

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

OPTOMETRY LIBRARY

01 AUG 1990

INDIANA UNIVERSITY

OPT

Volume 21

July 1990

Number 3

Notes with the dues:

Processing the OHS members' annual dues is a straight forward, yet moderately tedious task. To my delight, some of you have lightened the task by inserting notes with your payments. It is great to hear from the membership whether it be comments on past Newsletters, material for future issues or simply a greeting. OHS member Dr. Thomas Eade wrote, "I recently located in California a near perfect Morton ophthalmoscope vintage 1880's. These old instruments are out there but are rare and somewhat expensive when found. I enjoy the OHS Newsletter!"

Keep those cards and letters coming!

Armati revisited:

OHS member and past president Dr. Jerry Abrams wrote on May 21, 1990, "Reading in the OHS Newsletter several issues back about Jay Enoch's visit to the old church in Florence, Italy finding the burial place of the inventor of eyeglasses, I retraced Enoch's steps and found this historic church and historic site." On May 29, Jerry sent the following, "The enclosed are prints of the photos I snapped of Armati's tombstone and bust that are inside a small church in the center of Florence, Italy... If your Italian is good, you may translate. It reads,

...Armati of Florence,
inventor of eyeglasses -
God pardon his sins.
year 1317 A.D."

Unfortunately, the copies of Jerry's two photographs did not reproduce well and could not be included. Although historical scholarship has concluded that Armati was not the true inventor of eyeglasses, such a tangible memorial to the invention of eyeglasses makes for a very fascinating and attractive place. As demonstrated in this Newsletter, perhaps we are seeing a trend building - a pilgrimage site for optometry!

Who knows the answers?

OHS member Dr. Eric Muth continues his historical sleuthing into the details of visual aid history. He writes:

Indiana University

JUL 31 1990

I have questions for the membership which answers can be given to you or sent to me directly, it's up to you, that is if you will do me this favor.

1. The earliest documented shallow octagon frame found thus far dates 1822 Sweden. Is there earlier evidence?
2. Sliding (extension temples) sidearms are said to be a 1771 invention, however Adams' 1797 patent makes no mention of them. Are they of French origin? Does anyone know the when and where?
3. Does anyone have evidence of bifocal use or invention prior to Benjamin Franklin?
4. Does anyone have evidence of sidearms (temples) earlier than 1728-30 Scarlett's trade card?

If this creates some interchange then perhaps one can try other questions.

We hope this does create some interchange, and then some. Correspondence may be sent via the OHS or directly to Dr. Eric Muth, 25 Parkland Place, Milford, Connecticut 06460.

Oops - our mistake:

In the last Newsletter (April 1990, Vol. 21, No. 2, p. 25) you read about the availability of database printouts of lists of articles dealing with historical aspects of visual science. We made several errors in that article. Our errors have been noted and kindly corrected by Nancy Gatlin, Library Director at the Southern College of Optometry in Memphis, Tennessee. She writes:

We have recently received requests for information on the historical aspects of vision science based on a section of the April, 1990, issue of the Newsletter of the Optometric Historical Society. On page 25 under "For Supplementary Reading", Mrs. Patricia Carlson is noted as the supplier of lists of articles on this topic. The "marvelously developed lists" are not "derived from the current acquisitions of the respective libraries." These lists of articles are available to anyone who subscribes to the Southern College of Optometry's LION database quarterly update program. Mrs. Carlson's library has a subscription for the quarterly updates produced here at the Southern College in Memphis.

Our library has been indexing articles from many vision science publications since 1975, and we now have a database of about 60,000 articles. I have indexed all of the articles in the base, and I am interested in

historical aspects of vision science so our history file is fairly complete for the list of journals we have.

We can provide individuals with literature searches on the historical aspects of any topic in vision science or with the comprehensive history of vision science which was noted in the Newsletter article.

Since I had read and indexed all of the articles on the lists which were attributed to Mrs. Carlson, I felt that I had to respond to the data printed in the Newsletter. Line 2 of the first paragraph should read Southern College of Optometry not Southern California College of Optometry. Unfortunately we are unable to provide these printouts free of charge since we serve optometrists and libraries in all fifty states and twelve foreign countries. Curiously, the only individual (not librarian) who has ever subscribed to the "history" subject is an ophthalmologist.

We just ran our spring quarterly update so I am enclosing it for your perusal. If you have any questions, please let us know, and we will be glad to help with any of your informational needs.

For more information on these lists of articles you may write Nancy Gatlin, Library Director, Southern College of Optometry, 1245 Madison Avenue, Memphis, Tennessee 38104-2218.

