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HINDSIGHT

**Newsletter of the
Optometric Historical Society
243 North Lindbergh Boulevard, St. Louis, Missouri 63141, USA**

Volume 32

October 2001

Number 4

OHS Meeting:

The Optometric Historical Society will meet on Friday, December 7, 2001, in room 410 of the Philadelphia Marriott in conjunction with the American Academy of Optometry meeting. Jay Enoch will give another of his enlightening presentations. His talk is entitled: "Use of Concave Mirrors as Magnifiers and Refractive Corrections from at least Roman Times."

Members and interested friends are highly encouraged to come to this talk. In addition to hearing this presentation, the officers of the OHS would like you to exchange and share ideas on the future of the Optometric Historical Society. Your ideas and suggestions are very much wanted.

Dues Statement and Ballot Enclosed:

Enclosed with this issue of Hindsight is a dues statement for the 2002 calendar year. The dues remain unchanged at \$10 per year. Please send your dues payment along with the payment form to:

Bridget Kowalczyk, Secretary-Treasurer
Optometric Historical Society
243 North Lindbergh Boulevard
St. Louis, MO 63142

Also enclosed is a ballot for the positions on the OHS Board being vacated by Ted Grosvenor and Alfred Rosenbloom at the end of this year. Please complete the ballot according to instructions on the ballot and mail it to:

David A. Goss
Editor, Hindsight
School of Optometry
Indiana University
Bloomington, IN 47405

Hofstetter-Wolfberg correspondence concerning developments in scope of optometric practice:

Editor's Note: The March, 1999 issue of the Journal of the American Optometric Association featured an article by OHS member Melvin Wolfberg entitled, "A Profession's Commitment to Increased Public Service: Optometry's Remarkable Story" (volume 70, number 3, pages 145-170). Wolfberg's article was summarized in the October, 1999 issue of Hindsight (volume 32, number 4, pages 25, 26). Wolfberg used personal correspondence from a number of individuals along with other sources and his own personal remembrances to describe optometry's efforts to expand scope of practice to include the use of pharmaceutical agents. On the first page of his article, Wolfberg mentions an interesting seven page letter he received from Henry Hofstetter in response to a request for information to be used in his article. Thinking this correspondence to be of interest to OHS members, I (DAG) requested a copy of it from Melvin Wolfberg, and it is reproduced below with the kind permission of both him and Henry Hofstetter.

Wolfberg letter to Hofstetter, 1996:

TO: Selected, Highly Respected Colleagues

FROM: Mel Wolfberg

I have embarked on a project and I need your help.

Dramatic changes in our profession's scope of practice have taken place throughout our respective careers. Some of the stories of this development have been told but in my opinion, most have not. My personal involvement at the Pennsylvania College of Optometry and participation in changing AOA's traditional posture on this subject during the 1960's include some fascinating experiences that would make interesting reading and contribute to a more complete history of optometry.

To write this story from one perspective would be inappropriate, in my opinion. Many leaders participated in the rapid changes in our scope of practice at the state and national association levels, within our educational community, at the legislative level in many jurisdictions and in many other roles. My awareness of your involvement initiates this request for your assistance.

What I seek from you is the story of your participation based on your personal involvement in activities related to the scope of practice changes. Copies of memos, letters and other documentation would be most helpful. I do not doubt that there are a wealth of events that took place, have never been reported and would contribute immeasurably to this story.

It is my intention to submit the story for publication....

You have my personal thanks and appreciation for your consideration of this request. Please don't hesitate to contact me for clarification or additional information.

Mel

Hofstetter letter to Wolfberg, dated September 5, 1996:

Dear Mel:

Your telephone call of August 7, delightful as it was, has frustrated me no end. You asked me to comment on "How it happened", referring to the development of optometry's current scope of practice, or, more specifically, the inclusion of services which have traditionally been exclusive to the medical professions. In your subsequent letter of August 22 you state that your proposed history would "begin with the scope of practice as defined in the original state laws and the rationale for those laws." My frustration is twofold, first, because the issue in my opinion, is sufficiently complex to justify a career-long study, and second, because the original state laws are anything but a logical starting point.

