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NEWSLETTER
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Volume 18

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Number 3

The beginnings of an historical development:

It is often difficult to think of events of the last decade or two as history, mainly because we remember it. But personally remembered events are often not recorded except in casual correspondence, which today is so massive as to bury its own details. For the tangible record, then, here are some passages about a development in optometric education excerpted from a recent personal letter from Claro M. Cinco, O.D., of Cebu City, Philippines, to five of his overseas friends, as follows:

Forgive me for addressing you all in one letter. I am very much pressed of time, but I must share with you the good developments related to our project to update optometric education in the Philippines. As you know, since 1970 I initiated a study to upgrade the training of our graduates by creating a committee to review our curriculum. This move was shelved on account of the declaration of martial law in 1972. With the establishment of the Cebu Doctors' College of Optometry in 1980 I felt the need for organizing the Council of Deans of Philippine Colleges of Optometry to serve as a forum and vehicle for communication among the deans of the eight colleges in the Philippines.

As there was a divergence of opinion on what we should adopt to arrive at a consensus, we held a Symposium on Optometric Education in 1982 and invited you to participate and share with us your ideas and suggestions. After this symposium, it became clear that our course in optometry needs to be increased to six years by adding a two-years preparatory optometry curriculum so that the regular four years course can be devoted to professional and visual science related subjects.

The then Ministry of Education (now called Department of Education) was receptive to this plan, but upon consultation with the Ministry of Justice the latter ruled that it was necessary to amend the Republic Act 1998 (Optometry Law) in order to effect the proposed six years course since this law specifically provided that the optometry course shall be four years. Immediately, we asked two members of parliament to draft a bill for this purpose. As the bill was about to be presented to Parliament the February 1986 revolution took place, Marcos

was toppled, and parliament was dissolved by President Cory Aquino.

Fortunately, the new Secretary of Education Lourdes R. Quisumbing is from Cebu and a good friend of mine. I took the opportunity to discuss with her our project and she was very receptive. She asked the Director of Higher Education and four others of the department to meet with us on March 6th who committed their support.

The idea is that before the new congress will be elected in June this year we will take advantage of the executive powers of President Aquino to amend the Optometry Law to allow the change of the course to six years. If we wait for the new congress to enact such an amendment we will be suffering from additional delays since the said new congress will have to tackle first the more urgent economic and social amelioration measures.

On April 22 the Council of Deans will meet again with the officials of the Department of Education, this time to be attended by the Secretary herself, to finalize the draft of the executive order which will be presented by the Secretary to President Aquino for signature. Barring further hitches, we will be able to adopt the proposed six years course.

Our plan is to make the new curriculum effective within two years from the promulgation of the executive order. We feel that we would need two years to finalize the details of the new curriculum, train the faculty to handle the new subjects added, and prepare the physical plant of our colleges. In this connection, we shall be in frequent touch with you to seek your advice so that we may be able to formulate a curriculum to meet the standards of quality optometric education.

Now, we are just one step away from the realization of this project. It took us 17 years to arrive at this point, and I hope that there will be no restraints to hurdle. After some amount of discouragements, disappointments and frustrations we are beginning to see the fruits of our labor. This would not have been possible without your personal involvement, advice and the unquantifiable inspiration which you gave us, and for these, please accept our deepest debt of gratitude.

Optometry history to be published:

OHS member Brian Layland informs us that the Australian Optometrical Association has agreed to publish a History of Optometry in Australia as a contribution to the Australian

bicentenary recognition in 1988. Optometrist Charles Wright of Adelaide has served as the Association's very competent and interesting historian for several decades and for a number of years has been working on the book manuscript. As a member of the Association's governing Council Layland has been receiving a copy of each chapter as the book progressed. He anticipates that the book will be well received by historians as well as by optometrists. Those of us who have the pleasure of knowing Charles Wright surely agree.

Cartoon mystery solved:

From 7 Mirrabooks Avenue, Homebush 2140, Australia, O.H.S. member Brian Layland wrote as follows to report the source of the mystery cartoons:

I was sure that I had seen the cartoon contained in the January 1987 issue of the Newsletter and was sure that I had a copy somewhere!

During the Easter Holidays period I have been organizing for the IOOL meeting and whilst looking for papers in the depths of the International file I unearthed the book with the cartoon.

It is probable that the matter has been resolved by now as the book of cartoons must have received wide distribution.

The cartoon is contained in a book of cartoons titled "Seeing is Believing"; the author is Nate (Nathan) Kvetny O.D.. It was published in 1967 and the illustrations were by Howard R. Mioreanu.

Nate Kvetny's address is given as 3917 Virginia Rd. Los Angeles, California 90008.

Your copy of the book lacks the cover; this is where the information is contained. Looking at it, I realize that not only must the cover be missing, but also the first and second page plus the corresponding last two pages. The last page presents a message: "Your vision is your most important asset, and merits the finest regular professional care, available only from trained practitioners. This is the only way you can be assured that your eyes are functioning at their highest level of visual performance."

My copy has written on page 1: "With my Compliments, Nathan Kvetny O.D." and was received by mail in 1968.

The most recent Blue Book of Optometrists shows Dr. Kvetny's address to be 20 Fashion Square, Buffons, La Habra, California 90631.

