

OCT - 7 1976

ST. LOUIS UNIVERSITY

NEWSLETTER
OF THE
OPTOMETRIC HISTORICAL SOCIETY
(7000 Chippewa Street, Saint Louis, Missouri, U. S. A. 63119)

Volume 7

October 1976

Number 4

The historical value of your vote:

History is made by those who vote.

Within the last few weeks I happened to have served on three different election committees. In each instance the apparent majority choice of candidate changed several times between the first flurry of ballots received and the finally received ballot. In each of two of the three elections the last received ballot decided the victors!

True, this is a bit unusual, but not nearly as unusual as the apathetic nonvoter would like to have us believe. Even the President of the United States is usually elected by less than one-fourth of those eligible to vote. From this it is simple arithmetic to derive the fact that he who voted for the winner exercised the equivalent voting strength of more than three citizens.

Enclosed is your ballot from which to select a member of the Executive Board of the Optometric Historical Society for a five year term. Each of the candidates has been mentioned from time to time in this Newsletter. Each has special qualifications of value to the society. The choice is yours. Correction. The choice is that of those who vote.

An ophthalmologist as pope:

In the July-August, 1976, issue of Augenoptik, Vol. 93, No. 4, pages 110-111 & 116, is an article entitled "Über die Geschichte der Brille: Teil 3" (on the history of spectacles, part 3) by Wolfgang Münchow. The article is from the history of ophthalmology research collection in the eye clinic of the "Heinrich Braun" district hospital in Zwickau, East Germany, where Dr. Münchow is the medical chief.

In this installment Münchow makes the case for the invention of spectacles in Italy. He also devotes a fair share of the article to an account of the physician-ophthalmologist Petrus Hispanus of Siena, Italy, who became Pope John XXI on September 15, 1276. His election to this office was based largely on his excellent health (year of birth unknown), as his three successively elected predecessors had died in the same tragic year of 1276. Pope John XXI died on May 20, 1277!

While in medical practice in Siena (about 50 km south of Florence) he wrote a textbook on diseases of the eye.

Though this is "Teil 3" (part three), I don't know when and if parts 1 and 2 were published in Augenoptik. Not in 1976.

Ophthalmological medals and coins:

"Ophthalmologische Medailen und Munzen" is the title of an article by T. Gyöerffy of Budapest in the January 1975 issue of Klinische Monatsblätter für Augenheilkunde und Augenärztliche Fortbildung, Vol. 166, No. 1, pp. 114-125. Illustrated are 30 of the author's private collection of 91 medals and coins identified with ophthalmologists, or with physicists, physiologists, surgeons, opticians, and others who have made a name in the field of ophthalmology. A few familiar examples are Abbe, Bausch and Lomb, Dalton, Donders (4), Benjamin Franklin, Gullstrand, Helmholtz (3), Huygens, Kepler, Newton (3), Plössl, and Purkinje (2).

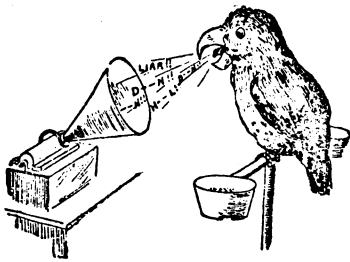
Copyrighted cartoon advertisements:

Recently received by the International Library, Archives & Museum of Optometry was a thrice folded 35 x 56 cm tabloid flier, hand-addressed and mailed to "E.F. Sullivan, Optometrist, Hutchinson, Kansas" from Magic Eye Glass Cleaners, Potts Mfg. Co., Camden, N.J. The paper is very brittle and yellowed with age, bearing a green one cent U.S. postage stamp with a profile view of George Washington and a "Camden" cancellation mark mostly illegible. The caption for the flier is "Copyrighted Advertisements for printing." One printed face of the fully opened flier includes 42 advertising blurbs of one to four paragraphs each. The other face includes 36 cartoons, each with accompanying legend.

It is not apparent to me whether one could purchase a cut for a chosen blurb or cartoon to run in a local newspaper, or purchase eye glass cleaners @ \$1.25 for 100 or \$10 for 1,000 with a selected blurb or cartoon as an imprint.

The best information we could get about the addressee Dr. Sullivan was that he was born in 1864 and died at age 89 years. He was listed in the first Blue Book of Optometrists and Opticians published in 1912 and in subsequent Blue Books for the next two decades, with membership indicated in the American Optometric Association and the Kansas Optometric Association. It seems very likely that the advertisement dates back to about the turn of the century.

For your own enjoyment I have rearranged the cartoons to appear in actual size on the next four pages. The blotches are due to old blots of spilled ink on the original document, some of which I was able to eliminate in the copy with opaque white correction fluid.



Bad records can be made by the mouth, but all bad records are not made this way. Poor sight creates an indolent, tendency, to disobey, an inclination to do wrong, because it is easier. We aid a person to see better, feel better, so they can do better.



The way the public would act if we advertised \$5.- Eye Glasses for \$1.-

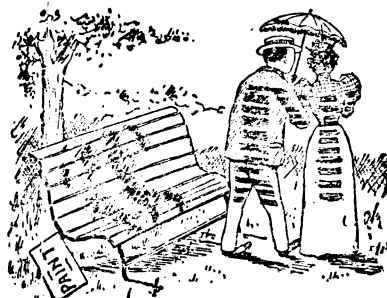
Why do we avoid such places?



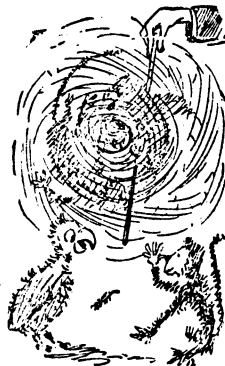
Because they harbor microbes, and patronage means direct contamination. Why do we avoid cheap eye glasses? Because they worry us, causing a waste of strength, and vitality, almost as bad as going without glasses. Making us spend money for medicine, and not obtaining any lasting relief.



A little Lye will help to make good soap, but it will not help to make \$1.- eye glasses as good as \$5.- ones. For this reason we do not advertise \$5.- eye glasses for \$1.-



The first impression will demonstrate our ability to fit you with correct eye glasses, that will be worth double the price we ask for them. Please favor us by calling.