Somehow we have to trace the role of optometry from its conceptual origins and ascertain its dimensions in every possible era of human history as delineated in literature, art, folklore, specimens, artifacts, and archival records. In this sense a less risky starting point would be the date of invention of spectacles even though optical science had started developing much earlier in association with mathematics. Also a few clumsy hand-held magnifying lenses were previously known. When, however, just before the turn of the 14th century, a clever artisan fashioned a riveted frame out of wood, bone, leather, or other available material to support a pair of thin biconvex lenses which he or she had ground and polished and tested by trial and error on the nose of a presbyopic scribe, optometry was born. It was definitively a service to improve sight.

In consonance with the then beginning Renaissance such skillful artisans served as well the correctable visual needs of clerics, artists, royalty, and the slowly increasing literate society. The artisans soon formed guilds to control quality, prices, and the training of apprentices, or they affiliated with other guilds sharing similar material, technical, or service interests, apparently none related to medicine, surgery, pharmacy, or other form of therapy. During this era there occurred such technological advancements as improvement of frames, temples, glass, tints, materials, cylinders, polishing techniques, power scales, age criteria, recognition and identity of anomalous types of vision, and fashion considerations, as is evident in museum collections. Even the societal role of the optometrist, variously identified as spectacle maker, master optician, Optiker, lens grinder, sight tester, et al., is depicted in artists' street scenes,

literary productions, and other forms of art. It is quite evident from these that the archaic optometrists of these first several centuries were almost exclusively concerned with vision care, showing no involvement whatsoever in any form of medical service. The same interpretation of the optometrists' vocational mission is clearly described in Daza de Valdes' 1623 book on optometry in several languages in which the secondary, incidental, and separate role of the physician is quite casually portrayed. The same distinctive separation between optometric vision care and medical eye care is documented for another century or two going into the Industrial Revolution in the archives of the still existent Worshipful Company of Spectacle Makers, a guild chartered only six years after the appearance of Daza de Valdes' book. With the Industrial Revolution in Europe the beginnings of prepaid and third party paid health care evolved. This soon included reimbursement for spectacles only when authorized by physicians. This has a creeping economic repercussion on the optometry profession as a result of which most optometrists were gradually putting primary emphasis on dispensing and less on prescribing. The effect of this development is still apparent in many European countries.

In the American colonies, however, the story is different. It may be presumed that the colonial population influx consisted overwhelmingly of young able-bodied, emmetropic adults whose needs for optometric service would be minimal until decades later. A similar pattern of temporarily very limited need would prevail successively among those in the westward frontier movement. This need was initially met in the early established east coast harbor cities by shipments of ready-made glasses, mainly from England and Germany, to be retailed with other household supplies by various entrepreneurs, including, for example, Ben Franklin and John McAllister, Sr. As the population expanded and approached presbyopia the increasing demand for optometric services attracted a number of young apprenticeship-trained ophthalmic opticians from Europe to the colonies. Simultaneously throughout the sparsely settled western frontier young entrepreneurs with skills in watchmaking, jewelry fabrication, and similar fine handiwork were fitting glasses and indulging in sight-testing, unchallenged by any laws or medical competition. Neither did such embryonic optometrists show any interest in offering any type of medical or surgical service or treatment, though they were free to use the wide variety of potions, pills, drops, and medicine being publicly sold for every ailment imaginable. This pattern of a maturing population and entrepreneurial expansion in the western-moving frontier continued well into the 19th century.

Throughout the prior five centuries the medical profession, including the eye physicians, had looked askance at the merits of spectacles and the well-established, uncontested, role of optometrists, then called opticians. The 19th century saw the beginning of large scale manufacturing of eyewear in America. The invention of the trial case in 1843 facilitated the determination of a lens prescription independent of the vending and dispensing of spectacles. With remarkable rapidity as the century progressed physicians in both Europe and America were engaging in refraction, variously self-taught or trained by optometrists. In 1864 Donders published his famous

book. In 1865 the Wills Eye Hospital first included refractions by ophthalmologists. Sixty or more optometry schools, mostly short-term training programs, were started in America between 1872 and 1900, several by medical doctors, some offering doctoral titles, though optometrists were almost unanimously resisting the title until the 1920s. In 1892 Mr. Prentice was accused of practicing medicine for charging a refraction fee, which he had been doing for at least five years. His services were exclusively refracting and dispensing.

