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NEWSLETTER OF THE OPTOMETRIC HISTORICAL SOCIETY (243 North Lindbergh Boulevard 8t. Louis, Missouri, 63141, USA)

Volume 22

Election results:

OHS members responded in a record number by returning sixty ballots for the OHS Executive Board election. It was a close vote. The two members of the Board elected by you are Walter Chase and Meredith Morgan. The Board members will now elect the 1991 OHS officers from among themselves and the results will be reported in the next Newsletter.

Membership list:

Appended to this issue of the <u>Newsletter</u>, you will find an updated membership list. Make sure your friends and acquaintances who have even a passing interest in optometric history are listed. If not, why not tell them about the OHS and ask them to join?

A Mayan beauty:

Associated with the Mayan civilization at the western edge of the Caribbean during the latter part of the 15th century is the concept of cross-eyedness as a thing of beauty. In his most recent novel entitled "Caribbean" James A. Michener describes one young lady of age 14 who was especially beautiful by Mayan standards in that her mother had carefully trained her to be conspicuously cross-eyed.

"When she was four days old I kept a feather dangling before her eyes on a length of grass, and as she stared at it, day after day, her eyes began to cross rather nicely. Then, when she was older, I asked her father to get us a piece of bright shell, and this was hung so that light from the sun reflected into her eyes, and this too helped to train them inward, the way a mother wants them. Finally, when she would walk, I would stand before her and bring my finger from way back here straight to the point of her nose, and in time her eyes locked properly, the way you see them today."

Cataracts in 1927:

Quite apparently written for optometrists is a 1927 brown paper covered pamphlet of 32 pages, 13 x 19.5 cm, entitled The "Why" of Blue Lenses In Cataract Cases, by Withers Bagwell, O.D., and published by Rey Publishing Company, South Boston, a small city in southern Virginia. Entries in the Blue Book of Optometrists identify Bagwell with the same town in the 1920s, 30s and 40s, but with no street address. A signature in the copy on loan from James Leeds' book collection indicates its former ownership by A.A.

Kilton, a contemporary California optometrist. The lack of any institutional identity of the author and the fact that the copyright is in the author's name suggests the booklet to have been purely an entrepreneurial gesture. The tone of the author's brief preface reinforces the suspicion that the author merely had the urge to look into an unanswered question and to share his findings with his colleagues.

The writing style is delightfully rhetorical, hardly befitting a staid journal. Witness a sentence in his opening paragraph, "To paraphrase the Bard of Avon, Some men are born with cataracts, some achieve cataracts and some have cataracts thrust upon them." The text's subdivision headings are BY WAY OF GREETING THE SUBJECT; PRYING OFF THE LID; WHO'S WHO IN CATARACTS; RUNNING OUR QUARRY TO EARTH; SIFTING THE EVIDENCE; FINGER-PRINTING THE VICTIM; A CORNER OF THE LABORATORY; SERVING THE WARRANTY; AND AS THE CURTAIN FALLS.

Despite the capricious phraseology pervading the text, the presentation of the then available technology, science, professional literature relating to lenses and cataracts legitimate and valid. In his preface he observes the generally prevailing advice of the day that "medium blue lenses arrest cataract" but that the supporting information is only vaguely Following this he reviews the known facts of cataracts and especially the etiological role of spectral radiation as well as the transmission data for available lenses. From this he draws the conditional conclusion that green rather than blue glass should be favored. He cautiously closes with the comment, "As the field is still so largely unexplored and the whole matter yet in the experimental stage, it would seem a measure of prudence to make few promises regarding assured results." Nevertheless, "if the protective glasses fail to prevent that [the cataract], the only harm that has been done is the expense to the patient of one pair of colored lenses."

Cataracts in 1938:

Another publication that helps to convey the status of cataracts in the public mind only a half century ago is a small 1938 hard-cover book of about 80 pages authored, copyrighted, and published by an "optometrist and orthoptist" named Neville Schuler under the title "The Prevention and Treatment of Cataract."

Declared to be "intended primarily for optometrists," it emphasizes the importance of early detection, a theme reinforced in the foreword by Marvin J. Blaess, an ophthalmic surgeon, as well as by several appended testimonial letters from physicians and surgeons in British Guiana (now Guyana) where the author had practiced optometry for a number of years before his establishment of the Schuler Eye Clinic in Toronto, Canada. According to the author's preface, patients showing early stages of cataract do not consult the optometrist for that reason but rather "for some trivial loss of near vision, or far vision, or just eyestrain and headache." He adds "... but unwittingly the patient is usually given a refractive correction which happily turns out to be the

correct procedure for the application of the first and foremost measure in cataract prevention and therapy." He credits the medical refractionist with even less alertness.

