NEWSLETTER
OF THE
OPTOMETRIC HISTORICAL SOCIETY
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St. Louis, Missouri, 63141, USA)

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OHS Annual Meeting:

President T. David Williams writes:

The annual meeting of the Optometric Historical Society will be held in New Orleans on Saturday, December 9th, 1989 in the Burgundy C Room of the Hyatt Regency Hotel at 6:15 PM. The annual meeting of the American Academy of Optometry will be held in conjunction with the OHS annual meeting.

Our invited speaker will be Dr. J. William Rosenthal, a New Orleans ophthalmologist, collector of antique spectacles, and member of the Ocular Heritage Society. Dr. Rosenthal will be discussing his collection of scissors glasses and pince nez glasses.

The Optometric Historical Society will also be celebrating its 20th anniversary at this annual meeting.

Ophthalmoscope invention:

A brief commentary by Roger L. Klingaman in the July 1989 issue of the Journal of the American Optometric Association, vol. 60, no. 7, p. 548 under the title "Who really did invent the ophthalmoscope?" highlights the well-known confusion. The author cites only two sources of information, both secondary, and draws the prevailing conclusion that Charles Babbage was first but that Helmholtz quite independently invented it again a few years later. He also states that because both Donders and von Graefe reported early observations of the fundus, "many other clinicians apparently assumed that they (Donders and von Graefe) had" invented it. The alleged assumptions are not cited.

A big search:

In response to my suggestion that much ophthalmic optical history could be obtained by perusing old patents, Eric P. Muth reports, "Regarding patents, I have a box full of numbers relating to everything optical. Someone must visit the patent library or send an order for a specific number. I think I'll save this project for my old age."

Incidentally, there are additional patent repositories in at least Chicago and Cincinnati, and perhaps elsewhere in microprint form, and subject indices are available. The patents in microprint form are really more maneuverable and more speedily accessible than the originals or even paper printouts, the only disadvantage being the need to read them by means of a magnifying viewer.

I daresay Dr. Muth would be pleased to learn that someone would beat him to this undertaking!

H.W H.

Another memorializing medal:

The Frederick Hebbard Medal for achievement in the field of optometry is sponsored by the Ohio State University College of Optometry.

Pre-World War I fees:

The only surviving daily ledger, 1911-1917, of Harry K. Engleman (1879-1963), a general medical practitioner in the village of Georgetown in southern Indiana, USA, showed charges of less than thirty-five cents for removing a foreign object from the eye, the same as for cauterizing a dog bite, lancing a tonsil, or bandaging a leg, a few cents more than for swabbing a throat, extracting a tooth, lancing a carbuncle, treating a toe, or cauterizing a baby's foot. This is reported by Gerald O. Haffner in "A Hoosier Country Doctor," Indiana Magazine of History, vol. 85, no. 2, pp. 151-161, June 1989.

Helmholtz ignored a century ago:

A casual scan of the table of contents of the 1889 issue of Zeitschrift für Instrumentenkunde (Journal of instrument technology) disclosed a brief review entitled "Ein neues praktisches Ophthalmometer" (A new practical ophthalmometer). It appeared on p. 374 of the October issue, vol. 9. It is a review of a similarly titled article which had appeared in a French physics journal by two French authors. The review describes the purpose and optical theory of the "new" instrument but rather pointedly takes the authors to task for failing to recognize or even mention the prior ophthalmometric contributions of Helmholtz (1821-94).

Clinical optometric instruments:

The publication of F.C. Blodi's translation of J. Hirschberg's

History of Ophthalmology is quite evidently complete with the 1986 appearance of Vol. XI, Part 2, J.P. Wayenborgh Verlag, Bonn. In previous issues of this newsletter I have commented on Vols. I, III, and IV, and, eventually hope to report my observations on the whole magnificent series.

Part 2 of Vol. XI is in fact a volume in itself covering two major topics. One, pages A1-A185, is "The History of Optical Instruments for the Examination of the Eye" by Thilo von Haugwitz, M.D., translated by Blodi. The other, pages B1-B296, is "The Eye, Vision and Ophthalmology on Postage Stamps" authored by Blodi himself.