It is surprising how a few trifles will stir up a commotion; with some people. Irritable nerves caused by defective eyes. We prescribe Eyeglasses to oblivate, this irritability.



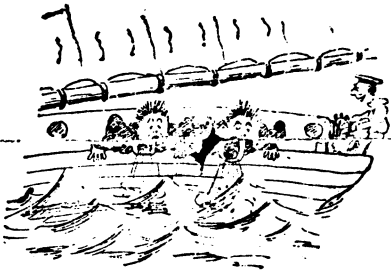
If many young ladies of this town had their choice, we know they would select the first, a pair of our gold mounted **Toric Lenses**



The joy and happiness is all yours, without realizing extra responsibility when equipped with our Eye Glasses. For they make tasks appear easy and heretofore arduous duties accomplished with less fatigue.



The raising of dollars, is not difficult with those who can utilize spare moments to improve by reading, studying and reasoning. When slightly tired, and troubled with defective vision, the going to sleep tendency, discourages and creates, I can't do it feeling. To defer this indisposition, Consult us



THERE ARE TWO KINDS OF ^{SEA} SICKNESS
Both effect a person about the
same way.

We remedy the See sickness
and the other can be avoided.



When choosing company, which would
you prefer? Please notice the difference
is in sight. One sees, nearly everything,
and is alert, the other doesn't see much
and is dull.

Using and fitting eye glasses



Before consulting an Optician, will
cause burning eyes, headache, and
general dissatisfaction. For invariably
the glasses will not be the proper
focus, nor of correct adjustment.

E. F.



Profound thought often originates
grand ideas, that would materialize
if not marred with contingencies.
To see & avoid minor contingencies
use our eye glasses.

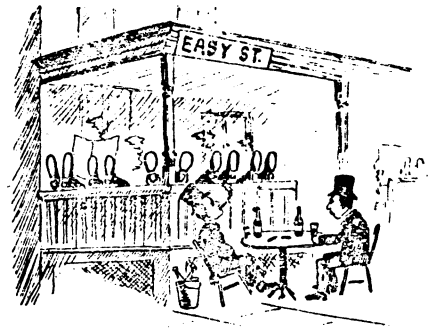


Allow me to introduce a charm-
ing subject; the possession of
which brings unspeakable joy. We
refer particularly to our Toric
and invisible bifocal lens



Damp weather effects Eye Glasses
Dirty handkerchiefs smear them
This cleaner restores the Orig-
inal Polish. We do our own grinding
and can duplicate any broken lens
on short notice

HOW ARE YOU?
HOW DO YOU FEEL?



ON EASY STREET. is the expres-
sion of many of our customers.
Try our Eye Glasses for the Easy
Street effect.



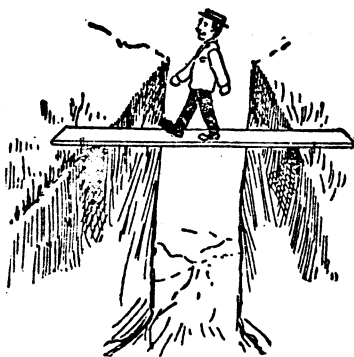
Advertisements for printing
Magic Eye Glass Cleaners
\$1.25 per 100 \$10.- per 1000

Potts Mfg. Co.

Camden, N. J.

Sullivan, Optometrist
Hutchinson, Kans.

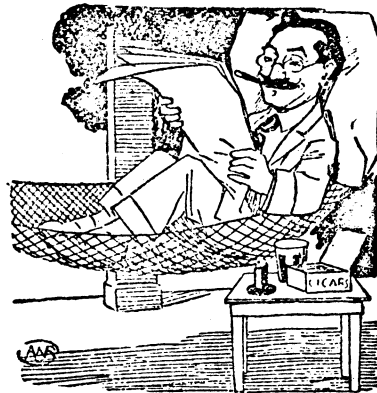
SO EASY TO



Walk over difficulties when a person sees the way. When using our Eye Glasses, gloom and disappointment are not apparent; customers seeing the clear way.

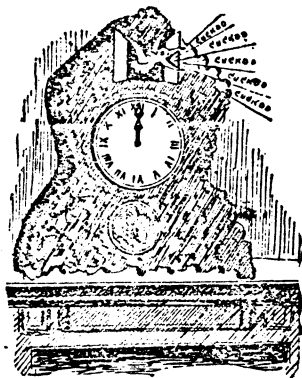


Before using our Eye Glasses



After using our Eye Glasses.

WORKING OVER TIME -



is not necessary. Our Eye Glasses improve vision, which quickens perception, makes thinking easier and leaves time for enjoyment.



We are all chasing after it and through improved vision many are getting more of them. Please call. The use of eye glasses often assures our customers a greater efficiency



The Leading man is conspicuous on most occasions. Using eye glasses show progression- and the saving of vital force. so essential for success.

Which is preferable?

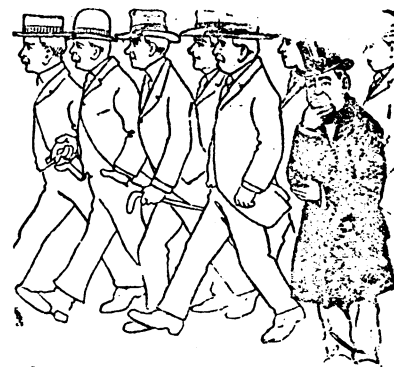


One gallon of this? or a pair of our eye glasses. Both same price. Both same effect. This for one month, with a headache between drinks, or our eye glasses, which often last two years, and leave no reaction; such as headache.

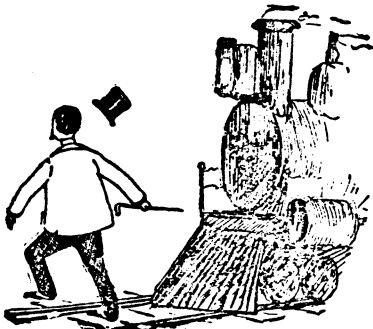


Seeing and avoiding or annihilating petty annoyances, prevents any great trouble. When many things are causing worry, it is surprising the relief eye glasses afford

Magic Eye Glass Cleaner

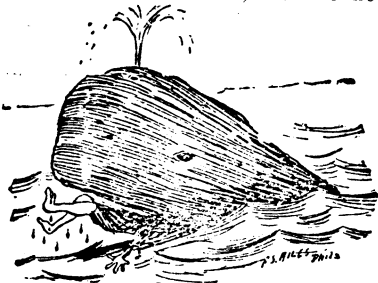


Don't Stop and Think. Join us and hear the advantages of our **Toric and Invisible Bifocal lens** also our **So-Easy Eye Glasses** on and off with one hand **Everything Optical**



Confusion, causes mishaps, in many and various ways. The better we see, the more we avoid, unpleasant occurrences. For better seeing, see.