Another memorial:

The Homer H. and Marie Hendrickson Award goes to a fourth year student at the Southern California College of Optometry who demonstrates "outstanding comprehension, aptitude and promise in the area of vision therapy."

Memorial clarification:

The previously listed A. M. Skeffington Memorial Award on page 15 of the January 1987 issue, Vol. 18, no. 1, was identified as one for Pacific University students. In fact the sponsors, the College of Optometrists in Visual Development, advise that these awards "for clinical competence in the field of vision therapy" are offered to students at each school and college of optometry.

In a recent letter from OHS member Homer Hendrickson, Immediate Past President of the Optometric Extension Program Foundation, we are informed that the College of Optometrists in Visual Development also offers an annual A. M. Skeffington Memorial Award to an optometrist for "excellence in optometric writing."

A memorials register:

For fifteen years we have been including in these pages the identification of various forms of memorials established for optometrists or other persons who have served the profession in an appreciated role. During the past year we have received occasional inquiries as to whether or not given memorials had been included. Each time this meant searching the indices of 18 volumes of the newsletter. This is especially time-consuming because the names of persons of prominence appear with high frequency in the indices whether or not they have been memorialized.

So, we finally undertook to search the back issues page by page and assemble an alphabetized card file of the names of memorialized persons herein recorded. It is a far-from-complete list, we are sure, but perhaps the best available. How many? One hundred thirty!

To what are the memorialized names attached? Included are awards, prizes, medals, plaques, scholarships, fellowships, libraries, archives, museums, funds, trusts, lectures, courses, buildings, rooms, halls, classrooms, auditoriums, theaters, organizations, chapters, institutes, schools, centers, foundations, trees, clinics, meetings, and academic chairs.

Not in our cumulative list to date have been any statuary, portraits, or published memorial dedications. Our criteria for inclusion are hardly restrictive. Essentially, any tangible gesture of apparent significance intended to prolong the memory of the person to be honored has been included.

Interestingly, a small number of the memorials are for persons still living. Perhaps their demises are anticipated to be soon, or else there is a desire to show appreciation while the honorees can still enjoy it.

Optometrists by necessity:

Having been given both credit and blame for introducing the word optometrist to identify the refracting optician Dr. John C. Eberhardt responded in a letter to the editor of the Optical Journal and Review of Optometry in the March 18, 1920, issue, Vol. 45, no. 12, p. 844, as follows:

First of all permit me to say that I have never claimed the credit of having coined the word Optometrist.

When Ohio, during the Winter of 1902, prepared for the introduction of an optometry measure, I served as chairman of the legislative committee. We found that in Ohio, legislation could not be obtained for the regulation of optics which the courts had designated as a trade.

Our committee represented that optometry was the application of optical principles through technical devices and methods for ascertaining the visual status of the human eye and the adaptation of corrective lenses, making prerequisite an appreciation of the eye and its various associate functions, and a comprehensive knowledge of physics and mathematics so far as these entered into the optical aspect of human vision.

As a result of the foregoing, we were advised to determine upon a word to designate the practitioner of optometry, as by us defined.

Optometrist seemed the logical derivative of the word optometry and this term was at that time submitted to a number of our representative men in optometry, also to various authorities as was considered proper and acceptable.

During the 1903 convention of the American Optometric Association held at Atlantic City, the writer presented a resolution advocating the adoption of this word for reasons herein given. This resolution was passed without opposition. During the following year, the writer succeeded finally in interesting the publishers of Webster's Dictionary in the words optometry and optometrist and their definitions appeared in their revised edition published during the spring of 1904.

Thus necessity was the father of the word optometrist, and the writer claims no credit other than he became the means to an end.

Another memorial:

The Meredith Morgan Lecture Series, sponsored by the University of California School of Optometry, Berkeley, is an annual program for optometrists.

OHS reminisce-in:

OHS President J. J. Abrams informs us that the annual reminisce-in will be in Denver, Colorado, on Saturday, December 5 at 6:15 p.m. This brief but popular gathering of all who may be interested in, or merely curious about, optometric history is sandwiched between the numerous busy events of the American Academy of Optometry, being preceded by the three days of Ellerbrock Continuing Education Courses and followed by three days of the Academy Papers Programs. The tight squeeze will be due to the traditional "Hofbrau" which in effect limits the reminisce-in to about an hour for most of us in attendance at the Academy meetings. Further details of hotel, room location, program, etc. will be announced later and of course available at the Academy registration desk. Everyone is welcome.

P. R. value in history:

A news brief in the March 1987 issue of the Deutsche Optiker Zeitung, Vol. 42, no. 3, p. 4, reports the results of a press conference on "a hundred years of contact lenses" at the annual congress of the ZVA (the national association of

optometrists). The interviewing of program lecturers by the attending media representatives resulted in reports in the major German newspapers and appearances on radio and television in which the history, current significance, and potentials of contact lenses were discussed.

Optometric residency history:

Optometric residencies are sufficiently recent to necessitate a brief definition for many of us. Briefly, a residency is a salaried appointment in a combined clinical and academic setting in which an optometrist provides special professional services so organized as to combine his or her experience with research and advanced educational development.

In a very real sense the clinical experiences of commissioned optometrists in military hospitals following World War II often provided many of the features of residencies. Officially, however, such appointments were not so recognized. The first to receive accreditation by the Council On Optometric Education of the American Optometric Association was a hospital-based optometry residency program at the Kansas City Veterans Administration Medical Center in Kansas City, Missouri. It was initiated in 1975 as a cooperative venture of the Center's Department of Ophthalmology and the Illinois College of Optometry.

