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Newsletter of the
Optometric Historical Society243 North Lindbergh Boulevard, St. Louis, Missouri, 63141, USA
Library**Volume 24****JULY 1993****Number 3**A message from Sheard:

The dedication of what may have been the first edifice designed and built to house an optometry school took place in June, 1950, on which occasion the founder of the school, Charles Sheard, sent the following message describing the first five years (1914-1919), a copy of which was provided by OHS member Neal Bailey:

DISTINGUISHED GUESTS, BELOVED FRIENDS IN OPTOMETRY, ASSOCIATES AND COMRADES IN EDUCATION AND RESEARCH IN VISION IN THE OHIO STATE UNIVERSITY: SALUTATIONS AND GREETINGS.

It is a source of much regret that Mrs. Sheard and I shall not be present with you on the occasion of the dedication of the Building to house the School of Optometry on the campus of the Ohio State University. A commitment made last fall to be a guest of honor and a speaker on the occasion of the First All Canada Congress in Optometry in Winnipeg on June 10-12 causes me to wish that some great magician would shorten, for the day, the time and space on Monday, June 11, between Columbus and Winnipeg so that I might have the great pleasure and privilege of keeping my promise to your and my Canadian friends and fellow practitioners and of being with you on this Sunday in June on this most memorable occasion. The minor hardship of any shuttling back and forth is as nothing compared to the uncertainties of air travel on a schedule which, if not possible because of weather conditions, would cause me to have failed to keep my promise and to have failed to play my part by my presence and my words for the first time in nearly fifty years and hundreds of visits and lectures both here and abroad. I am sure you would desire that I keep my record perfect.

For these reasons then I am unable to deliver myself in the body to you but I am delivering to you through the personage of our highly respected and much beloved professorial successor, Dr. Glenn Fry, a message of good cheer; a message of rejoicing over the great progress that has been made in optometry specifically and in the broad field of vision in general since the Fourth day of August 1914 when the course in optometry was established in the Ohio State University and I became the first professor of any such course in any university in the whole world, insofar as I know; a message of continuing interest in and support to all men and all things that are concerned educationally and professionally with vision; a message of exhortation to all of you gathered

together on this momentous occasion that you and, insofar as such is possible, all men and women, whether they be ophthalmologists, optometrists or opticians, rededicate themselves to a continuation of reading, study, and critical examination and a greater resolve to attempt to think clearly and without confusion, as you dedicate a building to house one particular school of teaching and scientific approach to the problems of vision on that part of the Campus of the Ohio State University devoted to the recently dedicated Health Center, surrounded by Schools and Colleges of Medicine, Dentistry, Pharmacy and other arts and sciences pledged and consecrated to teachings, practices and researches looking toward the alleviation of suffering and pain, the eradication of disease, and the dissemination and inculcation of knowledge concerning the care of the human body--yes, if you please, the sanctity of the human body--that men may not only live but live the life more abundantly, with greater personal bodily and mental efficiency to better serve their fellow man to the glory of God as the embodiment of all that is good and true.

If I were with you there is so much I could say about so many persons and things in some manner or other associated with the establishment of the course in optometry as the forerunner of the creation of the school. The warmth of my heart and the evidences of my energy and drive, coupled at times with the harshness of cold logic and the biting slash of sarcasm, cannot be conveyed in proper manner and just proportions through the medium of the written word. So, of necessity, I must refrain from much indulgence in the gentle and generally profitable (it is so to me) art of reminiscing. The shorthand recording of that which follows is very sketchy and spotty, leaving many of you who are here or who may read these words on a later occasion to fill in the details.

First of all, I wish to pay tribute to the founding fathers. It is true that I am, from the academic or university viewpoint, the founder of the first University course. That educational undertaking could not have been accomplished without the helping hands and open pocketbooks of many men in Ohio. No man lives unto himself; no group lives unto itself; no university or part of a university lives unto itself. Any undertaking requires team-work, a variety of necessary avenues of assistance and support. The establishment of the two year course on August 4, 1914 (changed the following year to a four year course at my request and after a series of conferences of a committee appointed by President Thompson to make recommendations), was made possible by reason of the untiring efforts of such men as Clark Sloan of Cleveland, then president of the Ohio Society; C.B. Edgar of Cleveland, C.N. McDonnell, P.C. Harris, Dan Hubbell and Homer White of Columbus; F.P. Barr of Lancaster; John Eberhardt of Dayton and Emil Klein of Cincinnati. Of course there are other names that should be mentioned and if I have failed them I am asking that I be pardoned for such

sins of omission, for I am writing these words at the midnight hour and into the early morning hours and have no access to exact references at the moment.