The contents include chapters on etiology, diagnosis, prognosis, treatment (optical and surgical), and aphakia. They make very obvious the fact that the optometrist's role then was really quite different from his or her role today because of the kind of care, preventive and corrective, to be provided during the seemingly interminable pre-surgical stages and the optical problems of post-surgical correction of that era.

While the booklet is clearly the expression of the author's very personal view of the roles of optometric and medical eye doctors, which may or may not be that of the majority of either practitioner group, it is nevertheless a significantly valid exposition in terms of historical documentation.

The present copy was borrowed from the James Leeds collection.

Cataracts in 1945:

One of the ways to evaluate the common emotional reaction to an ordinary word in any given era is to note the exploitation of the word by contemporary promoters of products and services. Remindful of this axiom is a 1945 gray-colored, soft-card covered, 48 page, 13 x 19 cm booklet boldly imprinted in red ink "How to Conquer CATARACT" and "Price \$1.00" on the front cover. Published by HEALTH PUBLICATIONS at a Los Angeles, California, address it is authored by "J.H. Maassen, Dietitian and Hygienist", with credit for assistance given to "Dr. Allen C. Holland, Optometrist, Past President of the California State Ass'n. of Optometrists." (A bias may show through this commentary because Dr. Holland and I held each other's professional views in extremely low regard during a several years period of frequent hostility. H.W H.)

Folded and inserted in the booklet, obtained from the collection of OHS member James Leeds, is an undated memo "TO THE OPTOMETRIC PROFESSION" on the publisher's letterhead explaining that the brochure "is written and intended for use by cataractous persons . . . under your observation . . . " Appended is a schedule of price discounts for quantity purchases.

On page 10 in a paragraph under the caption "GRAVE OPTOMETRIST PROBLEM" the author describes very accurately the caution that an optometrist would exercise in the choice of terminology when an incipient cataract is present, preferring such phrases as "cloudy lens, hazy lens, or deposits of foreign material in the lens" and avoiding the term "cataract" lest the patient react as to the word "cancer".

The author's recommended "dietetical cataract treatment" is reported as being based on a seven years' collaboration with Dr. Holland in which it was found that among the patients following the regimen for about four years "the opacifications did not recur;

that not only the vision gained was retained, but the improvement of general health, also." His theory of cataract formation involves primarily the alleged role of calcium, explaining, "due to faulty diet . . . the absence of [certain chemicals] permitted the calcium to be converted into the carbonate . . ., which is insoluble." Described in detail is a strict dietary regimen with supplements of vitamins, minerals, ocular calisthenics combined with breathing exercises, enemas, and frequent bathing. Avoided is any promise that the treatment will <u>cure</u> cataract but that it "can benefit not only the cataractous condition, but general health also; and the treatment contains nothing that can harm the body."

Included on the last page is an advertisement of a \$15 "Mediascope (patented)" for "Detecting and Visualizing Your Own Cataracts or Opacities". The instrument seems obviously to have been a device for introducing an over-focused or under-focused beam of light in the eye by which media opacities are seen entoptically shadowed. The description of its function leaves doubt that the advertiser understood the optics.

What the book does demonstrate is the author's assumption that to its rank and file reader of those days a cataract was still a very severely feared eye condition and that its surgical correction was feared even more.

Optometry in Victoria, Australia:

In 1911 optometrists of Victoria, Australia, organized the Victorian Optical Association and started a tutorial program of evening classes to be followed by examinations for fellowship after two, and later three, years of study. Prior to 1911 optometrists had either trained in England or had been privately tutored or had no formal training. The tutorial educational provisions prevailed for three decades until on 29 December 1939 five optometrists signed the official Memorandum of Association of the Australian College of Optometry. In immediate response the Victorian Optical Association elected six optometrists by ballot to serve as councillors of the College and petitioned for its incorporation, which was certified on 5 February 1940. At the first meeting of the College Councillors on 11 March 1940 they elected officers and invited the Honorable Judge Stretton to serve as the first President of the College.

The first service of the new college was to take over the tutorial training of those studying for V.O.A. fellowship, completing that phase in 1943. At the same time it developed an in-residence curriculum of four years length of which at least one and a half years were science courses at the neighboring University of Melbourne.

