NEWSLETTER

OF THE

*OPTOMETRIC HISTORICAL SOCIETY

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Vol. 17

SPIOMETRY LIBRARY

July, 1986 Indiana University

Number 3

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INDIANA IMMEDITY Annual call for nominations:

This year the call for nominations is unique. Unlike previous years when the objective was to elect one executive board member, this year three are to be elected. As detailed in the April 1986 Newsletter, Article IV, Section 1 of the Optometric Historical Society By-Taws now state that the executive board shall consist of seven members. In addition to the annual selection of the fifth board member, two more must be elected this year to begin their terms on January 1, 1987. Of the three board members to be elected one will serve for four years, one for three years, and one for two years.

The executive board member whose five-year term will expire at the end of this year is Jerome Abrams. Nominations, or renominations for the three executive board openings are hereby requested for placement on the ballot which will be sent out with the October issue of this Newsletter. Submissions should be sent to Douglas Penisten. School of Optometry, 800 East Atwater. Bloomington, IN 47405.

By all means, do not hesitate to include yourself as a candidate if such responsibility interests you. Please do not specify for which term (i.e., 4, 3, or 2 years) the nomination has been made, as this will be determined by a total vote ranking with the ballot nominee receiving the highest number of votes receiving the longest term. Ordinarily, merely the name of the person you are nominating will suffice especially if he or she is already well known to the O.H.S. members, but if you feel that a brief "pitch" should be made in your nominees behalf it will be most favorably considered for inclusion in the October issue of N.O.H.S.. Do it now.

Southall, the man:

The search for biographical information about James P.C. Southall (1871-1962) elicited two more sources immediately after our April issue went to press. One was a copy of a letter of 5 April 1951 that Southall had written to the late Harold R. Barnes and signed "Daddy Southall." It was sent to us by Optometry Librarian Margaret Lewis of the Harold Kohn Vision Science Library at State University of New York with the suggestion that more information might be gotten from Maurice H. Bernstein, O.D., a former student of Southall's. Dr. Bernstein informed me that I should call Leo Hirschberg, O.D., retired, a former Columbia University teacher who had maintained a very close friendship with Southall.

My call to Dr. Hirschberg was a sheer delight. He subsequently sent me a dozen or more copies of pertinent correspondence ranging from 1927 to 1954 selected from among many more in his files.

It was tempting to reprint the whole series in this issue, but with the exercise of nominal editorial restraint I decided to forward them, instead, to the International Library, Archives, and Museum of Optometry for permanent accessibility. The following excerpts, however, should convey the more personal nature of the man than can be derived from Allis technical publications or Who's Who.

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- 12 May 1927, in Department of Physics letterhead to "Leo Hirschberg, Esq.": "Dear Hirschberg, I want to tell you how much to tell you have precided your valuable help in the Clinic. We are exceedingly fortunate in having the benefit of your skill and loyal cooperation. From all I can hear, the work in The Clinic has made a very fine impression on outsiders. In my judgment, this is the best way to made optometry known to the public. I appreciate more than I can tell you all that you have done ever since you have been connected with this work. Sincerely yours, James P.C. Southall."
- 23 July 1936, in longhand from Charlottesville, Virginia, apparently in response to Hirschberg's wedding announcement: "Dear Hirschberg, The good news which reached me yesterday thanks to your cordial note which was much appreciated gave me a real thrill of delight. It is true I may have been, as you say, a little 'surprised' at first, but I have seen too much in my time not to know that the state of bachelor is a precarious existence at best and liable at any moment to what the French call a bouleversement! Both Mrs. Southall and I send you heartfelt congratulations. I feel also like congratulating the 'charming girl' because I know what a fine man she has captured. May you both have a long and happy life together with children to cheer and comfort you! I shall look forward to the pleasure of meeting your bride in the autumn."
- 10 February 1942: A long and sentimental letter from Charlottesville, typed, to Mr. Leo Hirschberg includes the verse:

"Oft in the stilly night
Ere slumber's chain has bound me,
Fond memory brings the light
Of other days around me."

Also, he expressed emotional regret that he was not young enough to help fight the Nazis and the Japs, referred to surgeons as Messieurs Les Assassins, and described charmingly his retirement activities which included an occasional lecture, writing a book on geometry, and writing letters to the newspapers, to the Secretary of War, and to others on "the way to win the war."

- 21 June 1942: Another similarly long and expressive letter to "Dear Hirschberg" expressing his continued interest in the program of the optometry at Columbia and his distress with the progress of the war. He added, "Unfortunately, there is no military genius in sight on our side of the far-flung battle." He reported occasionally doing "some scientific work for the army or navy ordinance department."
- 11 April 1942: Included in this letter was a brief account of a month in the hospital for "four painful operations for stones in the bladder and enlargement of the prostate gland," but that he had attained the age of 75 with an extended "lease on life."

- 14 March 1948: A similarly personalized letter expressing appreciation for another vernal equinox and anticipated visitations from his son and grandson and the Hirschbergs. He requested tolerance for his deafness and gave instructions on how to find his house. As in other letters, he included affectionate comments regarding Mrs. Southall's role in his life.
- 17 July 1950: In this letter he commented on the magnificence of the works of nature in the U.S.A., his regrets that Robert Bannon was leaving Columbia University, the utter misfortune that the optometry school was being removed away from the main campus, and the surprise that his letter to the editor of The New York Times in complaint of U.S. postal services was published.
- 24 October 1950: Some reminiscing of his summer of many years earlier at Berkeley, California, and further anxiety "about the status of Optometry in Columbia."

In about February 1951, Harold R. Barnes, O.D., Isadore Finkelstein, O.D., and Hirschberg formed a "James P.C. Southall Birthday Gift Fund" committed to celebrate Southall's 80th birthday on April 5, 1951, by asking each alumnus to "contribute one dollar for every year since graduation" to provide a collective gift to "brighten this and subsequent days for Professor Southall during the trying times through which he is passing." Let your generosity reflect the human warmth that Daddy Southall radiated in all his classrooms."

