word count: 11.417

History Notes re: X-ray, Spinography, Roentgenology, Radiology, etc.

Joseph C. Keating, Jr., Ph.D. 1350 W. Lambert Rd., Apt. 110, La Habra CA 90631 USA (562) 690-6499 filename: X-ray 98/05/31 Color Code:
Red & Magenta: questionable or uncertain information

Green: for emphasis

Sources:

Michael A. Giammarino, D.C.; 519 E. Lincoln Highway, Coatesville PA 19320-3413

1910: BJ introduces x-ray at PSC, Loban forms the Universal Chiropractic College (Gielow, 1981, p. 121)

1910 (Mar): *The Chiropractor* [6(3)] includes: -ad for "SPINOGRAPHY" (p. 127):

The **U.C.A.** wil hold its 1910 convention September 4th to 10th. One of the real treats instore for you, and whichis even now being arranged, is spinographical lectures (stereopticon and otherwise) and spinographical demonstrations. To the Chiropractic profession, it is a much discussed question as to whether there is or is not a scientific value in purchasing an outfit and learning how to use it.

"Dr. B.J." has installed in **The P.S.C.** the finest equipment possible. More money could not get better. His negatives are being made up into lantern slides weekly. Lectures will be delivered at the convention proving subluxations, bent processes, etc.

To all Chiropretors inclined to desire to put in an outfit, special classes will be formed and lectures given on the mechanism and how to use it. Thus you can start in right. No charges will be made for these lectures. Cuts will appear from time to time, between now an then, in the pages of **The Chiropractor**.

Spinography (skiagraphs of the spine) have been little worked out. It is an art for which medical men have had little use. Its technique remained practically unsolved until our Dr. B.J. got hold of it. Even now, altho only installed two months ago, several authorities have visited **The P.S.C.** and examined our negatives and call them "masterpieces." Of this we can be modestly proud. We propose to lay wide to **The U.C.A.** convention al this research and give you the benefit of it. One day will be set aside, the machine transported to the convention hall and be in working order, negatives made, developed, shown, etc.

Learn spinography of one who has developed its scientific qualities. We are endorsing the value of this work and as time proceeds we will endorse it more, therefore, if **The P.S.C.** can endorse this for our clinical value, you can do the same providing your business and its finance permits. It is an expensive adjunct and no Chiropractor **must** have it, but it is well if you can. It never does harm to know something about this work even tho you cannot afford to buy one. This is one of the new attractions offered for this year.

1916 (July 15): *FHN*[A.C. 21][5(22):2] notes: IT SPEAKS FOR ITSELF

On May 1st, we announced that the spinographic and X-ray work had been divorced from the regular P.S.C. courses. It will continue to be supplied to all students who enrolled BEFORE May 1st, 1916.

AFTER May 1st, this course was a separate one and cost \$25. At that time we enrolled 5 students, viz: Drs. Markwell, Lyman, Post, Buck and Mrs.. Thomas.

The \$25 rate continued until July 1st, at which time it was raised to \$50.00. To take advantage of the raise some 55 students enrolled at the \$25 rate, thus saving \$25.

Those who enrolled previous to July 1st, 1916 are:-

- 1. A.J. Larson, Ludington, Mich.
- 2. Ruth Ashworth, P.S.C.....
- 8. Carl S. Cleveland, P.S.C.....
- 43. Warren Sausser, P.S.C....

1917 (May 26) Fountain Head News [A.C. 22; 6(37)]: 6

BARGAIN DAY IN CALIFORNIA

LOS ANGELES CHIROPRACTIC COLLEGE. The curriculum includes X-ray, anatomy, physiology, diagnosis, urine analysis, histology, chemistry, bacteriology, geneology, pathology, toxicology, hygiene, minor surgery, obstetrics, medical, Spanish, chiropractic technique. Ten teachers, day and evening classes. Clinic and private treatments. Dr. **CHARLES A CALE**, President, 931 S. Hill Street. Classes and treatments from 8 a.m. to 10 p.m. Our regular \$300, 2,400 hour course, is now given for \$125, payable \$1 down and \$1 a week. Forty-one students now attending. the tuition price will positively be increased to \$130 May 1. The present Legislature is practically certain to legalize chiropractic. Enroll now and be ready. -- **Los Angeles Examiner.**'

The ad is sent us with this remark: 'The legislature slipped up on this so I presume the fee will be \$1.05 down and \$1.05 a week.'

Come when you please, stop when you like. Your credit is good. No wonder only 'Forty-one students now attending' when the possibilities could be for four hundred and forty-one

Cheap methods, cheap business. You are just what you are. You place the valuation and others follow your lead. No wonder **THE PSC** away over in Iowa pulls more students per year, from California, than the schools in California have themselves.

1917 (Sept 8) Fountain Head News [A.C. 22; 6(51-52)]: 24

Dr. James F. McGinnis, wife and twins, Leola and Neolo, of Maquoketa, were here until the close of the lyceum. They were accompanied by Mr. and Mrs. Josiah Walker, of Maquoketa. Dr. McGinnis was at one time in charge of clinics and spinography in the P.S.C., is a past president of the Iowa Chiropractors' Association and is at present secretary of the Eastern Iowa Chiropractors' Association and is well known to many Chiropractors of the country.

1918 (Jan 19) Fountain Head News [A.C. 23][7(19)]: 11 notes WS Putnam DC graduates from PSC's spinography course; Putnam will lead serve as president of the Minnesota ACA; see Chiro J(NCA) for 1935 (Dec)

1918 (Apr 6) *Fountain Head News* [A.C. 23]; 7(30)] notes: -(p. 15):

After an absence of 7 months, during which time he has been in practice in Ogden, Utah, Dr. Ernest A. Thompson resumes his place in the PSC faculty April 1 as director of the spinograph department.

Dr. Warren L. Sausser has been in charge of the department since Dr. Thompson went to Ogden and has rendered efficient service. He retires to enlist in the service of Uncle Sam, and leaves after a short stay at his former home, Reading, Pa., to take a special x-ray course in the roentgenology department of the Army Medical School at Washington, D.C., preparatory to duty in France.

1918 (July 13) *Fountain Head News* [A.C. 23][7(44)]: 2, 5 OUR BOYS GO MARCHING ON

More **PSC** students have joined the colors, and there qre quite a number more on the verge of going, some of whom have only a few days or weeks left of their course and hang on in the hopes of getting through if possible before entering upon war duties, so that they may take their diplomas with them when they leave.

Charles B Klopp of Lead SD had only a few weeks left when he left for Camp Greenleaf, Ft. Ogelthorpe, GA for X-ray service.

CS Kramer of Cedar Rapids IA, member of the Senior class, also goes to Camp Greenleaf for X-ray service.

CHIROPRACTORS IN CAMP

Students at THE PSC who recently answered the war call have been assigned to do camp duty as follows:

HE Welch of Columbus NE, to Camp Greenleaf GA, in X-Ray dental company No. 1. (p. 5)

1920 (Sept): *The Drugless Physician* (1[9]:32), published by the **American Association of United Drugless Physicians**, headquartered at Spokane, Washington, publishes ad for:

LOS ANGELES COLLEGE OF CHIROPRACTIC

Dr. Charles A. Cale, D.C., N.D., President,

Los Angeles, Calif.

Regular \$300 2400-hour or 3200-hour course now given at reduced rates. All drugless methods taught, including hydrotherapy, electrotherapy, massage, dietetics, spondylotherapy and X-ray. Competent faculty. Large clinic. Day and evening classes.

