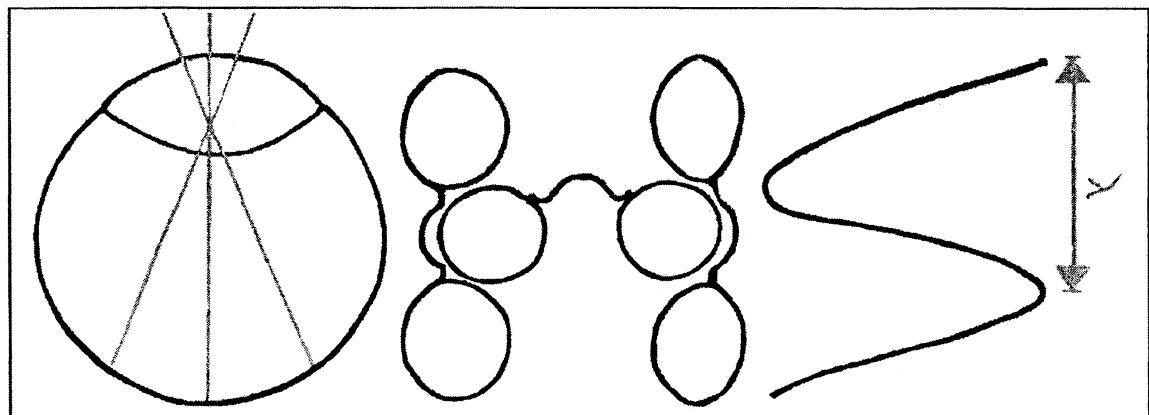


# HINDSIGHT

## Journal of Optometry History

July, 2010  
Volume 41, Number 3



OPTOMETRIC HISTORICAL SOCIETY

Summer 2010

Journal of Optometry History

Official Publication of the Optometric Historical Society

Hindsight: Journal of Optometry History publishes material on the history of optometry and related topics. As the official publication of the Optometric Historical Society, Hindsight: Journal of Optometry History supports the purposes and functions of the Optometric Historical Society.

The purposes of the Optometric Historical Society, according to its by-laws, are:

- to encourage the collection and preservation of materials relating to the history of optometry,
- to assist in securing and documenting the recollections of those who participated in the development of optometry,
- to encourage and assist in the care of archives of optometric interest,
- to identify and mark sites, landmarks, monuments, and structures of significance in optometric development, and
- to shed honor and recognition on persons, groups, and agencies making notable contributions toward the goals of the society.

Officers and Board of Trustees of the Optometric Historical Society:

President:

Irving Bennett, 1520 Pelican Point Drive, BA252, Sarasota, FL 34231, or 3307 Seventh Avenue, Beaver Falls, PA 15010, irvbennett23@gmail.com

Vice-President:

Douglas K. Penisten

Secretary-Treasurer:

Arol Augsburger

Trustees:

Jerry Abrams

Jay M. Enoch

Alden Norm Haffner

Chuck Haine

The official publication of the Optometric Historical Society, published quarterly since its beginning, was previously titled:

Newsletter of the Optometric Historical Society, 1970-1991 (volumes 1-22), and

Hindsight: Newsletter of the Optometric Historical Society, 1992-2006 (volumes 23-37).

Hindsight: Journal of Optometry History began in 2007 with volume 38, number 1.

On the cover: The drawing represents OHS for Optometric Historical Society: the O an elementary schematic of an eye, the H three intersecting pairs of spectacles, and the S a representation of a light wave with the Greek letter lambda indicating one wavelength. The drawing artist was Diane Goss.

OHS website: [www.opt.indiana.edu/ohs/ophohiso.html](http://www.opt.indiana.edu/ohs/ophohiso.html)

# HINDSIGHT: Journal of Optometry History

July, 2010

Volume 41, Number 3

INDIANA UNIVERSITY

SEP 21 2010

OPTOMETRY LIBRARY

Editor:

David A. Goss, School of Optometry, Indiana University, Bloomington, IN 47405,  
dgosss@indiana.edu

Contributing Editors:

Jay M. Enoch, School of Optometry, University of California at Berkeley, Berkeley, CA  
94720-2020, jmenoch@berkeley.edu

Irving Bennett, 1520 Pelican Point Drive, BA252, Sarasota, FL 34231, or 3307 Seventh  
Avenue, Beaver Falls, PA 15010, irvbennett23@gmail.com

## TABLE OF CONTENTS

When Optometrists Attended Think Tanks, <i>Irving Bennett</i> .....	66
Eugene Wiseman (1885-1967), Optometric Practitioner, Organizer, Innovator, and Writer, <i>David A. Goss</i> .....	71
The Elite School; 25 Years Later! & Optometry and Its Future in India, <i>Jay M. Enoch</i> .....	79
James E. Littlefield, Author of <i>Optometry – The Littlefield System of Eye and Nerve Measurements</i> , <i>David A. Goss</i> .....	92
Book Review: Man of Vision: The Story of Dr. Robert Morrison, <i>David A. Goss</i> .....	100
Book Review: Indiana in Stereo: Three Dimensional Views of the Heartland, <i>David A. Goss</i> .....	101
Instructions to Authors.....	103
OHS Membership Application Form.....	104

Journal subscriptions are registered by joining the Optometric Historical Society. The cost of an institutional or library subscription is the same as for personal membership.

Manuscripts submitted for publication should be sent to the Editor at the email or postal address above. A Word document attached to an email message is the preferred means of submission. Paper copy submissions sent by postal service will also be considered.

# When Optometrists Attended Think Tanks

Irving Bennett, O.D.

## **Abstract**

*This paper discusses the organization of the Bradford Woods Conference in Indiana that began optometry think tank meetings in 1954, the Allenberry Conference held annually for many years starting in 1967, and the Blue Sky Conference in Michigan that started concurrently with Allenberry. These were freewheeling meetings with enthusiastic exchange of often visionary ideas.*

**Key words:** Allenberry Conference, Blue Sky Conference, Bradford Woods Conference, optometry history.

In 1954, Henry W Hofstetter and Robert W. Tubesing, with no organizational sponsorship, invited 20 optometrists from Indiana and several nearby states to meet for a two-day conference on topics of optometric interest. The meeting was held at Bradford Woods Manor, an old mansion-like home located on a large tract of wooded land owned by Indiana University and established as a camp, recreation center and headquarters for educational activities sponsored by the University.

The Bradford Woods Conference was designed to be completely informal without organizational representation and entirely at the personal expense of those participating. It was a bit more rustic than its Allenberry counterpart that did not begin until 1967 in Boiling Springs, PA. The Michigan Blue Sky Conference differed from both Bradford Woods and Allenberry in that it was association sponsored. It was, however, completely informal and off-the-record.

## **The Beginnings of Optometric Think Tanks**

Henry W. Hofstetter was, indeed, a master educator who treated his experiences outside the institutions in which he taught or administered much like a teaching/learning experience. His term as 47<sup>th</sup> president of the American Optometric Association was punctuated with conferences designed to make participants think, discuss, debate and resolve. The Bradford Woods Conference of 1954 was not a major item on Hofstetter's curriculum vitae but it deserved to be. That conference, actually the granddaddy of think tanks for optometrists, combined academic optometrists and practicing optometrists, many of the latter being veterans of World War II. Together they questioned the scope of practice of the profession and its lack of progress to change that scope.

The Bradford Woods Conference was the brainchild of Hofstetter and his colleague Robert W. Tubesing. Hofstetter at the time was the head of the optometry school at Indiana University. Tubesing, an optometrist practicing in Richmond, Indiana, was president of the Indiana Optometric Association in 1953 and president of the American Academy of Optometry in 1957-58. They thought that if they could gather

together a couple of dozen leading optometrists in an informal setting, with no minutes, officers, or agenda, the conversation would result in thought-provoking discussions. Indeed it did.

The Bradford Woods setting was a Manor (an old mansion) owned by Indiana University and used for retreats. Hofstetter and Tubesing<sup>1</sup> described the meeting thusly: "The conference was designed to be completely informal, without organizational representation, and entirely at the personal expense of those participating. It was further planned that there should be no officers, by-laws, sponsorships, or organizational type activities beyond the election of a chairman to preside at the conference. No minutes were kept, no resolutions considered or adopted, and no publicity was given to the meeting. Topics to be discussed were left entirely to the discretion of those in attendance."

The Allenberry Conference and the Blue Sky Conference of the Michigan Optometric Association were somewhat different from Bradford Woods. At Allenberry, because the number of participants was greater, the attendees were split into three or four groups of 15 to 20, making sure that the participants of each group for each of the four "sessions" were different. At Blue Sky the meeting was an official one of the Michigan Optometric Association so the selection of attendees was not "by invitation only" as was the case for the Allenberry and Bradford Woods meetings.

Here are some distinguishing characteristics from each of these three meetings as they appeared in reports published in the *Journal of the American Optometric Association*, *The American Journal of Optometry and Archives of the American Academy of Optometry*, and *Michigan Optometrist*.

### **Bradford Woods**

Hofstetter and Tubesing, writing in the American Academy of Optometry's journal,<sup>1</sup> noted "The original 20 invited were selected for a variety of professional interests, their known or promising leadership in the profession, their recognized interest in fundamental professional problems, and their recognized ability to contribute constructively to optometric thinking. Some attempt was made to include men (sic) of all age levels, from various types of communities, and with differing educational backgrounds and points of view. By all means the selection was not intended to be exclusive; rather it was designed as an experiment in a type of conference which, if successful, might serve as a pattern for others who might wish to institute like meetings of similarly constituted groups.

"A year later the same participants were invited back and each was asked to nominate another person whom he felt could contribute to the discussions."<sup>1</sup>

The Bradford Woods conferences were held in October, a particularly inviting time of year in the autumn-tinted rolling hills of Southern Indiana.<sup>2</sup> The Manor provided dormitory type lodging, informal self-served home cooking, and the exclusive use of the

facility with its ample parking. Each participant was assigned a job (server, cleaner-upper, etc.). There was a phenomenally low cost of attendance.

Hofstetter and Tubesing<sup>1</sup> noted that "the conferences have been most invigorating, inspirational, and educational. The freedom of expression, the informality, the lack of distractions (e.g., no golf) and the lack of organizational pressures have made them unique in character. Topics for discussion have followed, the most part, the general theme of 'Optometry, its present and future role in society.' That original pattern of operation has been followed faithfully and without even minor modifications."

One of the outgrowths of the Bradford Woods Conference was the number of times participants suggested that similar conferences be instituted by other optometric groups.

### **The Allenberry Conference**

In 1967, Milton Eger, then editor of the *Journal of the American Optometric Association* (JAOA), and Irving Bennett, former JAOA editor, took up the suggestions made at Bradford Woods and decided to run a similar conference in their home state of Pennsylvania.<sup>3</sup> Each had attended several Bradford Woods meetings, and they were impressed by the candor of the conversation and the openness of expression.

One of the warnings from Dr. Hofstetter had been the "delicate aspect" of the first meeting "since it would appear to offend many who are not invited." The problem was not so acute with the Allenberry Conference since the facility would easily accommodate 50 people, if not more. The Bradford Woods meetings were limited to about two dozen participants.