The optical instrumentation history includes 458 pictorial illustrations, about 240 literature references and an index to personal names dealt with in the text, serving excellently as an historical atlas of testing and measurement devices. Under the chapter heading Optometry are 17 categories of instrumentation. Other chapter headings cover the ophthalmoscope, the light sense, the anterior segment, binocular vision, etc. That there is essentially nothing on eyeglasses or spectacle fabrication equipment beyond trial lenses for examination purposes, quite obviously reflects the fact that these aspects were not a part of ophthalmological history until the last century, and then somewhat exclusively in the New World.

The philatelic history includes full color reproductions of over 700 stamps plus biographic and explanatory details about the artists and the commemorated persons, objects, events, or incidents--a truly impressive, fascinating, and informative compendium.

H.W H.

A 20th-century optometric Lazarus:

Those of us old enough to have learned from the widely used text "Visual Optics and Sight Testing" will enjoy reading OHS member Edward J. Fisher's article in the July 1989 issue of Optometry and Vision Science, Vol. 66, no. 7, pp. 484, entitled "Lionel Laurance--A Pioneer Teacher."

Born in 1856, the youngest of eight children of Moses Lazarus, in Exeter, England, and reared and schooled in London, Lionel as a young man traveled extensively in Spain, Portugal, South Africa, South America, the Orient, and eventually into Toronto, Canada, near the turn of the century. There he was exposed to optics through his brother Barney in the wholesale optical trade.

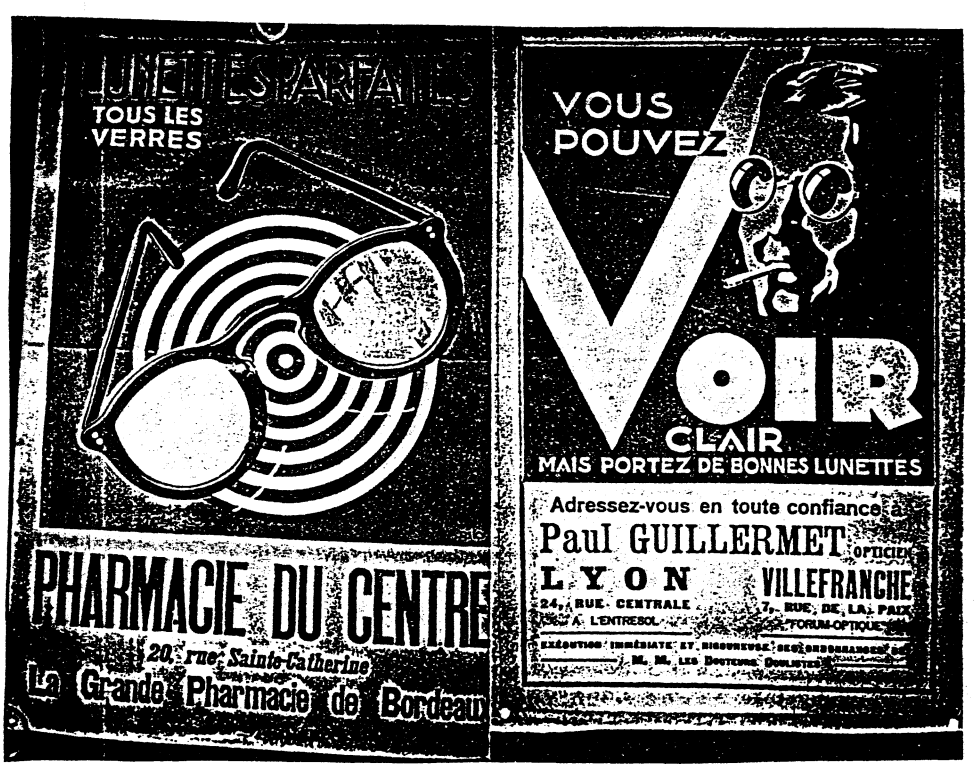
Acquiring several optical texts he quickly developed his skill in optics and ophthalmic clinical testing techniques and then

taught others as well, shortly thereafter returning to England. In 1888 he took the first examinations of the Worshipful Company of Spectacle Makers, and in 1904 the first examinations in Sight Testing at the age of 42. He entered promptly and vigorously in ophthalmo-politics for the advancement of the profession and the improvement of optometric education, publishing numerous articles and five books, and inventing several testing aids and techniques. In 1921 he made a return lecture tour to North America including three lectures to the American Optometric Association Congress in 1921 where he was made an honorary member in recognition of his many contributions to the profession. He retired in 1929 but maintained a lively interest in ophthalmic optics until his death in 1936.