I also wish to pay tribute to the first class of ten young men. I can call them by name, I can see each of their faces, I can remember the many conversations of one kind and another and concerning one beginning of a very important educational movement and there were many questions and queries, nay even dire accusations, unfriendly comments, destructive criticism. yes, indeed: a young professor setting out on an uncharted and unknown course, he himself setting the course and guiding himself and the ten fine young chaps by the light of the star as he saw it, the courage of his convictions, and his bulldog tenacity. And if, as the years have come and gone, I have moved on into other and broader fields of education and research and have become more liberal and broader in my viewpoints and contacts with the result that the "ism" and the "ology" have become wholly of secondary importance and the search for and acquisition of the truth insofar as such is possible has become paramount and supreme, let it be remembered that I owe a debt of inexpressible gratitude to the kindly words, warm clasp of hands and wholesome smiles of such men as Professor Landacre, professor of anatomy, and secretary of the Medicine School, Dr. Judson Ferree, professor of ophthalmology, Dr. Eugene McCampbell, then appointed (1918) dean of the Medical School, Dr. Arps (later dean of the College of Education) and many others of the faculty, including my own colleagues and associates in the department of physics, not the least of whom was Dr. Alpheus W. Smith, later dean of the Graduate School.

I remember, as though it were yesterday, visiting with Professor Landacre about the work in anatomy, particularly of the eye. Said Landacre to me: "Sheard, these boys do not have more than a high school education; anatomy is a tough subject; what will happen if I have to flunk some of your ten boys?" "Well," said I: "If you believe you should flunk them, flunk them." "Yes," said he, "then you will not have any class." "That's all right by me," said I. "I would rather see them all flunked out and have to start the whole thing over another year than to have you pass them if they are not worthy." It always pays to stand by what is right because, in the end, that which is right and good and true will prevail. If that thesis is not correct and if weakness, incompetence, quackery, mysticism, rattle-trap doctrines and teachings are encouraged and permitted, then there is no hope. It is to wage war against such quackery, incompetence and questionable doctrines that such universities as the one in whose classic shades you now find yourselves establish such schools and build such quarters as have been dedicated today.

To return to the anatomy course and the boys: they did not fail either Professor Landacre or me, although two of them

repeated some of the work. The point is: the course of instruction was sound; the professors had no favors to extend to anybody; it was a question of survival if there was anything that was fit to survive. Our belief in the goodness of the right type of education in optometry and the development of adequate service to the public based on adequacy of training was justified. The four year course--first established in the Ohio State University--did not succumb and finally became the accepted minimum standard on the part of all schools. Optometry has now come of age and may be expected to take its place as the years come and go in the body politic of the arts and sciences concerned with healing, public health and individual efficiency, commonly referred to as the field of medicine but which, in the broader concept which I have advocated and preached these many years, is the field of applied biologic science of which medicine *per se* is the center of the hub.

In closing I can but refer briefly to the development of clinics concerned with distinct, comfortable and efficient vision, the correlation of the functions of accommodation and convergence, and all things germane thereto. In most, if not all, instances, courses in optometry have come into the universities through the departments of physics. It was very natural that this should be the case, since the emphasis in 1914 and prior thereto was on ophthalmic optics--lenses, prisms, spectacles, frames--or the physical aspects. I think I can say with truthfulness and the right type of modesty that I was the first educator having anything to do with optometry who brought in and emphasized the physiological aspects and phases of the work and developed that which is usually referred to as dynamic ocular tests and which, in turn, have been so ably extended and amplified by Fry, Tait and Morgan. Today there appears to be a tendency on the part of optometry to introduce into the solution of clinical problems of vision the psychological aspects. Mathematics and physical science are the corner-stone or base on which all else is reared. They are the only exact science we have. Biology has many variables and variants and less exactness of laws and conclusions. Psychology has still more variables and intangibles (to the points of inability to define, on occasion, with any degree of exactness) and must of necessity be the least accurate of the three, the only degree of accuracy possible being based on the other two, although the viewpoints and methods of approach differ from the physical and physiological approaches and therefore are of value. Too frequently are the contributions from the field of psychology as they relate to vision simply a jargon of words, with the use of catchy expressions and even the coinage of terms that when carefully analyzed, mean nothing and are literally figments of the minds of the authors. The academic field of psychology and psychiatry are, of necessity, somewhat nebulous and indefinite in verbiage and conclusions. It would be well for the nonmedically trained practitioner to leave all of