1921 (June): according to the **PSC**'s *The Chiropractor & Clinical Journal* (1921[June]; 17[6]):

-Lavenia S. Tracy DC at 656 14th St, Oakland advertises as "the oldest licensed resident graduate of the Palmer School of Chiropractic on the Pacific Coast (1906)" although her Palmer schooling involved a post-grad and x-ray course in 1920 (p. 66)

1921: Chirogram, then the yearbook of ECC, includes:

-advertisement for **Edwin C. Fortin**, "Expert **Spinographer**, No Adjusting", located at 815 Wright & Callendar Bldg (p. 27)

1922 (pre-Nov): **LACC**'s "1922-1923 Announcement, Eleventh Year"; school is at 931 South Hill St, LA (LACC, 1922-23/SFCR Archives); **photos** of faculty and administrators; **photo** of college community "in front of the college on November 21, 1921"; no change in administration since 1921-22 *Announcement*; <u>faculty include</u>:

-John W. **Koer** AB, DC, PhC, "Instructor in Hygiene and X-ray" -Manley R. Gamage DC, PhC, "Roentgenologist"

1922 (May 1): **E. Franklin Johnson MD**, DC, Registrar of **ECC** signs notarized declaration that "on December 20, 1921, **Wilma Churchill** completed our regular three year course of thirty six hundred hours of study and has attended the required number of lectures, laboratory demonstrations, clinic work..."; **Charles H. Wood** DC PhC is president, **Lula B. Wood** DC is sec'y, **ME Eldridge** DC is **Editor** College Magazine [?probably the **Chirogram?**]; logo reads "A College Teaching A Standard Course in Chiropractic"; subjects include: "anatomy, physiology, bacteriology, histology, embryology, hygiene and sanitation, chemistry, toxicology, medical and physical diagnosis, symptomatology, Chiropractic technique, Chiropractic Philosophy, spinography, pathology, gynecology, obstetrics, dermatology, pediatrics, urinalysis, nerve-tracing, minor surgery and **X-ray**" (LACC Registrar's Archives)

PHOTOGRAPH



Perl B. Griffin, D.C., co-founder with Carl and Ruth Cleveland of the Central Chiropractic College of Kansas City on December 23, 1922 (C.S. Cleveland, D.C. is Griffin's brother-in-law)

1922 (Dec): **The Recoil** (official organ of Standard School of Chiropractic in NYC) [2(12)] notes:

 -Warren L Sausser authors "Spinography - One of It's Neglected Fundamentals" (p. 3)

-ad for Sausser's "Metropolitan X-Ray Laboratory" (p. 8)

1923 (Jan): *The NYS Journal of Chiropractic* notes: -ad for Sausser's "Metropolitan X-Ray Laboratory" (p. 17)

1923 (Jan 6): PB Griffin writes to prospective student on letterhead of "Central Chiropractic College", address is "436 Prospect Avenue, Down Town Headquarters 403 Lillis Building, Kansas City MO"; states charter from state of MO was granted on 12/28/1922; "standard course" includes x-ray; also dissection, "Palmer Method Chiropractic out of Palmer Text Books", notes that all faculty are PSC grads; day & night courses (Cleveland papers, CCC/KC)

1923?: "Announcement, Central Chiropractic College, Chartered by the State of Missouri, 436 Prospect Avenue, Kansas City, MO"; offers DC degree, PhC ("to those who display exceptional knowledge", and "Master of Spinography" certificate for x-ray course; "WE ARE THE ONLY COLLEGE IN KANSAS CITY" ?(see 1924-25: Mo-Kan College)?; most texts used are authored by PSC faculty (Palmer, Vedder, Firth, Craven, Burich), and books cost \$40-60; officers are: CS-president, PB Griffin-Dean, RR Cleveland-Sec'y-Treasurer; faculty are (Cleveland papers, CCC/KC):

-CS Cleveland DC: symptomatology, orthopedy & chiro analysis

-PB Griffin DC: physiology, histology & technique

 -Ruth R. Cleveland DC: anatomy, gynecology, palpation & nerve tracing

-AE Miller DC: chiropractic philosophy

-RC Jackson DC: x-ray & spinography

Tuition costs are \$360 for day course, \$450 for evening course, \$50 for Spinography course; man and wife can both take course for \$100 more than single tuition

PHOTOGRAPH



Rose Ruth (Ashworth) Cleveland, D.C., circa 1940?



Carl S. Cleveland, Sr., D.C., circa 1920

1923 (Dec); *Chirogram* [2(3)] reports:

-"The Course at the **Eclectic College of Chiropractic (ECC)**:

"The following is the course of study presented at the **Eclectic**, the 'hour' being the classical forty-five minute period:-

Subject	Hours
Anatomy (lectures)	
Anatomy (dissection)	
Physiology	
Pathology	200
Histology	100
Elem. Chem. and Toxicology	
Bacteriology	
Diagnosis	400
Chiropractic Theory and Practice	700
Hygiene and Sanitation	
Obstetrics and Gynecology	100
Urinalysis	100
X-ray	
Minor Surgery	100
Dermatology and Pediatrics	100
HA LUIS I I I I I I I I	

"An additional study has recently been added in a special course in the Physiology of Digestion and Food Values. Dr. Geo. E. Crowie, a practitioner with years of experience, is presenting the work." (p. 1)

-notes Frank **Pyott**, **PSC** grad, is managing the x-ray department (p. 3) and has organized a technique department at the **ECC** (p. 4)

1923: Announcement of the Golden State College of Chiropractic (Palmer/Davenport Archives) indicates: "Incorporated and Chartered by the State of California, Authorized Capital Stock, \$250,000; Building of Schools and Colleges, 625 South Hope Street, Los Angeles"

- -Announcement indicates school is a "the class 'A' Chiropractic College of the West" (p 1), a straight chiropractic college teaching only **Palmer System Chiropractic**
- -administration and faculty include (photos of each):
- -Dr. E.C. **Fortin**, Dean and Treas., Dept of Embryology, **Spinography**, Obstetrics





Earnest A. Thompson, D.C. (PSC '14), from second (1919) edition of Thompson's green book, *Chiropractic Spinography*

PHOTOGRAPH



Earnest A. Thompson, D.C. (PSC '14), from later (1923) edition of Thompson's green book, *Chiropractic Spinography*

1924: *Eclectograph* is yearbook of merged ECC and LACC, includes:

- -photos of the faculty (pp. 6-9), x-ray labs, free clinic (p. 14), graduates, junior and senior classes
- 1924 (June); Golden State Chiropractic Message (2[4]), published by the GSCC, includes:
- -"Chiropractic Ethics" by **CE Parsons**, DC, PhC (p. 1)
- -notes **EC Fortin** MD, DO, DC is now "President and Dean of the Faculty" (p. 8)
- -lists "Dr. **EC Fortin** as "**Spinographer**" located at 523 Loew's State Bldg (p. 8)
- -GSCC located at 1713 So. Flower Stree, Los Angeles (p. 15)

1924 (Aug): The Chiropractor [20(8)] notes:

- Warren L Sausser DC, PhC is VP of Universal Spinographic Society, authors article re: standardization of spinographic/x-ray procedures and spinal listings (pp. 44-6)
- 1924 (Aug 2): Fountain Head News [13(24-B):7] reports that Dossa D. ("D.D.") Evins, on behalf of "The Palmer School of Chiropractic," threatens to sue "J.W. Healey X-RAY COMPANY, representing Wm. Meyer X-Ray Company, Davenport, Iowa" for infringing on the PSC's yet to be issued patent rights to the NCM: "...These applications will shortly issue as patents and....we will proceed against you, as soon as our patents issue,....we shall bring actions against purchasers from you to enjoin them from using infringing devices bought from you..."
- 1924 (Sept 6): **FHN**[A.C. 30]; 14(1)] notes:
- -Neurocalometer & Spinographic Society formed; no mention of Sausser-not listed with officers (p. 12)
- 1924 (Aug 16): Fountain Head News [13(26)] notes:
- -CE Parsons DC, PhC of LA will speak at PSC Lyceum/UCA convention re: "Adjusting from Spinographs Exclusively" (p. 13)
- -Arthur W. Schwietert DC will speak at PSC Lyceum/UCA convention re: "The Universal Spinographic Society" (p. 13)
- 1924 (Aug 30): letter to CS Cleveland from JW Healey DC, president of JW Healey X-ray Company at 529 Brady St, Davenport IA, indicates consignment installation of x-ray machine is not possible; Healey is **PSC** grad; BE Healey DC is sec'y-treasurer of company (Cleveland papers, CCC/KC)
- 1924 (Aug/Sept); Golden State Chiropractic Message (2[5]), published by the GSCC, includes:
- -ad for "Neuropyrometer....manufactured by Wm. Meyer X-ray Company of Chicago," offered by EC Fortin DC, "exclusive Pacific Coast Representative" at 523 Loew's State Building, Los Angeles (inside front cover)
- -group photo of "Faculty and Student Body of the **Golden State**College of Chiropractic" (p. 1)
- -administration and faculty include (pp. 2-5):
- -DR. E.C. **FORTIN**, President and Dean, Dept. of Obstetrics, Gynecology and **Spinography**(photo)
- -EC Fortin authors "The Neurocalometer," notes that GSCC has adopted the Neuropyrometer, manufactured by the Wm. Meyer X-ray Company of Chicago, because BJ Palmer retains rights to teach and lease Neurocalometer exclusively for PSC students and grads (p 7)
- 1924 (Sept 6): FHN [14(1)] notes:
- -newly amalgamated Neurocalometer and Spinographic Society International includes on Board of Directors: Arthur W.
 Schwietert of Sioux Falls SD, Frank O. Logic DC of Iron

- Mountain MI and **J. Ralph John** DC of Baltimore, all of whom will later be active in the **NCA** (p. 12)
- 1924 (Oct 11): *FHN* [14(4):10] notes that Warren L. Sausser, D.C. (who will later report the first 14X36 full-spine, weight-bearing X-rays) writes letter to BJ on 9/6/24; Sausser reports on the "amalgamation of the Neurocalometer and Spinographic Societies"
- 1924 (Nov 8): **FHN** [14(7):13] publishes "Sample Letter for Neurocalometer Users Only":

Medical doctors have said, 'DEMONSTRATE to us your theory that subluxations in the spine casue PRESSURE upon nerves, and that by replacing those subluxated vertebrae to normal positions, you release pressure upon nerves, and we will believe.' They said it couldn't be done - and time only seemed to prove them right as far as actually demonstrating the fact. The only demonstration we could offer was that people got well when we replaced the subluxation, but we could not actually demonstrate that we released pressure upon the nerves.

But two men never gave up the fight. After 20 years of intensive research work, Dr. Palmer has perfected an instrument which DOES prove the above point - and goes way on beyond that. It proved so many things that it was no wonder that small group of chiropractors were enthusiastic.

It proves pressure upon nerves. It proves the exact spot where that pressure is. It measures the exact degree of pressure at that point. AND - it does more. It checks immediately after an adjustment whether a proper adjustment was given, by registering whether the pressure was removed fromt he nerves.

Can you see what that means?....

Experimental work on approximately a thousand cases had proven there are many subluxations in the spine which the X-Ray does not locate, causing pressure upon nerves. This instrument locates them. Experimental work also shows that by using the instrument as a check, results can be obtained in from one-fourth to on-half the time now necessary under the present method. In other words, should it take 100 adjustments to get a case well now, it would take only from 25 to 50 to get the same case well using the new NEUROCALOMETER

1924 (Nov 22): Fountain Head News [14(9)] notes:

-(p. 2):

In the past we have taken it all for granted that when we gave an 'adjustment,' that 'if the bone cracked,' or 'it moved,' then the pressure WAS removed. We have believed that when we 'adjusted' it based on PALPATION OR THE SPINOGRAPH, that that automatically released the pressure upon the nerves, restored the flow, and the patient SHOULD AND WOULD get well. BUT ;when he didn't, we were up the stump. The Neurocalometer has proven to us that thousands of 'subluxations' have been 'adjusted' for weeks and months and no pressures were released, nor were interferences removed, nor were transmissions restored. We were just 'cracking backs' or 'moving bones.' The Neurocalometer is CHECKING CHIROPRACTORS ON THIS HIT-AND-MISS SYSTEM.

-BJ Palmer notes reaction to neurocalometer: (p. 3)

TIMES CHANGE MEN

How well and vividly do I remember, a few years back, when the X-ray was introduced to detect the correct POSITION of vertebrae, both normal and abnormal, in alignment and in subluxations.

The field split on the question. A few saw its value and began to take it up at once. Some of THE FIELD held off and waited "to see." Today - some 13 years later - it is an accepted form of technique by the entire field. Few chiropractors but what are for it.

The schools split. On one side - THE **PSC**. On the other side - ALL OTHER schools. **Loban** became bitterly opposed, and wrote much against this 'form of mixing.' **Forster** wrote much and said much more against its use. Other schools took much the same attitude, all trying to stem the tide of the new movement, not

because the movement was wrong, BUT BECAUSE ONE **B.J. PALMER** ADVOCATED IT. Today - some 13 years later - **Loban**writes for **Spinography**, teaches it, uses it, advocates it. Today some 13 years later - **Forster** puts it first in value to detect
subluxations.

Now comes the **Neurocalometer** idea. **Loban** is neither for nor forninst, he is riding both waves, ready to jump either way that proves to be the most popular. **Forster** will come too on this the same as they did on **Spinography**. They move upward only as the field forces them to come in.

Times certainly do change men, but with some it takes a long, long time!

1925 (Apr/May): **Bulletin of the ACA** [2(3-4)] notes:

-Editor notes LA Nash DC's training (p. 11):

LA Nash DC, graduated from the Palmer School of Chiropractic in 1914 and practiced his profession in Carthage NY up to the entrance of the United States into the World War when he enlisted in the Medical Department of the United States Army.

After a thorough training in X-ray technic in the Army Medical School, and Laboratory training courses in two hospitals, Dr Nash was placed in charge of the X-ray Laboratory in one of the army's largest general hospitals and continued in this capacity throughout the war.

Dr Nash's experience included every known phase of X-ray work. He acted as X-ray technician for many of the leading Roentgenologists of the United States.

After completing active Army service Dr Nash attended the National Post-Graduate School at Chicago and is now in charge of a Chiropractic X-ray Laboratory in Syracuse NY...

1925 (July-Aug): Bulletin of the ACA [2(6-7)] notes:

-reprinted from the *Davenport Daily Times*, Tuesday, July 28, 1925, a report that **EA Thompson** DC, **PSC** faculty member will resign effective October 1, 1925 to operate X-ray laboratory in Baltimore (p. 15)

1925 (Sept): Bulletin of the ACA [2(8)] notes:

-LA Nash DC authors "X-ray Reminiscences" (pp. 8-9)

1925 (Oct/Nov): Bulletin of the ACA [2(9-10)] notes:

-EA Thompson DC "is now conducting an X-ray Laboratory in the city of Baltimore" (p. 9)

1926 (Jan 12): Opinion of Judge in trial of **Warren L Sausser** DC vs. Department of Health of the City of New York (National College Special Collections; in my X-ray folder)

1927: according to Arthur V. Nilsson, D.C. (1975):

In 1927 when I joined the College I found it fully serviceable in all respects. It was then privately owned and consisted of a sturdy threestory frame building on Venice Boulevard. A large auditorium occupied the top floor while the second floor contained a dissection laboratory and a number of smaller clinic suites. The X-ray Laboratory, Chemical Laboratory, class rooms, stock rooms, and the main office were all on the first floor. In fact, it was built specifically to serve and fulfill the needs of a Chiropractic College as they then existed. Upon my graduation in 1929, I was invited to join the Faculty. That was the beginning of a long and happy association with our College.