Index recognized:

In the last Newsletter, I praised the achievement of Henry Hofstetter for producing the ten year (Vol 11-20) index. OHS member Dr. Charles Letocha agreed and upon receiving his copy wrote: "Just wanted to congratulate and thank you for indexing the OHS newsletter. It makes it so much more valuable; there's a lot of useful information buried in these pages and it just gets lost without the index. Thanks."

D.K.P.

Bibliothecal evolvemements:

Included under "Sights and Sounds" in the May 1990 issue of ILAMO VISIONLINK, 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.

From clouants to lunettes:

The French called the earliest nose-supported visual aids "béricle clouantes" or simply "clouants", a pair of beryl lenses mounted in rims of various material nailed or riveted together to rest saddle-like on the nose. The subsequent successive dubbing of spectacles by the French included the terms véricle, bézigue, bésicle, and eventually lunectes and now lunettes ("small moons"). The beautifully illustrated, analytically interpreted, and comprehensively documented archival treatment of this seven-centuries evolution is a handsome golden cloth-bound 29 x 20.5 cm book of 156 pages modestly entitled "Spectacles & Spyglasses". Authored by Pierre Marly with text contributions by Jean-Claude Margolin and Paul Biérent, it is translated into English by Barry Tulett from the 1980 French edition and published in 1988 by Editions Hoebeke, presumably in Paris. The text divisions are entitled "Towards a Historical Semeiology of Spectacles" by Margolin, "Spectacles and Spectacle Wearers" by Biérent, and "Spectacles Through the Ages" and "From Telescopes to Spyglasses" by Marly. Approximately three fourths of the 436 illustrations are from the Marly collection and the rest from 22 other archival sources. They include spectacles, cases, paintings, cartoons, illusions, instruments, early documentary reproductions, catalog pages, and in fact anything even semiotically related to eyeglasses history. Many are in color. The chapter on spyglasses is very short and deals only with hand-held types of oculars in popular use. Optics as a science is not included.

Both the text material and the illustrations reflect the subject matter as known by the French. For example, of the 49 references in the bibliography, 33 are in French, eight in English, six in German, and two in Italian. This bias actually enhances the historical value of the book for those of us accustomed to reading about the history of eyewear as viewed by the English-speaking world. A single excerpt from Margolin's contribution illustrates both an isolated source of such bias and the semiological inference of a quoted 16th century verse, in French, as evidence of "the ironic profession of faith of the travelling spectacle vendor. The verse proclaims that everybody, scholars, madmen, old ladies and jealous husbands (not to mention bespectacled serpents and peacocks!), finds or should find a use for eyeglasses to suit his or her own particular case or needs".

Margolin also goes into the historical language of eyewear, the apparent meaning and import of the sense of sight, and the tampering with this God-given capability by using lenses, as evidenced by archival artifacts. Biérent in turn takes up the anecdotal history of people who relied on glasses. Marly gives a brief but fascinating history of the use of the long popular telescopes and opera glasses, especially as the thing to do in society. An interesting addendum to the book is a four-page list of "Some names of spectacle makers and opticians up to the beginning of the 19th century".

The book is truly an archival gem!

Texan optometry:

"Optometry in Texas, 1900-1984" is the title of an attractively bound, hardcover, 23 x 16 cm, 360 page book by Weston A. Pettey, O.D., published under the auspices of the Texas Optometric Association by Nortex Press, Austin, Texas in 1985. The date of 1900 in the title identifies the founding of the Texas Optical Association, but the author quite appropriately devotes the first of ten chapters to prior optometric developments in areas including other parts of the world.

The book is essentially a history as seen through the eyes of a prominent and highly regarded 77 year old optometrist of optometric family heritage who served as a long time editor of the Journal of the Texas Optometric Association and held many Association offices including the presidency. The fact that Dr. Pettey has known personally most of the people mentioned in the book is both a favorable and unfavorable consideration in the appraisal of its historical validity.

He writes glowingly of the profession of which he is clearly proud and which he dearly loves. As attributed to the famous Will Rogers, Weston Pettey seems never to have met anyone he did not like. Quite obviously relying heavily on memory, he is not always precise in his identification of people, places, events and things, but he is thematically and on the whole very accurate. Above all

he has searched through all obtainable and accessible original documents for the facts, making the book a highly documentary resource, especially regarding organizational, legislative, legal, and educational matters. Almost totally untouched are the clinical and technological developments of the era. Included are numerous photographs of persons and groups with almost every individual identified.