Our customers realize, we are not



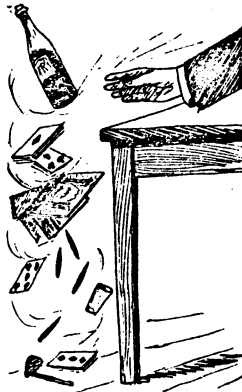
Taking in a great Profit on each sale. So every article sold is sure to be worth the price.



Pleasures partially relieve, being temporary. They are like chasing a Rain Bow. For more permanent relief, and as a dispeller of the blues, try our Eye Glasses.



An opening for a good man. Come and see us, we can help to stay the time. The Inevitable will happen. We, for delaying the time.



Discarded. Not satisfactory, after finding relief by using our eye glasses.



A false step has caused the majority of accidents. We aid you to see.



To get a head, better than a cabbage head, we must see well. Seeing is the commencement of all things. To see well helps to do well.



TO GET A-HEAD is the ambition of all creation. There are various ways. We aid our customers to see the nice ways.



To be suited is the reason they come to us for eye glasses. Correct glasses Guaranteed.



By degrees the Public has learnt the advantages of using our Eye Glasses. Assuring future patrons of the same prompt efficient service



We all work under difficulties. This we assume, without regret, but trouble with our eyes, can be ameliorated. Don't waste time in regret, when we are located so convenient.

William D. Zoethout, (1872-19??):

O.H.S. vice-president Henry A. Knoll studied Professor Zoethout's book on Physiological Optics while a student in optics at the University of Rochester. It was Dr. Knoll's introduction to the field of physiological optics, in which he himself later obtained the Ph.D. degree. So it is no surprise that he is now trying to find out more about Zoethout.

From an article entitled "Honors to Dr. Zoethout" in the July 1944 issue of The Bur, Vol. 44, No. 2, pages 51-54, a publication of the Alumni Association of the Chicago College of Dental Surgery, he learned that Dr. Zoethout was born in Birdaard, Holland, in 1872, and came to this country at the age of nine. He obtained his bachelor of arts degree from Hope College at Holland, Michigan, in 1893. In 1898 he was granted the doctor of philosophy degree in physiology by the University of Chicago. In 1912 he joined the faculty of the Chicago College of Dental Surgery and remained there 32 years. On April 26, 1944, almost 300 guests attended a testimonial banquet at the Lake Shore Club, Chicago, in his honor on the occasion of his retirement.

His "Textbook of Physiology" (3rd edition in 1928) was intended for students in dental, pharmacy, and normal schools. As the author he identified himself as "Professor of Physiology in the Chicago College of Dental Surgery (Loyola University) and in the Chicago Normal School of Physical Education."

But he also wrote a book entitled "Physiological Optics," the fourth edition of which appeared in 1947. It was published by the Professional Press, Chicago, as was also the 2nd edition in 1935, and presumably also the first and third editions, which I have not seen. In this book he did not identify his academic position, nor did he suggest that the book was intended primarily for optometry students, though I know he taught part-time for many years at the Northern Illinois College of Optometry. All of the graduates of N.I.C.O. during more than a decade prior to World War II learned their physiological optics from Zoethout.

How, asks Dr. Knoll, did Dr. Zoethout happen to become interested in physiological optics? He requests any information you may have or remember, especially if you were one of Zoethout's students.

One clue I have picked up comes from his preface to half of a book entitled "Anatomy and Physiology of the Eye" by Earl J. Brown and Wm. D. Zoethout, published by Hazlitt & Walker, Chicago, 1906. The second half of the book dealt with the physiology of the eye and was written by Zoethout. Said Zoethout, "These lectures, . . ., were delivered before the Chicago Optical Society." This makes it reasonably clear that his early interest in the eye was prompted by an invitation to give a course to a group of Chicago optometrists!

In the 1906 book he identified himself as "Professor of Physiology in the Jenner Medical College and at the Bennet College of Eclectic Medicine, Chicago."

Book review by Knoll:

Thinkers and Tinkers: Early American Men of Science, Silvio A. Bedini, Charles Scribner's Sons, New York, 1975. 520 p. Illus. Cloth. \$17.50.

This is a delightfully written account of the "mathematical practitioners" who played an important role in the settlement and development of this country. It covers the period of history while spectacles were still being imported from Europe, so all you eyeglass buffs will find virtually nothing here about specs or glasses. On the other hand it sets the background for the introduction of optical manufacturing about the middle of the nineteenth century. More importantly it stands on its own as a fascinating story about a group of clever and energetic men who literally shaped this nation.

Map makers, surveyors, navigators, mathematical instrument makers, and teachers of science are the "mathematical practitioners" herein referred to. These men and their students swarmed all over this land and charted its islands, coasts, and waterways with instruments so crude that we might discard them as so much junk. Among the 102 illustrations is a map drawn between 1585 and 1587 (almost 400 years ago!) of the Atlantic coast from Chesapeake Bay to Cape Lookout. I happen to be the proud owner of a satellite photograph of this region and the 16th century map is astoundingly accurate in its detail.

These men laid out our cities and established the familiar outlines of the eastern states; Mason and Dixon among them. Surveyors often learned from navigators; some of them had been men of the sea. Others learned by attending night school - yes, night school! I never dreamed there were night schools before electricity. Still others were self taught, studying such texts as "Geodaesia, or The Art of Surveying and Measuring of Land Made Easie" - get that Made Easie! published in 1688!

This is not turning out to be a critical review but rather a rave notice. I must admit that I find it difficult to be objective about a book which is filled (for me at least) with surprises and colorful anecdotes about the basics of establishing a new country and a new culture.