these things to the medical profession in general or, in particular, neurologists, psychiatrists and other adequately trained (with Ph.D. degrees) specialists who may be associated with them. Otherwise it is likely to resolve itself into pure and unadulterated quackery, of which I am sorry to say a considerable part of the American public seem, at the moment, to be fond and to which they are susceptible. Optometry has a sphere of real service and usefulness and has enough to do if it will attend to its own practices which have been built on solid principles over these past fifty years.

The faculty of the Ohio State University and the many acquaintances and friends in the city of Columbus, Ohio, will always be close to my heart. I came to them as a cub instructor (the bottom of the list) in physics in 1907. In the spring of 1908 I went to Cedar Point to address a state meeting of optometrists and opticians. This was the beginning of the making of acquaintances and friendships which led, through devious pathways and sundry means, to the beginnings of an educational adventure which finds its culmination, in part at least and for the day and age in which we live, in the establishment of a school of optometry and a home in which to house it in dignity and with honor on the campus of the Ohio State University.

May the dedication of this building to the arts and sciences concerned with vision also carry with it a rededication of ourselves to the support of that which is true and good and lovely beyond all comparison. May God bless us and keep us and cause His face to shine upon us, giving us health and strength to labor on, and kindness and wisdom as we serve those who come to us for assistance and counsel, exemplifying at all times the spirit of the Golden Rule. This is the sincere wish and heart's desire of your friend Charles Sheard.

Optometry in Zambia:

Accompanying a handwritten letter of February 25, 1992, to the Secretary of the International Optometric and Optical League from Dr. Dixon Konkola, P.O. Box 32135, Lusaka, Zambia (formerly Northern Rhodesia) is a typewritten report entitled OPTOMETRY OR OPTICS IN ZAMBIA 1920-1991. It is not clear from the introductory paragraphs what Konkola's nationality is but, if he was not born in what is now Zambia, he has lived there most of his life, which, from the events he mentions, seems to date back to the '20's.

For example, he mentions an epidemic of measles in the '30's and adds, "The following were the methods of eye care amongst the natives of Northern Rhodesia. They collected snails' backs and ground them before putting them into sore eyes. They also ground roots which they used smeared into face cuts as medicine. Some leaves were ground and soaked as well as the hollow reeds which were used to wipe tears from the eyes. The lucky were cured but

the unlucky ones went blind. There were no spectacles but when traders who wore spectacles came the natives called them 'mondals' as were their shops and trade."

The meaning of "mondals" is not explained.

Continuing, "In 1940 I began to feel that I should have glasses. I therefore got my first glasses in 1959 in Elizabeth Ville. I had tried to see Dr. Phillips who was the ophthalmologist or eye specialist at Ndola Government Hospital. Dr. Phillips was well known for his glasses. When I began my apprenticeship with Dr. Fred Buck, Dr. Phillips had gone to Zimbabwe, after Zambia's independence."

Dr. Buck was one of two opticians practicing in Lusaka. Dr. Konkola bought the practice after seven years of apprenticeship. Later he spent a year in clinical work with Dr. Freeman in London. Subsequently Zambia acquired an optician from Sweden, another from India, and a lady optician from the Philippines, plus two or three others from unidentified sources.

The rest of the paper deals with current developments and problems in the ophthalmic field in Zambia in which Dr. Konkola seems to play the leading role.