Among those solicited were Southall's former colleagues at the University. In a March 14, 1951, letter Professor George B. Pegram, Ph.D. pledged \$100 and suggested several other academic colleagues who should be given the opportunity to contribute.

The total amount of the collective gift exceeded \$2,150.00.

- 5 April 1951: In a letter addressed to Barnes for the committee and contributors, signed "Affectionately, Daddy Southall," opening reference is made to the "heap of letter and messages . . . and telegrams of sympathy." He declared, "Never in my life have I been so stunned, gratified and overwhelmed with trembling from head to foot . . . and saw with my own eyes, dim as they are now, ,the biggest check I ever held in my hands! In another paragraph he added, "whereby I am enabled to pay my debts and once more look my fellow man full in the face without fear and without shame." He closed with the statement that if he had the "strength to write one more book, I think it will be a companion volume to Mueller's Life of Trust" because his bounty had now excelled that of Mueller.
- 7 April 1951: In a letter to Hirschberg, Southall referred to his wife's long illness and last days of suffering and to her devotion to him and others.
- 7 April 1952: Responding to Hirschberg's birthday greeting and because his birthday was so close to the vernal equinox, Southall remarked, "Who would ever have dreamed of my having another birthday and beginning a new voyage inside the solar system?"

He also reported that his vision was nearly all gone, due to glaucoma.

6 April 1954: Having no teeth left, Southall described himself to be exactly in the same predicament as the lady at the religious revival where the evangelist laid much stress on the gnashing of teeth of the damned. "She rose from her seat and said a little indignantly; 'Sir. I'll have you to know, I have no teeth!' He retorted: 'Madam, teeth will be provided!"

He expressed his grief over the cessation of optometric education at Columbia University, "for which I fought with all my might." "The worst of it is, I say it with sorrow and deep affection, it [optometry] has only itself to blame." In the subsequent two paragraphs he gave his heartbroken interpretation of the circumstances and sequence of events that must have led to the termination of the optometry program at Columbia.

Philosophically he sighed, "The best laid plans o' mice and men gang aft agley."

Chronology of a man:

Prompted by previous N.O.H.S. commentry on James Powell Cocke Southall, 1871-1962, Mrs. Maria Dablemont and her staff quickly assembled a library packet of Southallian items and excerpts from the ILANO files and shelves. Arbitrarily arranged in chronological order they say much about Southall's career.

December 15, 1910, the Optical Journal and Review of Optometry, Vol., 26, no. 28, p. 1547: Professor Charles Sheard, a 27 year old faculty member in the physics Department of The Ohio State University four years prior to starting the optometry program there, writes a glowing review of Southall's book, "The Principles and Methods of Geometrical Optics" calling it "an epoch-making volume as far as English and American writers are concerned" in spite of the fact that "nearly all the work of merit . . . has been done by the Germans." He also mentions Southall's prior original work in this field "which has appeared in the past in the Astrophysical Journal".

1913: Copy of the title page of the 1913 printing of the 1910 edition of Southall's book by The Macmillan Company and the Library of Congress card with the call number AC381.S7. The 1910 edition was printed by The New Era Printing Company, Lancaster, PA and dedicated by the author to Henry C. Lomb, Esq.

July 23, 1914, op. cit., Vol. 34, no. 5, pp. 345-346: A reproduction of the Columbia University booklet describing the two year curriculum in optometry showing Southall teaching a course in each of the four semesters.

October 8, 1914, op. cit., Vol. 34, no. 16, p. 1064: An anonymous report announcing the enrollment of 23 new students in the fifth beginning optometry class, their undergraduate activities, and the important role of Professor Southall.

April 15, 1915, op cit., Vol. 35, no. 16, pp. 1061-1062: A review of the Columbia University optometry prospectus for 1915-16 showing Southall's key involvement.

January 13, 1916, op. cit., Vol. 37, no. 3, p. 181: A report from the optometry student body in which Southall is cited.

1918: Copy of the title page of Southall's first edition of "Mirrors, Prisms and Lenses" and the Library of Congress card with the call number QC385.S7. on which the book is described as "The outgrowth of a course of lectures on optics given in Columbia University" and as an abridgement of his earlier treatise.

May-November 1919, Journal of the Optical Society of America, Vols. II-III, Numbers 3-6: Copy of the title page shows J.P.C. Southall as an Associate Editor.

January 1921, op. cit., Vol. 5, no. 1, p. 121: Southall elected President of the Optical Society of America for the year 1921.

March 1921, op, cit., Vol. 5, no. 2: A statement of the object of the Society includes the declaration that "Its membership embraces: . . . [among others] Opticians, Optometrists and Ophthalmololgists intereseted in refractometry and the laws of optics;."

1924: Copy of the title page of Vol. 1 of the three volumes of "Helmholtz's Treatise on Physiological Optics, Translated from the Third German Edition, Edited by James P.C. Southall, and Published by The Optical Society of America," and a copy of its Library of Congress card with the call number QP475.H485.

December 11, 1931, The Optical Journal and Review of Optometry, Vol. 68, no. 24, p. 19: Extracts from Southall's review of "Die Optischen Instrumente" by Professor M. von Rohr, "the distinguished German authority on the history of optics."

Oct. 21, 1926, op. cit., Vol. 58, no. 17, p. 42: A letter from Southall expressing the fear "that we are not going to have enough students to take the new four year course. At present we have only 54 students, and nearly all of them are taking the old two-year course in University Extension." He is appealing for scholarship support from optometrists.

The 1927 Year Book of Optometry, p. 49: An editorial appeal from Professor Southall for scholarship funds from state optometric associations to attract students to fill the optometry courses offered at Columbia University, the University of Rochester, Ohio State University, and the University of California.