The author, Silvio A. Bedini, was born in Connecticut, studied at Columbia Univeristy and now serves as the Deputy Director of the National Museum of History and Technology of the Smithsonian Institution in Washington, D.C.

The text is divided into four parts: Settlement, Development, Revolution, and Nationhood. Approximately twenty-five illustrations precede each of the four parts showing examples of the "mathematical practitioners" art. Also shown are portraits of the practitioners. The pages on which the illustrations appear are not numbered - a minor irritation when trying to locate a desired illustration.

Navigators and map makers dominate the first part. Surveyors come into their own during the development of the eastern colonies, as do the instrument makers. Moving around in those days required a compass, and there was need for many pocket versions. Because all of the practitioners were in short supply, new blood was added through apprenticeships and the aforementioned night schools.

During the development period almanacs also became a very useful item and these were often compiled by these mathematically experienced practitioners.

When war with England became inevitable, the colonists quickly recruited their own experts to help in the science and art of gunnery and the construction of fortifications. Hand telescopes were also much needed by the officers and these were borrowed from the homes of colonists who had brought them to this country from Europe - principally England.

After the war there was a renewed interest in things scientific and the colonists welcomed back their telescopes, bought new ones (still imported) and looked toward the next lecture on astronomy to be given at the church or town hall.

Expansion to the west absorbed the men who had been engaged in military matters to survey and map the new regions being settled.

For the serious historian Mr. Bedini has included extensive reference notes. For the novice he has included a glossary. For example, dialing was one of the arts of the period. "Dialing. Art of constructing any instrument portable or fixed, which determines the divisions of the day by the shadow of some object or part upon which the sun's rays fall." The beautifully bound book is capped by an excellent index.

Try it - you'll like it!

Henry A. Knoll

Suitable for framing:

Two 18" x 24" (46 x 61 cm) charts on matte paper and in antique-appearing colors depict 600 years of eyeglasses. The chart entitled "Eye Glasses of Old" shows 25 items with brief comments. The chart entitled, "Through the ages . . ." shows 30 items, also with comments.

Both are available from Better Vision Institute, Inc., 230 Park Avenue, New York, NY 10017 at \$2.00 each for members, or \$4.00 each for non-members, of the Better Vision Institute.

". . . give me liberty,

or give me death." said Patrick Henry (1736-1799) at about the time he was 39, approaching presbyopia. An oil-on-canvas portrait, copied from a miniature by Thomas Sully in 1815, suggests that Mr. Henry may have had second thoughts about this remark. His pensive look is accentuated by his spectacles pushed up well above his forehead. The portrait, from the Colonial Williamsburg Collection, Williamsburg, Virginia, hangs in the Capitol's Joint Committee Room.

Picture postcard copies of the portrait are sold at Colonial Williamsburg, reports Henry Knoll.

Oh say, could they see:

A special feature in the August 1976 issue of the Journal of the American Optometric Association, vol. 47, no. 8, pp. 1017-1040, is an article entitled "The Eyes of Liberty" by Sidney Groffman. Dr. Groffman has brought together the portraits, quotes, legends, illustrations, paintings, and citations involving the eyes, vision, and spectacles of persons and personalities of the revolutionary era, circa 1776. Franklin, Paul Revere, Patrick Henry, Jefferson, Washington, John Adams, Aaron Burr, John Marshall, Charles Peale, Lord Cornwallis, Moses Brown, Gabriel Ludlow, Martha Barnes, Timothy Matlock, James Wilson, William Ellery, John Trumbull, Benjamin Rush, John Cuff, and George Adams are among those mentioned.

It makes delightful reading and is thoroughly illustrated, with 34 references.

Science of Seeing:

O.H.S. member D.G. Hummel, O.D., reports that he is gradually placing his "old" books in optometry college libraries, having already donated to four. Coming across his copy of Matthew Luckiesh's 1922 edition of "Visual Illusions and their Applications" he was prompted to comment, "I rarely see in print any appreciation of what had been done (by Luckiesh) for optometry. Luckiesh and Moss, of my knowledge, pushed Optometry to the point of interest and acceptance by other disciplines."

Dr. Matthew Luckiesh (1889-1967) was a physicist and electrical engineer long identified with the Nela Research Laboratories of the General Electric Company, author of numerous books, and recipient of the Gold Medal of the Distinguished Service Foundation of Optometry among many other forms of recognition and honor. Frank K. Moss (1898-1943) was also identified with visual research at Nela, author of numerous research publications, a member of the American Academy of Optometry, and a Lieutenant Commander in the U.S. Navy at the time

of his death. "Luckiesh and Moss" became a familiar byword in visual science circles. As a team they popularized the "Science of Seeing" concept and commanded the attention of scientists and practitioners from many disciplines.

Dr. Hummel and several of his optometric colleagues in Cleveland, Ohio, were very cooperatively involved in the Luckiesh and Moss research activities in the late 30's and early 40's.

I remember these details from the fortunate two or three weeks I spent in the associated optometric offices of Drs. Richard Hall, Eugene Higgins, and Daniel Hummel shortly after I graduated from the Ohio State University School of Optometry in 1939.

Two brief biographies

Details of some of the work, interests, and activities of Joseph Priestley Smith (1845-1933) and Albert Edward Turville (1890-1965) were displayed in a small commemorative exhibition in the main building of the University of Aston in Birmingham, England, December 8th to 12th, 1975. To supplement the exhibition the university's Department of Ophthalmic Optics published a booklet containing a photograph and brief biography of each. The Smith biography was prepared by A.G. Sabell, and that of Turville by G.V. Ball.

Presumably a complimentary copy may be obtained merely by writing to Professor G.V. Ball, Department of Ophthalmic Optics, The University of Aston, Gosta Green, Birmingham B4 7ET, England.

Early schools?

O.H.S. member Elizabeth Egan asks if we have a list of early schools of optometry or optics and their dates of operation.

Dr. Charles Sheard, in an article entitled "Optometric Education and Professional Advancement" reported 60, yes 60, schools in the U.S.A. during the period 1872-1901, 42 in the period 1901-1914, 36 in 1914-1922, and 30 in 1922-1926. This was in the November 5, 1942, issue of the Optometric Weekly, pp. 1085-1089.