Dr. Fisher documents his review with several references.

Collectible optical posters:

J.C. Teunissen of the Netherlands enclosed photocopies of two 1939 posters from his collection of "all literature about spectacles." Of the two illustrated below, the original of the one on the left is 82 x 122 cm. and that of the one on the right is 45 x 65 cm.



For want of a lens:

The late Noah A. Bixler, O.D., (1884-1959), made many tangible contributions of optometricana to Indiana University in the early years of the school especially to provide historical background and character. Besides hundreds of out-of-print books, several old instruments, and the like, he included dozens of photographic copies of paintings and portraits relating to our heritage.

Among these is a photographic copy of an oil painting labeled as "Schlacht bei Lützen" (Battle of Lützen), artist unidentified, depicting the gory scene of a cavalry engagement in the commune of Lützen, about 10 kilometers southwest of Leipzig in Saxony, Prussia. On the back of the photograph Dr. Bixler wrote (translated from his German), "His antipathy for glasses would be the cause of death of Gustav Adolph in the Battle of Lützen on 16 November 1632. His shortsightedness, as reported by the chronicler, led him too close to the foe and he was shot to death by a hostile sharpshooter."

Myopia might well have been a serious handicap in the depicted, virtually hand-to-hand, combat, and King Adolph may have been known to have a royal aversion to wearing glasses, but in retrospect the assumption of his antipathy as the fatal cause seems a bit far-fetched. Consider also the optically flat concave spectacle lenses in 1632, the contemporary primitiveness of spectacle supports on the head, the need for helmets in battle, the wobbliness of horseback riding, and the turbulence of dust and grime on the battlefield. Surely even the most opticophilic myope would have left his glasses elsewhere. Contact lenses had yet to be practical.

Nevertheless, the correction of the king's alleged myopia could have saved his life, so, to paraphrase George Herbert (1593-1633) of the same era who pointed out that a war was lost "for want of a nail," we may well moralize that for want of a lens a life was lost.

Optometry or ophthalmology?

This is the title of an article, subtitled "A historical review of early literature", by Sol Tannebaum in the September 1989 issue of the Journal of the American Optometric Association, vol. 60, no. 9, pp. 690-693. The theme of the paper is that a great share of optometry's heritage is reported in literature that describes visual science and optical contributions from a medical point of view. In clarification of his theme, Dr. Tannebaum comments, "Imagine a history of the United States written only from an American Indian's viewpoint, or the history of the American Revolutionary War written by an Englishman."

## Will buy, sell, or exchange:

The following is a photocopy of a letter from OHS member J.C. Teunissen, Staringstraat 20, 5615 HD Eindhoven, The Netherlands, telephone 040-447581. His collecting interests are spectacles and their literature including history, catalogs, anecdotes, etc., "but not diseases of the eye or theory of optics." He invites our correspondence.

As a collector of Spectacles and related objects I am allways interested in everything concerning optics.Because it is very hard to find litterature and books ,I made some fotocopies of the most interesting books and catalogues on spectacles.(only 10 ex.). All books were copied,than washed and cleaned and rebound as the original was.It is a very interesting collection of optical books.
I am still interesting in original books and catalogues for my own collection,also to buy, to sell or to change.

