENT HEALTH ASSOCIATION,<sup>†</sup> 1937-1951

(Chairman: William L. Benedict, 1937-1942; representative: Lawrence T. Post, 1943-1951)

Shortly after the Eye Health Committee was organized by the American Student Health Association, it asked the Academy to appoint a committee to give advice on eye health problems of college students and to recommend the best testing methods and devices. The Advisory Committee helped formulate plans for vision conservation (testing methods, proper illumination, teachers' training and education) which were effected by the Student Health Association. The National Society for the Prevention of Blindness encouraged and gave material assistance to the Committee, and in turn received all testing records for statistical analysis. The Committee was inactive during and after World War II.

#### PREVENTION OF BLINDNESS, 1938-1942 and 1948-1956

(Chairmen: W. H. Luedde, 1938-1942, Ralph I. Lloyd, 1948-1956)

At the request of the National Society for the Prevention of Blindness, the Academy appointed two liaison committees to assist as consultant-advisors in sight conservation measures. Nothing was referred for consideration by the first Committee, and the only matter of import to come before the second Committee was the question of using penicillin in place of the time-tested silver nitrate in the eyes of newborns. The Committee stood by silver nitrate on the grounds of efficiency and simplicity of application. See Committee on Investigation of Prophylaxis Against Ophthalmia Neonatorum (p 266).

#### SCIENTIFIC EXHIBITS (permanent committee), 1939-1977

(Chairmen: O. E. Van Alyea, 1939-1946, James H. Maxwell, 1947-1948, Kenneth L. Roper, 1949-1971, Eugene L. Derlacki, assistant 1952, cochairman, 1953-1971, Frederick C. Blodi, 1972-1977, Brian F. McCabe, 1972-1977)

See chapter 18, "Meeting Innovations."

#### OPHTHALMIC LITERATURE, 1939-1942

(Chairman: Conrad Berens)

Appointed at the request of the AMA Section on Ophthalmology, the Committee was to consider publishing abstracts of the ophthalmic literature in Portuguese and Spanish. No action was taken. However, Dr Berens was one of the organizers of the Pan-American Congress of Ophthalmology, which undertook an exchange of literature.

#### VISUAL DEFECTS AND CIVIL SERVICE, 1939-1941

(Chairman: Benjamin Rones)

The Federal Civil Service Commission requested an Academy committee to assist in studying pension rules relative to visual defects. No activity was reported.

#### HOME STUDY, 1939-1943

(Cochairmen: Harry S. Gradle and Frank J. Novak, Jr)

See chapter 22, "A Stop-Gap Measure: Home Study Courses."

#### PAN-AMERICAN CONGRESS OF OPHTHALMOLOGY,<sup>†</sup> 1939-1940

(Chairman: Harry S. Gradle)

Plans for a Pan-American Congress of Ophthalmology originated with some correspondence in May 1939 between Harry S. Gradle of Chicago and Moacyr E. Alvaro of Sao Paulo, Brazil. With war imminent and every evidence that there would be no International Congress of Ophthalmology in 1941, they developed a working plan for a congress of ophthalmologists in the Western Hemisphere which, as Dr Gradle said, "would not be interrupted by the jealousies of war and chauvinism, and one in which the rapidly progressing science of the New World would find free expression, unhampered by the paternalism so dominant in the old International Congress of Ophthalmology."

The two brought their idea to the Academy, which agreed to finance organization and the first meeting. Drs Gradle and Alvaro and Conrad Berens of New York were designated the organizing committee. It was an enormous undertaking to develop a new organization, plan the first meeting, and notify all ophthalmologists of the Western Hemisphere. Drs Berens and Alvaro developed the program on the basis of dividing the number of papers equally between the countries of the Northern and Southern Hemispheres.

Notification in specialty journals was supplemented by personal formal invitations to participate issued to all ophthalmologists south of the Rio Grande. The first congress was scheduled to follow the Academy's 1940 Cleveland meeting, and all Latin American ophthalmologists were invited to be guests of the Academy for its annual meeting.

The Academy's meeting was planned to take on a distinctly Pan-American flavor, with Frank E. Brawley's presidential address describing development of the congress, and the annual banquet featuring speeches on Pan-American goodwill and flags of all American republics decorating each table.

The first congress was attended by approximately 240 ophthalmologists from the United States and Canada and 25 from Latin American republics. This was considered satisfactory in view of the relatively short notice and the conditions resulting from war in Europe.

The congress adopted a plan of organization, elected officers (with Dr Gradle as president), appointed committees, and became thenceforth independent of the Academy. Dr Gradle's report on organization of the congress appears in the September-October 1943 *TRANSACTIONS*.

The organization is now known as the Pan-American Association of Ophthalmology.

#### PAN-AMERICAN CONGRESS OF OTOLARYNGOLOGY<sup>†</sup> 1941-1946

(Chairman: Chevalier L. Jackson)

When the Academy agreed to sponsor organization of a Pan-American Congress of Ophthalmology in 1939, the Council expressed its intent to do the same for otolaryngology if desired. The conditions that gave rise to the ophthalmology congress prevailed in otolaryngology. There had been ten International Congresses of Otology, and at the 11th such congress (Copenhagen, 1928), it had been decided to rename it the First International Congress of Oto-Rhino-Laryngology, which would serve as successor to the otologic congresses and to three previously held laryngo-rhinologic congresses. The new united congress was scheduled to hold its fourth meeting in Amsterdam in 1940, but plans were nullified by the war.

In 1941, the Academy appointed Chevalier Jackson of Philadelphia to embark on the project of a Pan-American Congress of Otolaryngology. War-imposed difficulties in communication and transportation made progress slow. Dr Jackson enlisted the able support of Academy President James A. Babbitt in 1943, and the two planned an Inter-American Night for the Academy's 1943 meeting and invited representative otolaryngologists from Latin American republics to attend. The eight Latin American colleagues who were able to attend met with the Academy's Committee and plans were solidified for proceeding with development of a congress.

The otolaryngologists relied heavily on the experience and organization of the ophthalmology congress in formulating their own. Harry Gradle, Conrad Berens, and Moacyr Alvaro, who had jointly organized the ophthalmology

congress, served as consultants to the otolaryngology committee. Like the ophthalmologists, the otolaryngologists planned to hold their first congress following an Academy meeting, to publicize the congress via announcements in journals and personal invitations, and to use translated abstracts projected on a screen during scientific presentations.