In a survey of 12,534 practicing optometrists in 1944 conducted under the auspices of the American Optometric Association the respondents named 21 schools from which they had graduated. The survey results were reported in an extremely limited number of copies entitled "Graphic Analysis of National Optometric Survey." The 21 schools are listed on page 296 of my 1948 book Optometry: Professional, Economic, and Legal Aspects, reprinted in 1964 by the American Optometric Association, St. Louis. I now know it to be a very incomplete and inaccurate list.

Who's in Who's Who?

O.H.S. member Antonio Pacheco, O.D., has distributed his September 1, 1976, report of his search for optometrists and native Puerto Ricans in the 1976-77 Bicentennial Edition of Who's Who in America and in the 14th editions of the four regional Who's Who directories.

Out of the over 70,000 biographies in the Bicentennial Edition he found 63 Puerto Ricans and 16 optometrists. The number of optometrist entries had increased by 33 1/3% over the number in the previous edition, 1974-75.

The total number of optometrists in the four regional Who's Who directories was 329.

Knowles' Encyclopedia-Dictionary:

Our O.H.S. Vice President Henry A. Knoll, Ph.D., commented as follows in a letter to me last April.

"While browsing through our collection of old books I came across the following, 'Encyclopedia-Dictionary and Reference Handbook of the Ophthalmic Sciences' by R.H. Knowles, M.D., published by The Jeweler's Circular Publishing Co., New York City, 1903.

"The volume first attracted my attention because of the author. I recognized R.H. Knowles, M.D., as one of the medical men who supported the Optometry Bill here in the state of New York. Charles Prentice mentions his name several times (pp. 41, 72, 78, and 376). It is of special interest to note that among the brief biographies included in the Encyclopedia-Dictionary one finds an entry for Andrew Jay Cross, but none for Charles F. Prentice!

"Would this be the earliest dictionary of visual science? I am not aware of an earlier dictionary in this field.

"There are many interesting items in the dictionary, e.g., 'Optist- One who is skilled in optometry.' Opticist is not included. 'Optometry- The science and art of employing the various methods for measuring the range of vision, as to color, static and dynamic refraction, form, the various positions assumed by the eyeball, the field and light. Optometry is therefore divided under six headings. 1. Chromoptometry, 2. Dioptrometry, 3. Eidoptrometry, 4. Ophthalmotatometry (sic), 5. Perioptometry, and 6. Photoptometry.' I believe 4. should read ophthalmotropometry, which is defined in terms of 'the various directions the eye takes in making its several revolutions.'

"Note that nothing is said about prescribing, but then prescribing is not mentioned under ophthalmology either.

"Finally let me mention 'Scopistry - A dark room employed for the purpose of making an examination of the eye.' I like that better than operatory!"

Joseph Zentmayer, 1826-1888:

Joseph Zentmayer was born in Mannheim, Baden, Germany, and served his apprenticeship with an optician there. He later associated himself with optical establishments in Karlsruhe, Frankfurt, Munich, and Hamburg, Germany. At the age of 22 he came to the United States and for "five years he nobly fought his battle of wage-earning in some of the best optical establishments in Baltimore, Washington, and Philadelphia."

His contribution of optical lens and instrumental design and manufacture won him almost innumerable awards, medals, and citations. Throughout his years of fame he proudly styled himself simply as an "optician." His portrait and a seven page obituary notice, prepared by Charles A. Oliver, M.D., appear in the January 15, 1894, Proceedings of the American Philosophical Society, Vol. 31, No. 142, pp. 358-364. It would be difficult to find a more glowing tribute to anyone else anywhere.

Zentmayer died in 1888.

Wisconsin Optometry, 1900-1950:

An announcement in the May/June issue of the Journal of the Wisconsin Optometric Association, p. 6, mentioned a booklet compiled in 1950 by Earle W. Johnson covering fifty years of optometry in Wisconsin. Announced also were current plans to compile the history of the subsequent 25 years. An inquiry to Harvey L. Hougen, O.D. (Retired), Historian for the Wisconsin Optometric Association, brought a prompt response plus, a little later, a copy of the 1950 booklet from the W.O.A. offices.

The title of the 40 page, paper covered, 14 x 21 cm booklet is "50 Years of Optometry in Wisconsin." Contributors of reminiscent chapters and historical accounts include Drs. Joseph Scholler, M.W. Haack, Eldred H. Jensen, A.N. Abbott, A.A. Lueck, Harry J. Bylan, D.B. Fast, Ray M. Johnson, Anita Eberl, N.E.W. Lenz, Charles S. Imig, Peter O. Fox, M.C. Cress, Earle W. Johnson, and Mr. Leo H. Nohl.

From the booklet we learn that the Wisconsin Optometric Association was originally chartered as the "Wisconsin State Optical Society," that Margaret Thomas "started an Optometry School in Milwaukee which proved very successful. . .", and many other fascinating tidbits.

The Wright Library:

A speech of tribute to Frederick Wright (1882-1932) & Charles Wright (ca. 1912-) by Arthur H. Ley at the formal dedication of The Wright Library, 29th October, 1975, appeared in the November 1975 issue of the Australian Journal of Optometry. An inquiry to Damien P. Smith, Ph.D., Executive Director of the Australian Optometrical Association, 611 St. Kilda Road, Melbourne, Victoria, 3004, Australia, brought the following supplementary information in a letter dated 2nd. August, 1976:

"For some time, there had been discussion amongst some of us that the contribution made by Charles Wright should be formally and permanently honoured. To some extent Charles has been a leadership 'bridesmaid', being passed over (by oversight really) for national presidency, a post that he considers the pinnacle of professional achievement and recognition. Charles also speaks constantly of the contribution made by his father Frederick Wright, and of the fact that Frederick was prematurely killed by the rigours of the leadership role he played.

"Since my arrival at the Australian Optometrical Association in 1973 I have gradually nurtured the nucleus of a small library. Indeed, it was perhaps my favourite objective. I suggested to National Council that it should honour Charles and his father by naming the embryo library in their honour. The suggestion was taken up, and in October 1975, THE WRIGHT LIBRARY of the Association was formally dedicated by Sir Mark Oliphant, Governor of South Australia. Arthur Ley read a speech of tribute at the dedication ceremony, and I enclose a photocopy of that speech as it was published in the Australian Journal of Optometry.