1928 (May 26): JAMA [90(21):1733-8] notes:

LOS ANGELES COLLEGE OF CHIROPRACTIC

(Inspected, Oct. 5, 1927)

This school is located at 918 West Venice Boulevard (West Sixteenth Street). It began in December, 1924, with the amalgamation of three schools: the **Golden State College of Chiropractic**, the **Eclectic College of Chiropractic**, and a small, struggling Los Angeles chiropractic college

conducted for years by Charles A. Cale but seemingly taken over by his wife, Linnie A. Cale, at the time of their separation; Linnie A. Cale is now dean of the **Los Angeles College of Chiropractic**, and Charles A. is running a school bearing his own name.

Building. - The schools owns a three-story building, all of which it occupies. Space is ample, but the arrangement is poor. The mentgenray department is given the most conspicuous place, on the first floor. Dr. CH Wood, the president, has his private offices in the front rooms of the second floor; all of his equipment, however, is used by the school. The assembly hall is on the third floor.

Equipment. - This is the best equipped chiropractic school that the inspector has seen. There were said to be forty new adjusting tables, and several of these were seen. There were said to be twenty therapeutic lights, four of which were of the large Fischer type. Four Morse wave generators were mentioned. There were patients in almost every booth, and to insist on seeing this apparatus would have been embarrassing. However, it is the policy of the president to sell all old apparatus about every two years and purchase new. He probably acts as advertising agent for the manufacturers and purchases at a very low cost. The statement is made that about \$11,000 worth of new equipment has been purchased within the past ten months, and the statement may not be grossly exaggerated. A new \$85 adjusting table was given as a premium to every new student enrolling this summer; this was done as a "substitute for a cut in tuition," but such a measure, together with the rapid change of its physical therapy apparatus, makes the school an agency for the sale of equipment - an objectionable feature in spite of the fact that it provides better equipment for the use of the students. There were said to be eight microscopes. The chemistry laboratory was small and meagerly equipped. The school offers a 'course' in 'urinalysis.'

Faculty. - There are eight teachers, one of whom (the dean) is an osteopath; the others claim only chiropractic education.

Students. - The present enrollment is said to be 225. One hundred of these are in the night class. The graduates last year numbered ninety. The year before there were 115.

Requirements. - The state law demands of chiropractors petitioning for examination a high school diploma or its equivalent. The state's field agent, to whom the inspector talked, asserts that Dr. Winters, who grants the qualifying certificates, is a graduate of the Los Angeles College of Chiropractic. It was learned in San Francisco that the students in the **Berkeley Chiropractic College** send applications not to San Francisco but to Los Angeles , because it is much easier to get qualifying certificates from Los Angeles.

Course. - The time required for the day course is eighteen months and for the evening course is thirty-six months. The schedule includes 3,600 hours - probably forty-five minute periods. Of this time, 200 hours are said to be given to dissection, and 100 each to roentgen-ray and minor surgery. Obstetrics and pediatrics are also taught, but all courses are included under the name of chiropractic, this being an all-inclusive name in California. The tuition is \$750 cash or \$850 in time payments; this price includes at present an \$85 adjusting table as a premium. (Schools, 1928)

1928 (July): Chirogram:

-Harold H. **Reuss**, Roentgenologist at the LA **X-ray** and Pathological Laboratories, publishes first of many articles in **The Chirogram** (p. 5)

1928 (Aug): Chirogram reports:

 -Harold H. Ruess DC, "Roentgenologist of the LA X-ray Pathological Laboratory" authors second article in series, entitled "Roentgenological studies" (p. 5)

1928: Clyde F. Gillett DC, PhC copyrights A Manual of the Eye, Ear, Nose and Throat, published by Kohnke Printing Company of San Francisco (available in WSCC library); title page indicates that Gillett is a "Graduate of the Palmer School of Chiropractic and

-"New Research Chairman: Dr. CW Weiant Succeeds the Late Dr.

Professor of Diagnosis in the **San Francisco College of Chiropractors** and **Drugless Physicians**, Special Lecturer on Iridiagnosis and Medical Jurisprudence at the **International School of Professional Arts** and **Sciences**"; acknowledgements include Byron L. Black DC, James R. Alberts DC, Gordon G. King DC of the **San Francisco X-rayLaboratory**, Clarence G. Burt DC, ND of the **International School of Professional Arts and Sciences**, Claude L. Houck DC, Charles J. Martin DC, anatomist, Glen J. Sipes DC, OD, ND, Ray S. LaBarre DC, PhC, **Leo W. Hosford** DC, PhC of the **San Francisco College of Chiropractors and Drugless Physicians**, who provided cadavers, and H.A. Houde DC, ND (pp 1-4)

1929 (Feb): Chirogram.

-Charles H. Wood DC publishes "Chiropractic philosophy":

"In the first place, **'chiropractic philosophy'** should be called **'chiropractic theory**,' because it is based upon a theory and only a theory, just like the medical man bases his philosophy in the practice of medicine upon the germ theory. All theories as to the cause and cure of disease must depend upon clinical evidence offered by the treatment of a great number of patients who are afflicted with sickness..." (p. 1)

-"Chiropractic Legal Notices" reports that (p. 2):

The case of Dr. **Hugh Benedict Logan** of Loew's State Bldg., Los Angeles, was first taken up and it was alleged that Dr. Logan, a resident of the City of Los Angeles, State of California, and a practicing Chiropractor, located here, obtained a license from the Nevada Board and then reciprocated back to California...

Dr. Edwin Celestine **Fortin**, proprietor of the Associated Pathological and **X-ray** Laboratories located in the Loew's State Bldg., in Los Angeles, was tried on the grounds of fraud and deception in apply for his California Chiropractic license, in that it was alleged that he had obtained his Chiropractic credentials from the Palmer School of Chiropractic fraudulently, by gaining advanced standing in the class work through representations that he was a Doctor of Osteopathy and a Doctor of Medicine. Evidence was introduced that there was a discrepancy in the statements of professional education sworn to in the application for licensure offered to the Medical Board in Colorado, the Osteopathic Board in California and the Chiropractic Board in California, and evidence showing Dr. Fortin's sworn statements of his professional education and his period of practice in California since his advent here in 1919...

The Board met in an Executive session on January 24, and after reviewing the volumunous evidence introduced, decided to revoke the licenses of Drs. Fortin, Logan and Eckhard.

1929 (Mar): *Chirogram* reports:

- -"Revised and additional rules and method of procedure of the Board of Chiropractic Examiners of the State of California" (p. 1)
- -CH Wood notes (p. 2) that new BCE rules require schools to purchase equipment to teach chemistry, bacteriology, pathology, x-ray and anatomy; Wood approves

1929 (Aug 1): Bulletin of the ACA [6(4)] notes:

-educational speakers include: James R Drain, CW Weiant on "Visual Nerve Tracing," HE Vedder on "Chest Examination," LM Tobison on "Laboratory Analysis" (National College of Chiropractic), Robert Ramsay on "Proper Application of the Stethoscope and Sphygmomanometer" (Minn Chiro College), CM Kightlinger on "Care of the Spine in Children," EA Thompson of Baltimore on "Use of the X-ray," LJ Steinbach of UCC on "Universal Methods of Examination of the Spine for Defects of Balance and Subluxations," Major Dent Atkinson of the Columbia Chiropractic Institute of NY on "Cervical Subluxations Never Produce Cord Pressure," and Frank Dean of Columbia Institute

JN Monroe to Head Important Bureau"; notes Weiant (p. 5):
....studied chemical engineering at Rensselaer Polytechnic Institute,
Troy, NY, 1915-18, as holder of Rensselaer and New York State
Scholarships. Thesis awarded the Laflin Prize for highest literary
merit in 1918. In the fall of 1918 Dr. Weiant was a member of the
Chemical Warfare Division of Students' Army Training Corps,
stationed at Cornell University, at that time taking special work in
physical and organic chemistry and in chemical microscopy. In 1919
he was Science teacher at Westchester Military Academy, Peekskill,
New York. Graduated in 1921 from the Palmer School of Chiropractic, and

received his Ph.C. degree from the **Texas Chiropractic College** in 1922. He was professor of Chemistry and Gynecology in the **Texas Chiropractic College** for serveral years up to 1925. Dr. **Weiant** practiced Chiropractic in Mexico in 1925 and 1926, during which time he adjusted President Calles. He lectured at the Mexican School of Chiropractic, Mexico City, during the summer of 1925, and attended physiology lectures of Gley (discoverer of parathyroid glands) given at the University of Mexico.