The 1928 Yearbook of Optometry, pp. 69-92: Southall participated in an intense three-way debate with Deputy Commissioner Downing of the New York State Department of Education and New York State Assemblyman Berg at the 1927 convention of the New York State Optometric Association in Syracuse. The question related to the title Doctor for optometrists.

Op. cit., pp. 115-117: An editorial entitled "Professional Optometry" in which Professor Southall points out the need for optometrists to deal drastically with the transition from a trade to a profession.

1937: Copy of the title page of Southall's "Introduction to Physiological Optics", Oxford University Press, and of The Library of Congress card with the call number OP475.S6.

May 1954, American Journal of Optometry and Archives of American Academy of Optometry, Vol. 31, no. 5, pp. 252-253: Editorial by Carel C. Koch on the Columbia University announcement of plans to terminate its optometry courses.

February 1963, Journal of the American Optometric Association, Vol. 34, no. 7, p. 581: A 72 word obituary on Professor Southall.

February 1964: Journal of the Optical Society of America, Vol. 54, no. 2, p. 288: A 167 word obituary on Professor Southall.

Former Southall student writes:

OHS member Elias Shaneson gently reminded us that we had misspelled Southall's middle name Cocke and added the following:

I read the April 1986 issue of the Newsletter of the Optometric Historical Society with interest, as I always do. I found your article on Professor James Powell Cocke Southall of special interest, since I had been his student at Columbia University in the years 1935-1937. I remember him well, but rather than describing my impression of him, let me tell you of an incident in my student life that may reveal a facet of his character.

Although tuition at Columbia University at that time was \$200 per semester, all entering students at the optometry courses had to buy a kit of refracting equipment (trial case, trial frame, May ophthalmoscope, Tait dynamic retinoscope) for an additional \$365. This proved very burdensome to me, and although I tried to earn money working part time and borrowing from relatives, I later found myself unable to pay the tuition for the last semester of my senior year. I applied for a student loan but was turned down because of the outstanding debts I listed on my application form. Dejectedly I walked over to the Pupin Physics Building, where the optometry courses were being given and where Professor Southall had his office, and sadly told him that I would have to drop out of the optometry courses and graduation.

He listened intently. I cannot recall our exact conversation now, but I distinctly remember his advice: "Go back to the bursar and talk to him again. Perhaps he will reconsider."

I did not just walk back -- I ran back. The bursar received me more cordially and offered me the loan on condition I get a suitable co-signer. This I was able to do and I graduated successfully. The first moneys I earned went towards repayment of that loan.

In 1952, on the occasion of his 80th birthday, his former students presented him with a check for \$1,000. He responded that he never held a check of that magnitude in his hands, ever.

On that occasion I sent him a congratulatory letter and recalled to him the incident of the loan. He answered me with a letter which I treasure and which I keep in his book "Mirrors, Prisms, and Lenses." I am enclosing a copy of his letter which you may print if you feel it appropriate to do so.

Now, perhaps I should put down some of my other recollections of him. His office was guarded by a formidable secretary; nevertheless, he was accessible to the students. Not many availed themselves of that privilege. My attempt to solve a difficult problem proved more obfuscating after his explanation.

He was somewhat tall, mostly grey and balding with small wrinkled eyes, and a peculiar habit of scratching his left ear with his right hand. I admired his easy walk and relaxed manners, to me, then, the epitome of a southern gentleman. His Virginia accent was pronounced but not too heavy.

He seemed to keep aloof of administrative and clinical problems. These were relegated to his associate, Professor Clifford Leroy Treleaven and staff. I never remember him visiting laboratories, examination rooms, or clinics. His domain was the lecture podium in the classroom. His soft mellifluous voice belied the difficult subject he expounded.

I think of Professor Southall kindly. His vision of all professions, including optometry, as servants of mankind was lofty and ideal, and still to be completely realized.

The following is the copy of the enclosed letter from Southall:

JAMES P. C. SOUTHALL
EDGEWOOD LANE
CHARLOTTESVILLE
VIRGINIA

6 June 1952

Dear Shaneson

Your kind and thoughtful letter, as welcome as it was unexpected, reached me yesterday. I am exceedingly grateful.

I have no amanuensis, and now my eyesight is very dim. It is as much as I can do to write even a short letter, but I will not let your letter go unanswered; as I am obliged to do very often. This little note may be short in one dimension, but it is wide and deep in other ways; wide, because you opened my heart and let in much pleasure, and deep in token of mutual affection and remembrance.

Fifteen years back is not far to go for me; I remember you well; yet I cannot remember the incident you recalled. It is enough for me to know that you still remember it, and it gives me much pleasure to be reminded that I befriended you once when I was in a position to be of service.

Nothing gives me so much delight as to get in touch with one of my old pupils, especially if he tells me that he enjoyed sitting at my feet, whether he is telling the truth or not.

Not long ago a pupil whom I am sorry to say I had forgotten wrote me, "You are the one teacher I will never forget:"

It was a little ambiguous, but I took it for a compliment.

I like to think you have had a big reward and have won success. Optometry, as I regard it, is a noble profession, a high calling. It makes little difference what profession a man chooses and follows (medicine, law, teaching, etc.), it is a high calling to do good work and make an honest living. The trouble is that few are worthy of a high calling, their hearts are not in it, and they debase it. In Optometry consider men like your old teachers in Columbia, Roberts, Barnes and Hirschberg, to mention the three I admire most: if Optometry was practised all over the country by men of that type, it would rank at the top of the professions.

Affectionately

Elias Shaneson, Esq. 1547 Genesee Street Buffalo 11, New York James P. B. Jouthale

Origin of a library:

Reading of the Narciso P. Cinco Memorial Library - Optometry in the January 1986 issue of Filoptics Newsletter, Series 1986, Vol. IV, No. 10, I wrote to our fellow OHS member, Claro M. Cinco, O.D., Dean of the Cebu Doctors' College of Optometry, Cebu City, the Philippines, for information. Ever promptly responsive, he replied immediately with this touching account.