| BOOKS : | u.s.$ |
|---|---|
| 1. Katalog einer Bilderausstellung zur Geschichte der Brille 110 pag., illustrated,1929.German. | 40 |
| 2. Bie Brille und ihre Geschichte.Dr E.Bock 1903,ill.,62 p. | 60 |
| 3. Edward Duncker Geschichte seines Wirkens K.Albrecht 1928 | 25 |
| 4. Lehrbuch der Formen und Fassungen der Augengläser. Prof. Dr. Greef 1925 ,300 p.,ill., | 90 |
| 5. Die Lehrlingausbildung des Augenoptikers W.Lieberkind 1933, 270 p., ill.,interesting. | 65 |
| 6. De geschiedenis van de bepaling van de Gezichtsscherpte Dr.K.T.A.Halbertsma ,1947 ,70 p., ill., | 25 |
| 7. Verhandeling aangaande uitvinding,gebruik en misbruik Brillen W.Mensert 1831 not ill.,96 p., | 30 |
| 8. Sieben Jahrhunderte Brillen G.Kuhn 1968 ,ill.,91 p. | 25 |
| 9. Brille und Bilnis H.Reetz 1957 ,90 p., ill., | 40 |
| 10.Praktische handleiding voor den opticien S.Polak 1941,ill.150 p. | 40 |
| 11.Forschungen zur Geschichte der optik M. von Rohr 1936,ill.,58 p. | 25 |
| 12.Die Sehhilfe im Wandel der Jahrhunderte E.Schmitz 140 p.,ill.,1961 | 30 |
| 13.Beitrage zur Geschichte der Brille 1958 250 p.,ill.,Zeiss | 50 |
| 14.The eye-its optical defects F.Shaw 1890 24p.,ill. | 20 |
| 15.Nog iets over brillen,Wees toch voorzichtig met de oogen, Beschrijving der ooggebreken 1840,not ill., | 65 |
| 16.On the development of spectacles in London from the end of the 17 century 22p. 1928 ill., M.v.Rohr | |
| 17.Farbige insbesondere grüne Gläser A.v.Pflugk 22p.,4 taf. 1938 | 25 |

A very nice collection of Trade-catalogues also reprinted(only 10 of each) All very well illustrated and dated befor 1940:

| | | u.s.$ |
|---|---|---|
| 1 | .Catalogue Anglo-amerian 280 p.,1905 | 80 |
| 2 | .Catalogue D.V.Brown Philadelphia 1910 190 p. | 80 |
| 3 | .Catalogue Curry & Paxton London 1930 ,32 p. | 25 |
| 4 | .Catalogue E.N.O.T. Amsterdam 1917 14 p. | 20 |
| 5 | .Catalogue E.N.O.T. Amsterdam 1920 40 p. | 25 |
| 6 | .Der König der Klemmer Stegman & Seeger 1912 68 p. | 40 |
| 7 | .Catalogue Lichttransperante (optcal signs) 32 p. rare! | 35 |
| 8 | .Catalogue Lizon & Cie Morez 25p + 25 p pricelist | 35 |
| 9 | .Hauptkatalog Nitsche &Gunther nur Brillen 209 p. ca 1908 | 90 |
| 10 | .Hauptkatalog Nitsche & Gunther komplett,Rathenow,ca 900p.,1908 | 220 |
| 11 | .Catalog.Optco Utrecht 1939 (dutch) 40 p. | 40 |
| 12 | .Catalogue Occhiali G.Ratti 1920 15 p. | 20 |
| 13 | .Catalogue Societe des lunetiers Paris 1901 ,170 p. | 85 |
| 14 | .Catalogue of eye instruments 1925 50 p. | 25 |
| 15 | .Catalogue G.Stamm & co den Haag ca 1925 55 p. | 35 |
| 16 | .Catalogue Rodenstock Munchen 1911,256 p. | 80 |
| 17 | .Catalogue Franz Rapsch Rathenow 1928 150 p.,very nice copie | 90 |
| 18 | .Catalogue VOIR Laronde 1937 40 p. | 35 |
| 19 | .Hauptkatalog E.Wurz Pforzheim,1910 264 p. | 80 |
| 20 | .Catalogue of all optical instruments W.Gowlland 1914, 150 p. | 80 |

There are some ORIGINAL doubles of these catalogues and books in my private collection(also other original books and catalogues not on this list).
There are also original prospects,publicity and posters in doubles.
I prefer to change them to other interesting objects from Your collection.
I am also interesting in the very early 17 th and 18 th centyry spectacles and cases.Even in the extreme butterfly masks of the sixties.