Dr. Weiant has since January, 1927, been Professor of Chemistry and Physiology at the Eastern Chiropractic Institute. He has had one year's practical experience in spinography at the Eastern X-ray Laboratory, Newark, NJ. He is Chemist and co-founder of the Eastern Chemical Laboratory, which, since 1927, has made over 4,000 urine analyses with Chiropractic interpretation. Dr. Weiant is co-inventor with Philip O. Gravelle, fellow of the Royal Microscopical Society, of the Analyte, an apparatus for the study of hyperemia associated with subluxations. He is the author of a number of scientific Chiropractic articles, including the 'Verdict of Science.' He was formerly editor of The Chiropractic Digest. He is a contributor to The Mexican Magazine; a member of the New York Microscopical Society, a charter member of the American Spinographic Society, an official lecturer for the New York State Chiropractic Society in its winter education program...

- The Chiropractic Digest is published by TCC

1930 (Jan/"N.D.J."): Chirogram reports:

-Advertisement from Radium Appliance Company, 350 Bradbury Bldg, LA for "Modified Radio-Activity as a Supplement to Chiropractic Treatments:

Modified radio-activity provides a force that is entirely different in its effect from the action of pure Radium in its usual form.

As emanated from Degnen's Radio-Active Solar Pad it affords a continual, beneficial 24-hour effect, being worn on the back by day and over the stomach at night. This element of continuity is responsible for a great part of the success of this pad. And it truly supplements your office treatments because being worn between visits to your office it helps the patient to respond more quickly to your corrective efforts.

An increase in blood cells and their hemoglobin content is quickly noted, together with a prompt normalizing of blood pressure. There is a beneficial effect on the circulation, an enlivening of every part and organ of the system, which enables nature to perform its healing, eliminative, recuperative and rebuilding processes.

In thirteen years we have sold over 150,000 of these pads, most of them to people who had tried other methods without success, and all on a trial basis providing for refund in full if satisfactory benefit is not received. Thousands of unsolicited testimonials tell of restored health.

Our standard pad and the one which has in the main made this wonderful record sells for \$27.50. Others, providing a stronger degree of radio-activity, at \$50, \$100, \$250, \$500, and \$1000, the last three being sold only through doctors of any recognized school. Discount courtesies to the profession.

We would welcome the opportunity of explaining fully our manufacturing technique to any Chiropractor, and to show some of our records of apparently marvelous recoveries. We are sure we have an adjuct to any method of healing that should not be ignored by the practitioner. (p. 3)

 -Harold H. Reuss DC authors "Roentgenological studies: Colon diverticula" (p. 6)

1930 (Apr): Chirogram (Vol. 6, No. 4) notes that:

-Los Angeles X-Ray & Pathological Laboratories at 918.5 Venice Blvd, LA are "Under new ownership and management"; Dr. CJ Joynt, Roentgenologist and Dr. Harold HU Cross, Pathologist are listed (p. 11)

1930 (Apr 1): Bulletin of the ACA [7(2)] notes:

-EA Thompson DC authors "Spinographically Speaking"; discusses the American Spinographic Society "was formed two years ago by a group of chiropractors along the Atlantic Seaboard"; Thompson is president, CM Kightlinger is VP (p. 8)

1930 (Dec): *Chirogram* (Vol. 6, No. 10):

- -George N. Adelman DC publishes article on "Visual Nerve Tracing" (p. 14)
- -"The **Los Angeles College of Chiropractic** was honored recently by having its newly appointed Dean of Physiotherapy (Dr. Cross) invited to attend the Pacific Conference of the Psychology Foundation, whose headquarters are in Brussels, Belgium" (p. 16); Harold U Cross claims PhD in "Electro-Raciology Certificate Faculty of Medicine, University of Paris (see *Chirogram* 1931 (June); 7(4):7)

1931 (Dec); *CCA Bulletin* (1[3]) includes:

-notes law suit (p. 3):

Mr. George G. Rinier, Chief Counsel for the Chiropractic Health Bureau, recently defending the 'Martyn X-Ray Chiropractors' in a malpractice case. Mr. Tom Morris, Attorney; of Los Angeles, served as local counsel in the trial of the case which was continued into December.

1932 (Apr); *CCA Bulletin* (1[6]) reports:

-reports "X-ray For Ratledge" (p. 5):

The **Ratledge Chiropractic College** has announced the opening of a new X-ray laboratory in connection with the institution. The most up-to-date full-spine equipment has been installed and the school expects to do **Spinograph** work for the Chiropractors of the district.

LH McLellan DC, a graduate of the ${\bf Palmer\,School\,of\,Chiropractic}$, is in charge of the department.

Dr. McLellan, who only recently arrived in California, is a dynamic and outstanding figure in the field of X-Ray and **Spinography**. His enthusiasm is contagious.

Students of the **Ratledge** institution should become expert X-Ray Technicians, Spinal Analysts and **Spinographers** under his instruction.

1932 (Sept): Journal of the ICC [1(9)] includes:

-Editor LM Rogers DC discusses NCA convention (p. 4):

...We cannot pass this opportunity without a word of praise for Drs. W.L. Sausser, W.C. Schulze, L.J. Steinbach, C.W. Johnson, Stanley Hayes and Mr. Arthur Holmes, all of whom had wonderful and timely messages for the field.

1933 (Feb): The Chiropractic Journal (NCA & ICC) [1(2)] includes:

-"News Flashes: New York" (p. 19) notes:

At a recent meeting held in the Hotel New Yorker, of leaders of various State organizations, school heads, and operators of Chiropractic X-Ray and diagnostic laboratories, a Chiropractic Council was formed. November 3, 1932 marks another step forward for Chiropractic in this State, the date when this organization was formed.

The object of the Council is to be "To establish better co-ordination between Chiropractic organizations, schools and laboratories for the purpose of cooperating and endeavoring to federate for counsel to advance the interests of Chiropractic in the State of New York."

The Constitution and By-laws were adopted and permanent officers elected December 2, 1932, at the Hotel New Yorker. The following

officers were elected to serve for one year: President, Dr. S. Goldschmidt; Vice-President, Dr. William H. Werner; Secretary-Treasurer, Dr. Warren L. Sausser.

1933 (July): The Chiropractic Journal (NCA) [1(7): 25] notes:

 -Warren L Sausser DC of NYC publishes landmark article on "New Spinographic Technique: the Full Length X-ray Plate is a Success", concerning 14-36 full-spine radiography; Sausser notes:

The writer in November 1932 had the opportunity of taking Dr. Hugh B. **Logan**'s **Basic Technique** work. This work requires examination of the spine in an upright position. The X-Ray verification of this procedure requires the up-right work also. It was this contact that finally decided that the only proper technique for spine work would be the one that would enble the operator to take the entire spine on one film in one exposure and to have the film wide enough to take in the entire pelvis and also to get the entire degree of curvature in an extreme rotatory scoliosis. This latter reason so as to be able to amke comparisons as the corrective work was applied. The 8" film was very impractical for curvatures. The two-exposure procedure was also impractical....