Since then a significant growth in the number of programs and of positions has occurred. By June of 1986, 43 programs had been granted accreditation with positions for 65 graduates. The number of additional residencies yet to apply or being established is not known.

These and other details are reported by John F. Amos, O.D. in an article entitled "A brief history of optometric residency education" in the May 1987 issue of the Journal of the American Optometric Association.

Recognition Award commentary:

At the OHS Executive Board meeting in Toronto in December the OHS Recognition Award was discussed with the suggestion that it be identified in the patriarchal name of someone whose role in optometry had unusual historical significance. By way of examples three names were brought up as possibilities for a choice, these being Andrew Jay Cross, John C. Eberhardt, and Charles Sheard, in both alphabetical and chronological order. (Had I been present at that meeting I probably would have tossed in a few other names to emphasize the essence of critical review!)

Recognizing the care that should be taken in the selection of an eponym, OHS President J. J. Abrams, O.D., says he would appreciate all possible input from the membership. He asks that we members write him at 4516 West Washington Street,

Indianapolis, Indiana 46241, U.S.A., (Telephone 317 241 8315) to express our views in favor of or opposed to the idea, suggestion of others to be considered, or even just expressing a preference for one of the three already nominated. With our comments in hand he will put the matter on the agenda for further discussion at the next meeting of the Executive Board. It would finally be resolved by a mail ballot of all seven Board members.

Dr. Abrams also asked me to write up a few paragraphs about the present three nominees to help you refresh your memories, compare historical roles, and perhaps remind you of some other person whose name you would prefer to see identified with the award. In other words, should it be the Cross Recognition Award, the Eberhardt Recognition Award, the Sheard Recognition Award, or in some other historical patriarch's name?

In response to Jerry Abrams's request I borrowed library packets on Cross, Eberhardt, and Sheard from ILAMO and attempted to condense the pertinent material. All three have been mentioned from time to time in this newsletter. Needless to say I have my own preference, but hope I can conceal it (except when I write my personal note to Abrams!)

Andrew Jay Cross (1855-1925). His early studies in physics and kindred sciences together with his father's work in horology and astronomy led him into optics. At age 21 he started as a jeweler-optician in Visalia, California, later in Walla Walla, Washington, and subsequently in Philadelphia. At age 34, in 1889, he opened an exclusively optometric office in New York City, remaining in that city until his death. This location effectively placed him geographically and contemporarily in the heart of the major organizational, political, and academic development of the profession in the U.S.A., for which he provided a vigorous and talented leadership.

In 1900, after serving as an organizer and president of his local and state optical (optometric) societies he was elected the second president, the first optometrical president, of the American Association of Opticians (later A.O.A.). With the introduction of optometry courses at Columbia University in 1910 he was called upon to give the lectures in Theoretic Optometry and he continued in this role for 14 years. He published extensively, especially on his favorite topic of dynamic skiametry, a controversial topic of the era. He invented a successful monocentric multifocal lens and several other items. A popular lecturer and campaigner for professional, ethical, and scientific optometry, he won honorary membership in 32 state associations and was made an honorary member of the AOA in 1919, the year of the name change to the American Optometric Association. His popularity was documented by the frequent label "Grand Old Man of Optometry", and in 1926 by the memorial dedication of a giant sequoia tree in his name at Muir Woods

Mount Tamalpais State Park, California, with the inscription "Andrew J. Cross, Pioneer Optometrist" on a bronze plaque.

A man of unusual vitality, Dr. Cross died quite suddenly following a slight cold and contraction of pneumonia at age 69. His body was interred at Massillon, Ohio, the prior home of Mrs. Cross.

John C. Eberhardt (1857-1927) was a contemporary of Cross but in a very contrasting milieu. Eberhardt was born in Muhlhausen, Germany, and attended school there until the age of nine when his family emigrated to Dayton, Ohio, a small midwestern city in extensively rural surroundings. At age 16 he was gaining apprenticeship experience in a foot-powered optical shop while simultaneously continuing his schooling to become a civil engineer. Subsequently followed two years as a civil engineer with the Denver and Rio Grande Railroad, two more years as a U.S. Deputy Surveyor in several western frontier states and territory and another year as a city engineer for Pueblo, Colorado. In 1882 he returned to Dayton to accept a position with a jewelry firm where "selling and fitting of glasses fell largely to my lot." Disturbed by the crude methods in vogue he took shortcourses in Kansas City and Cleveland, and studied "Hartridge" and other publications, and eventually enrolled in, and completed, an N.I.C.O.O. correspondence course.

He joined the A.O.A. in 1899, gave a paper on keratometry at the Chicago convention in 1901, and there was elected chairman of the first Board of Regents. In the ensuing year he successfully proposed the establishment of the Physiological Section and was elected its first president. In that connection he was instrumental in the establishment of the association's optometric library, which eventually evolved into our present ILAMO. A year later he was elected president of the AOA, at which time he had just completed a term as president of the Ohio association.