In the process of planning, the congress title was changed to Pan-American Congress of Oto-Rhino-Laryngology and Broncho-Esophagology, and the first meeting convened under this name following the Academy's 1946 Chicago meeting. Dr Jackson reported it had taken "two years of arduous work consisting of correspondence and personal visits to Pan-American countries" to plan the "magnificent" scientific program. The Academy financed publication of the transactions of the first congress and of two editions of a directory of Pan-American otolaryngologists. Thereafter, the congress carried on activities independent of the Academy.

The organization is now known as the Pan-American Association of Oto-Rhino-Laryngology and Broncho-Esophagology.

#### NATIONAL DEFENSE,<sup>†</sup> 1941-1942 (Chairman: Burt R. Shurly)

#### WAR ACTIVITIES, 1942-1943 (Chairman: Burt R. Shurly)

To establish a corps of efficient specialists in the armed services, the Academy Special Committee on National Defense assisted committees of the National Research Council and the AMA in compiling a list of certified specialists. A prime concern of Burt Shurly's was that specialists be assigned to their specialty in the armed forces, and he made recommendations on how specialty services could be useful. In this vein, he repeatedly advocated use of the audiometer and early treatment of ear infections as a possible means of reducing the number of pensions. Additionally, he said, knowledgeable specialists could better treat problems and injuries and help reduce the amount of radical "practice" surgery performed during the First World War.

The Committee on War Activities, appointed at Dr Shurly's request, presented a list of 15 proposals to the surgeon general of the army and the navy. These ranged from a suggestion for an ophthalmology and otolaryngology consultant in each corps area to inspect equipment to a request for postgraduate courses. The proposals fell on deaf ears, and Dr Shurly reported it was difficult to function in the face of a seeming objection to all specialism. This objection was rooted in the previous war when certain specialists attempted to control hospitals and supplies without regard for, or knowledge of, military procedure.

#### INDUSTRIAL OPHTHALMOLOGY, 1941-1956 (Chairmen: Albert C. Snell, 1941-1946, Derrick T. Vail, Jr, 1947, Albert D. Ruedemann, Sr, 1948-1956)

During the 1930s, economic pressures, notably an increase in benefits under Workmen's Compensation, forced industry to devote more attention to industrial safety, and industry naturally turned to medicine for assistance. Academy interest in the vision of industrial workers was sparked by Hedwig S. Kuhn's report, "An Appraisal of Visual Defects in Industry (Based on a Study of 16,332 Cases)" at the 1940 meeting. Dr Kuhn proposed a committee, but the request was received too late for action. A year later, at the suggestion of Derrick Vail, a joint committee of the Academy and the AMA was formed.

The initial phase of committee work was to investigate visual requirements for specific jobs, percentage of employees with visual defects in various types of industrial plants, relation of visual performance to employee efficiency, provisions for visual care in industry, and workable visual testing techniques. The data and experience gathered were then used in the Committee's educational activities to stimulate interest in industrial ophthalmology and to instruct industry and medicine on visual care programs.

Committee members published reports, gave lectures, participated in courses and symposiums, initiated a scientific program for Academy meetings, and compiled a bibliography of world literature dealing with industrial eye problems. The Academy assisted in giving exposure to the subject of industrial ophthalmology. In addition to the program at meetings, an industrial ophthalmology section of the TRANSACTIONS was initiated, and the TRANSACTIONS carried the Committee's ongoing bibliography. "A Basic Visual Industrial Program," prepared by the Committee, was published as a supplement to the TRANSACTIONS.

Committee members did much more. They built a slide library of eye injuries, studied Workmen's Compensation laws, wrote manuals, sent questionnaires to ophthalmologists to determine the amount of activity in industrial eye care, investigated and answered specific questions posed by industry, and carried on an extensive consultation service for industrial medical directors, nurses, and personnel directors. Many special projects were undertaken with other organizations.

Funds for the jointly sponsored Committee were cut off in 1954 as a result of ill-defined administrative problems. Two years later, the AMA Section on Ophthalmology discharged the committee, and the AMA Board of Trustees authorized appointment of an Advisory Committee on Industrial Ophthalmology by the Council on Industrial Health. The Academy decided not to proceed with an independent group on industrial ophthalmology.

#### STANDARDIZATION OF TONOMETERS (consolidated, 1977, into Committee on Ophthalmic Instruments and Devices), 1942 to date

(Chairmen: Jonas S. Friedenwald, 1942–1952, Peter C. Kronfeld, 1953–1958, Elmer J. Ballintine, 1959 to date)

With more than 35 years of accumulated activity, the Committee on Standardization of Tonometers is one of the longest running and most productive committees. It was first suggested by Harry S. Gradle, who had designed an indentation tonometer in use at the time, and Jonas S. Friedenwald whose calibration studies are familiar to all ophthalmologists.

Before the Academy began investigating tonometer standards, a tonometer testing station had been set up in New York by the National Society for the Prevention of Blindness. Testing revealed that many instruments alleged to be Schiøtz tonometers differed so radically from the original specifications of Schiøtz that their use in connection with the Schiøtz scale led to errors of as much as 30% to 40%. The Academy Committee outlined two initial requirements that would remain major features of the Committee's work. The first was testing facilities for tonometers in use by physicians. The second was formulation of design specifications for manufacturers based on the physical characteristics of the tonometer that affect its performance. The goal was and is that different tonometers give reliable and comparable results.

The Committee soon took over responsibility for the New York testing station and arranged for two additional stations located strategically in the Midwest and West. These stations tested tonometers for physicians, suggested repairs, and furnished correction factors whenever possible. Peter C. Kronfeld, director of the Chicago testing station, did much of the work in calculating correction factors for common abnormalities found in tonometers. In 1959, the testing stations were consolidated into one at Western Reserve University in Cleveland, supported partially by the Academy, and in 1973, the station moved, along with its director, Elmer J. Ballintine, to Bethesda, Md.

The first design specifications for Schiøtz tonometers were written and adopted by the Committee in 1944. Arrangements were made for a commercial testing laboratory to test instruments submitted by manufacturers and to certify, in the name of the Academy, those that conformed to the specifications. Later, the Committee worked on specifications for other indentation tonometers and for applanation tonometers. The Committee continues to aid manufacturers in development of new tonometers that meet the standards for certification.

Specifications for characteristics that influence the performance of tonometers and methods of testing for compliance with these specifications are subjects for continuing Committee investigation. The Committee works with foreign and international agencies in establishing compatible specifications for tonometers.

Another ongoing work is the development of correct calibration tables for conversion of tonometer readings to millimeters of mercury. Jonas Friedenwald undertook calibration studies supported by the Academy in 1944. His 1954 scale, based on his own studies and those of W. Morton Grant, was adopted by the Committee, and his revised 1955 scale is the one still in use. Dr Friedenwald's work prompted a number of investigators to engage in calibration studies.