Narciso P. Cinco, Sr., was my father. He was an optometrist, a graduate of the defunct Philippine College of Optometry and Institute of Technical Optics (in Manila) in 1921. I joined his practice in 1953 and took over after his death in 1963. While the schools at that time did not provide as much training as they do now, he developed and improved his knowledge and clinical skills through continuing self-education. I became aware of this when I inherited his books and journals which dated as far back as the early 1920's and which are now collector's items. A couple of these books were authored by a certain Brown, an M.D.

He was a deeply professionally-oriented optometrist and very meticulous in his practice. He was, at one time, elected vice-president of the Optometric Association of the Philippines (1947?) with Dr. Gregorio G. Estrada as president. He has greatly influenced my thinking on optometry. He was reputed to be the 'watchdog' of optometry in this region.

For years, I have been thinking how to honor his name. At first I thought or organizing the Narciso P. Cinco, Sr., Optometric Center, envisioned to be a center of future research, but this would entail a lot of funding. When I organized the College of Optometry at the Cebu Doctors' College, I loaned all my books and journals to start a library. After three years, I felt that these materials would be put to more use in the library than in my home, so I decided to donate them to the school on the condition that the college library will be named the "Narciso P. Cinco, Sr., Memorial Library - Optometry," and will be open to all optometrists, ophthalmologists, visual scientists, students, etc., and the school board agreed. Those books and periodicals are valued at around \$3,000.

Slowly, we have built up this library from donations, the major portion of which came from Al Rosenbloom's private library, solicitations made by Ed Marshall, and other sources. My journal subscriptions are turned over to this library after Fe and I have read them. Even the AOA News, and Interoptics are retained.

The library presently occupies a section of the common library for the different collegiate departments. As soon as we accumulate more materials and can justify it, I plan to get a separate room solely for the optometry library. I have already the pledge from many ophthalmic manufacturers and suppliers to contribute the furniture and furnishings.

During the Board meeting yesterday, I bared my plans to undertake a massive campaign for book donations. I was thinking of asking Ed Marshall to be our receiving end in the States for such donations, and forward them to us through the facilities of the Smithsonian

Institution. I am also thinking of asking the support of the optometric media, although I am not quite sure how I can invite their interest in this regard.

Also, I am slowly building up a section on Learning Resources. Already, I received donations of teaching slides from H. Barry Collin and Brien Holden from the University of New South Wales, a set of slides on diseases complete with text (published in England) from my brother in Texas (worth \$1,000), two volumes of slides from B&L, CooperVision, etc. I think we have now some 1,000 slides, but not yet enough to cover the other aspects of optometry. We are planning to produce our own video series on different clinical procedures to aid in the teaching at the clinic.

Narciso M. Cinco, Jr., is an M.D. He is practicing ophthalmology at Cleburne, Texas. He is my elder brother, the eldest in the family. He had formal training in ophthalmology at the University of the Philippines - Philippine General Hospital, and had his residency in otolaryngology at the John Hopkins Hospital in Baltimore under Dr. Bordley (1959). We had a joint practice in Cebu from 1959 to 1974 when he went back to the U.S. because he could not stand Marcos' martial law. While in Cebu, he set up the Cebu EENT Hospital and later set up and chaired the EENT department of the Cebu Institute of Medicine. He was one of the founders of the Cebu Doctors' Hospital which was finished in 1972, just a few months before martial law.

While he was here, he organized with Rev. Floyd Horst the Operation Mercy, and did some 600 harelips on indigent children. He came back to Cebu in 1982 with Project ORBIS and taught the local ophthalmologists how to do IOL. He was back again last November to revive Operation Mercy, and did some 70 harelips and 40 cataracts, some with IOL's free to indigents. Our optometry seniors assisted in screening the patients, performing the vision tests, tonometry, biomicroscopy, BP tests, coordinating the surgery schedules, and doing the post-operative optometric follow-ups, all done in the optometry clinic.

Narciso Jr. has a good practice in Cleburne, Texas. He converted his guest house into a clinic, complete with equipment including an argon laser, computerized perimeter, ultra-sound (biometer), etc. He is respected in his community, and in fact, was elected president of the Rotary Club of Cleburne last year. He indicated his wish to return to Cebu when Marcos is out, and last night he asked me if it was time to go home. I told him to take his time. You met him here in 1970 when we had a couple of drinks together in his house one evening.

A canonizing House of Delegates:

Thrice mentioned in the March 1, 1986, issue of The American Optometric Association News, pages 1, 8, and 13, is the assertion that the A.O.A. resolved in 1922 that Benjamin Franklin was to be honored as "a patron saint of optometrists." The anonymously written item on page 8 appears reasonably authentic, though the resolution itself is not quoted. A separate single paragraph on page 13 states that the November 5 (presumably 1986) issue of Capper's Weekly cited the A.O.A. resolution in a feature article on Franklin. The boxed item on page 1 merely highlighted the article on page 8.

Franklin is quoted as having written somewhere that "The Feet demand Shoes; the Legs, Stockings; the rest of the Body, Clothing; and the Belly, a

good deal of Victuals. Our Eyes, tho' exceedingly useful, ask, when reasonable, only the cheap Assistance of Spectacles, which could not much impair our Finances."

Noted also was Franklin's frequent posing for portraits while wearing glasses.

Another ophthalmic subdivision:

Environmental optics has history, too, but it is a bit difficult to trace because the nomenclature for phases of this discipline is so varied. Two-word identities include environmental, occupational, and industrial combined with vision, optics, ophthalmology, and optometry. Optoergonimics, ergonomics of vision, ergoophthalmology, and preventive ophthalmology also plague the literature indexes, as do some of the more comprehensive terms such as occupational health and occupational medicine. Yet each designation includes a significant aspect of opthalmic concern with a substantial substrate of literature, science, and technology common to all.