Probably his most popularly recognized single accomplishment for the profession was his proposing, promoting, and piloting the adoption of the terms "optometrist" and "optometry" as our professional identity. This was accomplished almost single-handedly by him through lectures, published articles, correspondence, resolutions, legislative efforts, and even prevailing on the publishers of Webster's Dictionary to include these new terms and their definitions.

In so many ways Dr. Eberhardt was the role model of the pioneer professional optometrist. Scholarly, forthright, scientific, and personable, he was widely accorded numerous optometric honors here and abroad. He contributed frequently and constructively to the technical and professional optometric literature of his era. A leading citizen in his home

community, he served as president of the Dayton Board of Education, as an organizer and governor of the Aero Club of America, a 32nd degree Mason, Chairman of the Ohio State Board of Optometry, and in numerous other roles. His death was preceded by five years of terminal illness, which he faced bravely and cheerfully.

Charles Sheard (1883-1963) lived in an optometric era very different from, though chronologically a bit overlapping with, that of Cross and Eberhardt. Many of us fondly and personally remember him. The practice of optometry was not his livelihood per se, but he was duly registered as an optometrist in more than one state, and his optometric research, teachings, and administrative involvement may well be unsurpassed. Except for one year as interim dean of the Los Angeles College of Optometry in 1952-53 his connection with optometric education was only the 1914-1919 period during which he founded and developed the optometry curriculum at the Ohio State University in Columbus, Ohio. For another five years he was head of the division of ocular interests at the American Optical Company, Southbridge Massachusetts, which included the founding and editing of the American Journal of Physiological Optics. In 1924 he joined the Mayo Foundation in biophysical research until his retirement as professor emeritus in 1949.

Throughout his career, and far into his retirement years, he retained his undying interest in the optometry profession's welfare and responded vigorously to every frequent invitation and opportunity to be of service on commissions, councils, and committees in a variety of advisory, academic, and organizational roles and as a frequent lecturer on optometric educational programs. He published often in the optometric literature as well as prolifically in the visual science area generally and including text books and major encyclopedia entries.

His academic qualifications included a B.A. degree from St. Lawrence University, and M.A. degree from Dartmouth College, and a Ph.D. degree from Princeton, all in physics. His teaching career started briefly at Dartmouth and then at the Ohio State University. While teaching physics at the latter he was quite fortuitously invited to give a talk on lens design at a local gathering of optometrists, an occasion which led to further contacts resulting eventually in his undertaking to initiate the optometry program on the campus.

Optometry was his introduction to the whole field of physiological optics, in which he soon acquired an outstanding reputation nationally. Not only eponymously identified with at least three widely used clinical optometric entities, he was accorded numerous special honors by a variety of institutions and organizations, including a foundation named in his honor, impressively listed in Who's Who and other directories.

His death in Rochester, Minnesota, was preceded by a long and debilitating illness, a sad ending to the brilliant career of truly a highest ranking patron of the profession of optometry.

In closing this commentary let me add President Abrams's request that readers not only give him views on the naming of the O.H.S. Recognition Award itself but also to nominate potential recipients of the award. The recipient may be any person who in some significant way has contributed to our knowledge, awareness, appreciation, or understanding of optometry's heritage.

H. W H.

Treasures and curiosities:

This is the headline of the June 1, 1987, issue of the American Optometric Association News, Vol. 25, no. 33, announcing the new exhibit on contact lens history at the International Library, Archives, and Museum of Optometry (ILAMO) in St. Louis, Missouri. The special exhibit was prompted by a grant of the AOA Contact Lens Section and the suggestion by one of the numerous donors of early equipment and other contact lens items. The article, with five illustrations, fills most of pages 1, 6, and 7. The exhibit is attracting the attention of many visitors.

Protection from light:

"A century's development of tinted spectacle lenses" is the title of an article by A. H. Degenhardt in the January 31, 1987, issue of Optometry Today (London), Vol. 27, no. 3, pp-67-69. It has also been reprinted in the March/April issue of the Journal of the Illinois Optometric Association, pp. 5-6 12-14, and 24.

Stating that the first rational research on the need for protection of the eyes from solar radiation was almost exactly 100 years ago, the author illustrated the prior vagueness of information by quoting prior professional advices. The first scientific justification of green-yellow lenses was made by Fieuzal in 1885 in terms of their cutting out ultra-violet rays.

Subsequent contributors to further developments included Professor Hallauer of Basel, the Rodenstock Optical Works, Sir William Crookes, G. Henkel, and Carl Zeiss. Later came the transparent anti-reflection coatings and their application to lens tinting, and more recently some successful developments of photochromic lens. Both represented long known principles awaiting practical development.

The most recent development has been the design of tinted segment spectacle lenses for use with visual display units to minimize the repetitive adaptations to brightness differences of the screens and their surrounds.

Georg Bartisch (1535-1606/07):

One of the most elegantly illustrated rare books is that of Georg Bartisch entitled "Augendienst" (eye care) published in Dresden, Saxony (now East Germany) in 1583. Born in Grafenhain bei Königsbruck (about 20 miles, 30km, north northeast of Dresden), Bartisch lived in a politically and culturally volatile era when in health care there were essentially three groups of practitioners. These were the academically trained doctors of medicine, the surgeons, barbers, and injury healers, and the untrained medicine men. Ophthalmic services involved all three plus itinerant Starstechers (cataract removers).