#### WHERRY MEMORIAL COMMITTEE,<sup>†</sup> 1942–1944

(Chairman: Harry S. Gradle)

See chapter 14, "William P. Wherry."

#### MICHIGAN PLAN FOR POSTWAR GRADUATE INSTRUCTION IN MEDICAL SPECIALTIES,<sup>†</sup> 1944–1945

(Chairman: A. C. Furstenberg)

No activity was reported from the Committee to consider Academy sponsorship of a plan for graduate study to be provided for doctors in military service.

#### STUDY OF IMMEDIATE POSTWAR EDUCATION OF OPHTHALMOLOGISTS DISCHARGED FROM THE SERVICE,<sup>†</sup> 1944–1945

(Chairman: Harry S. Gradle)

#### STUDY OF IMMEDIATE POSTWAR EDUCATION OF OTOLARYNGOLOGISTS DISCHARGED FROM THE SERVICE,<sup>†</sup> 1944–1945

(Chairman: Dean M. Lierle)

Desire to meet the educational needs of specialists returning from the war prompted appointment of committees to study what the Academy might do. The ophthalmology Committee made no suggestions, and Dean M. Lierle reported that the Academy should not interfere with functions of teaching institutions but might expand the instructional program. In fact, instruction courses began running a full day in 1946, and registrations for the Home Study Courses greatly increased.

#### UNDERGRADUATE INSTRUCTION IN OPHTHALMOLOGY,<sup>†</sup> 1946–1947

(Chairman: Lawrence T. Post)

#### UNDERGRADUATE INSTRUCTION IN OTOLARYNGOLOGY,<sup>†</sup> 1946–1948

(Chairman: James H. Maxwell)

Neglect of ophthalmology and otolaryngology in the medical school curriculum was a cause for concern (see chapter 25, “Concerns During the Fifties”).

#### PAN-AMERICAN RELATIONS IN OTOLARYNGOLOGY,<sup>†</sup> 1947–1958

(Chairman: Chevalier L. Jackson)

Through the Committee on Pan-American Relations, the Academy acted as the scientific sponsor of fellowships in otolaryngology financed by the W. K. Kellogg Foundation of Battle Creek, Mich. The fellowships provided for Latin American graduate students in otolaryngology to come to the United States for study, and the intent was to ensure that each faculty of medicine in the more than 50 Latin American medical schools included at least one trained otolaryngologist.

The Kellogg Foundation had originally become interested in such a venture through the Pan-American Congress of Ophthalmology, which established as one of its aims the exchange of graduate students between the Americas. Informal discussion of this aim with Kellogg Foundation President Dr George Darling led to the Foundation’s decision to finance fellowships in ophthalmology in 1942. Parallel fellowships in otolaryngology were sought and obtained after creation of the Pan-American Congress of Oto-Rhino-Laryngology and Broncho-Esophagology.

The Academy Committee also promoted goodwill and the activities of the Pan-American Congress and planned a few functions for Academy meetings in conjunction with a similar ophthalmology Committee established in 1952.

#### INVESTIGATION OF PROPHYLAXIS AGAINST OPHTHALMIA NEONATORUM,<sup>†</sup> 1948

(Chairman: Alan C. Woods)

Under the scare title, “Can Present Laws Blind Your Baby?” an article in *Woman’s Home Companion* (April 1948) depicted in sensational fashion complications (primarily chemical conjunctivitis) from the use of silver nitrate as a prophylactic for ophthalmia neonatorum and recommended that penicillin or some sulfone treatment be substituted. The Academy Committee investigated the current state of research and knowledge on the subject and concluded that much further investigation was warranted before any recommendations could be made regarding replacement of silver nitrate with antibiotic prophylaxis. Their report was published in the July-August 1948 *TRANSACTIONS*. Also see Committee on Prevention of Blindness (p 262).

#### HELMHOLTZ CENTENARY,<sup>†</sup> 1948–1950

(Chairman: F. Bruce Fralick)

The Committee provided suggestions to the American Ophthalmological Society for the 100th anniversary celebration of Helmholtz’s invention of the ophthalmoscope.

#### AUDIO-VISUAL INSTRUCTION (renamed AUDIO-VISUAL EDUCATION), 1948–1965

(Chairman: Dean M. Lierle)

The Committee assisted with two Academy-sponsored films, “Embryology of the Eye” and “Embryology of the Ear” (see chapter 23, “Teaching Aids”). Although it was suggested more than once that the Committee review medical films and approve or disapprove them, it never served in a reviewing capacity.

#### ARMED FORCES, 1950-1956

(Chairmen: James N. Greear, 1950-1951, M. Elliott Randolph, 1952-1956)

The Armed Forces Committee was instructed to formulate policy regarding exemptions from military service for medical students, interns, and residents in their final years of training and to assist the armed services. No Committee opinions on exemptions were reported, but the Committee did procure a list of qualified specialists at the suggestion of the surgeon general of the army.

#### NONSURGICAL TREATMENT OF CATARACT,<sup>†</sup> 1952-1953

(Alan C. Woods, Academy; David G. Cogan, Association for Research in Vision and Ophthalmology)

*Science* magazine (Sept 12, 1952) carried an article, "The Nonsurgical Treatment of Cataract," by R. F. Shropshire, Jacob R. Ginsberg, and Mendel Jacobi. A joint committee was appointed to investigate the validity of claims made in the article.

No report was published from the Committee. However, the Committee on Ophthalmology of the National Research Council reviewed the claims of Shropshire and associates, found a complete lack of evidence that the lens antigen treatment described had any efficacy, and recommended no further investigation of this treatment by any agency.

#### PAN-AMERICAN RELATIONS IN OPHTHALMOLOGY,<sup>†</sup> 1952-1958

(Chairman: Conrad Berens)

The Committee helped publicize activities of the Pan-American Association of Ophthalmology. It did suggest a Spanish or Portuguese rendition of a few instruction courses dealing with glaucoma and motility, but the Council did not approve.

#### PLASTIC SURGERY (renamed PLASTIC AND RECONSTRUCTIVE SURGERY and RECONSTRUCTIVE PLASTIC SURGERY), 1952 to date

(Ophthalmology cochairmen: Wendell L. Hughes, 1952-1968, Alston Callahan, 1969 to date)

(Otolaryngology cochairmen: John Marquis Converse, 1952-1963, Oscar Becker, 1964, John T. Dickinson, 1965 to date)

The plastic surgery committee has encouraged development of, interest in, and education for, the plastic surgery aspect of each specialty. Education of Academy members, through the scientific sessions, instruction courses, special scientific programs, Home Study Courses, and now continuing education programs, has been one part of the Committee's effort. Another part has been directed outward toward ensuring adequate residency training in plastic surgery procedures and recognition by the medical community of plastic work related to each specialty.