First Eger and Bennett sought a convenient site – somewhere central because Pennsylvania is a large state, somewhere easy to reach by plane or car, somewhere near one of the three larger cities, and somewhere meals and lodging would be provided for reasonable rates. It did not take long to find Allenberry, an Inn in Boiling Springs, PA – in the center part of the state and quite close to Harrisburg, the state's capitol.

The original list of invitees was 50 optometrists who had over the years been active in organizational, educational, legislative, and/or academia in optometry. It was gratifying that 43 of the original list of invitees accepted the invitation to attend the two day meeting on October 18 and 19, 1967.

There were many similarities between Bradford Woods and Allenberry and many differences. Because the attendees at Allenberry were twice the number that went to Bradford Woods, the group was divided into four smaller sessions each lasting two and a half hours. Each group selected a moderator to keep the discussion on track and each group selected a recorder to take brief notes.

Like its predecessor, Allenberry did not take minutes or arrange to publish the results of the discussions. The recorder was there to report to the closing session of each day what transpired in its group. Any conclusions that were drawn were done privately by participants to do with what he (or she) wished. For the first two Allenberry Conferences, at least, no female optometrists were invited or attended. Attendance records from the other Allenberry conferences do not appear to be available.

At Bradford Woods, participants helped serve the meals and clean up after the meals. Attendees made their own beds in the morning. At Allenberry, participants could pay for a private room or bunk with another attendee. Three meals a day were served in the Inn's dining room. Although very comfortable, the furnishings and atmosphere for both venues were rustic and sufficient.

The leaders at Bradford Woods, Hofstetter and Tubesing, verbally suggested subjects for discussion. For Allenberry, Eger and Bennett prepared a sheet with ten to 20 suggested topics to discuss, each with a brief background. Attendees could pick a topic from the prepared list or suggest other topics.

Both meetings offered some free time to kibbutz, to play a late night game of bridge, shoot the breeze, or take a social drink. Bradford Woods did not have a bar or bartender in the Manor so if anyone wanted to imbibe he needed to bring his own refreshment. At Allenberry there was a bar and a bartender.

Membership in the American Optometric Association (AOA) or in the American Academy of Optometry was not necessary to attend either Bradford Woods or Allenberry, but only a few non-AOA members ever did attend. As an experiment at one Allenberry Conferences, a group of ophthalmologists were invited to attend and a few did. At least it proved that we were all human but had different opinions.

Both Bradford Woods and Allenberry faded away like most meetings and conferences do. An effort to revise Allenberry after the turn of the century did not work. Most of the problems that faced the participants at Bradford Woods and Allenberry had been solved and the new problems did not appear as simple or as exciting.

### **The Blue Sky Conference**

The first Blue Sky Conference of the Michigan Optometric Association was conducted at the Waldenwoods Conference Center on Walden Lake near Howell, Michigan in September, 1968. The meeting was designed to be a completely informal, off-the-record discussion of problems facing Michigan optometry and the Michigan Optometric Association (MOA). It was attended by 41 optometrists, most of whom were officers and committee chairmen of the association.

Although it used the meeting formula well established by Bradford Woods and copied by Allenberry, it had one very fundamental difference – the meeting was an official one of the MOA and resulted in specific recommendations to be considered by the Association's Board of Directors. One of the eleven original Blue Sky

recommendations was that the conference be made annual and be made a part of the annual state convention.

The attendees at Blue Sky were split into three smaller working groups, with summary “general sessions” at the close of each of the two days. There was a working agenda of 22 broad categories and 52 sub-categories. Obviously, this meeting was much more structured than its predecessors.

One comment from a participant at the first Blue Sky Conference as recorded in the *Michigan Optometrist* summed up the general feelings of all three optometric think tanks: “This is without a doubt the most informative, interesting, and enjoyable meeting of the association I have ever attended. I just hope that it will be continued in future years and that you will invite me back next year.”<sup>4</sup>

### **End of the Think Tanks**

These meetings occurred in the days when continuing education was not the main focus of optometric society meetings. The records are not at all clear when Bradford Woods, Allenberry and Blue Sky had their last meetings. There may have been other think tanks that were never publicized or promoted. What is clear that those attended were nearly unanimously thrilled with attending and participating in a freewheeling conference where participants were encouraged to express opinions that conflicted with the mainstream, that were visionary or “off-the-wall,” and could be openly debated with no repercussions.

### **References**

1. Hofstetter HW, Tubesing RW. The Bradford Woods Optometry Conference. Am J Optom Arch Am Acad Optom 34:683-685.
2. Bennett I. The Bradford Woods Conference. J Am Optom Assoc 1966; 37: 53-55.
3. Eger MJ. The Allenberry Conference – Common Ground for the Future? J Am Optom Assoc 1969;40:1082-1083.
4. The First Annual Blue Sky Conference. The Michigan Optometrist November, 1968; 47:6-8.

# Eugene Wiseman (1885-1967), Optometric Practitioner, Organizer, Innovator, and Writer

**David A. Goss, O.D., Ph.D.**

School of Optometry, Indiana University, Bloomington, IN 47405, dgoss@indiana.edu

## **Abstract**

*Eugene Gilbert Wiseman was an important figure in early twentieth century optometry. His organizational efforts and his writings were significant factors in the movement to professionalize optometric practice. He was an important force in the early development of the American Academy of Optometry. This paper provides a biographical sketch and describes the contents of the books he wrote.*

**Key words:** American Academy of Optometry, blood pressure measurement by optometrists, optometric organizations, optometry books, optometry history.

Eugene Gilbert Wiseman (1885-1967) practiced optometry for several decades, beginning when it was commonly called “optics,”<sup>1</sup> and continuing into the second half of the twentieth century. He was an organizer in work as Chairman of the American Academy of Optometry and in efforts with the American Optometric Association. He was an innovator in that almost one hundred years ago he suggested that optometrists should measure blood pressure. And he was the writer of books and articles on professional practice, blood pressure measurement, ocular symptomatology, and other topics.

Wiseman was born October 17, 1885, in Webster Grove, Missouri. His father was a jeweler who had been born in Germany.<sup>2</sup> Wiseman’s first lessons in optometry were from his oldest brother Arthur, who had taken a correspondence course in optics.<sup>1</sup> He performed his first refraction in about 1902. He continued to learn through the periodical literature of the time such as the Keystone and through reading books such as Tscherning’s *Physiological Optics* and Stevens’ *Motor Apparatus of the Eyes*. The first two instruments he purchased were an ophthalmoscope and a retinoscope.<sup>1</sup>

Wiseman worked for about two years as a watchmaker, engraver, optician, and salesman in Sharpsburg, Pennsylvania. He then attended the Northern Illinois College of Ophthalmology and Otology (later Illinois College of Optometry), from which he graduated in 1905. After optometry school, he was in charge of the optical department of a large jewelry store in Pittsburgh, Pennsylvania and then worked for Philadelphia optometrist Alexander Martin, who also had offices in New York and Buffalo.<sup>2</sup> Wiseman worked in Martin’s Buffalo office and then purchased it in 1908.

New York State passed its optometry licensure law in 1908. This was after Wiseman had already started practice, so he would have been exempted from

examination. He instead “believed that an official certificate could be valuable” and took the test. He had “a humiliating failure” on his first try, but passed on the second try, to become the state’s 30<sup>th</sup> licensee.<sup>1</sup> It was also around this time that Wiseman had his first leadership role in an optometric organization. He served two terms as president of Buffalo’s optometric society (1908-09).<sup>2</sup>

### American Academy of Optometry

In his autobiography, Wiseman remarked that he thought that his views and ambitions were similar to those of E. LeRoy Ryer, and that their careers paralleled each other.<sup>1</sup> In 1905, Ryer was the first to propose an American Academy of Optometry.<sup>3</sup> Wiseman revived that idea and largely through his own personal efforts organized a National Academy of Optometry in 1912. Its stated purposes were to advance the science of optometry, to elevate optometric education standards, and to establish a recognized group of skilled practitioners. Response to the formation of the organization was limited and it lasted only a few months. Nevertheless, Wiseman felt that it had alerted optometrists to some of the needs of the profession.<sup>4</sup>

The time apparently was not right for the formation of an academy in 1912, but the purposes that Wiseman put forth for it were largely the purposes for the formation of the American Academy of Optometry in 1922. Wiseman was one of the 40 charter members of the American Academy of Optometry.<sup>5</sup> He was elected chairman (president) at the academy’s second annual meeting in December, 1923, and he held that position until December, 1928.<sup>6</sup> James Gregg identified Wiseman as “one of the most dominant figures – if not *the* most dominant” in the early success of the American Academy of Optometry.<sup>7</sup>

In 1925, Wiseman spoke at an academy meeting and emphasized some of the important values that separated it from other optometric groups. He noted that many other meetings were “accompanied by political clamor, factional fights and energetic self-seeking” and that “scientific spirit was most noted by its absence”.<sup>8</sup> This address made clear Wiseman’s stance on professionalism and the Academy’s role in its promotion. He noted the need for a place to discuss matters such as fees, tasteful publicity, technical subjects, referral to service-oriented colleagues, etc., among like-minded professional practitioners rather than in a group that included “store’ men”.<sup>8</sup>

### American Optometric Association

Wiseman was also active in the American Optometric Association and its precursor the American Optical Association. He served as one of its vice presidents. In 1918, he was a member of the American Optical Association Bureau of Optometric Information, which was given the task of improving the public image of optometrists.<sup>9</sup> In that capacity, he worked with Briggs Palmer, E. LeRoy Ryer, and Elmer Hotaling to produce a documentary motion picture about professional optometry. The film was shot in the Hotaling’s optometry office. Wiseman stated that it was “presented in leading theaters throughout the country and viewed by an estimated two and half million people.”<sup>1</sup> In 1925, Wiseman was among a group of ten clinicians identified by the

American Optometric Association who were leading an effort for education of the membership.<sup>10</sup>

## Writings and Other Activities

Wiseman was the author of four books, *A Treatise on Blood Pressure in Ocular Work: With Special Reference to Factors of Interest to Refractionists* (1916), *Fundamentals of an Ideal Optometric Practice* (1919), *Building Optometry* (1921), and *Ocular Symptomatology* (1924). He contributed to optometric periodicals such as *Optical Journal and Review of Optometry* and *Optometric Weekly*. Perusal of the cumulative index of the *American Journal of Optometry and Archives of the American Academy of Optometry* shows that he published six papers in that journal in the period from 1925 to 1933. The topics of those papers varied, including blindness from a focal infection, evolution of the visual apparatus, the visual portion of the autonomic nervous system, photography applied to strabismus, and exophoria.<sup>11</sup>

Wiseman's first book drew quite a bit of attention, and it led to lecturing to optometric groups all over the United States. Wiseman stated that he wrote the book "to promote optometrist's interest in the anatomy, physiology and pathology of the visual system but some thought it was intended to lead optometrists into medical practice which was furthest from my thoughts."<sup>1</sup> Writing in 1966, he also noted parenthetically that "there seem to be some who actually fear that optometry will ultimately be completely absorbed into medicine and vanish as an independent profession. Personally I doubt if this will happen in the foreseeable future but it is a possibility. It seems that many optometrists have been seduced into submerging themselves into ophthalmological offices and that is one form of absorption."<sup>1</sup>

In his autobiographical statement, Wiseman stated that his "over-riding determination" was "to promote the professionalism of Optometry."<sup>1</sup> Because he "bitterly opposed" commercial optometry and, as he recognized later, he was not diplomatic in many of his efforts, he says that gained many enemies. Tiring of battling opponents led him to withdraw from leadership in optometric organizations in the mid 1930s to concentrate on his practice.<sup>1</sup>

In 1962, Wiseman received honorary life fellowship in the American Academy of Optometry.<sup>12</sup> In 1973, an optometrist who had served an internship with Wiseman recalled him as "one of the finest 'gentle' men that ever graced our fold" and one who left "the most profound impression" on him.<sup>13</sup> He also recalled that Wiseman built some of his own orthoptic equipment.<sup>13</sup>

## A Treatise on Blood Pressure in Ocular Work

Wiseman's book on blood pressure<sup>14</sup> was published in 1916. In an "Introduction" section on pages xiii to xviii, Wiseman stated that the purpose of the book was "to acquaint the optometric profession with a science hitherto unemployed by it..." He noted that optometrists had a unique opportunity to be in position to differentiate between symptoms due to functional anomalies remediable by optometric means and symptoms due to pathologies treated by medical means. He recognized that his

advocacy of blood pressure measurement by optometrists would meet opposition both within and outside the profession. He argued that the essential use of ophthalmoscopy by optometrists was well accepted, but ophthalmoscopy detected tissue changes after they had occurred. In contrast, sphygmomanometry could detect an underlying cause of potential problems before they occurred.