Except for a few skills learned from his barber-surgeon father Georg Bartisch was essentially self-taught. His "Augendienst" was the first comprehensive ophthalmological text in German. His opinions on spectacles were almost entirely cautionary. They were to be used only during moments when it was absolutely necessary to see fine detail. However, at least one of his beautiful illustrations shows a scholar wearing a pair to read a book, with a second goggle - like pair lying at his elbow. He expressed beliefs that squint was attributable to prenatal events, but he also illustrated face masks to be worn by exotropes and esotropes to force the eyes to straighten. More effective than spectacles were pills, purgatives, smelling salts, amulets, etc., all described in the book.

A recent review of this book is by Dr. Phil. Sabine Fahrenbach of Karl Marx University in Leipzig under the title of "Georg Bartisch und sein 'Augendienst'" in the March/April 1987 issue of Augenoptik, vol. 104, no. 2, pp. 60-64, with 14 literature references and nine reproduced illustrations from the book. Fahrenbach is at the Karl-Sudhoff Institute for the History of Medicine and Natural Science. His review includes much of the peripheral history of Bartisch's countryside and era, especially to enable the reader to appreciate the significance of the book.

Very brief references to Bartisch have been made in two prior issues of this newsletter, those of January 1982 (vol. 13, p. 19) and July 1983 (vol. 14, pp 49 and 75).

An incredible scientific analysis:

Recently OHS member James Leeds brought to my attention another old book with which I had been completely unfamiliar. Entitled "EYELESS SIGHT, A study of extra-retinal vision and the paraoptic sense", by Jules Romain (pen name of Louis

Farigoule), it is an English version of the French edition of "Vision Extra-Retinienne" translated by C. K. Ogden and published in 1924 by G. P. Putnam's Sons, New York and London.

Jules Romain (1885-1972) is variously identified in biographical directories and encyclopedias as a French poet, dramatist, scientist, novelist, a brilliant student of philosophy, and a celebrated author. This book itself is a literary masterpiece of exposition, though not mentioned as one of Romain's contributions in the three encyclopedias I consulted.

It was Romain's theory that our skin, including the mucous membrane of our nostrils, contains microscopic ocellary structures or ocelli which are directionally sensitive to light with the potential of at least a crude level of "visual" acuity and, at some parts of our body, even of vision for several distinguishable colors including red, yellow, and blue. This latest sensory channel, however, required intense concentration and "awakening". The procedure is described as follows (p. 147):

"The experimenter carefully bandages his own eyes, composes himself, places in front of his face, at a small distance, a very visible object--the cover of a book or of a magazine, a sheet of paper with any sort of signs, or a number in the frame, makes an intense effort of will to see the object, tries, if necessary, the gestures which are common to those gifted with paraoptic clairvoyance; above all takes up an attitude of extreme perceptive attention. Summed up thus in a few words, the programme seems simple. It's application is singularly complex and arduous."

This last assertion is documented in several subsequent pages of description of the development of Romain's own paraoptic sense, from which the following few passages are extracted:

"A dozen sittings, spread over about a month, none of which lasted an hour, passed without the faintest sign of vision appearing. These sittings were wearying, and disappointing, but not fruitless."

"After an interval of two days, I began my experiments again, devoting to them every day four, five, or even six hours."

"A tenth sitting showed a sudden progress. (1) I had the impression of a more intense brightness. (2) I succeeded in discerning more numerous and more various objects, with a better defined shape and colour."

"The subjective series is composed then of 31 sittings, representing a total of at least 150 hours of effective observations and experiments."

The book and the theory apparently created quite a public stir, including lecture and demonstration audiences with several prominent contemporary scientists. Though the experimental requirement of hours of intense, dedicated, and unrewarding observation in pursuit of an incredible phenomenon must undoubtedly have eliminated the involvement of virtually every person of conventional sanity, the flourish of Romain's ostensibly scientific analysis of his alleged results of his own extensive experimentation almost defies challenge. The 250 page book itself provides fascinating reading and may well have been a widely sold one. Possibly it is in your own public library.

I did not undertake to try the experiment.

H.W H.

Another Skeffington memorial:

In 1986 the Optometric Extension Program Foundation, Inc. founded the A.M. Skeffington Memorial Library and Archives for Behavioral Optometry.

Contact lens history:

The July 1987 issue of Contact Lens Spectrum, Vol. 2, No. 7, is a special issue commemorating the so-called 100th anniversary of contact lenses. Included is a series of at least 31 separately identifiable articles, each with a heading or title but mostly without identification of authors, and totally, or almost totally, without reference citations of information sources. Nevertheless they clearly contain much information about pioneers in the field and their respective contributions. The information seems quite reliable, at least for the developments that have occurred within living memory, but the earlier history is dealt with superficially and a bit distortedly, including, for example, a gross misrepresentation of Leonardo da Vinci's description of a contact lens.

Identified authors include Neal J. Bailey, Irving J. Arons, Patty Sposato, Joseph T. Barr and Carol L. Herman. The issue includes numerous illustrations of persons and things which give the publication archival value.

Citrine cure cited:

Last December OHS member John E. Quinn, O.D., of Salem, Massachusetts, wrote us to say that one of his patients brought in an advertisement of H. Stern Jewellers, a firm of 170 stores worldwide, which stated, "The ancients believed that the citrine had the power to help failing eyesight. To achieve the cure, the stone was first immersed in wine and then rubbed on the eye."