Early Canadian optometry:

Following is the presentation made by Professor Emeritus E.J. Fisher, Curator of the Museum of Visual Science and Optometry, Waterloo, Ontario, Canada, at the OHS reminisce-in on December 13, 1986, at the Hilton Harbour Castle Hotel in Toronto, Ontario, Canada.

Long before the name "Optometry" or the professional designation "Optometrist" was in use in either the United States or Canada, there must have been some type of optical services rendered. For some time, I have been attempting to determine dates and persons who might have been involved in the provision of the earliest optical services which were available here in Canada, but have not been entirely successful. I suspect there must have been some opticians here in early New France, either in Quebec or Montreal and perhaps also in Halifax, but records are hard to locate. However, I can affirm that there was an optician here in Toronto in 1838, and I would like to tell you about him and other early pioneer opticians, and then give some idea of the beginnings of Canadian Optometry. Some of our development has been similar to that of the United States but a great deal has also been drawn from our British connection.

We are meeting now in the Yonge room, and if you go out to see some of Toronto, you will go north on Yonge Street. This was the main north-south thoroughfare and, before by-passes and modern highways were installed you could go north for 400 miles and the street was still Yonge Street! About one mile north of here, you will come to Front Street but some 50 yards before you get there you will cross the area which would mark the original shore line of Lake Ontario. The area around this hotel is all reclaimed land.

Three blocks north of Front Street is King Street and there, just one block east on the south side is where Toronto's first jeweller-optician established his shop in 1838. His name was Judah G. Joseph, and he was born in Exeter, England, in 1798. When he was 22 he emigrated to Cincinnati where he set up a jeweller-optician business. In 1837, someone swindled him out of a large sum of money, so he left Cincinnati and came to Canada to start afresh at the age of 40. Now in those days there were no optical suppliers as we know them today, so Judah made his own frames and ground the lenses, which of course, were mainly spherical. His training for this had been in England. In our museum at the University, we have a pair of spectacles stamped with his name on the temple. The frames are sterling silver with sliding

extension temples and convex spherical lenses. Not only was he active as an optician and jeweller, but he was the founder of what has become one of Toronto's prestigious synagogues, Holy Blossom Temple. Along with Nordheimer, noted for his fine pianos around the world, Joseph purchased the plot of ground for the first Jewish Cemetery on Pape Avenue. Sadly, about a year later, his ten year old son was buried there. Judah Joseph died in 1855.

I'd like to tell you about two other early opticians in Toronto. William Hearn and Charles Potter established an optician and instrument making shop in 1853. The chief partner, Hearn, also came from Exeter, England, and was somewhat older than Potter, who came from London where he was 20. Their location was also on King Street east on Yonge, on the site of today's King Edward Hotel. The partnership only continued for four years. Charles Potter then opened his own established a 9 King Street East. He became noted as a fine instrument maker, specializing in telescopes, compasses, barometers and sextants for the Great Lakes sailing vessels. He also made surveying instruments which were in big demand in pioneer life. He sold charts and navigation maps for the Great Lakes. In later years the demand for these instruments decreased and he emphasized his work as an optician. Before his grand-daughter died two years ago, she recounted how as a little girl, she used to visit grandpa's shop and use the brass curlings from the lathe cuttings as play curls in her hair. Some of Potter's instruments are still around and are highly regarded as antiques. Charles Potter was quite successful and became very wealthy for those days. He was largely self-educated, moved in the upper social circles in early Toronto, and was highly regarded as a successful business man and quite well-educated person. He was a founder of the first Toronto Telephone Company and installed a telephone in his home. Now in those days telephones were regarded as the devil's apparatus. Once a large mob protesting against its use surrounded his fine home, threw some rocks and broke several windows before being dispersed. The practice of Potter the Optician continues to the present time, although the name "Potter the Optician" was dropped due to restrictions in our legislation. Succeeding Potter about 1900 were Allen and Charles Petry, who in turn were succeeded by Dr. Harry Landon about 1950, then by Dr. Jack Young about 1960. It is now conducted by two young ladies - almost 155 years of continuous optometrical service.