After the Introduction, Section One consists of 79 pages in five chapters. In Chapter 1, "General Considerations," Wiseman discussed the consequences of high blood pressure and the diseases associated with it. He also gave three reasons why optometrist should determine blood pressure: for the physical welfare of the patient, for the ocular welfare of the patient, and for the welfare of the practitioner. By the latter, Wiseman meant that the practitioner wouldn't misinterpret causes of symptoms.

Chapters 2 through 4 were devoted to arterial anatomy and histology, arterial physiology, and arterial pathology. In Chapter 5, procedures and instrumentation for sphygmomanometry were presented.

Section Two consists of 159 pages in nine chapters. Various systemic diseases were discussed in Chapters 6 through 10. Chapters 11 through 13 dealt with the effects of tobacco, alcohol, and atropine. In Chapter 14, Wiseman presented an analysis of sphygmomanometry results for over 200 of his patients. Of these cases, 36.5% had abnormal blood pressure and 19.5% had both abnormal blood pressure and "ophthalmoscopic evidence of pathologic conditions." Wiseman noted that the measurement of blood pressure led to an increase in the numbers of patients he referred to general medical practitioners.

## Fundamentals of an Ideal Optometric Practice

This 33 page booklet was produced to help establish standards and policies by which optometrists could improve themselves and establish professional practices.<sup>15</sup> The suggestions offered include the following:

(1) Optometrists should locate their offices within the business section of a city.

(2) Optometry offices should be located upstairs because a downstairs office would appear to have the characteristics of a store.

(3) The reception room should be comfortable, have an atmosphere of service, and be separate from the examination room. Light tints, especially light gray, should be used in the examination room. Indirect lighting and neutral color furniture are best in the examination room.

(4) The examination room should have proper equipment. With "the trial case, visual acuity test, skiascope, ophthalmoscope, sphygmomanometer, ophthalmometer, and phorometer, the competent optometrist can take care of nearly everything which may arise in his practice..."

(5) Optometrists should have technical knowledge of topics such as lenses, skiascopy, ophthalmometry, ophthalmoscopy, and sphygmomanometry. Optometrist should have books on those subjects, as well as books on anatomy and physiology, strabismus, oculomotor function, ocular tests, and physiological optics.

(6) Optometrists should charge "a reasonable fee for examination." It was noted that services given away for free will not be appreciated or respected.

(7) Optometrists should conduct themselves in such a way as to "merit the respect and confidence of their fellow townsmen." They should act with "high ideals" and dignity and should participate in commendable and uplifting civic activities and organizations.

(8) Individual advertisements should not be used because they appear unprofessional to the layman. It would be much better if optometrists worked collectively to educate the public on the services they provide through such publicity as booklets from organizations or articles in national magazines.

(9) Being active in optometric organizations is of benefit to both the individual and the profession.

## **Building Optometry**

This 260 page book was published in 1921.<sup>16</sup> It expands upon the principles presented in Wiseman's *Fundamentals of an Ideal Optometric Practice*. In the first chapter, he defines professional and commercial practice and argues forcefully for professional practice. His passion for promoting professionalism shines throughout the chapter and can be exemplified by the following statement on pages 16-17: "Can anyone deny that our ethical position would be much stronger than it is, our profession more attractive to students, our men more greatly respected individually, and our collective net income far greater than it is if the majority of our men occupied offices instead of stores, conscientiously directed their energies toward doing better and more comprehensive work, giving better service, and thereby almost unconsciously but unavoidably developing our science along broader and deeper lines so that optometry and optometrists would always have to be reckoned with and we could take our place alongside of law, medicine, architecture, and dentistry?"

In chapter II, Wiseman continued his argument in favor of professionalism. He discussed some of the steps that commercial optometrists could take to become more professional. He described the different types of commercialism and how they worked against those who promoted professionalism. He gave the opinion that: "Optometry is injured by nothing more than by the methods of the some jeweler-optometrists. Generally speaking, this combination should not exist in the cities." (page 40) However, he did note that: "The jeweler-optometrist who practices in the smaller towns is about the only one whose position is justifiable. It is often impossible for small communities to support an optometrist by optometric work alone, and so the optometrist must combine other occupations with it, in order to gain a decent livelihood." (page 41)

In the third chapter, Wiseman discussed the importance of having a good knowledge base. He noted that one avenue is to study with an optometrist who "has given ample evidence of his scientific attainment, his breadth of view and his personal character." (page 53) He also gave lists of recommended books on anatomy, physiology, optics, refractive procedure, "skiametry," "ocular myology," ocular and systemic disease, perimetry, and general topics. Equipment recommended in Chapter IV included test lenses, trial frame, skiascope, ophthalmoscope, sphygmomanometer,

phoro-optometer, keratometer, amblyoscope, moving target, stereo-campimeter, and perimeter.

In the fifth though seventh chapters, Wiseman expounded upon the construction of the examination room, general arrangement of offices, and the location of offices. He considered the lighting (indirect), color (light tints), furniture, and electrical wiring of the examination room. He suggested that the reception room be "tastefully...furnished," but "less impressive than the examination room." (page 125) Wiseman preferred that an office be located in "that section of the town or city in which there are the greatest number of people during his office hours." (page 129) He recommended an upstairs office in order to avoid the appearance of a store and because upstairs rents were usually less, allowing the optometrist to keep fees at a reasonable level.

Wiseman emphasized the importance of charging fees in Chapter VIII. He noted that: "It is actually humiliating that there should be the slightest necessity for including in this book a chapter on the desirability of charging fees for services, for that implies 'free' examinations, and free examinations predicate *worthless* examinations." (page 137) The ninth chapter was devoted to the matter of publicity. Wiseman voiced his opposition to the use of hand bills, bill boards, theater program advertisements, street car signs, show windows, or newspaper advertisements. They were viewed as unprofessional, not cost effective, or both. He did feel the direct mailing of letters or booklets could be appropriate if they were sent under at least a two-cent stamp, were on medium to high class stationery, were brief and to the point, and contained "dignified, diplomatic, and etymologically correct" phraseology. (page 166) He also felt that collective publicity by optometric organizations could be done in an appropriate manner. He noted that the "indirect publicity" of having the proper equipment, office location, and education is also important.

In Chapter X, Wiseman discussed the importance of involvement in organizations and the support of organization leaders. He noted that organizations defend the profession and provide educational opportunities. He also noted that the development of the profession's literature was important. He observed that there was "a vital difference between the graduate of a high-class optometry school and the 'old-time' practitioner..." (page 205) in the eleventh chapter. He likened the old-tome practitioners to pioneers who "had to grope their way through untracked forests of difficulties..." (page 207) He suggested that even though recent graduates were well trained, they could benefit from working with an experienced professional optometrist. For optometry students who were sons of jewelers and expected to take over the family business, he recommended opening the optometry office in an upstairs office above or near the jewelry store, but separate from it.

Chapter XII was entitled Optometry's Opportunity. Wiseman emphasized the importance of vision and of optometric services. Because of that Wiseman saw almost limitless possibilities in the future of optometry. The last chapter described the offices of prominent optometrists. Included were the offices of the author and of Elmer E. Hotaling, E. LeRoy Ryer, Franklin Seward, P.A. Dilworth, and Laurence P. Folsom.

## Ocular Symptomatology

In the introduction to this 93 page book, Wiseman stated that its purpose is to help the refractionist discriminate between vision problems and non-ocular abnormalities with very similar symptoms.<sup>17</sup> He modestly stated that his work was "inadequate, but it is hoped that it will lead to more successful attempts on the part of other more skillful." (page 4)

The book was organized into four sections, each on a type of symptom. Section I is Blurred Vision (pages 15-56). The eight chapters in Section I were Cornea, Aqueous, Iris, Ocular Refraction, Crystalline Lens, Vitreous, Retina and Choroid, and Optic Nerve. Section II (pages 59-68) is Painful Vision, with two chapters, one entitled Photophobia and one entitled Muscular Pain. Section III (pages 71-79) is Vertigo, with chapters being Ocular Vertigo and Other Causes of Vertigo. Section IV is Headache, with five chapters.

## References

1. Wiseman EG. Autobiography of Dr. Eugene G. Wiseman, 1966. 12 page typescript obtained from the Buffalo and Erie County Historical Society Research Library, Buffalo, New York, also available from American Optometric Association Archives and Museum.
2. National Cyclopedia of American Biography. New York: James T. White & Co., 1973;54:250-251.
3. Gregg JR. History of the American Academy of Optometry 1922-1986. Washington, DC: American Academy of Optometry, 1987:5.
4. Gregg JR. History of the American Academy of Optometry 1922-1986. Washington, DC: American Academy of Optometry, 1987:10-13.
5. Gregg JR. History of the American Academy of Optometry 1922-1986. Washington, DC: American Academy of Optometry, 1987:192.
6. Gregg JR. History of the American Academy of Optometry 1922-1986. Washington, DC: American Academy of Optometry, 1987:21,176-177.
7. Gregg JR. History of the American Academy of Optometry 1922-1986. Washington, DC: American Academy of Optometry, 1987:11.
8. Gregg JR. History of the American Academy of Optometry 1922-1986. Washington, DC: American Academy of Optometry, 1987:23-24.
9. Gregg JR. American Optometric Association – A History. St. Louis: American Optometric Association, 1972:74.
10. Gregg JR. American Optometric Association – A History. St. Louis: American Optometric Association, 1972:105.
11. American Journal of Optometry and Archives of the American Academy of Optometry Forty-Four Year Cumulative Index vol. 1 (1924)-vol. 44 (1967). Chicago: Professional Press, 1968:77.
12. Koch CC. Honorary life fellowship for Wiseman and Hoare. Am J Optom Arch Am Acad Optom 1962;39:504-506.
13. Hanford SS. Ye olde timer. Western New York Optometrist 1973;17(4):1,7.