The optometrist as a nonperson:

A search for tidbits of optometric history quite obviously necessitates the perusal of ophthalmological history as well. This prompted the borrowing, from Dr. James Leeds' collection, of a handsomely bound 1965 book entitled "A History of Ophthalmology at the University of Pennsylvania" authored by ophthalmologists Daniel M. Albert and Harold G. Scheie. The still intact book jacket teasingly states, "Published in the same year that the University celebrates its two-hundredth anniversary, this inspiring survey traces the treatment of eye disorders from Franklin's invention of the biofocal (sic!) to the present."

Plate 1 is a full-page, full-color Bausch and Lomb sponsored portrait of Franklin writing his bifocal memorandum. Featured in the introduction are two paragraphs from Franklin's 1785 letter of invention to George Whatley. Immediately following is the casual assertion that, "In 1785, however, there were no ophthalmologists to pass on the benefits of Franklin's ingenious invention. The art of optical glassmaking was clothed in secrecy and passed on from father to son, and spectacles were sold by peddlers."

In the chapter on "Treatment of the Eye in the Mid-nineteenth Century", pages 98 to 106 are devoted to the topic of "Spectacles", approximately half of which space is occupied by three illustrations, one, a painting of "The Eyeglass Vendor", another, the painting "Mail Order Spectacles", and, a third, a photograph of four contemporary types of eyewear in the Mutter Museum collection, all four really quite elegantly crafted. Opticians mentioned were two McAllisters, Joseph Zentmayer, Ivan Fox, and James W. Queen. Cited are several medical and ophthalmological publications describing medical attitudes toward, and concepts of, the role of spectacles largely as bothersome or of questionable merit but admittedly of popular interest and wide acceptance.

With the University's eventual establishment of a Department of Ophthalmology in 1870, the invention of the trial case and skiascope, and the appearance of Donders' book the incentives for refracting began to emerge among eye physicians. During the professorship of George de Schweinitz, 1902-1924, "more than a thousand patients each year applied for glasses at the University Eye Dispensary". His curricular subjects included "functional testing of the eye", "methods of determining errors of refraction", and "physiological optics".

Perhaps attributable to the American Medical Association policy in effect at the time of this book's appearance, which made it unethical for physicians to consort professionally with optometrists, the words optometry, optometric, and optometrist are completely excluded from the text.

Vision screening in schools:

"Optometry in the Schools" is a very blue hardcover 14 X 20 cm booklet by R.C. Augustine, an optometrist who later served as President of the American Optometric Association. It is only 50 pages long, plus four pages of advertisements of other books by the same publisher, Optometry Publishing Company, Kansas City, Missouri. Though the book is not dated, two references in the text to F.G. Alexander as the current president of the American Optical Association indicate the period to be 1915-16.

In the title page Augustine is identified, among other qualifications, as the President of the Illinois Association of Optometrists. The conversational and anecdotal style of the text indicates that the book consists of lectures to optometrists, for which Augustine had a fine reputation. He invites his colleagues to think creatively and recognize the opportunities in optometry to bring their services to all segments of the public and especially through the children in the school system. His sincerity is conveyed most effectively in the introduction citing his own childhood experiences and "lost years" as an undetected compound myopic astigmat of more than four diopters who received his first lens correction five years after leaving school under the reputation of an incorrigible "outlaw".

In subsequent chapters he dwells on the importance of the optometrists' total involvement in the community at large and the school system, especially to use every opportunity to explain the nature of vision and its enhancement by proper optometric care.

A six page appendix entitled Examination of School Children's Eyes is authored by F.G. Alexander. He describes his administrative procedure for conducting a vision screening program at the school, together with suggested forms on which to record the examiner's findings and to inform the child's parents and teacher. It is not clear what tests or techniques were used but apparently they included acuity, some questioning, and inspection. This may be the earliest published evidence of vision screening of children in school.

Other than that, the historical significance of this document is its valid representation of optometric thinking as voiced by an acknowledged spokesman of that era. The nominal theme of the title was merely another vehicle for Augustine's sermon to his colleagues. This appeared at the height of the defensive two decades of legislative enactments to retain optometry's centuries-old status and at the early stages of firming up its identity under the name "optometrist" instead of "optician".

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, and professional literature relating to lenses and cataracts is 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 mentioned. 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."

Optometry in antiquity:

On November 30, 1989, the Deutsches Museum in Munich reestablished its optical department, which had been demolished in World War II. Included in the 650 square meter display area is the history of optics as well as optical phenomena, old instruments, and appliances. The project represents an investment of about 3.2 Mio. DM (almost two million U.S. dollars).