During the 1890s numerous medical licensing boards in the United States were introducing measures to include the regulation of optometry under medical board authority. As these and similar overtures occurred optometrists in state after state sensed a threat of medical control and organized state-level societies to combat the trend and to sponsor the introduction of licensure laws under optometric administration. The latter met with strong medical, or at least ophthalmological, resistance and some resistance from opticians who chose to limit their careers to the fitting and dispensing of glasses prescribed by physicians. The opticians who continued to refract began to identify themselves increasingly as optometrists. Several decades of battling in the legislative lobbies resulted in one common concession or compromise which seemed of negligible significance to the optometrist at the time, namely, the restriction “without the use of drugs.” It again reflected optometry’s six century old concept of serving visual needs, not medical needs.

This restriction then provided the medical eye physicians with two promotional tactics to entice patients away from optometrists. One was to remind the public that optometrists were not legally qualified to prescribe medicine, and the other was to declare that optometrists were not “doctors”. As a result, American optometrists’ long resistance to the use of the doctor title made a complete reversal by 1920. The drug issue remained unresolved, but in accompaniment with the doctor title many an optometrist cultivated a medical office demeanor to minimize his or her identity as a nonmedical practitioner. This may well be regarded as the earliest trace or symptom of expansion of optometry’s scope of practice into medical territory, strictly a defensive measure.

In 1910-1911 a parallel but different event occurred in an English court that had an optometric impact on the whole English-speaking world, including America. Prompted by an oculist, a Miss Markham with keratoconus had filed a malpractice claim against an optometrist, a qualified sight-testing optician, for not referring her to a physician. Though the defendant’s position was supported by his colleagues it was opposed by the testimony of oculists, and the patient won. This, of course, meant that optometrists had a legal obligation to detect anomalous conditions and to advise appropriate medical attention. Quite immediately optometric curricula began to include techniques of pathology detection, and increasing numbers of optometric practitioners added preliminary pathology inspection as part of their examination routine.

With the legislated registration of optometrists in every state and the District of Columbia by 1924 the oculists versus optometrists conflict reached a kind of detente-like status with occasional lesser skirmishes involving state law amendments, establishment of new schools in universities, military commissions, etc. In 1954, however, whatever semblance of armistice seemed to prevail was suddenly shattered by the badly misinterpreted American Optometric Association resolution at the Seattle Congress which declared that "the field of visual care is the field of optometry, and should be exclusively the field of optometry." Almost immediately the American Medical Association reacted with a resolution declaring it unethical for a physician to consult with or lecture to optometrists. This, of course, meant that the daily thousands of referrals that optometrists normally make to physicians were hampered by the need to arrange circuitous channels to accomplish the objective without embarrassment. In such circumstances the conscientious optometrist naturally assumed an increasingly responsible role as a defensive measure.

The A.O.A. in turn introduced resolutions to clarify its intent, including a carefully phrased official "premise" declaring that optometry would in no way invade the field of medicine. After about 15 years of the A.M.A. infliction its effect was finally neutralized by an opinion of the A.M.A. Judicial Council.

In the interim more emphasis was being put on pathology in the optometric curricula, the schools were attracting a higher share of students with biological and medicine-oriented pre-professional academic majors, increasing numbers of optometry graduates were familiarizing themselves with ophthalmological clinical procedures in military hospitals, and the fitting of contact lenses was providing a sense for the palpability of the eye itself resembling a kind of medical touch.

Apparently these and other lesser developments had planted the medical urge among numerous individual optometrists quite contrary to the official assertions of the A.O.A. So, in 1975, while I was in Europe on sabbatical leave, West Virginia, with the help of certain optometric leaders elsewhere, prevailed on its legislature to enact a therapy provision for optometrists. The action came as a complete surprise to me. I know virtually none of the details, so I have no theory as to how it happened. However, there then seemed to go through the other states the philosophy that if West Virginia can do it, so can we! With my retirement in 1979 I soon was out of touch with current developments.

I do believe, nevertheless, that our history shows that optometry's six century stance as applied vision science lost this identity during our most recent, or seventh, century, the 1900's, as a reaction to medical invasion of our field and not because of any clinical justification.