Two manuals have been published by the ophthalmology division of the Committee, *Ophthalmic Plastic Surgery* (Wendell L. Hughes and co-workers) in 1961 and *Ophthalmic Plastic Surgery* (Bernd Silver and co-workers) in 1977. A new society, the American Society of Ophthalmic Plastic and Reconstructive Surgery formed in 1970, was originated by instructors in the Academy's ophthalmic plastic surgery courses.

The otolaryngology division has compiled materials for a manual on facial plastic and reconstructive surgery. In 1974, the division expanded its scope with addition of a Facial Nerve Study Group, which is now planning workshops throughout the country.

#### IMPLANTS AND IMPLANT TECHNIQUES (renamed PROSTHETIC DEVICES; consolidated, 1977, into Committee on Ophthalmic Instruments and Devices), 1956 to date

(Chairmen: Albert D. Ruedemann, Sr, 1956-1971, Albert D. Ruedemann, Jr, 1972 to date)

Evaluation of ocular implants and prostheses of all types has been the primary function of the Committee. It is now known as the Subcommittee on Ophthalmic Materials and Devices.

#### EVALUATION OF NONSURGICAL TREATMENT OF STRABISMUS, 1957-1959

(Chairman: Daniel Snyder)

A three-year research project for critical evaluation of nonsurgical treatment of patients with neuromuscular anomalies was designed by the Committee at the request of the American Orthoptic Council. Seeking grant support, the

Committee met with a representative of the National Institutes of Health. A design for an experiment was outlined which the Committee believed would be impossible to execute, and hence the project was abandoned.

#### SURGERY OF THE HEAD AND NECK, 1957–1959 and 1960 to date

(Chairmen: LeRoy A. Schall, 1957–1959, George A. Sisson, 1960 to date)

The offspring of the first Committee was the American Society of Head and Neck Surgery. A second Academy Committee was established a year later to assure adequate coverage of head and neck surgery in Academy educational programs. The Committee sponsors instruction courses, special programs, and portions of the scientific sessions. Case reports presented in the Committee programs have been published as manuals and now appear in OTOLARYNGOLOGY–HEAD AND NECK SURGERY (formerly TRANSACTIONS).

#### USE OF DIAGNOSTIC PROCEDURES AND THERAPY IN UVEITIS,<sup>†</sup> 1957–1960

(Chairman: Albert D. Ruedemann, Sr)

Under a grant from the National Institute of Neurological Diseases and Blindness (effective April 1957 through March 1962), the Academy conducted a national research project on uveitis. The Committee provided initial technical supervision and administrative help to the field investigation. However, most of the organizational and administrative work was done by William Benedict in the Headquarters Office.

#### USE OF ALPHA-CHYMOTRYPSIN IN OPHTHALMOLOGY,<sup>†</sup> 1958–1959

(Chairman: Derrick T. Vail, Jr)

After Joaquin Barraquer's chance discovery of alpha-chymotrypsin as an effective zonulolytic agent in 1957, the enzyme quickly became widely used in cataract surgery. Naturally, many questions on the effects and results of using alpha-chymotrypsin remained to be answered, and the Academy Committee undertook a year's study to answer some of these questions.

Various Committee members reviewed the biochemistry and pharmacology of alpha-chymotrypsin, studied the effect of the enzyme on various ocular structures, addressed the question of whether use of the enzyme facilitated lens extraction, and conducted a national survey to gather data on alpha-chymotrypsin as an aid to cataract extraction and its association with operative and postoperative complications.

Although a year's time was not sufficient for the Committee to arrive at definitive answers to all questions, they generally found alpha-chymotrypsin to be a safe and effective aid to lens extraction. With a few exceptions, the operative and immediate postoperative complications occurring with use of the enzyme did not differ appreciably in type or incidence from those encountered with any cataract surgery.

On the basis of information obtained and analyzed, the Committee made some recommendations on the technique for use of alpha-chymotrypsin in lens extraction and listed types of cases in which the enzyme should not be used. Their report was published in the January-February 1960 TRANSACTIONS.

#### RESEARCH IN OTOLARYNGOLOGY, 1958 to date

(Chairmen: Harold F. Schuknecht, 1958–1960, G. O'Neil Proud, 1961–1962, Juergen Tonndorf, 1963–1964, Aram Glorig, 1965–1966, Richard J. Bellucci, 1967–1968, Joseph H. Ogura, 1969–1970, Ralph F. Naunton, 1971–1972, Paul H. Ward, 1973–1974, Robert I. Kohut, 1975–1976, Richard L. Goode, 1977, F. Owen Black, 1978)

Yearly awards for the best papers submitted by young investigators (not more than five years beyond the start of residency training) describing their research and a yearly meeting at which young investigators can present their work are planned by the Research Committee. The idea had its origins in a Subcommittee on Research of the Conservation of Hearing Committee, and the intent was and is to encourage interest in research among men entering the specialty. Monetary awards were made for the best papers in a clinical science and a basic science category from 1959 through 1971. Merit awards are now given in the same categories.

Both new and established investigators participate in the Committee's annual program, which in recent years has been divided, with basic research presented in the Committee's Research Forum and clinical research in the scientific sessions. Papers from both are published in OTOLARYNGOLOGY–HEAD AND NECK SURGERY (formerly TRANSACTIONS).

The Committee encouraged formation of the Association for Research in Otolaryngology, which now co-sponsors the Research Forum. Organized in 1975 with Academy help and sponsorship, the association provides an affiliation for all investigators in the field, including those ineligible for Academy membership.

#### EYE BANKS, 1960 to date

(Chairmen: R. Townley Paton, 1960–1975, Richard C. Troutman, 1976 to date)

The Academy Committee was instrumental in formation in 1961 of the Eye Bank Association of America (EBAA), which provides a central affiliation for the now more than 60 member eye banks. Since that time, the Committee has served in a liaison-advisory capacity to the EBAA. More recently, the Committee has turned its attention to development of educational programs devoted to improved methods of eye banking.

#### LARYNGEAL AND VOICE PHYSIOLOGY, 1961 to date

(Chairman: David W. Brewer)

Primary assignment of the Committee has been to stimulate education and research in the field of laryngeal and voice physiology. Part of the goal is to build an effective working relationship between otolaryngologists and speech and voice therapists. Committee members plan and participate in educational activities of the Academy and of other organizations, including New York's Juilliard School of Music. They also work with other institutions in generating interest in research and reviewing proposed research projects.