An authorless article in the January 10, 1986 issue of the Optician (London), Vol. 191, no. 5028, pp. 27-28, under the caption of RESEARCH REVIEW and subtitled ERGOOPHTHALMOLOGY discusses a number of optometric roles and includes a bit of historical commentary. It suggests that it may all have started in the 1840's in attempts to reduce eye risks. Professor Herman Cohn (1836-1906) is given credit for promoting the use of "his curved mica lens 0.5mm thick to give frontal and some side protection beyond that provided by flat plate glass." Cursory mention is also made of legislative involvements, insurance programs, accident statistics, and professional roles in various countries.

The article provides no real documentation, but it does point out the need to gather and sort out the historical facts of yet another expanding aspect of optometry.

An optical industry history:

The 235 year history of the largest producer of finished spectacles to individual prescriptions in Europe carries the title "Eyes Right: The story of Dollond & Aitchison Opticians, 1750-1985." Authored by Hugh Barty-King and published by Quiller Press Ltd., 50 Albemarle Street, London WIX 4BD, the book is priced at £12.95 (circa \$19.50 U.S.). It is anonymously reviewed in the March 1, 1986, issue of Optometry Today (London), Vol. 26, no. 5, p. 144, from which these notes are derived.

The book is said to include many amusing and fascinating anecdotes and in many ways is a story of the development of optics in Great Britain. John Dollond, the son of Huguenot refugees, was originally a silk weaver. He and his son Peter set up an optical instrument business together in 1750. According to the minutes of the December 26, 1756, meeting of the Worshipful Company of Spectacle Makers Peter Dollond was identified as an "optician," the first time such a title had appeared in the Spectacle Makers Company's records.

The Royal Society awarded John Dollond its highest honor, the Copley Medal, in 1758 and three years later made him a Fellow.

James Aitchison opened his own opticians shop in London in 1889. Under his son Irvine's management in 1927 it took over Dollond & Co., no longer run

by the family. Subsequently the firm underwent several changes of ownership and expansion as a public company quoted on the stock exchange.

Kevin M. Touhy, 1921-1968:

"Birth of the 'Flatter-than-K' Corneal Lens," is the title of an article about Touhy's involvement with contact lenses, his supporting professional colleagues, his patent, resulting legal battles, and some of his heartbreaking experiences. Written by Neal J. Bailey, it appears in the April 1986 issue of Contact Lens Spectrum, Vol. 1, no. 4, pp. 54-55. Included is a photograph of Mr. Touhy.

Optometric education in West Africa:

In an article entitled "The University of Benin Optometry Program" author I.K.O.K. Kragha provides a substantial historical introduction. The university itself was started in Benin-City, Nigeria in 1970. The optometry program was initiated in the department of physics in the 1973-74 academic session. In 1980-81 it became a separate department.

The article appears on pages 20-23 of the Spring 1986 issue of the Journal of Optometric Education, Vol. 11, no. 4.

Nominations and volunteers needed:

With the amendment of the O.H.S. by -laws, as reported in the April issue, this year calls for the election of three membeers to the Executive Board. Nominations are needed. Volunteers, i.e., self-nominations, are especially welcome, for the nominee's interest in optomeetric history is then known to be genuine. Consider yourself seriously as a potential candidate, and do not hesitate to suggest why you would be willing to serve.

In general there have been relatively few duties or expenses involved with service on the Board. It is always hoped that a majority of the Board Members can attend the occasional get-togethers at the time and place of the meetings of the American Academy of Optometry and/or the American Optometric Association. Each candidate must also realize that he or she may be elected to serve as president, vice-president, secretary, or treasurer. All duties may entail an occasional long distance telephone call, the costs of which are tax deductible as contributions in kind.

Membership on the Board does not demand qualification as an optometrist, historian, archivist, librarian, or author. Essentially, it is hoped simply that Board Members appreciate the significance of history as it pertains to optometry and of the need for a world organization like the O.H.S. to nurture it.

Think about it. Nominate yourself or another. If more nominations come in than can be dealt with comfortably on a single ballot President Jerry Abrams will appoint a nominating committee to preview the candidates and recommend a slate. For the mailing address of your nominations see p. 31 of this issue.

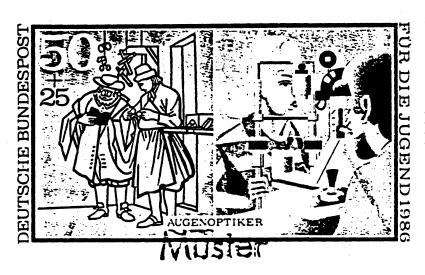
Early corneal contact lens patents:

"More Early Patents" is Neal J. Bailey's brief commentary on patents by Kevin Tuohy, George Butterfield, Noel Stimson, and Joseph Hornstein between 1950 and 1957 and the litigation between Tuohy and Morris Green between 1950

and 1953. The article appears in the May 1986 issue of Contact Lens Spectrum, Vol. 1, no. 5, pp. 64-65. Dr. Bailey promises a discussion of the court actions in the next issue.

A commemorative postal stamp:

On April 10, 1986, the German and West Berlin postal services (Deutsche Bundespost) issued a group of colorful commemorative stamps recognizing the early and current roles of eight vocations registered under the handicaraft ministry, namely, masons, locksmiths, carpenters, tailors, bakers, barbers, glaziers, and ophthalmic opticians (Augenoptiker). The optometric stamp, the enlarged design (Muster) of which is reproduced below, includes in one half a sketch of the familiar 1698 German classic copperplate engraving "Der Brillenmacher" (the spectaclemaker) by Christoph Weigel. In the other half is shown a blond-haired girl being examined with a modern ophthalmometer. Of 0.50 DM (German mark) denomination, an 0.25 DM surcharge is added for contribution to a foundation to provide assistance to unemployed youth (Jugend).