A feature of special optometric interest is a lifelike doll-house reproduction of a street-side spectacle-selling scene of the Middle Ages. A full color photograph of this scene is on page 24 of the January 20, 1990, issue of Deutsche Optiker Zeitung, vol. 45, no. 1. It is not evident from either the photograph or the text whether the models are life-size or miniature, but that the display is worth a visit is emphatically declared by the reporting author Wolfgang Fink.

Spectacle swap-fest:

Conceivably novel was the invitation of Gerald C. Elliott, O.D., of Greencastle, Indiana, to his optometric colleagues to bring with them to the annual state convention their duplicate antique eyeglasses for possible exchanges with some of the duplicates in his large collections.

Ocular calisthenics:

"Oculo-Didactics or EYE CULTURE" is the title of a gray colored hardcover 14 x 19 cm 72 page book copyrighted in 1915 by "Optometry Educational Bureau" and published by "Optometry Publishing Company", Kansas City, Missouri. The author is Charles Henry Taylor, identified only by two photographs, one, a small photograph of postage stamp size labeled as the author in 1879, with a black beard and wearing a felt hat. The other, full page, is labeled, "Photogravure from the fine steel engraving by Clark in the History of South Dakota", this time with white hair and beard. Whether or not the author was an optometrist or even represented himself as one is not clear though he occasionally refers to his "private practice". In discussing procedure he makes reference to himself as the "Operator". In the introduction he quotes excerpts from eight anonymous "reliable men" allegedly culled from the testimonials of many crediting him with a highly successful clinical procedure. Two of these seem to regard the author as an eye specialist or ophthalmologist, and none identifies him with optics or even sight-testing.

On page 49 he describes his fee system as being occasionally "free" for "patients" unable to pay but usually beginning at five dollars and sometimes "ten, twenty-five, fifty or one hundred dollars" for those "ample able to pay".

The Blue Books of Optometrists during 1912 through 1936 variously list a Charles H. Taylor in Waltham, Massachusetts, as having graduated from Northern Illinois College in 1908 and from "private instruction" in 1906. However, that Taylor was presumably not the author of this booklet. The author, for example, describes his system as having become "sufficiently encouraging" by 1900, at which time he therefore adopted a patient-numbering and record system and reached 33,359 within ten years. In 1910, he "abandoned much of his former activity on account of age".

In the title page the topic is declared to be "a system of eye training used for many years by the originator and founder in public schools, colleges and state institutions and private practice". By way of historical documentation in the preface the author states, "In 1707, Antoine Maitre-Jan gave a description of complaints which he thought 'Arose from the strain eye'". Additional attributions of theoretical support are credited to a Dr. W. Kitchner (1824), Willer (1832), Sichel (1837), Piorry (1850), and the author himself in 1867, but without any clue as to who these people were or where their statements may be found.

Absence of figures, tables, or data, together with a voluble style and a sparsity of facts, or even of definitive concepts, characterize the text throughout. The first chapter is titled "Principles of Oculo-didactics" and consists largely of analogies of this culture being to the eyes what physical training is to the bodily structure. Chapters II and III are both labeled "Oculo-didactics in Schools" and contribute many more inconsequential analogies. Chapters IV, V, and VI are titles, "Oculo-didactics in General Practice" with hints as to how he relates to patients' needs and expectations. They include numerous extremely scantily described cases of success involving such conditions as diplopia, tropia, amblyopia, extra-ocular palsy, hyperopia, migraine, stuttering, nervous tension, and tobacco addiction. They also include three terms presumably coined and defined by the author as follows: Aoropia (subnormal refraction due to immaturity), Copiopia (eye fatigue), and Ophthalmagia (neuro-ocular pain). In Chapter VII, Procedures, he vaguely mentions the roles of eye movements and rotations, gentle pressures applied to the eye, incidental use of prism correction, monocular blinking, and accommodation. Instructions for 10 specific exercises involving fixation, prolonged attention, tracking, lid movements, peripheral perception, etc. make up the final chapter, no. VIII.

How to interpret the significance of this book in terms of optometric history is difficult, and especially confusing because it was published by an optometrically labeled enterprise. To this interpreter (H.W H.) it may reflect the circumstances of frontier eyecare before adequate legislative control of the health professions, at which time and place cultists and a variety of self-designated and unbridled healers at all levels of sophistication and sincerity were quite rampant. That the author of this book repeatedly identifies himself as an "operator" may well tell the whole story.

Contributing Editor:

Henry W Hofstetter
2615 Windermere Woods Drive
Bloomington, IN 47401
USA

Managing Editor:

Douglas K. Penisten
College of Optometry
Northeastern State University
Tahlequah, OK 74464
USA