The man who is known as the father of Canadian Optometry is Wellington Graham Maybee. He was born in

Cannington, a small town 100 miles north east of Toronto in 1866. He studied at the Detroit Optical Institute and about 1893 established a practice in St. Catherines, just south of us now across Lake Ontario. On a clear day it can be seen from the top of our CN tower. Eleven years later he went to Winnipeg, heeding the 1851 advice of John B. Soule of the Terre Haute, Indiana, Express "Go west, young man." There in 1904, he established the Winnipeg Optical Company as a retail outlet and the Western Optical Company as a supplier of optical material for opticians and jewellers. He also lectured widely across Western Canada and gave courses on Optometry, partially at least to increase outlets for his optical products. In January, 1909, he organized the half dozen Winnipeg optometrists into the Manitoba Optometric Society and spearheaded the passing of the first Optometry Act in Canada, tied with Quebec almost to the day. The Manitoba Act became law in March, 1909. Maybee was appointed the first chairman of the Board and had license #1.

In 1913, Maybee sold his business enterprises, went to California, passed the board examinations there and was going to establish a small part-time retirement practice when the first World War broke out in 1914. He returned to Toronto, opening an office in the Lumsden Building on the north east corner of Yonge and King Streets. Optometric affairs in Ontario were in a sad state at the time with warring factions and rampant commercialism. Maybe undertook to change this but during the war not much attention was paid to civilian affairs. He was finally successful in having an Ontario Act passed in 1919 and again was appointed chairman of a Canadian Board with license #1. Under contract with our federal government he trained some 150 returning veterans. He conducted courses from coast to coast in Canada, established and edited our first journal - The Canadian Optometrist and Optician -and also conducted a high class practice for those days. He was active in the affairs of the AOA, and in 1919 was made an honorary life member. In 1920 he wrote one of the courses in the educational series published by the AOA under the chairmanship of Dr. William Todd. He was highly acclaimed in the optometric press for a series of lectures at a New England Congress in 1923. He was instrumental in establishing an undergraduate training program for optometrists at the Toronto Technical School, now known as Central Technical School. Later he helped to establish the College of Optometry of Canada, the immediate fore-runner of our program at the University of Waterloo. When one considers the difficulties of transportation and communication in those early days of our profession, one

cannot help but admire the stamina, foresight, and dedication of such men to the cause of Optometry. We are indeed debtors to our fore-runners in Optometry. Wellington Graham Maybee died in 1929 and is buried in Oakville, 30 miles west of here.

Time permits only a sketchy account of Optometric Education in Canada. One indication of our optometrical connection with Great Britain is reflected in the educational development. The first known educator was Lionel Laurance, who came from England in 1893 and established two optical companies, one in Montreal and one in Toronto. In order to increase the outlets for his products he also established two training institutions - the Dominion Optical School in Montreal and The Optical Institute of Canada at 60 Yonge Street, Toronto. His brother, Barney Laurance became president of the Dominion Optical Company at 63 Yonge Street. After 1898, Lionel returned to London where along with Oscar Wood he conducted The School of Optics on Guilford Place, not far from the British Museum. Laurance is well known for two books, the Grosvenor or Borish texts of that day. These books were used in many optometry schools as late as the mid thirties, going through several editions. He also developed some instruments, notably an indirect ophthalmoscope made by the Culver Company in London. We have two of these in our museum.

Another early Canadian educator was L.G. Amsden, whose father was an officer sent to Winnipeg with Colonel Wolseley on the Red River Expedition in 1870 to quell the first Riel Rebellion. Amsden senior took up a section of land near Winnipeg following the skirmishes, but after five years he brought his family back to Toronto where his son, Lionel G. Amsden, became associated with the Cohen Brothers, a firm of distributors for jewellery and ophthalmic supplies. Lionel Amsden convinced the Cohens to expand the optical part of the business and in order to increase the demand for optical products, he started the Canadian Ophthalmic College. We have a diploma issued by this institution in 1899 and signed by Amsden. Cohen Brothers later became Consolidated Optical Company, which included Laurance's Montreal Optical Company, his Dominion Optical Company in Toronto, and Maybee's Western Optical Company in Winnipeg. The Consolidated Optical Company is now known as American Optical Company, Canada.