Mel, this is written without the conveniences and help of an office staff or the facilities for checking the accuracy of some of my assertions. I have relied heavily on

combing my feeble memory as a 25 year editor of Hindsight.

Sincerely,
Hank

Wolfberg letter to Hofstetter, dated September 14, 1996:

Hank:

You make an excellent point about the logical starting point for the scope of practice story. Although I have no idea what other information may be made available to me in the course of my research, it is likely that the information you have provided likely will be an integral part of the telling.

My thanks to you for your cooperation and contribution. My apologies for causing you any frustration; however, I concur that the subject is a complex one and it could well justify a career-long study. The very fact that it hasn't been done is a part of my motivation to proceed....

Warmest personal regards,
Mel

Jay Enoch's Column:

Shadows of the Night

One of the delights encountered when visiting Italy is to come onto contact with the Etruscan civilization which largely, but not wholly, preceded Roman times. Etruscan can be morphed into "Tuscan". This group of people was centered in modern-day Tuscany. Etruscan influence stretched roughly from Bologna (the Etruscan community of Felsina) in the north to Rome in the south. The Etruscan city-states appeared about 900 B.C. and ruled in central Italy for about 500 years.

In order to obtain a sense of these remarkable peoples, when in Rome, one can visit the beautiful "Villa Julia" (villa is pronounced "valla" locally). Villa Julia is the former palace of Pope Julian, and is located on the periphery of the Borghese Gardens. You will discover the Etruscans were skilled artists, sculptors, ceramicists, and metalworkers. At the Villa Julia you will see one of their masterpieces, a sarcophagus with a reclining couple on the lid. And they are smiling in their contentment. (A second similar sarcophagus may be found at the Louvre in Paris.) Happiness and contentment are features of Etruscan art. That is, they smile, they live life to the full, sex is not a dirty word. Their art is quite different from that of the succeeding Romans. Incidentally,

the famous Romulus and Remus statue - a symbol of Rome - is Etruscan.

There are maps of Etruscan centers, digs, tombs, museums, etc. Having spent a number of weeks, along with Becky, going about this area, and enjoying and studying Etruscan sites and artifacts. I can enthusiastically recommend such a pursuit. The country-side hotels, inns, restaurants, etc., also are a delight.

In addition to the Villa Julia and the Vatican collections in Rome, there are fine Etruscan museums, decorated tombs for viewing, etc., at Tarquinia, Veio, Volterra, Vulci, Chiusi, Cortona, etc. and larger collections are to be found in centers such as Bologna and Florence.

There is a very interesting vision-related component to this activity. In most museums there are on display a modest number of vertical "stick-like" sculptures. They range in height from six inches to about two feet high or a bit taller. Careful examination reveals that these are not nearly as primitive as one might imagine. Unofficially, these sculptures are called "shadows of the night". They depict people as if they are looking at their own extended shadows cast by the setting sun. The head is relatively small, the arms and hands are longer, and the legs and feet are extended quite a bit. Interestingly, these statues rarely widen from top to bottom. Rather, it is the increasing vertical distortion which is emphasized.

These designs do not seem to have the precision of certain ancient and contemporary constructs. However, the intent of the designer(s) is never in doubt. Stated another way, these sculptures do not have quite the mathematical precision of say, later perspective designs, or various Egyptian and Greek architectural constructs. Were these a somewhat stylized form of folk artistic expression?

Particularly in their later years, Etruscan artists and artisans were influenced quite a bit by Greek culture. However, that influence is not particularly expressed in these statues.

I purchased a replica of one of these statues at the archaeological museum in Florence (Firenze). Since these figures are broadly distributed, the Etruscans must have found pleasure in them. Other implications are not known to the writer.

• For those seeking to read about Etruscans, I recommend the June, 1988 issue (volume 173, no. 6) of National Geographic magazine. On page 734 of the article on the Etruscans, there is a picture of a "shadow of the night" figure (although not so designated) from Villa Julia. This particular example does not have a supporting base. There is a fine book by Maja Sprenger and Gilda Bartoloni, "The Etruscans, Their History, Art and Architecture", Harry Abrams, Inc., New York, 1983; this book treats Etruscan art in depth. The book also has some discussion on their mirrors.