The "yesterday/today" theme was designed by graphic artist Professor Heinz Schillinger. The special ceremony in recognition of the eight handicrafts and the commemorative stamps was attended by Wilfried Oberlander, President of the Zentralverband der Augenoptiker (Confederation of optometrists), and other national dignitaries. Further information may be found in the March 1986 issue of Deutsche Optiker Zeitung. Vol. 41, no. 3, p. 54.

A Korean overview:

Perhaps one of the heaviest and most impressive tomes in the ophthalmic field of literature is a new Korean book with the translated title "The History of Eye-glasses in Korea: An Overview" recently sent to us by Won Shi-hwan as a gift from Hwa-Ju Kim, President of the Opticians Association of Korea, 12-1, NAMDAEMUNNO 5-GA, CHUNG-GU, SEOUL, KOREA. Measuring 30 x 22 x 4 cm in very hard cover, gold with seafoam green trim, encompassing 675 pages, possibly a few hundred illustrations of people, places, and things, with numerous tables and graphs, and weighing 2.5 kilograms, it is encased in an imprinted open-end heavy cardboard protective container for convenient shelf use. Its publication date is 1986.

A separate insert of five typewritten pages gives an English language outline of the contents which may be further abbreviated as follows: Prefaces by prominent Korean and world dignitaries, primitive and early world history of optical science, spectable and other lenses in the Shilla dynasty (BC57-AD935) and other adjunct eras, the origins and development of optometry and ophthalmology, the propagation, distribution, and industrialization of eyewear, the history of contact lenses, and the formation and development of the ten year old Opticians Association of Korea. As a supplement the book includes substantial descriptive accounts and advertisements of Korean optical firms and extensive statistics in ophthalmic business trends and international optical imports and exports.

Besides serving as a major cultural resource the book is an encyclopedic handbook and directory for anyone wanting historical or current information on almost any phase of Korean ophthalmic optics. It is of course necessary that the reader be able to read Korean.

An historian views optics:

"Optics in Philadelphia During the Nineteenth Century": is an article in the March 1985 issue of the Proceedings of the American Philosophical Society, Vol. 129, no. 3, pp. 291-299. The author is Ms. Deborah Jean Warner, Curator, History of Physical Sciences, National Museum of American History, Smithsonian Institution, Washington, D.C. 20560, and a member of OHS. Documented by 55 citations of sources largely unfamiliar to others than history scholars she describes the slow and halting start of spectacle and other optical production in the colonies late in the 18th century and the difficulties of competing with European-made spectacles throughout most of the 19th.

She observes, "Like most technologies, optics was learned more in the doing than in the reading. The skills . . . were usually passed from master to apprentice. Since colonial life attracted no trained opticians, Americans could not easily learn this technology. The one exception was David Rittenhouse," from whom George Washington ordered the grinding of his lenses for 'A new pair of spectacles.'"

The first Philadelphian to specialize in optical goods was William Richardson, who was listed in city directories from 1789 to 1799 as an "optical instrument maker" or "optician." He supplied several pairs of spectacles to Thomas Jefferson. In 1799 Richardson sold out his stock of spectacles to John McAllister (1753-1830). Later, John McAllister, Jr., joined his father and together they began making spectacle frames in 1815 and fitting them with imported lenses. "The McAllisters were among the first American spectacle makers, and for many years they had the field pretty much to themselves."

The names of numerous others, mostly immigrants, are mentioned, together with their involvement in the 19th century origins of the optical industry and professions. A few of the author's incidental observations include: "While few of these men 'made money,' most seem to have earned enough to live comfortably;" "most of these men immigrated [from Europe] after completing their training; "Despite their obvious talent the immigrant opticians could not establish a succession [of sons];" and America did not seem to provide the "needed formal educational institutions."

Spectaclemaking emerges into optometry:

An historical article by C. Kuhn entitled "Brillen ju machen, ist eine der besten und notwendigsten Künste "(Spectaclemaking is one of the finest and most valuable arts) appears in the March-April 1986 issue of Augenoptik, Vol. 103, no. 2, pp. 50-52. Illustrated are an early reading lens, a pair of circa 1300 rivited eyeglasses, and two circa 1400 oil portraits of religious scholars wearing such glasses.

Quoted from the high council of Venice is the following regulation dated 2 April 1300 (translated): "We, the elder administrators of justice of Venice, decree that no member of the aforementioned glass works guild may risk the buying or permitting of buying or selling or permitting of selling any product made of ordinary clear glass that is in imitation of crystal, be it for buttons, decorations on cuffs or boots, or for eyeglasses.

Credit is also given to an Italian Professor of Medicine Bernhard de Gordon for mentioning spectacles in 1303.

Identity as an Augenoptiker (eye-optician) was introduced around 1900, and with it a much more formalized program of training.

On page 34 of the same issue is a 40 year review of the East German firm VEB Verlag Technik, publishers of Augenoptik and other technological journals. It was established February 12, 1946, as part of the postwar reconstruction program. Illustrated on the front of the same issue is a beautiful circa 1700 book opened to show a pair of whalebone frame spectacles clamped into place in a recessed cutaway on the inner side of the book's very thick front cover.

The eye has it:

Responding to the "It has a good eye" phrase on page 22 of the April issue of the N.O.H.S., OHS member David Williams writes that it reminded him of an aphorism of unknown origin: "Nothing fattens a horse like a King's eye." He interprets its meaning to be that if the stable hands know the King has his eye on a particular horse, they will give it special attention.

Philatelists nota bene:

Mrs. Richard M. Hall, whose spectacle stamp collection was described on page 12 of the January issue of NOHS, reports that she would sell it for \$180, frame and all, plus the cost of crating and shipping. She also reminds us that a new U.S. stamp called "Public Education" depicts a pair of spectacles, Her address is 1200 Holden Avenue, Suite 159, Orlando, Florida 32809, U.S.A. Telephone 305-855-4126.