"I do not envisage that THE WRIGHT LIBRARY will become a true library of visual science. Currently it subscribes to the major optometrical and ophthalmological journals, and receives a host of professional, public health and government bulletins. It has a minimal text book holding, and the majority of titles are annual reports and technical reports of Australian and overseas government and non-government bodies. Most of these deal with health insurance and health services and planning, education of optometrists and health professionals, and directories. You will appreciate that with the excellent library of the Victorian College of Optometry so close, it would be wasteful to attempt to build a similar holding. Instead, I intend that it will provide a unique resource library for the proper administrative, political, educational and professional needs of the Association.

"As part of the programme, I am pleading with the profession to send in their old journals, bound or unbound, of any

vintage or condition. I intend to compile these into bound holdings for the library, and to catalogue and store duplicates for donation to the libraries of new schools of optometry. I am pleased to be able to say that just yesterday the library was outfitted with new timber shelving.

"I must also acknowledge the great generosity of the International Library, Archives and Museum of Optometry which has now provided me with boxes and boxes of its reserves of duplicates. Unfortunately, many of these are incomplete sets; there is nothing more heartbreaking than a volume of a journal complete but for one number. Nevertheless, I have been able to fill gaps, to the extent that I have already bound the Journal of the American Optometric Association from 1959 and the American Journal of Optometry and Physiological Optics from 1961.

"You asked for a brief account and I hope that the above is adequate. If I may plug the cause, I am continually on the lookout for fresh donations. Thus, if any of your colleagues have texts of journals that are no longer needed, I will be thrilled to receive them. The Association will meet the costs of freight by dispatching a bank draft to the value of the postage.

"Oddly, this 'historical' account has turned into a description of current aims and future needs!"

Having met Mr. & Mrs. Charles Wright on several occasions, including a visit to their home in Adelaide, I cannot refrain from adding a personal note about this very charming as well as dedicated couple. Whether philosophizing, giving a witty after dinner speech, preparing a sophisticated document on professional ethics, teaching a course in physiological optics, organizing the business of a conference, handpainting certificates of appreciation, indulging in award winning sculpture, handcrafting jewels of office, restoring another and another vintage Rolls-Royce car, tracking down an archival detail, or practicing classic optometry in perhaps the most professional setting in the world, Charles Wright, a man of pleasingly modest demeanour, is the pride of Australian optometrists.

Another optometrist memorialized:

Persons who contribute \$2,500 annually to the Independence Fund of the Southern California College of Optometry, 2001 Associated Road, Fullerton, California 92631, are designated Ernest A. Hutchinson Fellows.

Dr. Hutchinson was for many years the dean and later the president of the College, known during his time as, successively, the Los Angeles School of Optometry and the Los Angeles College of Optometry. The fact that raising funds for the school was one of Dr. Hutchinson's major problems and one of his major accomplishments makes this memorial identification particularly apt.

Serial sacrosanctity

The 1976 issues of the East German periodical Augenoptik are identified as volume 93. Simple arithmetic suggests that Vol. 1 therefore must have been published in 1884. This may be the reason that the origin of Augenoptik in Ulrich's International Periodicals Directory, 11th Edition, 1975-76, is shown as 1884!

In spite of the faith some of us would like to have in the volume numbering of journals, this reasoning is not correct.

A routine search into various union lists of serial publications and into various directories of periodicals for the publication history of Augenoptik, a rather good journal incidentally, can be most frustrating. It happens to be an East German publication, and so far as I can determine, no single "Western" library has a complete set of the presumably 92 previous volumes plus the current issues of Vol. 93. The various directory and union list entries of scattered holdings and title variations (at least eight) are at best the elements of a librarian's nightmare. But the numbering of the volumes through all of the title variations, mergers, and divisions remained sacred, except for a four year numerical lapse during the last years of and immediately following World War II. Here, then, is the chronology.

Vol. 1 of Central-Zeitung für Optik und Mechanik, sometimes spelled Zentral- . . . , was published in Leipzig in 1880, and continued so through Vol. 15 in 1894. From 1895, Vol. 16, to February 11, 1934, starting Vol. 55, it was published in Berlin. On that date it was merged with the Deutsche Optische Wochenschrift which was in its 20th volume. The combined periodical was called Deutsche Optische Wochenschrift und Central-Zeitung für Optik und Mechanik and given the volume number of the older serial, Vol. 55.

At some time during 1943, perhaps at the end of the calendar year, during or at the completion of Vol. 64, the serial combined further with at least two, and perhaps three, other journals (Optische Rundschau und Photo-Optiker, Deutsche Photo-Zeitung, and Deutsche Optiker-Zeitung) to form Optik, published in Weimar. I have not determined what volume numbering, if any, was applied to Optik, but it evidently was not a continuation into Vol. 65. A year or two later (ca. 1945-46) Optik was retitled Nachrichtenblatt für das Optiker-Handwerk and continued so through 1947. In 1948 the Deutsche Optische Wochenschrift und Central-Zeitung für Optik und Mechanik re-established itself as Vol. 65, continuing the volume numbering where it had left off four years earlier! In 1952 the title was changed to Monatschrift für Feinmechanik und Optik, but the old serial numbering was continued as Vol. 69, through Vol. 80 in 1963. Beginning with the January 1964 issue the Monatschrift. . . split into two journals, Uhren und Schmuck and Augenoptik, with the latter inheriting the volume number 81 and the former presumably starting numerically anew. As stated in my opening sentence, the Augenoptik issues of the current year, 1976, are Vol. 93.

Surely it could have been serial numbering rather than the river that Tennyson was speaking for when he wrote, "For men may come and men may go, But I go on for ever."

Origins of Optometry

"The Evolution of the Ophthalmic Optics Practitioner" is the title of a three part article in the Optician (London), Vol. 168, nos. 4346, 4347, and 4348, Aug. 30 (pp. 4, 6, 8), Sept. 6 (pp. 4, 6) and Sept. 13 (pp. 15, 17, 22), 1974, by Mr. Montague Ruben, F.R.C.S. of Moorfield's Eye Hospital. It was originally delivered at the Glasgow College of Technology as the Champness Lecture organized by the "Spectacle Makers Company" (which I presume to be the Worshipful Company of Spectacle Makers).