14. Wiseman EG. A Treatise on Blood Pressure in Ocular Work – With Special Reference to Factors of Interest to Refractionists. Rochester, NY: John P. Smith Printing Company, 1916.
15. Wiseman EG. Fundamentals of an Ideal Optometric Practice. No location given: American Optometric Association, 1919.
16. Wiseman EG. Building Optometry. Philadelphia: Keystone Publishing Company, 1921.
17. Wiseman EG. Ocular Symptomatology. Chicago: Professional Press, 1924.

# The Elite School; 25 Years Later! & Optometry and Its Future in India

**Jay M. Enoch, O.D., Ph.D.**

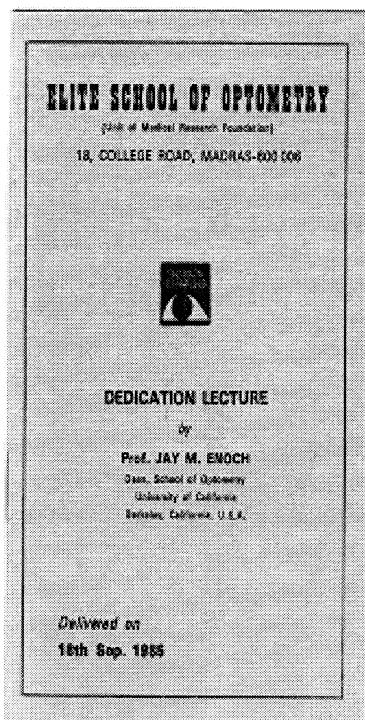
Professor of the Graduate School & Dean Emeritus, School of Optometry, University of California at Berkeley, Berkeley, California 94720-2020; 5537 106th Avenue NE, Kirkland, Washington, 98033-7413, jmenoch@berkeley.edu

## Preface

25 years ago, on a very bright, sunny, and extremely hot day, September 18, 1985,<sup>1</sup> a number of those who are in attendance today, and others, gathered to inaugurate the Elite School of Optometry of the Sankara Nethralaya. (Figure1) A modest period of time later, on August 28th, 1987,<sup>2</sup> on an even hotter day(!), we assembled once again and dedicated the Elite School of Optometry Academic Building and the Rural Eye Hospital and Clinic on the School's lovely new Campus at the foot of St. Thomas Mount.<sup>1,2</sup> (Figure 2) I am very pleased to see some of you here again on this special gala occasion!

Indeed, it has been a tempestuous 25 years in many parts of the World. The American news magazine, TIME, in its December 7, 2009 issue, termed the recent decade, "The Decade from Hell". So saying, and in spite of all that has transpired in this unsettled World, we have watched this then new institution, The Elite School of Optometry, grow slowly, but surely, to become a pace-setting optometric institution in India. [In case some of you wonder about the origin of the name of the School, a kind gentleman, Mr. C. Shah, who was (is?) head of the Elite Optical Company, made a sizeable and generous donation to help initiate this new School.] Importantly, associated with the founding of the School, research in behalf of the profession has been initiated, and a quality faculty has developed.

I have had the great pleasure, with the cooperation of University of California Berkeley authorities, to transfer ample clinical equipment from the School of Optometry, U.C. Berkeley reserve stores to help initiate the Elite School clinic; and I have donated my personal library, and many of my papers/reprint files to this institution. Particularly important to the future of this School, an agreement was made with BITS (the Birla Institute of Technology and Science located in Pilani, Rajasthan), to grant the Elite School the right to award the B.S. degree in Optometry, as well as to authorize the granting of the advanced degrees of M.S., and Ph.D. to candidates successfully completing an appropriate associated academic program. This action helped regularize the role of this collegiate institution, and opened its doors to advanced research, scholarly pursuits, and effective future faculty development by the School.



**Figure 1.** This is a reproduction of the cover of the Elite School of Optometry "School Dedication Lecture" presented by Dean Jay M. Enoch on September 18th, 1985. Honored guests were: Chief Minister Dr. M. G. Ramachandran, Hon. Dr. H.V. Hande (Tamil Nadu Minister of Health) , Professor S.R. Govindarajan, Mr. V. Mohan Rao, Mr. C. Shah, and Dr. S.S. Badrinath.



**Figure 2.** This picture shows workmen adding finishing details to the Elite School of Optometry Academic Building. And other individuals are straightening up the area prior to the dedication ceremony in 1987.

Sadly, early on, a number of graduates used their optometry degree as a means/excuse to emigrate from India to other nations. In candor, our collective goal for the school was to strengthen optometric education in India, and certainly not to deplete the graduate pool in this manner! A positive side of this tendency was the achievement of advanced degrees by a number of these able individuals in Singapore, in Australia, in the U.S.A., and elsewhere. Fortunately, and significantly, the tide to emigrate has turned in recent years. And five years ago, on the 20th anniversary of the School, the numbers of students accepted for training at the Elite School was increased meaningfully.

Very importantly, under guidance from Sankara Nethralaya, progress has been made at the Elite School of Optometry in cooperation with the profession of ophthalmology! In addition, other fine schools of optometry have developed, and are developing.

The Speaker has been particularly interested in recent documents addressing the long-standing needs of Indian optometry. Existing issues just must be addressed! As I have emphasized in talks/papers in recent years,<sup>3,4</sup> the optometric profession (all groups in India) has to face up to the multiple "optometries" in India, build programs based upon growing academic strength, and become an integral and more-contributory part of the emerging Indian health-care and ophthalmic enterprises.

Today, we find this great Nation embarking upon new legislative actions designed to organize and to deliver for the health professions better health care training, licensing, and oversight provision. I addressed a number of related issues in my Palkhivala Oration.<sup>3</sup> In a recent letter, to the pertinent Committee; I argued strongly that I felt it important for optometry to be represented /as an independent profession/ within the emerging health science structure of India. Separately, it has been my profound wish to see the professions of ophthalmology and optometry work effectively together in behalf of the greater good of the Indian Nation. Simply stated, there is need for both groups to serve ably this large population. And there is ample opportunity for all eye-care providers in this vast Nation.

Clearly, demands for ophthalmic services in India are great, and will remain so, because of both the continued growth and the aging of the population. That is, there remain large numbers of individuals whose ophthalmic requirements need to be met on a continuing basis. And we should never overlook the rehabilitation of the partially-sighted and blind populations! It has been stated repeatedly that one-third of all blind and visually handicapped individuals in the World reside within India. It has been, and remains my profound hope that this School will take major role in leadership within optometry in the evolving fabric of Indian Health Care.

## **Introduction**

At a celebration such as this special one, we look both backwards and forwards in order to assess progress made in development of this excellent School and the Profession of Optometry in India. Mahatma Gandhi said, "We must be the change we

wish to see in the World." I interpret this thoughtful statement to mean that if we are to see/realize changes occurring in our environment or World, we must be active participants in making possible those changes.

India, with its population now approaching 1.2 billion individuals, needs every capable eye care practitioner it can acquire in order to meet the very-real demands for health and eye care by this ever-burgeoning group of individuals. Whether ophthalmologists, or optometrists, you each must meet your responsibility to enhance /the visual quality of life/ of the Indian population, as well as to meet adequately their eye-care needs. It is critical to find ways to serve better all citizens of this mighty Nation, in order to help them achieve their full visual potential.

It breaks my heart every time I hear the derisively-used terms "spectacle peddlers" and "lens grinders" used. In the United States, we put such words/terms and activities behind us over a century ago! That is, optometry is certainly not a new profession! It was well established (perhaps not in India) when I graduated from the Optometry School at Columbia University in New York 60 years ago in 1950! We all need to find ways to meet necessary societal goals in a harmonious way. And Governments needs to foster such actions and interactions constructively!

After serving these past 60 active years as a licensed optometrist, in April of this year, I chose to resign my license to practice. During that time period, I never ground a lens (or ever thought to do so)! I know of no-one of my classmates/colleagues who performed such tasks. Optometrists in much of the Developed World do not do this! So saying, I regard grinding of lenses as an honest/valued technical-task, but one which had been largely-automated throughout my entire period of service as an optometrist!

Early-on in my career, I do remember being asked to check recently purchased large "lots" of mass-manufactured spectacle lenses for imperfections! At that time, I worked in a large optometric practice, and this task proved to be a very valuable part of my education. That is, with acquired knowledge of manufacturing-imperfections encountered, I could more effectively detect flaws and evaluate the quality of products properly prior to their being delivered to my patients.

I have made good and enduring friendships in the ophthalmic professions. I have been given opportunities to work with the true leaders of both ophthalmology and optometry from almost the very beginning of my career including Professors Bernard Becker, M.D.; St. Louis; Hans Goldmann, M.D., and Franz Fankhauser, M.D., of Berne, Switzerland; Baldur Gloor, M.D., Basel and Zurich, Switzerland; David Cogan, M.D., and Everett Kinsey, Ph.D., Boston; Isadore Finkelstein, O.D., Ph.D., and George Smelser, Ph.D. of New York City; Glenn A. Fry, Ph.D., and Vincent Ellerbrock, O.D., Ph.D. of Columbus, Ohio; Walter Stanley Stiles, Ph.D., F.R.S., Teddington, MDDX., U.K.; etc. And I cannot omit my fellow-graduates/associates from Ohio State University, Mathew Alpern, O.D., Ph.D., M.N.A.S. of Ann Arbor, and Gerald Westheimer, B.S. (Optom.), Ph.D, F.R.S., A.M., of Berkeley/Sydney. To this list, I am proud to add Drs. S.S. Badrinath, the founder of Sankara Nethralaya; and Dr. G. Venkataswamy, the

founder of the Aravind Eye Hospital, as well as a number of their colleagues and students. No doubt, I am omitting some kind individuals, whom I should be including in this list! Added to the latter list would be my many able students and post-doctoral fellows, as well as visiting scholars in my laboratory.

To me it is so very sad, a tragedy if you prefer (!), that so much energy is wasted upon divisive actions. I feel aspects of the legislation being discussed and considered will only serve to ignite the flames yet again! What grand purpose is gained by seeking to reduce the independent profession of optometry to technician status? I react equally strongly to recent designations of optometrists as paramedical personnel (a comparable term). My Webster's New World Dictionary, 2nd Edition, 2002, lists "paramedical personnel" to mean, "Auxiliary medical personnel such as midwives, and nurses' aides."

Why these giant steps backwards? Do ophthalmologists or optometrists lack patients? Are all citizens of India served adequately? Truly, I wish the latter statement was true! So saying, conditions here are indeed much better than in the past. But there is certainly quite a ways to go. I ask all parties to take a deep breath, and then ask how the two groups can better cooperate in order to meet the real needs of India! If stating the obvious forth-rightly doesn't work; I will appeal to your logical-selves, and urge all to try please to resolve outstanding issues and problems in behalf both of your patients and your Nation. As I understand the proposed Government plan, the recent proposals are/ a frank insult to well-trained Indian optometrists. And this matter had better be an alarm-bell to all optometrists in this Nation. They need to organize and seek their proper place/role in health-care in this critical Sub-continent!