#### STUDY CURRENT NEEDS AND MODERN TRENDS IN OTOLARYNGOLOGY,<sup>†</sup> 1962–1963

See chapter 31, "Chafing at the Bonds."

#### DRUGS, 1963 to date

(Ophthalmology cochairmen: Irving H. Leopold, 1963–1974, Robert P. Burns, 1975 to date)

(Otolaryngology cochairmen: Harry P. Schenck, 1963–1967, Joseph L. Goldman, 1968–1971, Maurice Schiff, 1972–1973, David A. Dolowitz, 1974–1975, George A. Gates, 1975 to date)

The Committee on Drugs, with a section for each specialty, keeps the membership informed on new developments in pharmacology relevant to the specialties and answers inquiries from members on problems encountered with the use of drugs in ophthalmology and otolaryngology. Both sections have served as liaison with, and assisted when asked, the Food and Drug Administration, National Research Council, National Institutes of Health, pharmaceutical firms, and other medical disciplines.

The ophthalmology division often has been swamped with questions regarding the systemic side-effects of ophthalmic medications and the effect of systemic drugs on the eye. For years, the Committee has presented an annual symposium at the Academy meeting in conjunction with the Association for Research in Vision and Ophthalmology. The proceedings were published in book form, *Symposium on Ocular Therapy* (volumes 1 through 11) until 1978 and are now carried in the journal *OPHTHALMOLOGY* (formerly *TRANSACTIONS*). Drug information articles were also published in the *PERCEIVER*, and currently the Committee is working closely with the National Registry of Drug-Induced Ocular Side-Effects under direction of Frederick T. Fraunfelder at the University of Oregon Health Sciences Center, Portland.

The otolaryngology division sponsors scientific programs and instruction courses at the Academy meeting, published drug information in the *PERCEIVER*, and now in *OTOLARYNGOLOGY—HEAD AND NECK SURGERY*, and is currently conducting a survey of members regarding use of specific drugs in otolaryngology.

#### REVIEW RECOMMENDATIONS OF FORMER AD HOC COMMITTEE STUDYING CURRENT NEEDS AND MODERN TRENDS IN OTOLARYNGOLOGY,<sup>†</sup> 1964

(Chairman: Walter P. Work)

See chapter 31, "Chafing at the Bonds."

#### DEVELOPMENT OF THE ACADEMY, 1964–1969

(Chairmen: Lawrence R. Boies and A. Edward Maumenee, 1964–1967, A. Edward Maumenee, 1968–1969)

The Committee advised the Council on Academy organization and programs. See chapter 31, "Chafing at the Bonds."

#### STANDARDIZATION OF NOMENCLATURE IN RHINOMETRY, 1967–1969

(Chairman: Henry L. Williams)

An Academy manual, *Definition of Terms Used in Rhinomanometry*, was prepared by the Committee. Its purpose was to provide a standard definition of terms and meaning for symbols that would facilitate communication among those working in the field.

#### INSURANCE (permanent committee), 1967 to date

(Chairmen: Kenneth L. Roper, 1967–1973, Stanley M. Truhlsen, 1974 to date)

In 1952, the first group insurance program, one providing accident-sickness disability income protection, was initiated as a service to members and at no cost to the Academy. Since that time, other group insurance plans have been added until there are now 15 types of insurance protection offered for members as well as plans for which Academy employees are eligible. The Insurance Committee monitors the Academy's insurance programs for members and employees and works with the insurance administrator in supervising and reviewing programs. In the future, the separate Academies will handle their own insurance programs.

#### CURRICULUM FOR OPHTHALMOLOGY,<sup>†</sup> 1969

(Chairman: John W. Henderson [Ann Arbor, Mich])

See chapter 26, "Expanding the Formula: Programs for Practitioners."

#### CONSTITUTION AND BYLAWS (permanent committee), 1969–1977

(Chairmen: Jerome A. Hilger, 1970, A. Edward Maumenee, 1971, Howard P. House, 1972, Kenneth L. Roper, 1973, John J. Conley, 1974, Frank W. Newell, 1975, John F. Daly, 1976, Bradley R. Straatsma, 1977)

Originally appointed to make nominal revisions in the Constitution and Bylaws that would fit current Academy activities, the Committee played an important part in determining the permissible limits of the Constitution and the available options after division became an issue.

#### MEDICAL AUDIOLOGY STUDY COMMITTEE,<sup>†</sup> 1970–

(Chairman: Frederick R. Guilford, 1970–1971)

Whether or not the patient care component of audiology should be included in Academy activities was the question put to the Committee for investigation. Dr Guilford died, and no report was made.

#### PROCEDURAL AND DIAGNOSTIC TERMINOLOGY, 1970 to date

(Chairmen: Bruce E. Spivey, 1970 to date, Guy E. McFarland [separate otolaryngology committee], 1977 to date)

To effect utilization, nationally and internationally, of a uniform terminology in ophthalmology and otolaryngology has been the goal of the Committee. To this end, the Committee developed and the Academy published two volumes of procedural terminology in 1975 (*Ophthalmologic Services—Terminology for Reporting, Indexing, Retrieval of Services and Procedures in Ophthalmology* and *Otolaryngology Services—Terminology for Reporting, Indexing, Retrieval of Services and Procedures in Otolaryngology*). This material formed the basis for the ophthalmology and otolaryngology sections of the third (1973) and fourth (1977) editions of the AMA's *Current Procedural Terminology* (CPT). It was also supplied to and accepted by the California Relative Value Study (CRVS).

The Committee went on to develop a diagnostic classification of disorders of the eye and a diagnostic classification for otolaryngology. These were used for the ninth (1978) edition of the World Health Organization's *International Classification of Diseases* (ICD). Committee input into development of the American modification of ICD (called ICD-9-CM [clinical modification]) resulted in a diagnostic coding system which, although different from CPT/CRVS procedural coding, is entirely compatible and translatable. Because of the Committee's work, ophthalmology and otolaryngology are the only two specialties able to take full advantage of the five-digit coding offered in ICD-9-CM (three-digit codes for gross statistics, four digits for hospital indexing, and five digits for use in subspecialty areas).

The ophthalmology classification is part of a larger work, *Nomenclature of Ophthalmology*, which will be published by the Academy. The nomenclature includes classification levels for statistics, for hospital indexing, and for specialist use, in addition to short definitions of all terms, equivalent terms in other languages, and search terms for literature retrieval. August Colenbrander was in charge of the nomenclature project conducted in cooperation with the International Council of Ophthalmology and supported in part by a grant from the National Library of Medicine and in part by the Academy.