Only a few persons who were closely associated were informed of the new technique that was being worked out. It was still uncertain as to whether the procedure would be successful. Finally the stage was set for the work, and the first 14x36 inch film that was taken was a success. Everything from the atlas down to and including four inches of the femur was plainly visible and easily interpreted. The work was put on display at one of our **Basic Technique** meetings and from then on the word was passed along until to-day so many requests have come in for the technique that it was decided to write this article in answer to all of them. (p. 18)

1933 (Oct): *The Chiropractic Journal* (NCA) [1(10)] publishes:

-"New York School News," edited by H. Lewis Trubenbach DC, notes (p. 17):

NEW FACULTY MEMBER

It is with great pride that we announce the augmentation of our faculty in the person of Dr. **Warren L. Sausser**, President of the Board of Counselors of Spinographers and X-Ray Operators, who will present a course in Spinography to the Senior classes. Dr. **Sausser** is nationally known as a leading authority in his subject.

1934 (Dec 31): typed and hand-edited copy of news release (National College Special Collections; in my CINY files): Release on Sunday January 15th

TO THE EDITOR: Appended herewith is an advance story on the Seventh annual meeting of the New York State Chiropractic Society. If there are any changes your paper will be communicated with.

SYRACUSE, N.Y. Jan. 13 -- Two complet X-ray photographs of the anatomy of human beings, said to be the first ever developed in the history of therapeutic science, are featured at the semi-annual convention of the New York State Chiropractic Society which is in session here at the Hotel Syracuse. The pictures, which are full sized, each standing six feet in height, were made by Warren Sausser, leading Xray researcher, and show that the structure of the human body is such that the vertebrae of the spine act as supports for the nerves that radiate from the spinal cord and that these nerves pass through the space between the vertebrae. The purpose of the X-ray photographs, according to S. Goldschmidt, President of the New York State Chiropractic **Society.** is to demonstrate the contention of the chiorpractic school of mechano-therapeutics that when there is the least subluxation or misalignment of these spaces impingement upon the nerve branches causes irritation and interfere nce with the normal functioning of the human system resulting in pain and disease. The convention, attended by 300 chiropractors from all over the state, was welcomed by Mayor Marvin of this city and other officials and was addressed, among

others, by Dr. Ruland W. Lee, President of the National Chiropractic Ass'n.

One hundred million people in the United States may legally receive chiropractic treatment and are safeguarded in such treatments by the laws of forty-two states, of the District of Columbia and Hawaii, where this form of mechano-therapeutic treatment is recognized by legislative enactment and qualified practitioners are licensed by state boards set up to regulate the practice, Dr. Lee stated during the course of his address. On the other hand, he declared, 27,000,000 people in this country are legally deprived of the opportunity of availing themselves of chiropractic treatment by the States of Delaware, Louisiana, Massachusetts, Mississippi, new York and Texas, where the practice has not been legalized and brought under State control like the practice of medicine, or dentistry, optometry and even chiropody., Dr. Lee said. As a consequence, he added, large numbers of people in the mentioned states seeing such treatments are exposed to the dangers of serious injuries at the hands of unqualified chiropractors and quacks. Prosecution for practicing chiropractic in the states where it is unlicensed and therefore illegal, he pointed out, has been of little avail, the only effect being to humiliate and "martyrize" qualified practitioners who have fallen foul of the law in the states where chiropractic is not yet legally recognized.

"The Chiropractic movement is closely following the experiments of all scientific developments," Dr. Lee declared. "Those of us who are being hounded by the authorities and our foes who are desperately endeavoring to monopolize the treatment of the sick in the few states which are still closed to us, may derive comfort from the recollection of how Harvey was martyrized when he first announced his discovery that blood actually circulates through the human body; of how bitterly Pasteur's theory of innoculation against hydrophobia was assailed by the conservatives and reactionaries in the field of medicine; how Jenner was denounced as charlatan and trifler with human life when he began his innoculation of children against diptheria. Marconi was jeered at, but modern radio came despite his deriders. Fulton's steamboat was denounced as 'Fulton's Folly,' and the first locomotive was anathematized as a 'contraption of the devil.' Peruvian Bark was curing thousands of victims of malarial and other fevers before the medical profession dignified it with a belated admission to its pharmacopea."

Nevertheless, the fact that states like Maryland, Pennsylvania, Illinois, California and Wisconsin, where great medical schools are located had legally recognized chiropractic, which had also been legalized by the United States Congress for use in the District of Columbia, was proof of its increasing acceptance by the American people, Dr. Lee asserted, adding that in the states where the practice was still illegal, the principles of chiropractic have for years been accepted by leaders of the medical profession who, in increasing numbers, are employing chiropractors in their private practice or to give treatments to themselves and to members of their families. "by what logic they seek to deny to others the benefits they extend to their own patients or to themselves, one must leave to our opponents to explain," he said.

Dr. Lee quoted from numerous articles in leading medical journals by prominent physicians showing that relief of certain ailments is obtained through mechano-therapeutics which, in reality, are chiropractic, he added. One outstanding surgeon whom he quoted is Dr. James P. Warbasse, chief surgeon of the German (now Lenox Hill) Hospital in New York City and a member of the New York Academy of Medicine, who in his work on "Surgical Treatment" stated that a large category of peripheral nerve distrubances are due to subluxation, or misplacement of the vertebrae, and are relieved by chiropractic treatment.

He also cited the experiments at Cornell University reported in 1926, by Dr. Henry P. DeForest of New York City and Dr. Horace G. Baldwin, of Tannersville, covering, during a period of three years, of some 3,000 cases including nervous prostration, neuritic diabitis [sic], Raynaud's disease, sciatica, lumbago, neuralgia, angina pectoris and various forms of painful afflictions classed as "rheumatic." by

dissection, by study of the human skeleton, by actual experiment on living patients and by the aid of the X-Ray, Dr. Lee said, they delved into the connection between the sympathetic nervous system and the sacro-iliac joint. Their results, as reported in the New York Herald Tribune on May 24, 1926, in every case substantiated their theory that a slight dislocation of the dorsal bone of the pelvis exerts pressure on nerves passing through the joint and may have deleterious consequences in the human body.

Another medical authority quoted by Mr. Lee was Dr. G.H. Patchen, of New York City who, in an article in the Journal of the American Institute of Homeopathy, described vertebral adjustment as "a therapeutic procedure founded upon the theory that pressure upon a spinal nerve by a displaced or subluxated vertebrae is the physical and perpetuating cause of 95 percent of all cases of disease, the remaining 5% being due to subluxations of other skeletal segments. He quoted Dr. Patchen's article to the effect that the reluctance of the medical profession to accept this theory was due to an erroneous opinion concerning the limitation of vertebral movements and to confused ideas about the nature and cause of disease." Studies by Dr. John B. Carnett, Professor of Surgery in the Graduate School of Medicine, University of Pennsylvania, were stated by him, Dr. Lee said, have disclosed that the usual cause of pain and tenderness in the abdominal wall is an irritation of the spinal nerves where they made their exits through the vertebrae and that the commonest cause of this nerve irritation is bad body mechanics, Prof. Carnett wrote, cures the abdominal pain and

Another medical authory involved by Dr. Lee in his address was Dr. Joel B. Goldthwait, of the Graduate School of Medicine of Harvard University, who, in a paper published in 1933 in the *Journal of Bone and Joint Surgery* said: "The average surgeon does not understand back cases. The same is true of the average arthritic, or the paralytic, or the average foot cases, which respond so easily if rightly handled...The endless putting on of plaster cases or braces, of strapping feet or knees, without first correcting the mechanical features that are at fault, is purposeless." Dr. Goldthwait urged, said Dr. Lee, that orthopedic surgeons, in addition to doing all that general medicine indicates should see to it that the body mechanics are such as to make health possible. If, Dr. Goldthwait said, the members of the surgical profession choose to do only operative work, some other specialty or school will take this over.

Finally, Dr. Lee quoted the findings of the White House Conference Child Health and Protection, called by President Hoover in 1932. The subcommittee of this conference on orthopedics and body mechanics, which was headed by Dr. Robert M. Osgood, made the following statement, among others: "Its impression from its own experience is very strong that the average general practitioner has been insufficiently informed and consequently not vitally interested in the details of body mechanics... This failure of appreciation is primarily due to a lack of training in the basic principles of body mechanics in the medical schools."