Dr. Quinn's patient was curious as to whether the "ancients" really believed that, as was Dr. Quinn, and subsequently I. A letter of inquiry to the H. Stern Jewellers head office on January 6 and another on March 13 asking for their source of information elicited no response or even acknowledgment. Just as there are today manufacturers of antiques perhaps there are also creators of new folklore. Until someone informs me of the validity of the H. Stern Jewellers assertion I shall purchase my jewelry elsewhere.

H. W H.

More soft lens history:

To supplement the historical comments of soft contact lenses in the April 1986 issue of this newsletter OHS member Howard A. Backman, O.D., of Pierrefonds, Quebec, Canada, has added to our archives a copy of the January-February 1965 issue of Optometrie (Montreal), Vol. 35, no. 1, on pages 6-10 of which is the first hydrogel lens description published on the North American continent. Dr. Backman is the author of the article, which is entitled "Hydrophilic Plastic Contact Lenses." The journal is available at ILAMO.

His report was prompted by a British Optical Association lecture given at the Royal Society of Health by Mr. Robert A. Turner of G.T. Optics Limited of London at which Backman witnessed one of the first demonstrations of the new soft plastic contact lens in London. Credit for development of the lens is given to Professors Wichterle and Dreifus at Prague, Czechoslovakia. A thorough account of the features and properties of the lens and its development and application makes the article a clear milestone.

Please come:

The state of Colorado, traditionally considered a rather progressive state, was a bit slow in getting statutory regulation of optometry, the 30th state to do so in 1913. Our special speaker at the annual OHS reminisce-in on Saturday, December 5, may provide some clues as to why the delay. He is OHS member Ron Fair, O.D.

The gathering will take place at the Marriott Hotel in downtown Denver during the week-end of the meetings of the American Academy of Optometry. The OHS reminisce-in is not an official part of the Academy program but it is cooperatively scheduled so as not to interfere with any Academy function.

All interested persons are welcome and no charge is made for attendance. Information on the specific room location at 6:15 p.m. will be available at the Academy registration desk.

The gospel according to Gould:

It is very possible that you as a book lover have seen on the shelf of an institutional optometric or medical library, or even in a second-hand bookstore or in a private collection of vision-related books, a set of six volumes entitled Biographic Clinics, and, without taking the immediate time, wondered what they contained. You noticed their aging burgundy color, each about 20x14x3.5 cm, and you may even have noticed the name of Gould as author and wondered momentarily if it might be the same George M. (Milbry) Gould, M.D. (1848-1922), author of well known medical dictionaries and of numerous articles in the medical literature.

It is.

The six volumes, 400-500 pages each, were published by P. Blakiston's Son and Company in 1903, 1904, 1905, 1906, 1907, and 1909 respectively.

Looking in Webster's Biographical Dictionary and in Who Was Who in America you will find that Gould was a drummer boy for the 63rd Ohio Volunteers in 1861-62 and enlisted with the 141st Ohio Volunteers in 1864-65 for Civil War service. He later earned his A.B. degree from Ohio Wesleyan University, an A.M. degree from Harvard Divinity School, and an M.D. degree from Jefferson Medical College, all very respectable institutions of higher learning. He practiced ophthalmology in Philadelphia, served as editor of several medical journals, and received the Doyne medal at the ophthalmological congress at Oxford, England. He was unquestionably talented, well educated, industrious, and devoted to the welfare of humanity.

But he harbored a strange and persistent obsession, quite unbecoming of his brilliant literary and scientific aptitudes otherwise. Stated all too succinctly his was the belief that an incredible host of health problems were due to inadequately corrected refractive errors, that the medical profession was grossly negligent in its management of refractive errors, and, concomitantly, that refracting opticians (optometrists) were without exception inherently incapable of doing so.

In support of his thesis he wrote detailed biographical accounts of the often life-long health problems of well-known persons, pointing out specifics which he believed supported his theory. The biographees, for each a whole chapter, are Thomas De Quincey, Thomas Carlyle, Charles Darwin, Thomas Huxley, Robert Browning, George Eliot (pen name of Mary Ann Evans), George Henry Lewes, Richard Wagner, Francis Parkman, Jane Welsh Carlyle (Mrs. Thomas Carlyle), Herbert Spencer, John Greenleaf Whittier, Sarah Margaret Fuller Ossoli, Friedrich Wilhelm Nietzsche, John Addington Symonds, Hippolyte Adolphe Taine, Honore' de Balzac, Peter Ilich Tchaikovsky, Gustave Flaubert,

Lafcadio Hearn, Louis Hector Berlioz, and Jonathan Swift. Other chapters deal with numerous health problems, the physiology of vision, refractive errors and eyestrain, and professional responsibilities. Many of the chapters are reprints of his publications in a variety of medical journals.

The intensity of his feelings about optometry is epitomized by the following statement on page 209 of Volume I:

"In his proper act and work the optician has usually been so backward, and in his impertinence and assumption so forward, that both have conspired to engender disappointment and disgust. Few opticians can rightly do their legitimate work, the making and fitting of spectacles. And this is because they are striving to do the physician's duty. It should be as illegal and impossible for an optician to sell a pair of lenses without a physician's prescription as it is for a druggist to sell poison without medical warrant. The latter kills instantly, the other slowly."