You need to have "one optometry" in this nation, not an amalgam of trained individuals with differing skills, training, and experience! I have consistently argued in support of this position.<sup>3,4</sup> I realize fully that those entering (or who have entered) schools offering briefer training periods, did not do so for some malign purpose(s). To the extent that it is/was a matter of costs, please realize, I grew-up in "the great depression." My father was destroyed by its sequelae. And I recognize that there are differing traditions. Please note, I have argued consistently that there MUST BE a means established to up-grade those educated in optometry in a less than broadly-based manner. They must be provided with a reasonable opportunity to enhance their base-of-knowledge. Thus, the so-called "bottom line" is that /there needs to be only one optometry in India/, and this must be based on a high quality professional education and meaningful/extensive clinical exposure/practice! And optometry, the profession, must work effectively with the ophthalmological community! It needs to be recognized that given rapid progress being made/experienced in health-care occurring Worldwide, /continuing education must be a requirement/ /now and in the future in all health-related fields of endeavor including optometry/!

I know I have said it before,<sup>3,4</sup> but it is worth repeating, when I had just-started my lengthy term as Dean at Berkeley, my Provost (you might call have called her Vice Chancellor or other term in this Nation) summoned me to her office. After I had introduced myself to her, i.e., "My name is...", there followed a moment of silence,

which was followed with her THUNDERING at me in a very powerful voice, "Enoch, I pay you to be effective, not nice! If you can be effective and nice, so much the better, but be EFFECTIVE!" These literally were my "marching orders," ... not a criticism of my actions. At first, I thought my Provost was being un-necessarily harsh. In time, I learned that she was absolutely correct! Our role in life is to be effective at whatever it is we do! Here, I am trying very hard to be effective in your collective behalf!

In this situation, you/we must meet the visual needs of the Indian populous, and this includes the low vision population and those otherwise visually impaired or challenged. Do we always win, of course not; but we must try! And, as always, we must refer properly those needing additional/special care to appropriate practitioner(s). We must prove our collective value to the Indian community/populace, and speak effectively as a group with one voice!

In a real sense, I argue, the "hour" is late! Indian optometry needs to organize promptly, to function effectively, and to do so as a single group. /Please realize the real risks you will encounter if you do not work together, or fail to formulate a common updated and progressive position./ You must "lobby" effectively for optometry's common interests! And you must argue your positions based on true achievements, and not just on words.

Let us settle on a four year optometry program for now, in keeping with virtually all other nations in the Developed World. In fact, this four-year solution will have to be changed up-ward in time spent in training in coming years. Indeed, "the die is cast", and the sooner this is realized, the better. Long term planning by optometry here is needed badly. It is time to upgrade and/or retire the one, two and three year programs, and to realize that lens-grinding is not part of modern optometry, but rather this is a separate technical role associated with manufacturing opticianry, and we need to recognize the real differences between this form of opticianry and the modern form of dispensing opticianry.

Today, we must think in terms of information technology, provision of distance-care, new methodology, etc. I am now 81 years old. In the past weeks, I spent two hours at Ophthalmology Rounds in Midtown Seattle, and another 1.5 hours at the weekly meeting of the Vision Research Group at the University of Washington. I also attended a full day of research reports on eye care at the U. of Washington. That is today's World! Let optometry be part of it!

To the best of my understanding, modern optometry in India has been built upon programs developed in two major schools. These are the Elite School of Optometry of Sankara Nethralaya in Chennai, and the L.V. Prasad / Bausch and Lomb School in Hyderabad. Other developed or developing progressive/modern schools of optometry exist in Mumbai, Coimbatore, etc. The Aravind organization of Madurai has been developing two schools of optometry in Madurai and Pondicherry. The Aravind program is somewhat different in structure and goals. Separately, there have been repeated efforts to build quality schools in Mumbai made by my very able old friend, now

deceased, Mr. Naval Balliwalla of Mumbai. I am sure I am omitting some other schools, e.g., Pune! I apologize for that. I find it particularly interesting that much of the progress made in optometric development has occurred in the southern parts of India.

On a separate note, ophthalmologists Dr. Sanjiv Desai of Jodhpur, and his late father, Dr. Navin Desai before him, were both strong supporters of the need to enhance low vision care and rehabilitation for the blind and partially sighted populace of India. At an annual All-India Ophthalmological Meeting a number of years ago, separately, Sanjiv and I (I was told) presented first talks on necessary low vision care presented in India. Here, too, we should not overlook the contributions in low vision of my late friend, Mr. Naval Balliwalla, who was trained as an optometrist in England. He served as supplier, educator, and able practitioner in the low vision care domain.

### **Optometry and Ophthalmology**

Here, I emphasize to all parties, that I have never suggested that Indian optometry should follow a model similar to that currently practiced by the optometric profession in the United States! I do not criticize the latter, but rather that set of developments involved additional issues which included the U.S.A.'s national health care scheme(s) (Medicare, etc.), as well as a different culture.

So saying, (1) I will argue that optometric practitioners (like all health-care practitioners!) need at a minimum to be trained adequately in first aid. I support this; because patients in an emergency, without a good understanding of the proper roles of different health care practitioners, will seek care from anyone they think might be able to help them. Similarly, (2) it is important for optometrists to utilize properly certain diagnostic pharmaceutical agents. This should be done with due concern for possible complications! As but two pertinent examples, sodium fluorescein remains important in the fitting of contact lenses; and pupil-dilating-agents are valuable either to induce temporary cycloplegia, or to aid in better assessment of the status of a patient's inner-eye structures, etc.

The speaker has wondered what sparked the latest (and seemingly endless) inter-professional set(s) of differences! We all know that there is a long history of virtually all non-medical health care professions (individually and collectively) seeking greater privileges in their own domains, often at the price of medicine, which has been blessed with (or has acquired) broad powers in their enabling legislation. Medicine has defended its rights and privileges with considerable success. In the eye field, we tend to think only of differences between ophthalmology and optometry. This is merely one technical area experiencing some confrontation. As an example, I have witnessed quite similar struggles throughout much of my career between medicine and dentistry! Etc.

When I was a student at Columbia University, my first research was conducted at/in Columbia University's Department of Ophthalmology Research where I had been hired as a research subject, by then Professors Smelser and Finkelstein, at the then princely sum of \$1.00 per hour! During the years I was associated with these two fine gentlemen (!), a very strong-willed Dean of Medicine (later Vice Chancellor for Health

Affairs) served at the College of Physicians and Surgeons at Columbia U. His name was Dr. Willard C. Rappleye.<sup>5</sup> In a variety of ways, Dean Rappleye sought to bring the non-medical health professions under the tight control of medicine! As I understood what occurred, a major early attempt of his was connected with the Columbia University School of Dentistry. He literally terminated the Dental School as it was then constituted at that University. [Note: at that time, the School of Dentistry research group was located just down the hall from the laboratories and offices of the Dep't. of Ophthalmology Research. Hence, those of us working there learned much of what was transpiring from the dental research group.] Dean Rappleye decided to cease offering the Dental degree, D.D.S. (Doctor of Dental Science). Instead, he instituted a new degree, "Doctor of Facial-Mandibular-Surgery." The dental students in this new program were required to take their first three years of training with the medical students at Columbia U. Then, they took a three or four year residency (?) in facial-mandibular surgery. As a result, the Columbia U. School of Dentistry lost its accreditation with the American Dental Association Board. There was a great uproar! Within a few years, this very much altered dental program was cancelled.

A few years after my graduation, in 1950, from the Optometry School at Columbia, then Vice Chancellor for Health Affairs Rappleye served as one of the leaders in the effort which ultimately destroyed the School of Optometry located at Columbia University. This was a true pity, as it was a fine school with a superb faculty!<sup>6</sup>

My old mentor, teacher, and friend, Prof. I. Finkelstein (and others), wisely saved the Columbia University School of Optometry library and its clinic equipment at the time the School was closed. For a while this equipment was used in a public clinic in Manhattan. Ultimately these items were incorporated into the then newly created State University of New York (SUNY) College of Optometry.<sup>6</sup> [These matters are really not addressed in the book by R.A. McCaughey.<sup>5</sup>] Many aspects of this set of issues were described in some detail in a dissertation located in the library at the SUNY College of Optometry (located in Mid-Town in New York City).<sup>6</sup> Importantly, based on knowledge of these prior actions, I knew it was very important for me to help to locate the necessary resources for both a new clinic and the supporting library for the institution when the Elite School of Optometry was created in Madras/Chennai!

I have often advised both ophthalmology residents and optometry students, sets of whom I have had been given the privilege of training, to practice their medicine or optometry and not politics! Such a course often serves all parties involved in a far superior manner.

Recently, I read a most interesting draft of a document prepared by the International Centre for Eyecare Education with support of the Indian Optometric Association, the Association of Schools and Colleges of Optometry, India; and the L.V. Prasad Eye Institute (Hyderabad). While I might quibble about a few points, and emphasize some others, the authors seem to be quite on track! I sense there is influence here from the Australian Optometric Group. Such organization and orderly processes are needed. [Note: I do not cite this draft document as (to my knowledge) it

has not yet been published].

In the past I have argued for just such a process, i.e., the need for group action.<sup>3,4</sup> If Indian optometrists don't face reality, others will do it for them, and probably in not so kind a manner.

## In Closing

The chaotic situation of different program lengths and emphases in training within optometric programs does not sit well with administrative entities. Stated simply, the profession must speak with one voice, and it must do so effectively! There must be one modern optometry in India. Anachronisms must be put to rest, and a defined and a desired future course of action formulated. Everyone must give-way a bit. So saying, we must opt for the strongest, most durable program achievable! Now, we must stand-up and be heard, and lobby for the future of the profession of optometry in India! At the same time, we must try to ease the burden for those who will have to adopt new ways and techniques. It is absolutely critical that we maintain our independent professional status! And, we must look forward, not backwards!

I strongly urge all to accept the four year model similar to that existing in Developed Nations and already adopted in India in a modest number of schools. Yes, that means change for many, but what is the real option? Let us seek strength, and not compromise our values. Yes, as noted, we must help those less well-trained to adapt, and adapt they must. It is your future, your opportunity, and you must "grab onto it!" And we have no time to lose, as the modern organization of health care is now actively being considered by the Indian Government/ Parliament! Finally, we must find a way to work cooperatively and appropriately with ophthalmology. Thank you!

## Acknowledgements

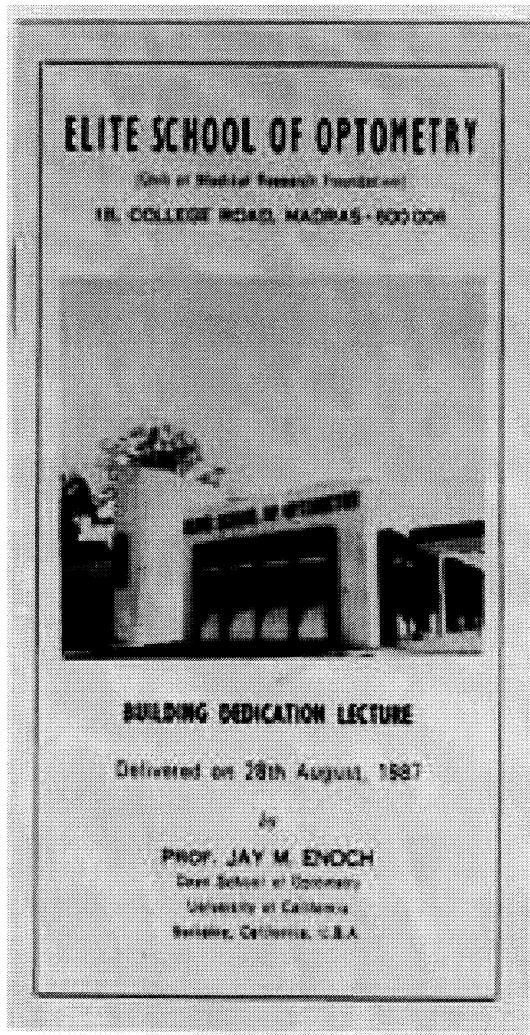
The Elite School would not exist without the support of Dr. S.S. Badrinath of Sankara Nethralaya (and his charming wife Visanthi!); a number of his fine faculty and staff, e.g., Dr. T. Surendran, and several others [KK please add others], as well as the ever-loyal backers of Sankara Nethralaya, including particularly Mr. C. Shah, Head of the Elite Optical Company; the late Professor Vasudevan, organizer and leader of the Institute for Advanced Mathematical Studies (Matlab) in Chennai; and a number of other kind individuals. I have played a continuing role as best I could from a distance. And, I never underestimate the help I receive(d) in all things from my wife, Rebekah!