A few passages will convey the interesting and delightful tenor of the paper, as follows:

"The earliest optical practitioners in this country were often monks and associated workers. The English monk Roger Bacon (1214-1292) was often associated in the 17th and 18th centuries with optician shop signs and trade sales cards in the same way as were Archimedes and Isaac Newton."

"From this time (the 15th century) the spectacle makers and opticians were associated with grocers, apothecaries, cordwainers, goldsmiths, barbers, surgeons, and all craftsmen held in high esteem by the community."

"By Act of Parliament in 1858 certified apothecaries became doctors."

"Adam (18th century), optician to the Prince of Wales and mathematical instrument maker to H.M. George III, was probably the first optician to write an authoritative scientific text on the eye, vision and its correction. It was, however, intended for the patient."

"... world astronomers call two stars of the Bear constellation Alcor and Mizor. But in Persia the star Alcor is called Saideh (test) because the angle subtended by the two stars is 11' 48" and could be used as a sight test. ... those able to give the correct answer were recruited for the army"

Cordwainers, incidentally, are shoemakers, but the above-mentioned Adam is new to me. Any helpful lead from a reader will be appreciated.

The Ursa Major acuity screening test impresses me as a bit incredible. Presumably the Persian army did its recruiting at night.

Isaac Heilprin, 1827-1900:

Isaac Heilprin prescribed glasses for Abraham Lincoln, Andrew Johnson, Rutherford B. Hayes, Chester A. Arthur, Robert Ingersoll, Bret Harte, Walt Whitman, James G. Blaine, Carl Sumner, Carl Schurz, Ambassador Bryce, S.P. Langley, Grace Greenwood, Simon Newcomb, Champ Clark, Senator Bayard, General Grant, McKinley, Senator Thurman, Grover Cleveland, Benjamin Harrison, Theodore Roosevelt, Tom Reed, Li Hung Chang, Taft, Bob Evans, Admiral Dewey, Admiral Peary, Justice Field, Admiral Schley, General Meade, General Sampson, Alexander Graham Bell, and many others of national and international fame.

This information is in an article by F. Romer entitled "When 'Opticians' Examined Eyes with Little Equipment" in the June 15, 1933, issue of the Optical Journal and Review of Optometry, Vol. 70, No. 12, pp. 58-61.

This 148 page issue, incidentally, commemorated a "Century of Progress," as did the famous Chicago Exposition the same year. More than a dozen historical articles, and even the advertisements, provide many details about our heritage.

The ophthalmoscope:

German ophthalmologists credit the invention and design of the reflex-free ophthalmoscope and several other clinical ophthalmological instruments to Walter Thorner (1874-1948). Memories of Dr. Thorner are recited in an article entitled "Erinnerungen an Walter Thorner" by T. Graff in Augenspiegel, Vol. 20, No. 10, Oct. 1974, pp. 468-476. In the December issue of the same journal, No. 12, p. 515, is a commentary on the article by H. Sachtleben entitled, "Nachtrag zu 'Erinnerungen an Walter Thorner'"

The History of Arising of Ophthalmoscopy is the translated title of an article by S.G. Magilnitsky in Oftal'mologicheskii Zhurnal, Vol. 29, No. 4, 1974, pp. 313-315. Sorry, I have not read it, nor do I expect to do so.

Phoropters:

"Zur Entwicklung des Phoropters" (on the development of the phoropter) by T. von Haugwitz and F. Mehlhose, appeared in the November 1974 issue of Augenspiegel, Vol. 20, No. 11, pp. 558-566.

About Carl Pulfrich (1858-1927):

In a two page "Historical note" authors Michael J. Morgan and Peter Thompson remind us that Pulfrich was not the first to describe the stereophenomenon that bears his name, that he never could observe it, as he was blind in one eye, and that his brilliant attempt to

apply the phenomenon in heterochromatic brightness matching is now generally regarded as erroneous. They also point out that Pulfrich did not take credit for discovering or seeing the effect, but that he did indeed research it thoroughly. The commentary is an addendum to the authors' article entitled "Apparent motion and the Pulfrich effect" in Perception, Vol. 4, No. 1, 1975, pp. 3-18.

Another article similarly entitled "Some Historical Notes on Carl Pulfrich" by Susan Christianson and H.W. Hofstetter appeared in the November 1972 issue of the American Journal of Optometry and Archives of American Academy of Optometry, Vol. 49, No. 11, pp. 944-947.

Leonardo da Vinci (1452-1519):

"LEONARDO DA VINCI, ophthalmic scientist" is the title of a series of four articles which appear in four successive issues of The Ophthalmic Optician, Vol. 16, Nos. 9-12, May 1, 15 & 29 and June 12, pp. 393-398, 447-452, 492-497, & 536-541. The personal interest of the author, Walter Gasson, in Leonardo's contributions has extended over many years. This paper is an attempt to identify those items which are related to visual science. It is a follow-up of the thesis entitled "Classical and medieval ophthalmic science" which the author completed in October, 1970.

Briefly reviewed:

Nordmann, Jean, "The Eye Department of the Medical School of the University of Strasbourg, 1919-1945," Survey of Ophthalmology, Vol. 19, No. 5, March/April, 1975, pp. 293-301. The author, chairman of the ophthalmology department from 1946 to 1969, reviews the post-armistice (1919) history of the department in relation to the personalities and achievements of his three predecessors, Camille Duverger from 1919 to 1924, Georges Weill from 1924 to 1937, and Edmond Redslob from 1937 to 1946. Recounting his own experiences as an interne under Duverger the author reports, "But before having contact with the in-patients and before being admitted to the operating room, one had first to learn during many long months how to prescribe a proper pair of glasses. In my case this period of purgatory was reduced to five months, since I had spent a year in general surgery prior to joining the Eye Department as an assistant."

Fraser, Ian C., "The Oxford Ophthalmological Congress," Survey of Ophthalmology, Vol. 19, No. 6, May/June, 1975, pp. 385-389. The annual congress started as an informal meeting in 1904, continued annually so, and was formally constituted in 1909.