The separate terminology committees for ophthalmology and otolaryngology will continue to assist in developing and updating medical terminology and coding systems. A new extension for the ophthalmology committee (now named Terminology and Medical Audit) is the development and dissemination of information and guidelines on quality care audits for various ophthalmic procedures.

PHACOEMULSIFICATION SURVEY,<sup>†</sup> 1972–1975  
(Chairman: Richard C. Troutman)

After the new technique of phacoemulsification was widely reported in the lay press, ophthalmologists became concerned with patient inquiries about, and enthusiasm for, a technique that had not been proved by scientific method to be as safe or effective as established procedures. The phacoemulsification committee conducted a large survey aimed at determining the safety and efficacy of the technique as compared with the standard intracapsular procedure. Postoperative visual acuity one year following cataract surgery was the parameter for measuring effectiveness, and data were adjusted for population groups. Results showed the technique of phacoemulsification to be no more and no less effective than intracapsular extraction in restoring vision. Patient age, sex, and general health proved to have more effect on the surgical result than did the technique used.

The Committee's report was published in the January-February 1975 issue of the TRANSACTIONS.

RESTRUCTURING OF THE ACADEMY,<sup>†</sup> 1973–1974  
(Cochairmen: A. Edward Maumenee and Howard P. House)  
RESTRUCTURING OF THE ACADEMY: OPHTHALMOLOGY,<sup>†</sup> 1975  
(Chairman: Frank W. Newell)  
RESTRUCTURING OF THE ACADEMY: OTOLARYNGOLOGY, 1975  
(Chairman: John F. Daly)  
INCORPORATION,<sup>†</sup> 1977  
(Cochairmen: Bradley R. Straatsma and Eugene L. Derlacki)

See chapter 32, "Which is Better—One or Two?"

With activation of the divisions, Jan 1, 1976, control of committees in each specialty was vested in the Executive Committee for the division. During the next two years, both divisions created new committees, often ones concerned with present and future development of the division. The ophthalmologists consolidated existing standing committees into a revised committee structure. The following list depicts new committees for each division during 1977 and 1978, the last years of a united Academy.

## DIVISION OF OPHTHALMOLOGY

BUDGET AND FINANCE  
(Chairmen: Bradley R. Straatsma, 1977, Frederick C. Blodi, 1978)

PROGRAM ADVISORY  
(Chairmen: Frederick C. Blodi, 1977, Robert D. Reinecke, 1978)

INSTRUCTION ADVISORY  
(Chairmen: David Shoch, 1977, Melvin L. Rubin, 1978)

CONTINUING EDUCATION  
(Chairmen: Bruce E. Spivey, 1977, David Paton, 1978)

The former advisory committees to the secretaries were made standing committees of the Division of Ophthalmology.

EDITORIAL  
(Chairman: Stanley M. Truhlsen)

ORGANIZATION AND RULES  
(Chairmen: Bradley R. Straatsma, 1977, Frederick C. Blodi, 1978)

## OPHTHALMOLOGICAL SERVICES

(Chairman: Robert D. Reinecke)

Projecting present and future manpower requirements in the field of ophthalmology is the Committee's task. A planned four-part study is being carried out in conjunction with the American Association of Ophthalmology and the Association of University Professors in Ophthalmology.

Part I, released in 1978 (October 1978 issue of OPTHALMOLOGY), estimated manpower needs to the year 2000 and recommended that the current number of first-year residency positions be maintained but not increased. The projections, acknowledged to be on the conservative side, were based on a survey of the current incidence and prevalence of eye disease in the population of the United States and the number of ophthalmologist man-hours required to provide complete eye care. The Committee is continuing to study the many variables that can influence and change the amount of care required in the population and the amount of care delivered per ophthalmologist.

Future sections of the report will include a survey of ophthalmologists' opinions on manpower demands, a survey of consumer demands for eye care, and recommendations for the best visual care system for the people of the United States.

## PUBLIC AND PROFESSIONAL EDUCATION

(Chairman: John W. Henderson [Ann Arbor, Mich])

The Committee has delineated three directions of activity through subcommittees on Annual Meeting Public Information (Alice R. McPherson, chairman), Professional Education (Paul R. Lichter, chairman), and Public Education (Byron H. Demorest, chairman). See chapter 19, "Building Rapport."

## OPHTHALMIC INSTRUMENTS AND DEVICES

(Chairman: Arthur H. Keeney)

Consideration of instruments and devices used in the field of ophthalmology and their standardization is the function of the Committee, which works closely with the American National Standards Institute. Seven subcommittees express the Committee's current areas of interest: Ophthalmic Contact Lenses (Oliver H. Dabiezies, chairman), Ophthalmic Intraocular Lenses (Norman S. Jaffe, chairman), Ophthalmic Instruments (Richard C. Troutman, chairman), Ophthalmic Materials and Devices, which was formerly the standing committee on Prosthetic Devices (A. D. Ruedemann, Jr, chairman), Relations With the American National Standards Institute (Joseph F. Novak, chairman), Standards for Ophthalmic Instruments and Devices (G. Peter Halberg, chairman), and Tonometer Standards, also a former standing committee (Elmer J. Ballintine, chairman).

## ACTIVITIES

(Chairman: Whitney G. Sampson)

The Activities Committee serves as the parent body to many individual committees concerned with a limited aspect of the specialty. The former standing committees on Drugs, Eye Banks, Ophthalmic Pathology, Terminology and Medical Audit, and Reconstructive Ophthalmic Plastic Surgery were incorporated as subcommittees. A further Subcommittee on Low Vision was added in 1978, and more undoubtedly will be appended as the need arises.

## GOALS AND PRIORITIES

(Chairman: Frederick C. Blodi)

To determine future objectives for the American Academy of Ophthalmology is the charge of the Committee. The Committee is assessing membership opinion in deciding what new activities to pursue in addition to the services already provided.

## DIVISION OF OTOLARYNGOLOGY

### ACTIVITIES AND FINANCE (1977 only)

### RULES AND REGULATIONS

(Chairman: Eugene L. Derlacki)

## LONG-RANGE PLANNING AND DEVELOPMENT

(Chairman: Eugene L. Derlacki)

## RESOLUTIONS (1977 and 1978 only)

(Chairman: Eugene L. Derlacki)

## ALLERGY AND IMMUNOLOGY

(Chairman: Jack D. Clemis)

The Committee is charged to study, create, assemble, and coordinate knowledge concerning allergy and immunology relative to the specialty. Education on the subject is being planned for Academy members and other professionals, and the Committee provides consultation and assistance to both individuals and groups.