This School has been especially blessed to have had very able Directors/Deans and faculty including the outstanding founding Director/Dean/Physicist Dr. Govindarajan; and not the least important, our current Director, Dr. R. Krishna Kumar.

In the early days of the Elite School, I was pleased that a number of members of the Berkeley School of Optometry faculty also sought to help in quite a variety of ways; some sent the new School class notes/curricula/outlines of courses; others served for varying periods of time as early teachers at the School, etc. Separately, I do not overlook the contributions/thoughts/ideas of the very loyal members of the informal

"India Group" which met with me each month in Berkeley for some years in a supportive role. The latter were optometrists who had formerly served in India in a variety of programs including the New Delhi Program. They, too, did their best. Prof. Vasudevan's son, my former student, research associate, director of my Research Laboratory at Berkeley for some years, and good friend(!), now Professor Vasudevan "Vengu" Lakshminarayanan was also there early and played meaningful roles in the development of the School. I thank them (!), I thank you all!

### Some Early Photographs of/from the Elite School of Optometry



**Figure 3.** This is a reproduction of the cover of the "Building Dedication Lecture" presented by Dean Jay M. Enoch on August 28, 1987. The facade of the then new Elite School academic building is portrayed here. Honored guests were: Hon. Minister Mr. Ponnaiyan, Mr. C. Shah, Prof. S.R. Govindarajan, Mr. V. Mohan Rao, Mr. V. Vaidyanathan, and Dr. S.S. Badrinath.



**Figure 4.** Near the time of the building dedication ceremony, Dean Jay Enoch is shown with a number of the students and some faculty of the Elite School of Optometry in August 1987. Note, there was a clear female bias in the early classes of the Elite School!



**Figure 5.** Here, Dean Jay Enoch is shown with a group of the Elite School students signing (dedicating) a drawing of himself (created by whom?) for students near the entrance to the Academic Building.



**Figure 6.** In this photograph of a garlanded Dean Jay Enoch, he is shown presenting a gift from the School of Optometry Faculty and Students at the University of California at Berkeley to the Elite School of Optometry. This gift is a very famous photograph recorded/taken by the late and highly renowned California photographer, Ansel Adams. It was presented to the Elite School on the occasion of the dedication of the buildings on the new campus. This photograph of "Half-Dome Mountain in Yosemite National Park by Moonlight" was presented by Dean Enoch to then Director of the Elite School, Dr. Govindarajan. This National Park site in Northern California is truly worth a visit if individuals ever happen to be in that region! It is one of America's most beautiful/famous natural areas.

## References

1. Enoch JM. Elite School of Optometry / (Unit of Medical Research Foundation, Sankara Nethralaya, 18, College Road, Madras 600-006, Tamil Nadu, India) School Dedication Lecture. Delivered on 18th September, 1985. Cover + 7 pages printed in a separatum.
2. Enoch JM. Elite School of Optometry/ (A Unit of the Medical Research Foundation, Sankara Nethralaya, 18 College Road, Madras, 600 006, Tamil Nadu, India) /Building(s) Dedication Lecture. Delivered on 28th August, 1987. A Separatum, 8 pp + Photos of The Elite School Academic Building (cover), and the speaker. Gnanodaya Press, Madras, 600 001, India./ /This event was held at the New Campus located near to the Chennai Airport at the foot of St. Thomas Mount.
3. Enoch JM. [JME served as Invited Guest Orator at the Shri Nani Palkhivala Foundation meeting (NP was a truly distinguished man; he was quite worthy of the recognitions paid to him by the organization bearing his name. That organization mainly addresses legal and government-related issues. This Oration was presented in the Rani Seethai Hall in Chennai (Madras), Tamil Nadu, on January 26, 2008.] The Need for Recognition, Regularization, and Regulation of Optometry in India, S.S. Badrinath, M.D., Coordinator. A copy of this document also appeared in the Jan.-Feb., 2008 edition of the Indian Optician, published as a separatum, A Special Report, 24

print pages, not paginated. It also appeared in Hindsight: J Optom Hist 2008; 39:26-57.

4. Enoch JM. (Invited plenary speaker), India, There Are Problems Which Need To Be Addressed. Vision, 2008: Rehabilitation and Research, International Conference on Low Vision, Montreal, Canada, July 7-11, 2008 (Presented July 10, 2008).

Reproduced in Hindsight: J Optom Hist. Invited for publication in Vision Impairment Research 2008;10 (2-3, July-November), 35-43.

5. McCaughey RA. Stand Columbia, A History of  
> Columbia University in the City of New York, 1754-2004. New York: Columbia University Press, 2003.

6. Jolt HA. The Optometric Center of New York: Its history, organization, development - A case study of the impact of a leadership role and analysis of its effects upon a segment of the health community. Dissertation, New York University, New York, 1973.

# **James E. Littlefield, Author of Optometry – *The Littlefield System of Eye and Nerve Measurements* (1905)**

**David A. Goss, O.D., Ph.D.**

School of Optometry, Indiana University, Bloomington, IN 47405, dgoss@indiana.edu

## **Abstract**

*This paper reviews what is known of the life and work of James E. Littlefield, born 1860, author of Optometry – *The Littlefield System of Eye and Nerve Measurements*. He practiced optometry in Maine, Kansas, and California, and operated a correspondence school known as the Kansas School of Optics or Kansas School of Optometry.*

**Key words:** optometry books, optometry history, optometry schools.

James E. Littlefield practiced optometry in three different states, operated an optometry correspondence school, and published an optometry book that attracted some interest. Despite that, I have been unable to find a biographical sketch or his obituary. This paper describes what information I have been able to piece together about him.

According to the 1900 United States federal census, James Littlefield was born in October, 1860 in Maine. In the 1870 census, nine year old James E. Littlefield was living in Saco, York County, Maine with his parents, James W. Littlefield and Roxanne E. Littlefield, and a younger sister, Alice L. Littlefield. In the 1900 federal census, Littlefield was in Topeka, Kansas, with his wife of one year, Ester, and two sons, Earl, born in 1887, and James, born in 1889. In the 1910 census, he was back in Saco, Maine, with wife May, along with a four year old son and a two year old daughter. Then in the 1920 census and the 1930 census, he was in Atascadero Township, San Luis Obispo County, California.

The following excerpts from the introductory section of his 1905 book *Optometry – The Littlefield System of Eye and Nerve Measurements* may give some idea of his career path. They also demonstrate his apparent tendency toward self-promotion:

“When I taught my first student in 1879 we measured lenses on a yard-stick in a dark room, 99 percent of our work being with plus spheres. At that time cylinders and compounds were practically unknown....

“I have evolved with this profession from the start. I was jeweler optician, a peddler optician, a Doctor of Optics, a matriculate and graduate in ophthalmology from

a recognized Medical College, a graduate from several optical colleges, a manufacturing optician, a wholesale optician, and finally the organizer of the Kansas School of Optics which was duly incorporated and chartered in 1901. I was made President of this college and hold the position at the present time....

"I hold the honor of being the first registered Doctor of Optics to have his degree confirmed by an act of the Legislature and passing a medical board in the Science of Optometry.

"I wrote the bill to recognize optometrists in Kansas which became a law. In that bill I introduced the word optometrist which has been endorsed and recognized as the official title of all those practicing this new profession.

"I have traveled over thirty states as a missionary for the advancement of the Science of Optometry. I have enrolled hundreds of students and 95 percent were engaged in the business. I know many of these men personally as members of state societies, holding highest offices, members of the state boards of examination with enviable reputations as optometrists, also have letters from many of them saying that my lectures have made them what they are...."

An advertisement for his book in the *Optical Journal* in 1909 said that Littlefield "organized the Kansas Association of Opticians, was the first secretary and started that organization off with a large membership and a good bank account with all bills paid. The law recently passed in Kansas was written by Dr. Littlefield and introduced in the Legislature nine years ago...He introduced the same bill in the State of Maine six years ago, showing clearly his interest in optical organization and legislation....He is now permanently located at Saco, Maine, where he has a large private practice. He was born in that city nearly fifty years ago....From Saco he is conducting his correspondence school, enrolling large numbers of registered optometrists who wish to get right up-to-date; also many who are preparing for State examinations...."<sup>1</sup>

Littlefield is in the 1912 and 1914 *Blue Book of Optometrists* in Biddeford, Maine. In 1916, he is listed in Paso Robles, California. Then in each of the editions from 1918 to 1950, he is listed in either Atascadero, California or Morro Bay, California. His listings in 1948 and 1950 indicate that he was retired. In the 1920 *Blue Book of Optometrists*, Littlefield is said to have been a graduate of four colleges, 1898, 1899, 1900, 1901, and to have done post-graduate work at the Department of Ophthalmology at Kansas Medical College in 1899. The 1912 *Blue Book of Optometrists* includes the following after Littlefield's name: Omaha Opt. Inst., So. Bend Coll., Kans. Sch. Opt., Chicago Opt. Coll.

Also in the 1912 *Blue Book of Optometrists* in Biddeford, Maine, is Littlefield's wife May. She took the course at the Kansas School of Optics in 1906. She appeared in the *Blue Book of Optometrists* in Maine until 1922. Her occupation in the 1920 federal census for York County, Maine was optician, at which time she had her daughter and her 86-year old father-in-law, James W. Littlefield, living with her.

## **Littlefield's Attitude Toward the Doctor Title**

In the early twentieth century, most optometrists opposed the use of the doctor title, even though many schools awarded diplomas, specifying the recipient as holding Doctor of Optics, Doctor of Ophthalmics, Doctor of Optometry, or other similar title.<sup>2</sup> Littlefield freely made use of the doctor title. In 1902, the Secretary of the Kansas State Medical Board warned him to cease using "Dr." in his advertising. Littlefield's letter in response was printed in the *Optical Journal*.<sup>3</sup> Writing from Topeka, Kansas in November of 1902, Littlefield said, in part:

"...Several months ago I came before your honorable body, the Medical Board, and passed a most rigid examination to determine my qualifications as a doctor of optics.

"I incidentally paid \$15 and received a certificate of registration entitling me to use the titles, Dr., Doctor, or Doctor of Optics....

"The law does not and cannot give the M.D.'s the exclusive use of the prefix Dr. as you state in your letter. If the exemption means anything it means that a registered optician can advertise as Dr., provided he does not represent himself as a medical doctor.