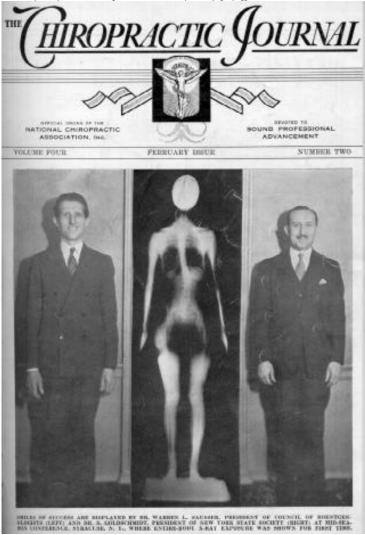
S. Goldschmidt, president of the New York State Chiropractic Society, who presided at the session, today said at the conclusion of Dr. Lee's address that chiropractic training reverses the training of the physician. The latter gets his practical training, he declared, after he begins his practice. As a matter of law, he pointed out, a license to practice medicine in this state may be issued even before the candidate has served any internship. "The chiropractor gets his practical experience from the beginning," he pointed out.

Mr. Goldschmidt stated to the convention that steps are now under way to secure the enactment of a law by the New York Legislature legalizing and regulating chiropractic. Under the proposed legislation licenses would be issued only to such persons as have been graduated from a resident school after a course of study over a period of not less than four successive school years. Admission to such a school would be limited to high school graduates.

"It is not our intention to have chiropractic encroach on the fields of general medicine or surgery," he declared. "On the contrary, we intend that the practice shall be limited strictly to the field of body mechanics.

We do not hold chiropractic out as a panacea or 'cure all,' but we maintain that it has a place in medical science that should be recognized akin to dentistry. With that recognition will automatically come the protection of the public against charlatans and quacks - just as the recognition and licensing of dentists eliminated the dangers to the public from the barber who in addition to cutting one's hair added to his income by yanking out decayed teeth."

1935 (Feb): The Chiropractic Journal (NCA) [4(2]] cover:



Collinson WA. The vertical x-ray: newer technique gives accurate interpretation. *The Chiropractic Journal* (NCA) 1935 (Mar); 4(3): 12-18

1935 (Apr): The Chiropractic Journal (NCA) [4(2]] cover:



"The National Chiropractic Clinics are meeting with wide approval. An intimate glimpse of the group, with the new vertical x-ray unit developed for the National Council of Chiropractic Roentgenologists, in action at Detroit recently is shown above. Members (left to right) Dr. G.W. Will, Dr. J.E. Slocum, Dr. K.P. Laurence and Dr. K.J. Hawkins"

1935 (Aug): *The Chiropractic Journal* (NCA) [4(8)] includes:

-article by WN Montgomery DC of the Missouri Chiropractic College: "Vertebral subluxations - employing the x-ray to locate and prove their existence" (pp. 28, 38)

1935 (Sept): *The Chiropractic Journal* (NCA) [4(9)] includes: -article by WN Montgomery DC of the National Chiropractic Clinics: "Radiographing the upper cervical vertebrae" (p. 28)

1935 (Dec 13): Paul Smallie graduates from the Ratledge System of Chiropractic Schools in Los Angeles (later renamed Ratledge Chiropractic College); DC diploma is signed by TF Ratledge DC, BM Ratledge, Ralph P. Kingsley DC, Howard Compton DC, Sorin A. Raarup, DC and Albert Muchleisen DC; "X-Ray and Spinography" diploma is signed by TF Ratledge DC and Howard Compton DC (Howard Compton was son of James Compton DC, first sec'y of California BCE?) (Interview, 1992)

1937 (Feb): *The Scientific Chiropractor* (2[18]) notes RC **Howe** DC of 847 S Union Ave, LA is Editor (p. 5); includes:

-LL Truscott DC of San Jose authors "Atlas again" re: x-ray (p. 6)
 -GT O'Sullivan of SF authors "X-ray diagnosis of pulmonary tuberculosis" (pp. 30, 41)

1937 (Oct): The Scientific Chiropractor (3[5]) includes:

 -ad for Eacrett Laboratories at 1115 Garfield Bldg, 403 W 8th St at Hill, LA, Clifford B. Eacrett DC, Director; lab "all clinical examinations including basal metabolic tests", 14x36" upright spinal x-ray (inside front cover)

-notes that San Francisco branch of **NACC** held meeting on Oct 1-3, 1937 at St Francis Hotel in San Francisco; speakers included **GT O'Sullivan** PhD on x-ray, Terrence J. **Bennett** on "Autonomic Nervous System"; J. Edwin **Crapo** DC is judge in a "Perfect Back Contest" (p. 17)

1938 (Feb): The Scientific Chiropractor (3[9]) includes:

-GT O'Sullivan PhD, DC of SF authors "X-ray diagnosis of acute abdominal conditons" (p. 22)

1938 (Oct): The Scientific Chiropractor (4[5]) includes:

-Henry G. Higley DC will teach "a class on X-ray interpretation in relation to Bio-Engineering" begining November 19 at the Bio-Engineering Building at 846 South Beacon Ave, LA (p. 33)

1939 (June): The Scientific Chiropractor (5[1]) includes:

- -ad for Gardner's Institute for Drugles Healing at 2727 South Vermont, LA offers "Radiologist... Friendly Fever: Treatments - Man's most POTENT ALLY in the treatment of disease; Colon Irrigations, Colon Implantations, Nutritional Deficiency Tests -measured accurately by means of your own human energy; Radiant Lights; Ultra Violet Light; Spinal Manipulations" (inside front cover)
- -GT O'Sullivan of SF re: "X-Ray Diagnosis and Treatment of Sinus Diseases"
- -ad for "Bio-Engineering X-ray Laboratories under the direction of Dr HG Higley DC" at 846 S Beacon, LA (p. 33)

1939 (Nov): *The Chiropractor* [35(11)] notes:

-first full body x-ray was 1897 by Dr. Morton of NY; "exposure of only 30 minutes was required" (p. 11)



1940 (May): *The Scientific Chiropractor* (5[12]) includes:
-notice of upcoming **NACC** convention in Santa Monica on May 30-June 2, 1940 (cover; pp. 4-11, 16-18); speakers will include:
-Clifford B. Eacrett DC re: x-ray

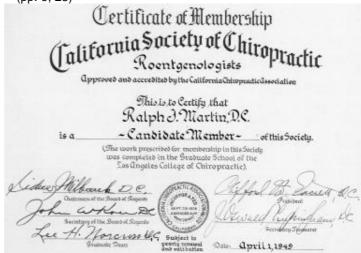
c1946: brochure from Cleveland/KC indicates "Clincis Where Every Patient is X-Rayed" and "Approved for G.I. Training of Veterans"; CS Jr. is "College Dean"; brochure promotes 14x36 full-spine x-rays, CS Jr's instruction in "heart graph," "basal metabolism" testing, bloodwork, and technic taught by CS Sr.; CS Cleveland Sr.'s credentials include: "has attended the following schools and courses: -Graduate of the P.S.C. in 1917, Graduate of the P.S.C. X-Ray Course, 1919, Post-Graduate in the following: -Carver under Willard Carver, 1932; Davenport School under Smith, 1929; Spears, 1926; Aquarian Age Healing or BioEngineering under Hurley and Saunders; X-Ray Technique under Montgomery, 1932; Basic Procedures, 1937 under Dr. J.M. Bauer, a former Logan Instructor; LaGrange Methods under Whitman; Courses under both Dr. Slocum and Hawkins; three courses under Dr. DeJarnette; two complete courses under "Bonesetter" Richter, 1946; Vladeff X-ray Course,