Our present School at the University of Waterloo had its origin in 1921 as a course at the Toronto Technical School, now known as the Central Technical School on Harbord Street here in Toronto. In 1925 the Board of Examiners in Optometry for the province of

Ontario established the College of Optometry of Canada, later known as the College of Optometry of Ontario. This arrangement of having the Board of Examiners conduct the training program became part of the provincial University system, after negotiations between the Board of Examiners, the provincial government, and the University of Waterloo.

The story of the Quebec School is a separate issue with a very interesting history, but it would take too long to elaborate for you just now. It started as a private school offering part-time courses to young apprentice optometrists in the first decade of this century. It gradually developed through the stages of an independent school, affiliation with the University of Montreal and finally to its present situation as a full department of the University. It has an excellent program with instruction given in the French language.

Optometric legislation in Canada parallels that of the United States. Our first Acts were passed in Manitoba and Quebec in 1909, just 8 years after that of Minnesota. There were at the time some 17 American state laws. The last Canadian province obtained its Act in 1925, the same year as your DC law was passed. A great many legislative revisions have been made since that time. At present half of the provinces have legislation allowing DPA's.

This has been a brief attempt to acquaint you with some of our professional background in Canada. The material could be expanded at considerable length as it applies to each of the other provinces and to our sister School in Montreal, Quebec. In point of fact, one could build a full semester course on the available material, so this brief summary is only a teaser. We are fortunate that much of the material has been recorded, but there are many gaps. It is my hope that much of our Optometrical history will be available in book form in two to three years.

Licensed BY EXEMPTION:

Historically the "grandfather clause" had a politically ugly identification with a provision included in the constitutions of some of the southern states of the USA after the war between the North and South. It exempted from newly adopted literacy and property qualifications for voting those persons entitled to vote before 1867 and their lineal descendants, thus effectively disenfranchising Blacks.

A similar tactic but with nobler connotations occurred later for optometry. With the subsequent enactment of licensure and registration laws for professional practitioners in the various states, those already in practice were issued licenses by exemption on the democratic principle that no one should be legislated out of a legitimate livelihood. In optometry in North America this occurred between 1901 in Minnesota and 1925 in Ontario, Canada. The same principle prevailed in each instance and is routinely identified as an application of "the grandfather clause", hopefully without the original ignominious implications. Further, the same principle has been exercised repeatedly with subsequent amendments of the laws which provided for higher and higher licensure standards. It, therefore, seems very probable that most of today's practitioners have not met current licensure requirements specified for new applicants. Prior licenses are quite automatically continued each year with the payment of annual renewal fees and, in many states, mere evidence of having attended certain hours of exposure to educational programs. In a purely technical sense they are in effect being renewed "by exemption" but without being so demeaningly labeled.

The principle is, in my opinion, very defensible. It merely recognizes that the very immeasurable criteria of reputation, experience, public acceptance, and achievement may easily match, if not outweigh, the classroom exercises, text-reading, clinical demonstrations, and multiple-choice selection skills statutorily required of the neophyte. It also acknowledges the common law fact that accepted professions have full legal standing quite independent of statutory registration and that such standing itself is a form of licensure. Why then, this commentary about an already familiar historical detail? Does it have any significance in terms of current or future optometric developments?

Indeed it does. As one who has long been observant of optometric licensure trends in numerous countries I can say that a serious deterrent to optometric progress in some nations is the fear among established practitioners that the grandfather clause may not apply or might at least be compromised. In many a conference I have tried to stamp out such anxiety by citing dozens and dozens of historical examples and the lack of any exceptions.