## PUBLIC AND PROFESSIONAL INFORMATION

(Chairman: William M. Crutcher)

See chapter 19, "Building Rapport."

## PLANNING COMMITTEE FOR PLANNING AND ORGANIZING A COORDINATING BODY OF NATIONAL OTORHINOLARYNGOLOGICAL SOCIETIES†

(Chairman: George F. Reed)

See chapter 34, "Resolution and Expectation."

## AUDIOMETRIC TRAINING IN INDUSTRY†

(Chairman: D. Thane R. Cody)

The Committee is investigating, in conjunction with the Committee on Hearing and Equilibrium, possible development of training courses for industrial health personnel.

The otolaryngologists retain their standing committees on Drugs, Hearing and Equilibrium, Laryngeal and Voice Physiology, Otolaryngic Pathology, Plastic and Reconstructive Surgery, Research in Otolaryngology, Surgery of the Head and Neck, Teachers' Section in Otolaryngology, and Terminology. Additionally, the Standing Rules for the American Academy of Otolaryngology, Inc, effective in 1979, established a permanent Editorial Committee (Mansfield F. W. Smith, chairman) and a permanent Insurance Committee (Manuel A. Schofman, chairman).

## Appendix 3

# Ophthalmology Monographs, Manuals, and Atlases

TITLE	AUTHORS	FIRST EDITION
<i>Atlas of Ophthalmic Pathology</i>	Elbert DeCoursey, James E. Ash	1938
<i>Anatomy of the Orbit</i>	Rollo E. McCotter, F. Bruce Fralick (3rd ed, 1949, with John W. Henderson)	1938
<i>Essentials of Slit-Lamp Microscopy</i>	Everett Goar	1941
<i>Exhaustive Study of Compensated Glaucoma</i>	Harry S. Gradle, et al	1941
<i>Finer Uses of the Cross-Cylinder in Refraction</i>	Philip A. Halper	1941
<i>Anomalies of the Extraocular Muscles</i>	James White, Rudolph Aebli, Wendell L. Hughes, John H. Dunnington	1942
<i>Refraction</i>	Avery de H. Prangen, et al	1942
<i>Ophthalmology in Aviation</i>	Brittain F. Payne, et al	c 1944
<i>Slit-Lamp Microscopy</i>	Robert J. Masters, Harvey E. Thorpe, Peter C. Kronfeld	c 1944
<i>The Glaucomas</i>	Harry S. Gradle	c 1944
<i>The Extrinsic Eye Muscles</i>	H. Saul Sugar	1945
<i>Cataract Types</i>	Frederick C. Cordes	1946
<i>The Interpretation of Visual Fields</i>	C. Wilbur Rucker (4th ed, 1979, by Thomas J. Walsh, et al)	1946
<i>Slit Lamp Biomicroscopy</i>	Everett L. Goar, Robert J. Masters, Harvey E. Thorpe, Peter C. Kronfeld	1948
<i>Endogenous Uveitis</i>	Alan C. Woods	1949
<i>Outline of Neuro-Ophthalmology</i>	P. J. Leinfelder	1950
<i>Ocular Surgery</i>	Conrad Berens, Michael Loutfallah	1950
<i>Refraction Difficulties</i>	Clarence A. Veasey, Jr	1950
<i>Disturbances of Ocular Motility</i>	Richard G. Scobee	1951
<i>Ophthalmic Pathology: An Atlas and Textbook</i>	Jonas S. Friedenwald, Helenor C. Wilder, A. Edward Maumenee, et al	1952
<i>Refraction</i>	Daniel Snyderacker, Frank W. Newell	1952
<i>Glaucoma</i>	Samuel J. Meyer	1953

TITLE	AUTHORS	FIRST EDITION
<i>Retinal Detachment</i>	Hermenegildo Arruga, et al (2nd ed, 1965, by Dohrmann K. Pischel, et al)	1953
<i>Strabismus: A Symposium</i>	Kenneth C. Swan, et al	1953
<i>Ocular Surgery</i>	Conrad Berens, John Harry King, Jr	1956
<i>Microbiology of the Eye</i>	Ted Suie	1958
<i>Sensorimotor Anomalies of the Extrinsic Ocular Muscles</i> (2nd ed, 1966, entitled <i>Anomalies of Binocular Position, Visual Perception and Ocular Motility in Strabismus</i> ; 3rd ed, 1971, entitled <i>Strabismus and Associated Sensorimotor Anomalies</i> )	Glen G. Gibson, Robison D. Harley	1961
<i>Allergy of the Eye</i>	Frederick H. Theodore	1961
<i>The Cataract Operation: A Study of Details</i>	Kenneth L. Roper	1961
<i>Ophthalmic Plastic Surgery</i>	Wendell L. Hughes, et al (3rd ed, 1977, by Bernd Silver, et al)	1961
<i>American Orthoptic Council: Syllabus of Orthoptic Instruction</i>	Hermann M. Burian, editor	1962
<i>The Lacrimal System in Clinical Practice</i>	Everett R. Veirs	1963
<i>Development of the Eye</i>	A. A. Pearson, et al	1965
<i>An Introduction to Visual Optics</i>	Richard K. Parrish	1967
<i>Basics of Contact Lenses</i>	Jack Hartstein	1968
<i>Refraction Problems</i>	Gerald E. Fonda	1969
<i>Ophthalmic Anatomy: A Manual With Some Clinical Applications</i>	Lester T. Jones, Merrill J. Reeh, Jonathan D. Wirtschafter	1970
<i>Understanding Magnification in Ophthalmology</i>	Louis S. Jagerman	1970
<i>Glossary of Chromosomal and Genetic Terms</i>	Jack P. Cowen	1970
<i>Guidelines for Screening—Ophthalmology</i>	Harold F. Falls, chairman	1974
<i>The Electroretinogram and Electro-Oculogram in Retinal and Choroidal Disease</i>	Gerald Allen Fishman	1975
<i>Ophthalmologic Services—Terminology for Reporting, Indexing, Retrieval of Services and Procedures in Ophthalmology</i>	Bruce E. Spivey, chairman	1975
<i>Companion Source Manual</i> (Basic and Clinical Science Course), vol 1	Bradley R. Straatsma, chairman	1975
<i>Companion Source Manual</i> (Basic and Clinical Science Course), vol 2	Bruce E. Spivey, chairman	1976
<i>Fluorescein Angiography</i>	Joseph W. Berkow, James S. Kelley, David H. Orth	1977