Fleeting technology:

Often we identify history with only the events that occurred prior to our living memory. In actual fact it must be identified with whatever happened when. In case this point seems a bit overemphasized, just read carefully the following opening paragraph in a draft supplement to the minutes of the February 24, 1992, meeting of the Indiana University School of Optometry faculty entitled "Progress Report for Last 3-Year Plan (1989-92)":

Technological development of the School of Optometry has been so rapid over the past three years that today it is difficult to envision the state of affairs described in the previous 3-year plan (5/89). At that time only a few faculty or staff had access to microcomputers; today everyone has a personal workstation on his or her desk. In 1989 we had a "guerilla network" interconnecting a few research MacIntosh computers with a slow, unreliable LocalTalk network and a single, shared T-box which provided a tenuous link to the rest of the campus via SYTEK; today every computer in the school is on a high-speed ethernet, which supports a local area network (LAN) of some 70 Macintosh and 20 IBM-class microcomputers, plus a high-speed fiber-optic link to the rest of the Bloomington campus and from there to the greater Internet. Three years ago we longed for a way to share information with each other electronically; today we are served by two file servers, one dedicated to research and the other to general purposes, plus a convenient, heavily-used electronic mail system which puts every faculty, staff, associate, and graduate student in

immediate contact with each other. Back then we wished for a network of printers, scanners, graphics workstations, and other tools needed to implement our mission; today we have all of these plus a device unique to IU departments, a film recorder for transferring color graphics and data to photographic film. In 1989 our clinic was struggling with a nearly useless computer system for managing patient records; today the clinic is served by a modern, reliable network of computers running state-of-the-art business-management software that is poised for distributed access to faculty, staff, and students for teaching and research purposes. Back then we identified a need to connect our faculty, staff, and students with the Optometry library; today our library is fully integrated into the Optometry LAN and electronic mail system, which supports such services as personalized scanning of *Current Contents*, and the entire IU library system is available at the desktop through the IU network.

A heyday for stereopsis:

Probably out of print but likely to be available in many public libraries, and especially museum libraries, is a 1977 book authored and published by Professor William C. Darrah, Gettysburg, Pennsylvania, entitled "The World of Stereographs." It deals with just about every aspect of stereography except the optics. The first 69 pages are devoted to a history which has considerable incidental interest for optometrists.

The invention of the daguerreotype and later photographic processes together with the introduction of the Holmes, Brewster, and other easily handled models of the stereoscope led to a parlor pastime that rivaled in significance today's television role in the home. The popularity era included the eight and a half decades between 1850 and 1935. One manufacturer boasted, "A stereoscope for every home." Darrah personally identified the names and locations of many thousands of stereographers in North America alone and thousands more elsewhere. The total number of different stereographs produced probably exceeded five million. The eighty categories of subject matter identified by the author range from "advertising" to "zoology."

The earliest stereographs were made by simultaneous exposure of two cameras laterally separated, or with one camera laterally displaced between two successive exposures. The latter technique occasionally resulted in the appearance of a person, horse and buggy, or other moving object in one of the two pictures but not in the other. Stereoscopic cameras were commercially manufactured in 1854 to meet the rapidly growing demand. The same demand led a number of optician-optometrists to manufacture and sell stereoscopes.

Were optometrists otherwise involved in the implementation of the pastime? Because many of the stereographs rewarded the sharpest visual acuity for their maximum appreciation, correction

of refractive errors must have been paramount. The small but significant number of functionally monocular persons must also have expressed their puzzlement as to what phenomenal sensation binocular viewers were claiming. And then there were certainly those patients with heterophoric imbalances that reported diplopia or simply fusional delays or even instrumentally induced headaches when engaging in stereoviewing. Evidence that such clinical complaints occurred is not apparent, but perhaps we have not searched diligently.

Pouces and Zolle:

These terms in French and German respectively, and inches in English, were small units of length commonly used in specifying lens power in terms of radii and focal lengths in the latter half of the 19th century. Eventually the reciprocal term diopter took over, and we now use it without our consciousness of the complexity of the related standardization process. Similar but a considerably less complex evolvement of the term prism diopter occurred during a contemporary time period.

The history of these developments is described by G.B. Friedman in an article entitled "Diopter and prism diopter" in the February 1992 issue of the Journal of the American Optometric Association, vol. 63, no. 2, pp. 117-22 with 43 references!

In spite of this obviously exhaustive search of the literature the author did not mention Daça de Valdez's use of the grad, a reciprocal unit very nearly equal to the diopter. That was in 1623, two and a half centuries earlier.

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