All of this is just the beginning of the developmental details of today's world-famous optometric educational and research center in Melbourne, Australia. Further details of the tripartite program, the college, the clinic, and the university Department are impressively described in an attractive brochure entitled "1989"

Annual Reports" available from Professor B. L. Cole, Department of Optometry, University of Melbourne, Parksville, Victoria 3052, Australia. It is also undoubtedly available at ILAMO.

Hirschberg's vols. 8a and 8b:

This is commentary on volumes 8a and 8b of Julius Hirschberg's "History of Ophthalmology" as translated by Frederick C. Blodi. The original German issues were completed just prior to World War I, and these two translated volumes were published in 1987 and 1988 respectively by J.P. Wayenborgh Verlag.

Both volumes cover a wealth of ophthalmological history but nothing at all of optometric history. Vol. 8a is "Part Four of the First Half of The Nineteenth Century" in Great Britain. Slightly more than half of Vol. 8b is "Part Five" of the same, and the remainder is on ophthalmology in Italy during the same era. The overwhelming bulk of both books consists of remarkably informative biographical accounts of individual ophthalmologists, their accomplishments, reputations, contributions, and personalities, together with numerous portraits. Incidentally covered are the histories of numerous eye hospitals and a wide variety of surgical and bloodletting techniques but relatively little on other forms of medical treatment or on ophthalmoscopy. The names of Thomas Young and William Porterfield are mentioned in passing, but visual science, visual physiology, optics, refraction, and eyewear are virtually unmentioned anywhere in either text except for one or two comments to the effect that they were simply not a part of the ophthalmological realm in the first half of the nineteenth century.

Topically anomalous for the text and anachronistic by three centuries is the frontispiece of volume 8a, a full-page reproduction of a beautiful copper etching of a 16th century spectacle merchant!

A myth preserved in stone:

Prompted by Jay Enoch's report in the January 1990 issue of this newsletter, vol. 21, pp. 4-5, on the still standing granite or marble bust of an alleged inventor of spectacles, J.J. Abrams included a visit to the same church and took photographs of the bust and the engraved legend. It reads insignificantly different from that cited in Enoch's report, but, in case you enjoy being persnickety, here it is in original capital letter form (unless this gets typographically mangled):

QVI DIACE
SALVINO D'ARMATO DEGLI ARMATI
DI FIRENZE
INVENTOR DELGI OCCHIALI
DIO GLI PERDONI LE PECCATA
ANNO D'MCCCXVII

More information on this tomb will be given in the next issue of the <u>Newsletter</u> from OHS member Dr. Robert v. Sander.

A life of optometry:

"Ein Leben für die optometrie: Peter Abel und Seine Zeit" is a biography of Peter Abel (1908-) and more. It is authored and published by Hans-Ulrich Geyer, a young optometrist, Pfarre-Sturm-5, D-7012 Fellbach, West Germany, 1988. clothbound book has 302 pages and 78 illustrations. Although written in the third person, the text often gives to those of us who know Abel the feeling that he himself is speaking. with the forewords by optometrists Thomas Nosch and Wolfgang Cagnolati the biographer clearly conveys Peter Abel's traits of farseeing, imaginative, unselfish, outgoing, being creative, determined, industrious, a champion for modern optometry, and appreciative of the career-long assistance of his wife Elizabeth. His oft expressed motto was "performance precedes success." Nosch added, "No other German optometrist is internationally as well known, loved, and honored."

The general organization of the book really makes it a documentary that tells us much about optometry's history in Germany, and to some extent the world, during the past 60 years. The introductory sections deal philosophically with such questions as the aims of a career, who can profit from reading the book, the ethics and mission of the optometrist, and the biographer's explanation of his sources of information, including much from Herr Abel, who is now retired in Australia.

Part 2 covers his childhood, youth, early involvement with optics, his life during the Hitlerian years, eventual attendance of an optical school in Berlin, early learning of English, appointment to the optometry school teaching staff at age 26, his wide travels, being drafted in WWII into the military where he served as a telecommunications officer and photographer, his post-war search for his evacuated wife and two children, and the miseries of reestablishment in Berlin.

Part 3 is essentially an informative album of persons who played significant roles in Abel's career. They include Karl Hermes, A.E. Turville, Waldemar Friang, Otto Marzock, Karl Schultze, Rolf Weinschenk, Willi Sohnges, Clifford Hall, Frank Dickenson, Geo. F. Kapernik, Eduard Raskop, and Willi Kaue.

Parts 4-10 respectively treat Peter Abel as entrepreneur, optometrist, contact lens specialist, worldwide diplomatic traveler, teacher-lecturer, organization leader, and career role model. The appendices include a chronology, a publications list, a glossary of technical terms, credits, and index.