"Any optician who has taken the prescribed course at a chartered optical college and has had the degree doctor of optics, doctor of ophthalmology, or doctor of refraction conferred upon him by that college has the moral and legal right to use the same regardless of the rulings of any medical board....

"I did not come before the medical board to obtain the right to use the prefix Dr., but to prove to them and the world at large that the professional opticians are competent and know their business and are entitled to be classed as professional men.

"...I have earned my title by years of hard work and research. I have proven my right to use it by passing your examination, and I will never relinquish my claims to the title without a struggle...."

Ten years later in 1912, Littlefield wrote a letter to the *Optical Journal and Review of Optometry* in response to an ongoing debate in its pages concerning the use of the prefix "Dr."<sup>4</sup> Part of what he wrote from Biddeford, Maine in June of 1912, is as follows:

"...I am a graduate from several optical colleges who confer the degrees Doctor of Optics, Doctor of Refraction, Doctor of Optometry, etc., etc. I practiced for four years as an assistant to two of the best oculists in Kansas. I attended the Kansas Medical College one year, taking all that the medical graduates get on anatomy, physiology, diseases, surgery and refraction of the eyes. I attended all clinics and dissections at the college and various hospitals where my preceptor attended cases, and passed the final

examination in ophthalmology with the class of doctors in 1900, and hold my certificate from the Kansas Medical College as evidence of same.

"About this time the medical board was urged by some of the oculists of Topeka to get after me for using the prefix 'Dr.' on my cards and advertising, although I always qualified by adding 'eyesight specialist.' I fought it out in the legislature and secured an amendment to the medical law permitting graduates of optical colleges to apply for examination, and if successful the medical board of Kansas was to give a certificate permitting the doctor of optics to use his title....

"I took the first examination and my title was confirmed....

"I came to Maine, my native State, eight years ago. I put out my sign, Dr. Littlefield, registered optometrist. The secretary of the medical board, an oculist in my own city, made seven attempts to have me arrested and indicted by the grand jury of this county. He claimed I had no right to use the title Dr. in my advertising....

"My case never came to trial but the State of Maine soon had a new secretary of the medical board....

"...Any graduate from any chartered optical college who honestly earned his degree of 'doctor' is entitled to use the same when properly qualified by doctor of optics, doctor of refraction, doctor of optometry, optometrist, sight testing specialist, or any other term which shows the line of work he follows.

"I cannot affiliate with the Maine Association of Opticians because their by-laws prohibit the use of the title doctor, which I have honestly earned and heroically defended for 14 long years. I started to sell and repair glasses 33 years ago. I got my first degree in 1898 and the next week I had my cards struck with my title Dr. I will never surrender, and expect the time will come when the rank and file of opticians and optometrists will obtain the education which will entitle them to wear the title comfortably, and that every State will recognize the science of optometry as a distinct and separate science and its practitioners as doctors."

### Kansas School of Optics

The 1912 *Blue Book of Optometrists* says that the Kansas School of Optics was incorporated and chartered in 1901 at Topeka, Kansas. It is also noted that the school issues "diplomas under the name of Kansas School of Optics, but the work is conducted by Dr. Littlefield personally." The school's location at that time is given as Saco, Maine.

The school apparently also went by the name Kansas School of Optometry. In the preface of his book, as quoted above, Littlefield refers to the school as the Kansas School of Optics. However, in a notice facing page 240 (the last page) of the book, there is an apparent facsimile of the school's diploma, which has "The Kansas School of Optometry" across the top of the diploma. Signatures at the bottom of the facsimile

diploma are Dr. J.E. Littlefield, president, and C. Heibron[?] Trapp, Opt.D., secretary. The text in the notice states:

"Our College is chartered and incorporated. This Diploma is as valuable as any optical diploma in the world. The Legislature of the State of Kansas in 1901 passed a law legalizing the title we confer, Doctor of Optometry.

"I want you to honestly earn this Diploma and Degree. Write the best answer you can to the quizzes I have given you and mail to me with \$5.00 in a registered letter and I will send prepaid one of these Diplomas, full size 19x24 inches, with your name in Old English, sealed with a gold seal and blue ribbon.

"If you feel the need of personal coaching for your State Board Examination I will make special terms."

There isn't much other information available about the Kansas School of Optics or Kansas School of Optometry. However, the school must have been known within optometry at the time, because a notice in the December 24, 1914 issue of the *Optical Journal and Review of Optometry* says that the principal speaker at the regular monthly meeting of the San Francisco Optical Society was Dr. J.E. Littlefield, "who is widely known for his correspondence course in optics."<sup>5</sup>

### **Littlefield's Book, *Optometry – The Littlefield System of Eye and Nerve Measurements***

I examined a hard cover copy of this book. It carries a copyright date of 1905, but no other notation about date of publication. In the introductory section, Littlefield states that he taught his first student in 1879, which he says was "thirty-four years ago", suggesting a publication date of 1913. Also in the introductory section, he says that this particular edition was the fifth edition and that he had revised and enlarged each version. The book was printed by the Press of the Biddeford Journal, Biddeford, Maine. The book consists of 240 pages, plus a few illustration pages without pagination.

The book opens with an "Introductory" section (pages 3 to 5) in which Littlefield introduces himself. Portions of that section were quoted above. On page 6, there is a list of abbreviations and symbols. On page 7, Littlefield noted that optometry had established itself "on a solid foundation and that is EDUCATION," and that optometry was "recognized by the Legislatures of more than half the States." That latter statement would also suggest that this edition was published later than 1905 because it wasn't until 1911 that more than of the states in the United States had licensure laws.<sup>6</sup>

On pages 7 and 8, Littlefield stated: "It is my aim in this book to give the necessary instruction in optometry so that the reader may become familiar with every test of the eyes and use of all instruments and know how to fit glasses perfectly and be able to prove same. I am preparing students to pass state board examinations, and my instructions will cover every requirement as I understand them...Many practitioners have remained in this business because of the exemption certificates, but there is a

demand that they qualify. My one desire is to help them measure up to the standard and I believe that a faithful study of this book will bring every student up to the standard required in every state."

The text on pages 8 through 200 is organized into 30 "lectures." Noting that "the minds of most men who have passed beyond their school days are sluggish...." Littlefield's first lecture gives some exercises to improve concentration. Topics of other lectures include anatomy of the eye, extraocular muscles, refraction, wave theory of light, optics of lenses, accommodation, convergence, eyestrain, use of the trial lens case, astigmatism, refraction tests, presbyopia, prism tests, binocular fusion, prescription of lenses in strabismus, static and dynamic retinoscopy, ophthalmoscopy, eye diseases, ophthalmometry, sympathetic nerves, hygiene and general well-being, phrenology, and mechanical optics.

There are some elements of Littlefield's book that are not commonly seen in other optometry books. Littlefield emphasized what he referred to as "life's essentials." He advised getting enough sleep, spending some time in the sunshine, exercising regularly, not eating a morning meal, maintaining cleanliness and good habits, keeping an optimistic state of mind, etc.

In the discussion of eyestrain, Littlefield talked about "measuring nerve force." This applied to the effort to perform various tasks. He gave as an example the amount of accommodation exerted for given amounts of time as required certain amounts of nerve force. It was apparently this system that was acknowledged by Ralph Barstow, well known for his lectures and writings on practice management, in the 1930s. Barstow was discussing a potential system of measuring visual functions to arrive at a "visual rating," including visual acuity, convergence ability, form fields, color fields, energy demand, occupational demand, color perception, and structural defects. Barstow said: "It is fitting that I pay tribute here to two pioneers, Littlefield and McCormick, both of whom, long years ago, sensed the need for a measurement of the energy demand and both of whom produced systems that, to my knowledge, have not been bettered."<sup>7</sup>

Littlefield does not hesitate to make his opinions known. In speaking of retinoscopy, he says: "This system of examination of refractive errors and measuring the eyes for glasses was discovered by Cuignet and later described by Sir William Paget Bowman in the Sixties. Since that time many writers have produced works covering this subject, but, in every instance, it seems to me, they have had a greater desire to show their profound knowledge rather than make plain this simple method of diagnosing difficult cases." (p. 130)

Pages 201 to 210 in the book is a section headed "Quizzes." It consists of 250 questions, the answers to which were to be sent to Littlefield to receive a diploma. Following an index on pages 211 to 214, there are 167 questions which are provided "as an aid to students preparing for examination before a state board of examiners..." Answers or page references are included after those questions to close out the book.

In 2003 and 2004, a survey was conducted to get opinions on what may have been the most important optometry books in the twentieth century. The survey was sent to members of the Optometric Historical Society, of the Association of Vision Science Librarians, and of the Binocular Vision and Perception Educators Special Interest Group. One of the 21 returned surveys included Littlefield's book.<sup>8</sup>

### **Non-optometric Activities and Later Years**

In 1920, a letter to the editor from Littlefield telling of his life in Atascadero, California was published in the *Optical Journal and Review of Optometry*.<sup>9</sup> He reported growing a wide variety of fruits and vegetables in his garden and orchard, including four tons of potatoes and ten tons of carrots. He also mentioned that his son James had died of influenza at Camp Knox in Kentucky during World War I.

Lon Allan, Historian for the Atascadero Historical Society, said that Littlefield won a prize for a very large cauliflower and awards for giant cabbages.<sup>10</sup> Littlefield had an "optical practice" inside a big general store that opened in Atascadero in March of 1917, and he was active in the first businessmen's association in Atascadero.<sup>10</sup>

I have not been able to find a death date for Littlefield by searching on ancestry.com, by looking through the obituaries in the *Optical Journal and Review of Optometry*, or by making various email inquiries. As noted above, he was listed in the 1950 edition of the *Blue Book of Optometrists*, but not in the 1952 edition. Martha Crosley Graham of the San Luis Obispo County Genealogical Society found him in 1950 in the Morro Bay section of a city directory, but she could not find a death certificate for him.<sup>11</sup> We might guess that Littlefield died sometime between 1950 and 1952. He lived a long life, characterized by a variety of optometric activities in three states and an apparent confidence in his qualifications and direction.

### **Acknowledgments**

I thank the following for providing information for this paper: Linda J. Draper, Special Collections Librarian, Archives & Museum of Optometry, American Optometric Association Foundation; Lon Allan, Historian, Atascadero Historical Society, Atascadero, CA; and Martha A. Crosley Graham, Librarian, San Luis Obispo County Genealogical Society.

### **References**

1. Opt J 1909;25:90.
2. Hofstetter HW. Optometry: Professional, Economic, and Legal Aspects. St. Louis: Mosby, 1948:90-101.
3. Littlefield JE. Letter to H.W. Roby, M.D., dated Nov. 12, 1902. Opt J 1902;10:746-747.
4. Littlefield JE. Letter to the editor, dated June 14, 1912. Opt J Rev Optom 1912;30:203.
5. Opt J Rev Optom 1914;34:1753.

6. Arrington EE. History of Optometry. Chicago: White Printing House, 1929:26-27.
7. Barstow R. A programme for visual rating. *Australasian J Optom* 1936;19:421-426,429-430.
8. Goss DA, Penisten DK. Most important 20<sup>th</sup> century optometry books. *Hindsight: Newsletter Optom Hist Soc* 2004;35:36-40.
9. Littlefield JE. Optometrist tells of life on a fruit-growing colony in California. *Opt J Rev Optom* 1920;45:104.
10. Allan L. Email to the author dated May 29, 2010.
11. Graham MAC. Email to the author dated June 2, 2010.