A few weeks ago, however, in attendance at an informal conference, I heard a prominent optometric leader make a casual but nevertheless firm assertion that the original American certificates of licensure issued in Missouri and other states without qualifying examination were conspicuously labeled "BY EXEMPTION". I was startled. Though I surely had seen a hundred or more licensure certificates, as they normally have to be conspicuously posted where patients could see them, I did not recall ever having seen one that was so labeled. After all, the great majority of optometrists during my early years had practiced optometry quite legally prior to statutory registration and were therefore of the

so-called "exempted" category.

A request to the archivist at ILAMO brought the response that "None of the licensure certificates in our collection shows BY EXEMPTION." She consulted the legal counsel of the American Optometric Association and he advised her that he had never heard of such labeling. Her forwarding of my request to the Secretary of the International Association of Boards of Examiners elicited a single copy of a very impressive looking 1909 certificate of licensure from North Carolina which includes in the detailed small script text of compliances and privileges the three innocuous words "without an examination." I say innocuous because even the most critical interpretation of the total phraseology does not suggest anything less than full qualification, indeed even hinting that the qualifications were so obvious as to justify no formal examination.

Because Missouri was cited as one of the offending states, the AOA counsel contacted the son of an early St. Louis optometrist and obtained a photocopy of a 1921 Missouri license, number 427. It was not labeled BY EXEMPTION but it was conspicuously identified, in bold type, as having been issued by LIMITED EXAMINATION rather than simply by examination or by having met the statutory requirements. The Missouri law was enacted in 1921.

A significant number of the nations of the world still have not attained statutory optometric registration even though many optometrists already practice in those areas with all of the legal privileges and responsibilities enjoyed by those who are formally "licensed." If this brief review is valid it should provide assurance that with the enactment of optometric registration requirements such optometrists should not fear being downgraded to second-class professionals by any demeaning identification such as "licensed BY EXEMPTION."

H.W H.

Optical manufacturing history:

"A history of American manufacturing opticians" is the title of an article by John W. Young in the July/August 1989 issue of Optical World, vol. 18, no. 121, pp. 18-20 and 22, an Essex, England, periodical incorporating MOI manufacturing optics international. (The pagination is slightly in error in that the text sequence is actually 18-20-19- and 22.)

In his opening paragraph the author mentions in passing that Marco Polo (c. 1254-1324) reported spectacles in use in China in 1220 and that he "may have been responsible for bringing the concept to Italy" where "Alessandro della Spina is credited as the first in the western world to fabricate spectacles in 1313." (Spina died in 1313.) He then develops the theme that "Having several pair of glasses was only made possible through the

inventive minds of early manufacturers", stating the price to have been $200 per pair in 1750 and $6.50 to $12.00 per gross (144 pair) a hundred years later.

Next he asserts that the American history for the optician began in 1769 when David Rittenhouse designed and built his own telescope and began grinding lenses from imported glass in 1780 and fabricated a pair of spectacles for George Washington in 1783. He describes the early optical involvement of John McAllister, Thomas Whitney, and numerous others. He quite incidentally adds that "Benjamin Franklin was advertising spectacles in 1738" and that he "included them in his general merchandise trade." He credits the firm of John McAllister and Son with having a "register of gold spectacles," dated 1815 to 1837, showing "a list of some 2,984 pairs sold to affluent Americans nationally." Mentioned incidentally as available in 1825 are "Chamblant's glasses, on the new construction of Cylindrical Surfaces." These are identified parenthetically as "Poukon's Philadelphia, Sept. 1825" and described as "cross cylinder lenses with the net result of spherical power" whose purpose "was to reduce aberrations, not to correct astigmatism."

The author develops another theme that out of the general concept of optician there emerged three specialties, the "prescription optician", who did the complete refraction and the dispensing of lenses purchased from "jobbers" the "artisan optician" or "jobber", and the "manufacturing optician". It is the third category, the manufacturing optician, which emerges as the big companies of American Optical, Bausch & Lomb, and others. Their historical roles are described at some length.

Ten information sources are given in a reference list but it is not indicated to which ones the various assertions are attributable. Of five quoted passages in the text of the article none is adequately locateable in, or clearly identified with, a listed reference.

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