Sadder but wiser?

Referring to our April article on the unconventional Graf Wiser system of ophthalmic cures and corrections, OHS member Henry Knoll reports that he found the doctor's town of Bad Eilsen listed in Meyers Kleines Konversations-Lexicon, Vol. 1, 1898, p. 626, an abridged edition of the multi-volume Meyers Konversations-Lexikon published by Bibliographes Institut, Leipzig und Wien, 1897, in which Bad Eilsen is more extensively described in Vol. 5, p. 456.

Bad Eilsen is a spa about 45 kilometers west and slightly south of Hannover, W. Germany, with 232 residents in 1890 and nine sulpher springs offering gas inhalation measures, mineral drinking water, and mud baths for a variety of ailments. Knoll queries, "Perhaps the Count's treatment needs sulphur and mud baths to work properly?"

History is people:

An accolade to Caryl Croisant, O.D., still active at age 85, describes here career and services to the Optometric Extension Program Foundation in the July 1986 issue of Optometric Extension Program News, Vol. 58, no. 10, page 3.

The Adolph Lomb Optical Library:

Sometime before 1910 young James P. C. Southall, then living in Alabama, had completed the manuscript for a book to be entitled "The principles and methods of geometrical optics, especially as applied to the theory of optical instruments" with no assurance that anyone would publish it. Taking a random shot he addressed and mailed the manuscript to the Bausch & Lomb Optical Company in Rochester, NY hoping at most that he "might get some word of encouragement and kindly advice." After about ten days he received an encouraging letter from Mr. Henry C. Lomb, also a young man of about Southall's age, together with an overwhelming check for a thousand dollars, "nearly as much as my salary for a whole year."

Southall and Henry Lomb first met face to face several years after the 626 page book was published and Southall had been appointed Professor of Physics at Columbia University. Their "friendship grew apace and ripened in mutual affection knit by a bond not less strong than that which united David and Jonathon." In writing about Henry Lomb years later Southall frequently referred to him as "Harry," quote evidently a warm and friendly nickname.

Adolph Lomb was Henry's slightly older and devoted brother, almost a twin in comradeship, one of the founders of the Optical Society of America, "withal a patriot, a gentlemen and a scholar', a man of large means who "enjoyed the luxury and the privilege of giving all his life long." It was Southall's privilege and happiness to be numbered among Adolph's most intimate friends. Not until about 1930, however, did Southall have the occasion to visit in Adolph's country house where he saw the magnificent collection of books on optics that the two Lombs had collected during their careers.

In September 1932 Adolph Lomb died suddenly. Shortly afterward Henry Lomb asked Southall for advice on where to place the book collection where it would be kept intact. Mr. Lomb's idea was to give it to Cornell University or Columbia University, but Southall "timidly put in a word for the University of Virginia," his Alma Mater. He supported his suggestion with the argument that "the richly endowed colleges had big libraries already and that the time had come to distribute the benefits and facilities of learning and scholarship more widely throughout the country." Henry Lomb, like Adolph, an enthusiastic admirer and disciple of Thomas Jefferson, the founder of the University of Virginia, greeted the suggestion enthusiastically and immediately authorized Southall to offer the library to the University of Virginia "lock, stock and barrel." The university accepted the gift. In June 1934, Henry Lomb arrived in Charlottesville, Virginia, for the final arrangements.

All of these details, and more, were described by Southall in the June 1943 issue of the University of Virginia Alumni News, pages 2-3 and 14. The originally published announcement of the gift was made in the December 7, 1934, issue of Science, Vol. 80, no. 2084, p. 518, under the heading of MEMORIALS.

Included in the collection were 706 books, 470 monographs and brochures, and 174 bound and 86 unbound volumes of scientific journals. Among the many rare volumes, for example, were German (1755) and French (1767) translations of Robert Smith's COMPLEAT SYSTEM OF OPTICKS, the English (1738) edition of which was already in the original library of the university as one of the books selected by Thomas Jefferson.

Henry Lomb had every intention of keeping the Adolph Lomb Optical Library up to date as long as he lived, but he died in 1936, almost as suddenly and unexpectedly as his brother Adolph had died two years earlier. Even in this short interim during the Great Depression years he expended several hundred dollars toward the library's maintenance and development.

In 1947, the University of Virginia published Number Seven of its Bibliographical Series entitled the "Catalogue of the Adolph Lomb Optical Library at the University of Virginia" with an introduction by Southall, a copyrighted and lithoprinted book of 203 pages. L. M. Polan, O.D., of the Zenith Optical Company, Huntington, West Virginia, is given credit for making its publication possible. Credit for contributions toward the growth of the collection is given to Anchor Optical Corporation, Applied Optical Industries, Bonshur & Holmes Optical Company, Libbey-Owens-Ford Glass Company, May Oil Burner Corporation, Minneapolis-Honeywell Regulator Company, R. B. Tucker, and Zenith Optical Company.

Each of the entries consists of the information normally found on the catalog cards of the library itslef, the call number, the author's full name, life span, title, publisher, place, date, pages, etc. At least one copy of the Catalogue is presently in the Bausch & Lomb Scientific Library in Rochester, New York.

OHS member Henry Knoll kindly tracked down the information from which this report is derived.

What did Nagel mean?

According to Duke-Elder, on page 196 of Vol. 5 of his System of Ophthalmology, "When the eyes regard a near object the visual axes must be directed upon it if single binocular vision is to be retained. The unit of convergence is conventionally taken as the metre angle, the amount normally required to converge upon an object 1 metre away." On pages 170-171 of Vol. 6, however, he says, ". . . it [the meter angle] measures the angle which the line joining the object to the centre of rotation of either eye makes with the median line when the eyes are converged upon an object situated 1 metre away on the median line." He then adds that for the distance of 1 meter "the angle is about 2°," which would be half that for the preceding definition. The former is the angle between the two lines of sight while the latter is the angle between one line of sight and the median line. The former is twice the size of the latter.