The National Geographic article quoted a statement made by the famous author D.H. Lawrence in the 1920s. This was made after he had spent some time touring Etruscan sites, "Italy today is far more Etruscan in its pulse than Roman; and will always be so."

J.M.E.

Documenta Ophthalmologica theme issue:

The journal Documenta Ophthalmologica publishes articles of historical interest on occasion. Volume 99, number 3 (1999) of that journal is a theme issue on the history of ophthalmology. The majority of the articles are biographical notes on various notable ophthalmologists and short histories of some surgical procedures. One of the articles is "First known lenses originating in Egypt about 4600 years ago: The unique optical properties of these lenses in the context of the known technologies of the time" (pages 303-314) by OHS member Jay Enoch. Jay gave a presentation on this at the 1999 OHS meeting and published an article on this topic in the April, 2000 issue of Hindsight (volume 31, number 2, pages 9-17).

The following is the table of contents of this issue:

Reifler DM. Friedrich August von Ammon (1799-1861), pp. 199-213

Baum J, Helena B. Fedukowicz: Pioneer educator in ocular microbiology, pp. 215-218

Daxecker F. Three reading aids painted by Tomaso da Modena in the chapter house of San Nicolò Monastery in Treviso, Italy, pp. 219-223

Flynn JT. Werner Ernst Reichardt Ph.D.: Founder of modern computational visual neurophysiology and anti-Nazi resistance fighter, pp. 225-236

Truhlsen SM. Harold Gifford, Sr., M.D.: Omaha's premier turn of the century ophthalmologist, pp. 237-245

Blanchard DL. George Handel and his blindness, pp. 247-258

Dellaporta AN. Retinal detachment surgery: Historical notes, pp. 259-272

Welch RB. Julian John Chisholm M.D.: Confederate surgeon, ophthalmologist and hospital founder, pp. 273-284

Jokl DH-K. Robert Koch's debt to Ferdinand Cohn, pp. 285-292

Rehn NO. Eye surgery in Stockholm at the beginning and at the end of the 20th century: a comparative study, pp. 293-301

Enoch JM. First known lenses originating in Egypt about 4600 years ago, pp. 303-314

Documenta Ophthalmologica is published by Kluwer Academic Press in The Netherlands. Persons with access to the internet who wish to look for articles of historical interest in that journal can look at the Kluwer website at www.kluweronline.nl. Click on Kluwer Academic Press and then on Documenta Ophthalmologica. Clicking on an article title will lead to an abstract of the article.

D.A.G.

Frescoes depicting monks with reading aids painted by Tomaso da Modena in 1352:

In the history theme issue of Documenta Ophthalmologica (volume 99, number 3) is an article describing frescoes showing monks with various reading aids (Daxecker F. Three reading aids painted by Tomaso da Modena in the chapter house of San Nicolò Monastery in Treviso, Italy. Documenta Ophthalmologica 1999; 99: 219-223). Daxecker describes these frescoes as being found in the chapter house of San Nicolò Monastery in Treviso, about 20 kilometers north of Venice. One of the frescoes depicts a monk wearing riveted spectacles. That is the one reproduced in the previous issue of Hindsight (July, 2001, volume 32, number 3, page 24) from a photograph by Jerry Abrams. Daxecker mentions that the subject is generally thought to be Cardinal Hugh of Provence (Ugone di Provenza), although some sources say that it depicts Hugo of Saint Cher who died in 1264.

Another of the frescoes shows Cardinal Nicolò of Rouen holding an open book with his left hand close to his eyes and holding a reading glass on a handle with his right hand. The reading glass was held close to his right eye.

In the third fresco Fra Isnardo da Vicenza sitting with an open book in front of him on his desk and holding another book. To his left is what appears to be a framed reading lens on a decorative stand.

These frescoes were painted in 1352 and are among depictions of 37 monks reading and writing painted by Tomaso da Modena in the chapter house of San Nicolò Monastery. Tomaso da Modena was born sometime between March 9, 1325 and May 6, 1326 in Modena, and died sometime before July 16, 1379, also in Modena. The article also mentions some of the other work by Tomaso and the desire for advancement to monastery superior general that motivated the prior to hire Tomaso to paint the chapter house at San Nicolò Monastery.