In an appendix to volume II, Gould listed 68 reasons why glasses may sometimes fail to give relief from "headache, sickheadache, biliousness, dyspepsia, neurasthenia, anemia, anorexia, chorea, epilepsy, and many other nervous, mental, cerebral, and denutritional disorders." Reason number 4 reads "The glasses may have been prescribed by an optician, instead of by a physician. No optician ever prescribed a scientifically correct pair of lenses. There is no duty more incumbent upon the medical profession than to make illegal the prescription of glasses by opticians." Most of the 68 reasons were described as faults of medical procedures and judgements and the remaining reasons were attributed to circumstances and dispensers.

In volume III (1905), Chapter I, beginning on page 27, Dr. Gould made an interesting description of what he called "new" and "old" ophthalmology.

"The 'old ophthalmology' was, and is concerned with inflammatory and surgical diseases alone, remaining ignorant of and indifferent to such relations as might exist between the eye and the general system, except as regards those minor and few diseases which arise in the body and then affect the eye."

In contrast,

"The new ophthalmology finds its objects of study and interest in . . . systemic results of ocular conditions . . . which might better be called physiologically aberrant or variant. They do not originate in inflammatory or pathological conditions, but simply in optical ones."

In volume IV (1906) on page 298 he expressed his view on the optician's role very precisely, as follows:

"There is needed in every city and village at least one optician who understands his business, is able to do it, and limits himself to doing it. In many places where there should be several or many the incompetence of all is so amazing that to get rightly made and fitted glasses is an utter impossibility. The oculist in such cases does not care, he is not a refractionist, and his optician, of course, is appealing to the legislature to be allowed to become an oculist."

Volume V, like volumes III, IV, and VI is subtitled "Influence of Visual Function upon Health." In it is included a chapter by Professor H. Augustus Wilson, M.D., on "The Ocular Factors in the Etiology of Spinal Curvature." Several chapters include case reports of unidentified patients. Chapter XX discusses "The Ophthalmic Sins of Hospitals", and Chapter XXI the "Ten Types of Ophthalmic Charlatans." Under "Eyestrain" the index lists 48 related ailments ranging alphabetically from "albinism" to "vomiting".

The first chapter of the final volume, number VI (1909), is entitled "Valediction", in which, on page 26, he identified it as "the last I shall write." He added, "To 'the gospel' I have given all the strength and money I could spare, and of both the expenditure has been great. That is nothing, however, compared to the burden of hatred and persecution which has been heaped upon me by my medical colleagues"

The following excerpt from the last paragraph of the book, Chapter XXII, pp 470-471, summarizes his thesis clearly and unrelentingly:

"The larger number of aberrant physiologic processes are directly or indirectly due to slight imperfections of measurement and shape of the eyeballs. Eventually they phase themselves into those mysteries of medicine called migraine, headaches, sick headache, functional diseases of the digestive organs, lateral spinal curvature, kyphosis, nervous and mental diseases, such as insanity, much criminality, hysteria, neurasthenia, epilepsy, even suicide. There is an abundance and a growing mass of testimony that these diseases are very largely the consequences of morbid ocular function."

H. W H.

Optometry in Nigeria:

Nigeria is a very large country which gained its independence from Great Britain in 1960. The colonial government did not get involved in any health care services until the 1920's but even then did not include optometry nor did the existing or prior Christian missionaries. The first Nigerian to study optometry was Thomas King Ekundayo Phillips who took and passed the British Optical Association exam in London in 1912 and became the lone Nigerian optometrist until 1943. In 1944 seventeen others joined him.

These and more details are reported by Jokotoye Babalola in an article entitle "History of Optometry in Nigeria" in the May 1987 issue of the Journal of the Nigerian Optometric Association, Vol. 3, no. 1, pp 3-7. It is reprinted from the December 1982 issue of Optometric Monthly.

The article identifies several of the optometric pioneers and describes the gradual government involvement, contributions of voluntary agencies, the early acquisition of optometric education, the trends of working conditionns, manpower growth, and professional organization development.

Three-phase history:

In an article entitled "Moderne Entwicklungstendenzen der Kontaktlinse" (Modern development trends in contact lenses) Professor Gunter Forst of West Berlin introduces his subject with an interesting representation of three historical phases based on the materials of which contact lenses have been made. The first was glass, the second was PMMA (polymethyl methacrylate), and the third was HEMA (hydroxyethylmethacrylate). With each material he identifies respectively the key names and dates of, first, August Muller (1887), secondly, Theodore Obrig (1938) and Kevin Touhy (1947), and, thirdly, Otto Wichterle (1962).

To depict the exponential expansion of contact lens literature he includes a graph showing a single publication in 1887 and more than a thousand in 1987. The article appears in Deutsche Optiker Zeitung, Vol. 42, no. 5, May 1987, pp. 84-86 and 88-93.

Rubens Peale's spectacles:

The front cover of the April 17 issue of JAMA, The Journal of the American Medical Association, vol. 257, no. 15, is graced by Rembrandt Peale's "Rubens Peale with a Geranium", the painting which holds the record purchase price of \$4.07 million for an American painting at auction. On page 1996 of the same issue is a commentary by Carol E Hevner, who is writing a study of Rembrandt Peale's life and work.