Similarly in the American Encyclopedia of Ophthalmology two different definitions may be found, one by "H. D." apparently Harry Gradle, Vol. 1, p. 473, and the other by "C. F. P.," Charles F. Prentice, Vol. 10, p. 7675.

Gradle defined the meter angle as the angle between the two lines of sight when the object was placed at one meter in front of one straightforward looking eye while the other eye did all the converging, the angle being described as "about 3 $1/2^{\circ}$ ". Prentice on the other hand defined the meter angle in terms of one eye turning to fixate an object on the median line at one meter, approximatley half of the preceding angle.

Howard Solomons in his 1978 programmed text entitled BINOCULAR VISION gets around the apparent ambiguity by identifying the "metre angle" as the angle made by one eye fixating an object at one meter on the median line and the "large metre angle" as the angle made between the lines of sight of both eyes.

A further search of the literature might well uncover additional examples of the same discrepancy. The only consistency seems to be the crediting of the meter angle concept to Albrecht Nagel in the Graefe-Saemisch Handbuch der gesamten Augenheilkunde, Vol. 6, part 4, 1880, pp. 478-486.

Precisely what did Nagel say?

This is not as easy as one might be led to believe by the explicit diagrams, tables of angular values, and the inordinately lengthy text which Nagel devoted to making it clear. First of all Nagel employed two terms which we in the English language sometimes use interchangeably, one being fusion angle (Fusionswinkel) and the other being convergence or divergence movement (Convergenzbewegung or Divergenzbewegung). He then defined the fusion angle in terms of the turning of one eye to fixate an object on the median lien. To correspond with the dioptric nomenclature for accommodation he named his unit for the fusional movement of one eye the meter angle (Meterwinkel). He identified one meter angle with a fixation distance of 1 meter from the center of rotation, two meter angles for a half meter, three for one-third meter, etc. reciprocally. His diagrams, formulas, and tables of values for the degree equivalents at various distances and for various separations of centers of rotation are in this context unambiguous. For example, for a 64 mm separation of the centers of rotation (equivalent to the interpupillary distance) and a distance of 1 meter from the center of rotation of one eye to a fixation point on the median line the corresponding metre angle equals 1 50'. For a distance of 10 cm or one-tenth meter the correspondign 10 meter angles equal 18° 39'30", as shown in Nagel's table.

However, having thus clarified the metric of "fusional movement," Nagel then discussed its clinical application to convergence, referring to examples of convergent and divergent squint. A translation of his first example reads as follows, "For instance, in a convergent squint of 3 meter angles the fusional far point lies at a distance of one-third meter (assuming a 64 mm interpupillary distance) and a base-out prism of 3 meter angles or of 11 degrees* placed before each eye will displace the fusional far point to infinity." Similarly he identifies a divergent squinter of 3 meter angles as one who has a fusional far point at a distance of one-third meter behind the eyes correctable by a 3 meter angle base-in prism before each. In both clinical examples the angular size of 3 meter angles would be double the values in his own prededing tables.

In other words a person whose far point is at one-third meter behind or in front of the eyes can be said in Nagel's own terminology to have a "three

^{*}Probably referring to the refracting angle of the prism rather than its deviation.

meter angle squint," which of course is an angle of squint of about 11° . At the same time the Nagel terminology would identify the three meter angles of fusion of be 5 $1/2^{\circ}$, corresponding to one eye only!

This turns out to be precisely the case, according to the very reputable German optical encyclopedia "ABC der Optik" by Karl Mutze et al, Leipzig 1961. In the therein described meter angle a differentiation is made between convergence angle and fusion angle, the former being the sum of the two fusion angles. In other words a meter angle is either about 1°50' or 3°40', i.e. about 3° or 6° respectively, depending on whether reference is to the fusional movement of each eye or to the vergence movement of both.

A clue to Nagel's thinking lies in his apparent obsession with the concept that vergence or fusion should be represented on a one-to-one sacle with accommodation expressed in diopters. The accommodation of two eyes is quantitatively expressed to be the same as the accommodation of one eye, just as two legs walk only one mile when in fact each leg does. Whether we focus on an object at a distance of one meter with one eye or both we say that the accommodation is one diopter. It appears that Nagel wanted a similar designation for convergence and divergence. It was in this sense that he wanted the number of meter angles to be the reciprocal of the distance in meters. Then he chose to represent it in one eye just as we do accommodation. He simply ignored the concept that fusion is not a monocular function. He must have believed that he avoided the incongruity of using the reciprocal value for the truly binocular aspect by calling the binocular function convergence instead of fusion, in which case the meter angle doubled its angular size.

Also he ignored the fact that the plane of the centers of rotation differed from the spectacle plane or any other optically logical plane of reference for the refractive power of the eye. The meter angle has other faults, too, such as its lack of additivity, its variance with interocular distance, and its inadaptability to mechanical measuring scales.

Would that we could bury the meter angle. But no, it still crops up occasionally into attempted use, I guess because of its teasing resemblance to our beloved diopter.

H.W H.

December Gathering:

O.H.S. President Jerry Abrams has written to inform the membership that a guest speaker has been arranged for the annual December O.H.S. meeting. As usual the O.H.S. gathering will be held during the American Academy of Optometry which this year is to be in Toronto. The guest speaker, Dr. E. J. Fisher, Curator of the Museum of Visual Science and Optometry, School of Optometry, University of Waterloo, will present, "Canada is Optometrical History."

Henry W Hofstetter Douglas K. Penisten, Editors

P.S. This issue of the <u>Newsletter</u> will be coming to you later than normal. In order for us to include your nominations for the O.H.S. Executive Board in the October <u>Newsletter</u> (as detailed on page 31 and 41), and you will need to send us your <u>nominations</u> immediately upon receipt of the <u>Newsletter</u>. Please do this. Your input is important!