# **Book Review: Man of Vision: The Story of Dr. Robert Morrison**

**Man of Vision: The Story of Dr. Robert Morrison.** Rosanne Knorr and Kevin Kremer. Osprey, FL: U.S. Publishing, 2006. 181 pages. ISBN-13: 978-0-9663335-5-8. ISBN-10: 0-9663335-5-1. Hardcover, \$22.95.

**David A. Goss, O.D., Ph.D.**

School of Optometry, Indiana University, Bloomington, IN 47405, dgoss@indiana.edu

This book tracks some of the events in the remarkable life and career of optometrist Robert Morrison. One of the authors noted that the content of the book "is based largely on the reminiscences [sic] and anecdotes of Dr. Morrison," who "made every effort to recall the facts accurately."

Morrison was born in December of 1924. He attended Pennsylvania State University before entering the Army in World War II. He served in Army camps and hospitals "performing various medical duties." He entered Pennsylvania College of Optometry after his military duty was concluded. He completed his O.D. degree in 1948, and set up practice in Harrisburg, Pennsylvania. He later started an additional practice in New York City.

Morrison established himself as an authority on contact lenses and started a contact lens company. He lectured extensively on contact lenses, at one time completing an around the world tour. He built up his practice so that at one point it included five optometrists, an M.D., and 27 opticians, technicians, and secretaries. In addition to his practices, he taught part-time at Pennsylvania College of Optometry, and had teaching appointments at New York Medical College, Albany Medical College, and Pennsylvania State University College of Medicine. The book discusses his work with Czechoslovakian chemist Otto Wichterle in adapting the polymer invented by Wichterle into a soft contact lens.

A significant portion of the book discusses Morrison's experiences in his travels and his provision of optometric care to several royal families in Europe. The latter work led to his knighthood in the Netherlands. He also has been the optometrist for a number of television and motion picture figures, and has played tennis in celebrity tournaments.

The book includes a sixteen page section of photographs, most in color, of Morrison and his family with royalty and celebrities. This book contains many entertaining anecdotes and was written at a level for a lay audience.

# **Book Review: Indiana in Stereo: Three Dimensional Views of the Heartland**

**Indiana in Stereo: Three-Dimensional Views of the Heartland.** George R. Hanlin and Paula J. Corpus, editors. Indianapolis: Indiana Historical Society Press, 2003. xi + 289 pages. ISBN 0-87195-165-7. Hardcover, \$17.95.

**David A. Goss, O.D., Ph.D.**

School of Optometry, Indiana University, Bloomington, IN 47405, dgoss@indiana.edu

This book's foreword notes that the editors of the Indiana Historical Society Press presented this book "in an attempt to introduce readers to the history of stereographs and to capture some of their wonder..." It was also reported that: "We were aware that the University of Iowa Press had published an attractive book of Iowa stereographs, and we thought we could duplicate the efforts for Indiana." (page vii)

Pages 1 to 16 contain a section entitled "Stereographs, Bringing Dimension to the World" written by Anne E. Peterson, a photographic historian and curator of photographs at the DeGolyer Library at Southern Methodist University. This section highlights developments in the history of stereoscopes and stereographs and of photography. The famous paper on binocular vision by Charles Wheatstone (1802-1875) presented to the Royal Society in 1838 included the description of a mirror stereoscope. In 1840, Wheatstone asked William Henry Fox Talbot (1800-1877), whose work resulted in the production of photographic images on paper, to take pictures for use in stereoscopes.

In 1849, David Brewster described lenticular stereoscopes. By the 1850s, stereographs were commercially available in England. In the United States, stereographs became popular with the articles by Oliver Wendell Holmes (1809-1894) published in *Atlantic Monthly* in 1859 and 1862 and with the familiar hand-held viewer he invented. Advances in photography led to its more widespread use, allowed photographers to have greater mobility, and made photography possible for amateurs. Stereographs were very popular the last two or three decades of the nineteenth century and the first decade or two of the twentieth century. Two interesting illustrations of stereographs in this section of the book were one of Charles Wheatstone with his family and one of Theodore Roosevelt at Yosemite.

A section entitled "Capturing the Past, Stereo Photography in Indiana" occupies pages 19 to 29. The author is Joan E. Hostetler who holds an M.F.A. in imaging arts and is working on a directory of photographers who worked in Indiana from 1841 to 1940. The earliest Indiana stereographs were taken in the mid 1860s, and the period of greatest popularity appears to have been the 1870s and 1880s. In the discussion of Indiana photographers in the 1870s, there is the observation on page 20 that: "Small towns often could not support a full-time photo gallery, so photographers in communities

across Indiana often relied on a second occupation in order to make a living. Markings on the backs of photographs reveal that they commonly worked as jewelers, silversmiths, dentists, and opticians."

There were not many schools teaching photography in the nineteenth century. An exception was the Indiana College of Fine Arts and Photography, in Wabash, Indiana. The *Wabash Free Trader* for September 18, 1874 had an advertisement that the school scheduled to open in October would offer "facilities for the study of drawing, painting, photography, and allied branches such as optics, chemistry, anatomy, architecture, and landscape gardening." (pages 24-25)

Most of the book is devoted to reproductions of stereographs, primarily from the late nineteenth century. They are organized into the following categories: Indiana Landscapes, pp. 31-53; City Streets and Small-Town Sidewalks, pp. 55-77; Community Landmarks and Other Buildings, pp. 79-121; Destructive Forces, pp. 123-133; Travel and Transportation, pp. 135-149; Home and Family, pp. 151-175; Leisurely Outings and Public Gatherings, pp. 177-203; and Hoosiers at Work, pp. 205-229.

Next is the section "Stereo Photography, A Continuing Art," (pages 231-243), in which present-day photographer Darryl Jones discusses the techniques of taking stereo photographs. Then a section, "Contemporary Views by Darryl Jones," (pages 245-273), exhibits color stereographs of historic sites, outdoor scenes, and the Indianapolis Motor Speedway. Closing out the book are a five page table of information on known Indiana stereo photographers, a glossary, a bibliography, and a few more stereographs. In a pocket inside the back cover there is a small plastic lenticular viewer for use in examining the stereographs.

## **Instructions to Authors**

Hindsight: Journal of Optometry History is the official publication of the Optometric Historical Society (OHS), and, as such, supports and complements the purposes and functions of OHS. The journal publishes historical research, articles, reports, book reviews, letters to the editor, and article reviews. The topics of material published in the journal include: history of optometry; history of eye and vision care; history of spectacles, contact lenses, and other corrective devices; history of vision therapy, low vision care, and other vision care modalities; history of vision science; biographical sketches of persons who have worked in or influenced optometry and/or vision science; recollections or oral histories of optometrists and persons who have worked in optometry and optometry-related fields; and related topics.

Material submitted for publication should be sent to the editor: David A. Goss, School of Optometry, Indiana University, Bloomington, IN 47405; dgoss@indiana.edu. Material may be submitted by postal service or by email, although the preferred mode of reception of submissions is a Word document in an email attachment.

Authors who wish to use direct quotations of substantial length, tables, figures, or illustrations from copyrighted material must obtain written permission from the publisher or copyright owner. Short quotations may be acknowledged by quotation marks and a reference citation.

Submissions should include a title, the names, degrees, postal addresses, and email addresses of the authors. Abstracts are not recommended for short articles. Abstracts and key words are recommended but not necessary for longer articles.

Tables and figures should be numbered sequentially in the order that the mention of them appears in the text, e.g., Table 1, Table 2, Figure 1, Figure 2. Each table and figure should have mention or discussion of it in the text of the article. Each table and figure should be accompanied by an explanatory figure legend or table legend. Any article containing tables should be submitted as a Word document attachment to an email message with the tables produced through the table creating function of Word (as opposed to an Excel or comparable spreadsheet).

Extensive use of uncommon abbreviations, symbols, and acronyms is discouraged. Common abbreviations, such as D for diopters or cm for centimeters, may be used. Common symbols, such as  $\Delta$  for prism diopters, may be used when the context for their use is clear. The first use of acronyms should be accompanied by the name or phrase spelled out followed by the acronym in parentheses, as for example: The Optometric Historical Society (OHS) has produced a quarterly publication since 1970.

Acknowledgments should be placed between the text of the article and the reference section. Sources of support, such as grant funding or other significant assistance, should be acknowledged. The assistance of persons who contributed to the work may also be acknowledged.

References should be placed after the acknowledgments, and for most papers will be the last section of the paper. References should be numbered in order of their citation in the body of the article. Citations should be identified in the text by superscript numbers. Authors are responsible for ensuring that reference listings are correct. Reference format should be as follows:

Journal articles:

Calvo M, Enoch JM. Early use of corrective lenses in Spanish colonies of the Americas including parts of the future United States: reference to Viceroy Luis de Velasco (the son). *Optom Vis Sci* 2003;80:681-689.

Section in a single author book:

Hofstetter HW. *Optometry: Professional, Economic, and Legal Aspects*. St. Louis: Mosby, 1948:17-35.

Chapter in a multi-author volume:

Penisten DK. Eyes and vision in North American Indian cultures: An historical perspective on traditional medicine and mythology. In: Goss DA, Edmondson LL, eds. *Eye and Vision Conditions in the American Indian*. Yukon, OK; Pueblo Publishing, 1990:186-190.

Citations to articles in *Hindsight: Journal of Optometry History* should be given as follows:

Bennett I. The story behind Optometric Management magazine. *Hindsight: J Optom Hist* 2007;38:17-22.

If footnotes or notes on additional (minor) details are used, they should be marked in the text with superscript lower case letters starting with a and continuing in alphabetical order. The notes themselves should be the last section of the paper. The heading for the section should be Notes.

# **Optometric Historical Society Membership Application**

Membership in the Optometric Historical Society (OHS) is open to anyone interested in the history of optometry, spectacles, vision science, or related topics. Membership includes a subscription to *Hindsight: Journal of Optometry History*.

To join OHS, send your address and a check for dues payment to:

Shannon Reynolds Torbett, MHP  
Optometric Historical Society  
243 North Lindbergh Boulevard  
St. Louis, MO 63141

INDIANA UNIVERSITY

Check one:

AUG 24 2010

LIBRARY

- regular membership, \$25 per year  
 patron membership, \$50 per year  
 lifetime membership, \$250

Checks should be made payable to the Optometric Historical Society.

Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

A sample copy of *Hindsight: Journal of Optometry History* can be obtained by writing to the journal editor: David A. Goss, Hindsight Editor, School of Optometry, Indiana University, Bloomington, IN 47405; dgoss@indiana.edu or can be viewed at [www.opt.indiana.edu/ohs/hindsightJan07.pdf](http://www.opt.indiana.edu/ohs/hindsightJan07.pdf). For more information on the Optometric Historical Society, see: [www.indiana.edu/ohs/optohiso.html](http://www.indiana.edu/ohs/optohiso.html).

Institutional or library subscriptions to *Hindsight: Journal of Optometry History* can be obtained by following the above instructions for registering OHS membership and completing the above OHS membership application form.

*Members of the Board of Directors of Optometry's Charity™ – The AOA Foundation and the Optometric Historical Society (OHS) recently signed a Memorandum of Understanding that places OHS under the auspices of The AOA Foundation.*