Image technology:

A very personalized review entitled "Forty years of image technology and vision research" by Donald H. Kelly appears in the July 1990 issue of <u>Optics and Photonics News</u>, vol. 1, No. 7,

pp. 24-30. It deals almost exclusively with scientific developments and personnel at the University of Rochester Institute of Optics during the author's career.

Goethe's aversion to spectacles:

Johann Wolfgang von Goethe (1749-1832), prolific poet, dramatist, novelist, and freely expressive observer of almost anything that struck his fancy, gave vent to his aversion for spectacles time and again. In the bicentennial commemoration of Goethe's birth optometrist Kurt Muller of Plauen, East Germany, gave a paper entitled "Goethe und die Brille" which appeared in the August 15, 1949 issue of the <u>Deutsche Optische Wochenschrift</u>, no. 16. The paper has recently been reprinted in the March/April, 1990 issue of <u>Augenoptik</u>, vol. 107, no. 2, pp. 48-49, with five illustrations on the inside front cover and editorial notations by K. Radicke.

That Goethe was myopic was the author's interpretation from the two items of eyewear in the Goethe museum in Weimar so confirmed by Goethe's grandson. One is a hornrimmed lorgnette holding a pair of two diopter concave lenses and on one arm of which is stamped "Tauber" and on the other "Leipzig". The Tauber firm was founded in 1800, suggesting that Goethe was at least 50 and probably 60 years old when he obtained the lorgnette. The other eyeglass is a short-handled golden monocle stamped "Nr. 6D" and having a lens diameter of 30 mm, but the author does not mention its power or whether it is concave or convex. In the illustrations it resembles a simple magnifying lens.

There are indications that Goethe was myopic in his youth, including an account in a letter he wrote at age 18 in which he describes his difficulty identifying someone he was trying to find in the theatre and having to borrow theatre-goer's glasses rather that returning home for his own "Glas". Even then he expressed his antipathy for any visual aid by commenting that he accomplished more by willpower than by the lens.

Numerous other indications support the opinion that he was myopic, including his letter to a Dresden optician requesting at age 85 a new lorgnette of the same concave power as his present one and the comment of a friend that at age 80 he was seen reading without any glasses.

The author describes at some length Goethe's enchanting exophthalmic and almost black eyes as evidenced in portraits and in comments of those who had met him. Most fascinating however was his emotional aversion for glasses as documented frequently in his writings and correspondence, including a 20-line epigram "Feindseliger Blick" (malignant outlook). It was not merely an annoyance with eyewear per se but more emphatically an instant and unavoidable feeling of hostility toward anyone wearing glasses in his presence. Even at age 81 he described to a friend the impact he would feel when a stranger approached him with spectacles on—he could not even be civil to the stranger. He philosophized that

glasses contribute nothing to our cultural and moral senses, that they distort our views and make the wearer feel smarter than he really is, and that, by all means, we should avoid becoming addicted to them, merely to use them for emergencies. He made a single exception in behalf of his closest friend who wore glasses constantly.

Bibliothecal evolvements:

Included under "Sights and Sounds" in the May 1990 issue of <u>ILAMO VISIONLINK</u>, vol.8, no. 5, are four videotapes, each of which is entitled "A Living History Interview". Catalog numbered VT-184, 185, 186, 187, and 188 they are interviews of Drs. Lynn Gabriel, Robert Graham, Solon Braff, and Morris Applebaum respectively by Margaret Dowaliby, O.D. It is most gratifying that this very personalized type of resource is accumulating and available for those who would become familiar with optometry's heritage.

With the stockpiling of resources, unfortunately, there occurs a problem, namely, that of discoverability of pertinent items. Like the innumerable volumes of unindexed optometric periodicals already on our library shelves, the accumulating wealth of information takes on the "needle in a hay stack" challenge. The same problem has long been building up in unpublished theses, dissertations, technical reports, government documents, and the like. Partial solutions are accomplished by abstract services, key word indexing, bibliographical attempts, and computerization, making literature-searching itself a professional tool skill to be acquired only with special effort.

The burden falls ever more on libraries such as ILAMO and other institutional libraries serving collegiate and research roles in visual science. Even a person who has an enviable private collection often finds it necessary to rely on institutional indexing facilities to utilize effectively that which is already privately owned! In the case of the above mentioned videotapes, for example, one needs to know, at least by key words, if not by abstracts, what topics the interviewees dealt with informatively. The alternative is hours of viewing and searching for those elusive "needles" as well as borrowing and returning each tape, unless, of course, one undertakes to view them just for fun, not a bad idea in itself.

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