Bangerter, Alfred, "Mein lieber Freund Curt Cüppers" (My dear friend Curt Cüppers), and Sevrin, G., "20 Jahre Freundschaft durch

die Amblyopie und den Strabismus" (a 20 year friendship through amblyopia and strabismus) are two successive articles on pages 153-155 and 155-157 respectively of Klinische Monatsblätter für Augenheilkunde und Augenärztliche Fortbildung, Vol. 167, No. 2, August, 1975, in recognition of the 65th birthday anniversary of Curt Cüppers of orthoptic and pleoptic fame.

Smith, William, "The genesis of orthoptics as a basis for procedure," Optical Journal and Review of Optometry, Vol. 112, No. 5, March 1, 1975, pages 11-14 & 16. This is essentially an account of the author's own career experiences in orthoptics. For example, "Orthoptics, as a separate training procedure, did not reach the optometry school curriculum until the end of the 1930's. 'Visual training' is even a later spin-off of this modality." Apparently Smith never read the widely used optometry school text of the beginning of the century, C.H. Brown's, "The Optician's Manual," Vol. 2, 1902, Philadelphia, or M.J. Revell's "Strabismus: A history of orthoptic techniques," British Optical Association, London, 1971. I recall well that when I was an optometry student in 1937 there were some old orthoptic instruments in the clinic which were already museum pieces.

To quote Smith further, "Paucity in citing sources of early investigations is one of the sins of which optometric writers are guilty. This applies not only to omitting biographical sources and references, but also to the depth to which it is carried out."

He cites no references.

Rentsch, Werner, "Augenlicht" (eyesight, or vision), Süddeutsche Optikerzeitung, Vol. 29, 1974, No. 3, March, pages 196, 198, & 200; No. 5, May, pages 348, 350, 351, & 354; No. 8, August, pages 562, 564, 566, & 567; No. 10, October, pages 736, 738, 740 & 744. This is another extensive historical series by Rentsch with emphasis on visual science. Many illustrations and references.

Wessing, A., "Filmaufnahmen vom Augenhintergrund und Fluoreszenz-angiographie. I. Historische Übersicht" (Cinematography of the ocular fundus and fluorescein angiography. I. Historical review) Albrecht von Graefes Archiv für Klinische und Experimentelle Ophthalmologie, Vol. 192, No. 3, 1974, pages 227-233. Deals with the young history of fundus cinematography from the early experiments reported by J.L. Pavia in 1933 to fluorescein-angiography with high speed cinematography. 44 references.

Storey, J.K., "The ophthalmic optician and his tonometer," Optician (London), Vol. 169, No. 4379, April 25, 1975, pages 4, 6, & 8. The author finds that ophthalmic optician H.B. Marton of Manchester used an aneroid tonometer in 1932, but infrequently. He names "Donders and Hamer (1853)" as having introduced an indentation tonometer. The article ends with, "to be continued," but I was unable to locate a continuation in about 25 subsequent issues, so I cannot cite a reference to the Donders and Hamer article.

Brailliant, J.P., "Un bicentenaire meconnu: l'extraction totale (an overlooked 200th anniversary: the total cataract extraction), Annales d'Oculistique, Vol. 208, No. 4, April 1975, pp. 297-300.

Roy, P.N., K.S. Mehra, and P.J. Deshpande, "Cataract surgery performed before 800 B.C.," British Journal of Ophthalmology, Vol. 59, No. 3, March 1975, page 171. "The general belief that the technique of cataract extraction in India in the Sushruta period (300 B.C.) was couching is no longer tenable. A study of the original text suggests that the method was more closely allied to the extracapsular extraction of recent times."

Sad but true:

Just how many people are there in this world who have even a passing interest in optometric history? The several of us who organized the Optometric Historical Society believed the number was small, but we could not be sure how small. Some of us already knew that articles of historical interest in optometric periodicals were not popular with the editors, who seemed to know that such articles were not popular with their readers. Those of us who had tried to nurture optometric museum collections and archives also were aware of the generally prevailing apathy among the professional practitioners. We who teach in optometry schools are aware that history courses rank well below foreign language courses and the other social sciences and the humanities as elective choices.

Nevertheless, within a few months after this Society was announced in a few optometric periodicals we acquired a membership of over a hundred. In the subsequent years this membership has not doubled, though the increasing representation from around the globe has been almost phenomenal. I like to believe that since our founding we have stimulated a higher frequency of historical articles in the various optometric periodicals and a greater concern for museum and archival collections of optometricana at numerous centers.

But is the rank-and-file optometrist showing any greater interest in his professional heritage?

Over the past few years a few of us have kept a supply of little blue slips of paper inviting "anyone interested" to join the Society. It reads as follows:

"Does optometry's history fascinate you? Would you like to get involved in discovering optometry's heritage? Does the O.H.S. Newsletter sound interesting? Do you wish the names and addresses of other optometric history buffs? Are there any other reasons you would like to join us?

"If so, this is your invitation. Anyone is eligible, and membership is only \$5.00 per year. Just send your name and address and a five dollar check to:

"THE OPTOMETRIC HISTORICAL SOCIETY
7000 Chippewa Street
St. Louis, Missouri, U.S.A. 63119"

An occasional handing of one of these invitations to a friend or colleague, or inserting one with a letter that happened to be going to a friend who could be interested, brought in an occasional new member. In my own experience I would guess that I obtained close to a 20% response. I presumed, of course, that most of the favorable responses were due to the personal touch of this technique.

Last April, however, I put the question to an impersonal kind of numerical test. A total of 500 copies of the invitation were printed on a brilliant orange colored paper and inserted with a monthly mailing of memoranda, news items, and communiques from the headquarters of the Indiana Optometric Association to all of its members. It was the only orange colored sheet in the 12 sheet packet. These packets are perused quite carefully, we know, as many of the enclosed items are often of critical importance to the individual optometrist.

The response?

During the subsequent two and a half months the total number of new members obtained from this mailing was one. Not two, not 10, not 100. Only one.

This means that we still have "a long row to hoe."

I do not believe we want to ask people to join out of courtesy or as a favor. What we want is a genuine interest in optometry's heritage and history. It was Santayana (1863-1952) who said, "Those who cannot remember the past are condemned to repeat it." Within the span of my own career I have observed several such self-condemnations by the optometry profession.

Must it always be so?

H.W. Hofstetter, Editor