D.A.G.

The blindness of George Frideric Handel:

The famous composer George Frideric Handel spent the last few years of his life totally blind. A biographical sketch and a discussion of the likely cause of Handel's blindness is the topic of a paper by Donald L. Blanchard in Documenta Ophthalmologica (Blanchard DL. George Handel and his blindness. Documenta Ophthalmologica 1999; 99: 247-258).

Handel was born in Halle, Germany in 1685. While still a young man Handel became known in Italy and Germany as a harpsichord and organ virtuoso and a composer of operas. But most of his adult life was spent in London. There he composed a wide variety of music, produced and directed performances, published and personally sold his works, and even sold tickets to the performances of his works out of his home. His financial condition had its ups and downs corresponding to how large production costs were in comparison to ticket sales, but he died a wealthy man. Handel is, of course, best known for the oratorio "Messiah".

The article discusses Handel's general medical history before going on to his ocular history. He is described as having "cyclothymic swings of moods" with "times of wan, dark melancholy and then periods of exuberance...." Handel was obese and sedentary, but largely healthy until 1737 when he had what was called a "Paralytic disorder", probably a stroke. He again had strokes in 1741 or 1742 and in 1743. He died in 1759.

In early 1751 Handel had an apparently fairly rapid loss of vision in his left eye. It appears that by mid or late 1752 Handel also had lost vision in his right eye. He had to be led on to the stage for performances which were performed by memory or extemporaneously. There are no known examples of his handwriting after 1752, and he had a full time assistant for the remainder of his life.

It is often assumed that Handel had cataracts and that cataract "couching" surgery done in late 1752 had a bad outcome resulting in loss of vision. Blanchard argues against cataract as the cause of Handel's blindness. He discusses various retinal conditions and neuropathies as potential causes, and finally settles on nonarteritic anterior ischemic optic neuropathy.

Blanchard indicates his caution concerning this diagnosis in the last paragraph of the article: "Making a diagnosis first hand on a patient before the examination is tempting but treacherous. Making a diagnosis second hand on information supplied by non medical people is counseled against in the early days of medical school. Making the diagnosis after the passage of approximately 250 years borders on foolhardy unless one takes it as an idle pastime of a medically trained, musically interested, dabbler in history, who promises not to be dogmatic with his conclusions. With that in mind, it is reasonable to change the history of Handel from blind due to cataracts to blind from nonarteritic anterior ischemic optic neuropathy."

The article appears to be well researched and includes citations to over 40 references, most of them biographical material on Handel.

D.A.G.

Indiana Historical Society seeks stereographs of Indiana scenes and subjects:

The following announcement, possibly of interest to OHS members, appeared on H-INDIANA, an e-mail listserve on Indiana history:

From: George Hanlin [ghanlin@indianahistory.org]
Sent: Tues., August 14, 2001
Subject: IHS seeks stereographs for possible book

The editors at the Indiana Historical Society hope to publish a book on stereographs. Their goal is to reproduce in the book facsimiles of approximately 150 to 200 stereographic cards featuring Indiana scenes and subjects, and they plan to include a plastic hand-held viewing device to help readers see the images in three dimensions.

The IHS houses in its library an extensive collection of stereographic cards, but the editors are extending their search in hopes of finding the best images from around the state. If you know of quality views from either private or public collections, please write George Hanlin, Indiana Historical Society, 450 W. Ohio St., Indianapolis, IN 46202-3269; call (317) 233-3156; or E-mail ghanlin@indianahistory.org. The editors may be interested in obtaining copies for use in the book and will consider all leads or submissions through the end of October.

Benjamin Franklin as Patron saint of Optometrists:

OHS member Jerry Abrams wrote the following note: Finding the August, 1976 copy of the Journal of the American Optometric Association in my library the other day the following is taken from a feature article on early American eyeglasses - "By virtue of his contributions to visual science, helping to establish the desirability of using eyeglasses, experimental researches in illumination and color, and the design of bifocal lenses, the optometrists of the United States should reaffirm the homage paid to Benjamin Franklin at the Indianapolis Convention of the American Optometric Association when he was acclaimed the 'Patron Saint of Optometrists'."

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