In the portrait, painted in 1801, 17 year old Rubens Peale is shown wearing a pair of glasses but also holding a pair in his hand in his lap. Rubens's daughter Mary Jane Peale had explained in her diary that Rubens's 23 year old brother, Rembrandt, had initially done the painting with the spectacle in Rubens's hand but later painted a pair on the eyes without deleting the pair in hand.

Picking up from this, OHS member Charles Letocha wrote a letter to the editor of JAMA, Vol. 258, no. 4, July 24/31, p. 476, to point out how at 10 or 12 years of age Rubens quite fortuitously discovered that his vision was correctable with a large burning glass. Thereupon, Rubens's father, the renowned Charles William Peale, took Rubens to John McAllister, the optician, who made up a special pair of glasses with double convex lenses of about nine diopters. Letocha also mentions the late John Levene's conjecture that the two pair of glasses represented a pair for distance and a pair for near.

On the same page Hevner responds to Letocha's letter with further evidence of the correctness of Rubens's daughter's explanation. He also mentioned the fact that the boys' father, Charles William Peale, himself had experimented with making spectacles.

Both writers identify additional sources of information which could well reveal more insight into optometry in the late 18th and early 19th centuries.

An authentic lamp museum:

A bit off the beaten path of routine travelers is a fine collection of historical forms of lighting, on South Street (State Route 44), Chardon, Ohio 44024, USA. The name of the place is The Gilded Cock Tavern of Chardon Lakes Inn. The tavern itself is a faithful replica of a stagecoach stop of 1830, and the lighting collection is in "The Lamp Room".

The room includes scores of devices from many parts of the world and earlier eras. In one corner is an example of the horn lantern which would have been lighted by one candle. The candle light showed through windows shielded from the wind by a thin layer of cow's horn, which supports the theory that the word "lantern" comes from "lant horn".

In another corner is an example of Ami Argand's lamp patented in England in 1784, a cylindrical wick lamp used by many of our grandparents. In the other two corners are a replica of Edison's first successful electric light bulb and a combination of a gas lamp and electric bulb.

21 points and more:

A letter from OHS member Homer Hendrickson, a past president of the Optometric Extension Program Foundation, Inc., provides some documentation to the theory of the origin of the "21 point" examination, as follows:

From everything I can find I agree with Ted Fisher and Irv Borish (see Vol. 18, No. 2, pp23-24) that the original "18 tests" came from Sheard.

Page #2 of a 1933 course published by OEP, copyrighted by E.B. Alexander, lists "the minimum number of points (that) have been accepted," the 18 points. By the end of the course (the last page) he had included History and Visual Acuity (unnumbered) and added #13A, habitual near phoria; #14B, binocular crossed cylinder and #15B, the associated induced phoria; #16A and #17A, the blur-out findings associated with #16 and #17, which then were renumbered as #16B and #17B; #19, the binocular amplitude of accommodation at 13 inches; #20 and #21, blur-out findings at near with minus and plus spheres respectively. Later he added "after" phorias taken through the gross of #20 and #21, as well as monocular (OD and OS) amplitudes.

Thus he added eight numbered points (five of which were a sort of subtest) and four unnumbered, but the total grew to only 21.

Nothing that I can find in the OEP courses by Skeffington (1928 to 1976 when he died) states the why of numbering the findings. Apparently it was done to save time in communicating his concepts and teachings, oral or written. He found it more convenient, faster, and precise to state how each test was to be made, what he termed "standard procedure," and to refer to them from then on by number.

Skeff did originate, just before the 1920s, the syndrome approach for diagnosis and subsequent treatment of visual problems, much like that used by medicine. For example, physicians looked for a syndrome, a set of symptoms, observations and tests that occur together, such as unusual blood pressure, temperature, respiration rate, pulse or heart rate, pupil size, etc., and made a diagnosis and prescribed a treatment.

Skeffington proposed as a syndrome, for example, that when:

The "net" of Dynamic Retinoscopy at 20 inches is high the True Adduction (base-out to first blur at far), the Adduction (base-in to break and recovery at far) and the Negative Fusional Reserve (base-in to break and recovery at near) are low the patient is diagnosed as having an "intensified near problem" and "full plus reduced at far but full plus at near" is to be prescribed.

Using numbers to identify the standard procedure and each test, the above indented syndrome statement of optometric probes became:

5
9-11-17B

and the person was diagnosed as a B type case, with a directive lens regimen of "cut plus at far, full plus at near."

This doesn't completely solve the mystery of the 21 point genesis (see Vol. 17, NO. 4, p61) so I leave it to the researchers.

Annual Call for Nominations:

It's that time of year again for the OHS membership to send in their nominations for a seat on the Executive Board. The executive board member whose term expires at the end of this year is James Leeds. Nominations, or renominations for the four-year term are hereby requested for placement on the ballot which will be sent out with the October issue of the Newsletter. Submissions should be sent to Douglas Penisten, School of Optometry, 800 E Atwater, Bloomington IN 47405.

By all means, do not hesitate to include yourself as a candidate if such responsibility interests you. Ordinarily, merely the name of the person you are nominating will suffice especially if he or she is already well known to the OHS members, but if you feel that a brief "pitch" should be made in your nominee's behalf it will be most favorably considered for inclusion in the October issue of N.O.H.S.. Please do it now, as the October issue will be out soon.

Henry W Hofstetter
Douglas K. Penisten, Editors