## Appendix 4

# Otolaryngology Monographs, Manuals, and Atlases

TITLE	AUTHORS	FIRST EDITION
<i>Atlas of Otolaryngic Pathology</i>	Elbert DeCoursey, James E. Ash	1938
<i>Embryology, Physiology and Histology of the Ear, Nose and Throat</i>	A. H. Andrews, Jr, W. J. McNally, I. Jerome Hauser, Frank J. Novak	1938
<i>The Mastoid With Its Radical Modification</i>	Abbott T. Hutchinson	1938
<i>Nonsurgical Complications of Otolaryngological Surgery</i>	Joel J. Pressman (2nd ed, 1948, with Mario J. Acquarelli, Norman K. Carter; 3rd ed, 1957, with Acquarelli, Richard B. Aronsohn)	1941
<i>Embryology of the Ear, Nose and Throat; Histology of the Ear, Nose and Throat</i>	O. E. Van Alyea, Werner Mueller	c 1944
<i>Physiology of the Ear, Nose and Throat</i>	W. J. McNally, A. H. Andrews	c 1944
<i>Manual for Program Outline for the Rehabilitation of Aural Casualties Both Military and Civilian</i>	Walter Hughson, Harold Westlake	1944
<i>Syllabus of Audiometric Procedures in the Administration of a Program for the Conservation of Hearing of School Children</i> (2nd ed, 1952, entitled <i>A Manual for School Hearing Conservation Programs</i> )	Horace Newhart, Scott N. Reger, editors	1945
<i>Meniere's Disease</i>	John R. Lindsay	1947
<i>The Embryology of the Ear, Nose, and Throat</i>	O. E. Van Alyea	1949
<i>Hearing Tests</i>	Arthur L. Juers	1950
<i>Radiographic Anatomy of the Temporal Bone</i>	J. Brown Farrior	1951
<i>Helpful Hints for Handling the Hearing Handicapped</i>	Gordon D. Hoople, et al	1952
<i>Principles of Otolaryngologic Plastic Surgery</i>	Oscar J. Becker	1952
<i>Examination of the Labyrinth in Relation to Its Physiology and Nonsuppurative Diseases</i> (2nd ed, 1967, entitled <i>Physiology of the Labyrinth</i> )	W. J. McNally, E. A. Stuart	1953
<i>Physiology of the Larynx</i>	Joel J. Pressman, George Kelemen (revised, 1970, by John A. Kirchner)	1955
<i>An Atlas of Otolaryngic Pathology</i>	James E. Ash, Muriel Raum	1956
<i>Guide for Conservation of Hearing in Noise</i>	Aram Glorig, et al (revised, 1973, by Francis I. Catlin, et al)	1957

TITLE	AUTHORS	FIRST EDITION
<i>Embryology of the Head and Neck in Relation to the Practice of Otolaryngology</i>	Jack R. Davies	1957
<i>The 1954 Wisconsin Fair Hearing Survey: Statistical Treatment of Clinical and Audiometric Data</i>		1957
<i>Suggestions to the Parents of a Deaf Child</i>	Jacqueline Keaster, Gloria Hoversten	1958
<i>Vocal Rehabilitation</i>	Friedrich S. Brodnitz	1959
<i>Allergy in Otolaryngology</i>	French K. Hansel, Jack R. Anderson (2nd ed, 1968, and 3rd ed, 1975, entitled <i>Allergy and Immunity in Otolaryngology</i> )	1959
<i>A Guide to the Care of Adults With Hearing Loss</i>	Lawrence R. Boies, et al	1960
<i>Suggestions to the Parents of Children With Hearing Impairment</i>	Jacqueline Keaster, Gloria Hoversten	1960
<i>Malformations and Anatomical Variations Seen in the Middle Ear During Operations on the Stapes</i>	Jack Van Doren Hough	1961
<i>Cochlear Anatomy in 3-D (atlas)</i>	Juergen Tonndorf, et al	1964
<i>Radiographic Atlas of the Temporal Bone</i>	Wesley E. Compere, Galdino E. Valvassori	1964
<i>Suggestions to the Parents of Pre-School Children With Hearing Impairment</i>	Jacqueline Keaster, Gloria Hoversten	1964
<i>Development of the Ear</i>	A. A. Pearson, et al	1967
<i>Atlas: Tympanoplasty in 3-D, vol 1 and 2</i>	J. Brown Farrior	1968
<i>Histology of the Temporal Bone</i>	John C. Gallagher	1968
<i>Radiographic Anatomy of the Paranasal Sinuses</i>	Robert A. Merrell, Jr, Eiji Yanagisawa, Howard W. Smith, Seth Thaler	1969
<i>Definition of Terms Used in Rhinomanometry With Suggested Standard Symbols</i>	Henry L. Williams	1970
<i>Transactions of the 1968 Meeting of the AAOO Committee on Surgery of the Head and Neck: 21 Case Reports</i>		1970
<i>Transactions of the 1969 Meeting of the American Academy of Ophthalmology and Otolaryngology Committee on Surgery of the Head and Neck: 18 Case Reports</i>		1971
<i>Transactions of the 1970 Meeting of the American Academy of Ophthalmology and Otolaryngology Committee on Surgery of the Head and Neck: 15 Case Reports</i>		1971
<i>1970 Reviews of Scientific Literature</i>	Bobby R. Alford, W. Dixon Ward	1971
<i>Atlas: Tympanoplasty (Cholesteatoma in 3-D), vol 3</i>	J. Brown Farrior	1972

TITLE	AUTHORS	FIRST EDITION
<i>Guidelines for Clinical Auditory Evaluation</i>	Bobby R. Alford, chairman	1972
<i>Vocal Cord Paralysis</i>	Patrick J. Doyle	1972
<i>1971 Reviews of Scientific Literature on Hearing</i>	W. Dixon Ward, chairman	1972
<i>Biochemistry of the Labyrinth</i>	S. K. Juhn	1973
<i>Guidelines for Screening—Otolaryngology</i>	Roger A. Simpson, chairman	1974
<i>Otolaryngologic Services—Terminology for Reporting, Indexing, Retrieval of Services and Procedures in Otolaryngology</i>	Bruce E. Spivey, chairman	1976
<i>An Approach to Respiratory Therapy</i>	G. B. Racz, et al	1977
<i>Infections of the Deep Fascial Spaces of the Head and Neck</i>	David E. Brown	1978
<i>Hereditary Sensorineural Hearing Loss</i>	Conrad Proctor	1978
<i>Vestibular Physiology in Understanding the Dizzy Patient</i>	Brian F. McCabe, Jai H. Ryu	1979