1946, etc. He has taken and analyzed more than 25,000 x-Rays for patients and doctors in the middle west"; promotes "A PRO-CHIROPRACTIC POLICY: The Policy which we try to maintain at Cleveland College is not anti-medical, anti-mixing or anti-anything but a PRO-CHIROPRACTIC Policy. This helps all Chiropractors, mixers and straights..."; nerve tracing and HIO technic are taught; (Cleveland papers-CCC/KC)

- 1947 (July): Journal of the California Chiropractic Association (JCaCA), Volume 4, No. 1; LE Montenegro DC is on editorial board; this issue includes:
- -Ralph J. Martin and Clifford B. Eacrett DC of the LA District of CaCA arrange for Waldo Poehner DC to speak on "X-ray diagnosis and practice building" on June 3 at the Elks Club in LA (p. 14)
- 1948: **LACC** stops awarding **naturopathic** degrees, but continues to teach "**herbology**" (Homola, 1963); new pathology and anatomy labs and new x-ray equipment at **LACC** (LACC, 1986); Henry G. **Higley** MA, DC named chairman of Dept of Physiology, **LACC** (Rehm, 1980)

1949 (?May?): Journal of the California Chiropractic Association, Volume 5, No. 10; this issue includes:

-JO Empringham DC, "Chairman, Department of Radiology, LACC, Member of California Society of Roentgenology" authors continuing series called "Radiology of the gastro-intestinal tract" (pp. 9, 28)



Ralph Martin was quick to apply for membership in the California specialty society for radiologists, the leaders of whom (Drs. Milbank, Koer, Norcross, Eacrett and Empringham) were members of the Board of Regents and administrators of the Los Angeles College



L to R: Leo Wunsch, Michael Giammarino, ??, Earl Rich



L to R: Ray Richardson, Earl Rich, Theodore Vladiff, ??, Hilary Pruitt, Michael Giammarino, Loren M. Rogers, Leo Wunsch



James O. Empringham, D.C., M.Sc., Chairman, Department of Radiology, Los Angeles College of Chiropractic (Aesculapian, 1951)



First NCCR x-ray certification exam, at Omaha, 1958; Janse seated in suspenders, Giammarino handin paper to Duane Smith, board member; Earl Rich is seated at table directly behind Janse



First NCCR x-ray certification exam, at Omaha, in 1958; Janse seated in suspenders, Earl Rich seated at table behind Janse, Leo Wunsch standing behind Earl Rich, Giammarino standing at rear of phone speaking on phone; Duane Smith, board member/examiner, seated on Janse's left; bald headed man in front is James McCarthy



Amedeo Vampa, Jr., D.C. (Aesculapian, 1960, p. 12)

1963 (June): A. Vampa DC is a "certified chiropractic roentgenologist and Director, LACC Outpatient Clinic X-ray Laboratory at 920 E Broadway, Glendale (Carlson, 1963)

1966: LACC earns status with CCE; implements residency in roentgenology (LACC, 1986)

1967 (Sept): JCaCA [24(3)] notes:

-"CHIROPRACTIC LOSES A LEADER"; obit & photo for Earl Rich DC (pp. 8-9):

Dr. Earl A. Rich, President Emeritus of Lincoln Chiropractic College, died at his home in Indianapolis, Indiana on August 6, 1967 after a prolonged illness. He was 46 years of age and is survived by his wife, Mary, a son, his mother and a sister.

Dr. Rich attended Indiana University and was a 1942 graduate of Lincoln Chiropractic College. He spent three and one half years in the Army Medical Department serving as an X-ray technician and instructor. His association with Lincoln began in 1946 as an instructor and later as chief of roentgenology section until 1955, when he accepted the position of Secretary of the college. In 1962 he was advanced to vice-president and became president in 1965.

He was elected a diplomate of the American Board of Roentgenologists in 1958, appointed cineroentgenological research director of the American Chiropractic Association in 1962 and was a member of the American Chiropractic Council of Education. He authored "Radiography and Diagnostic Roentgenology," and "Atlas of Clinical Roentgenology." He was a member of the American Chiropractic Association, Masonic Lodge 312, Scottish Rite and the Shrine, Phi Delta Theta and Delta Tau Alpha Fraternities, and held a fellowship in the International College of Chiropractic.

An Earl A. Rich Memorial Fund has been established. PHOTOGRAPH



Earl Rich, D.C.



Clockwise from left: Duane & Mrs. Smith; Michael Giammarino; Donald Hariman; Mrs. & Virgil Good (Cinn.); Joseph Howe; at the Huntington Sheraton (CA?) in 1968

1969: Nilson Santos, D.C. and radiology residents at LACC (Aesculapian, 1969):



1970 (Feb): *Chirogram* [37(2)] includes:

-cover is **photo** of **Wolf Adler** DO, DC, ND, LLB; editorial notes (p. 6):

Dr. Adler was born February 19, 1899 in New York City. He attended City College of New York for two years, and then went to Philadelphia School of Osteopathy where he earned his DO degree.

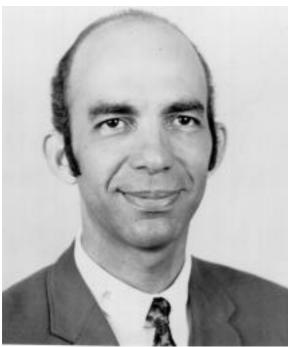
His chiropractic training was at the **New York College of Chiropractic**, where he earned his DC degree, and later a PhC. Even then, he was not content, and earned the ND degree from the **American School of Naturopathy**. He also holds a Bachelor of Science, and a LLB from the American University.

Dr. **Adler** discovered his great love for teaching quite early in life. His classroom career has taken to the School of Philosophy in New York where he taught Academic Philosophy and to New York's School of Modern Art. Incidentally, he is famous as an anatomic illustrator, and uses his talent in teaching anatomy.

He has taught a wide range of subjects in chiropractic schools, including physiology, gross anatomy, dissection, pathology, technic, x-ray, diagnosis, bacteriology and public health.

He has taught in the New York College of Chiropractic, the American School of Chiropractic and Naturopathy, The School of Drugless Physicians, the Southern California College of Chiropractic (where he served as Dean), the Cleveland College of Chiropractic at Los Angeles, and for the past many years at the Los Angeles College of Chiropractic.

He is an author of note, his articles having appeared in "Psychology Magazine," "The Thinker" and in various chiropractic and medical journals....



Nilson A. Santos, D.C. (LACC Registrar's collection

1973 (Aug): *Chirogram* [40(8)] includes:

 -photo of Carol Port Kaplan DC, Roentgenology resident and Nilson A. Santos DC, chairman of LACC Department of Roentgenology (cover)

1978 (May/June): *LACC News & Alumni Report* [1(9)] includes: -AJ Vampa DC, former head of X-ray at LACC, re-appointed to CA

-"Joseph Howe DC DACBR named to head x-ray department" (p. 8), 1952 PSC grad has been chair of radiology at National

1978: **Joseph Howe** DACBR becomes chairman, department of radiology at **LACC** (Dzaman et al., 1980)

VISIT TO Cleveland/LA, 8/12-8/14/90

-Carl Cleveland Jr. says TF Ratledge, D.C. had no x-ray equipment at time of purchase of Ratledge College, i.e., 1951-55 (but Dr. Ted L. Shrader insists he learned and used x-ray at Ratledge College in late 1930s)

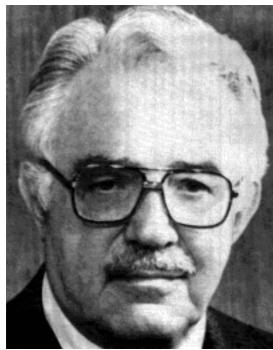
Notes from Keating (1992; Chapter 4):



Fred W. Illi, D.C.

Chiropractors were early and eager developers of x-ray equipment and technique. BJ Palmer had introduced an early **roentgenographic** device at the PSC by 1910-1911. **Spinography**, as BJ called it, was seen as a method "to verify or deny palpation findings and to verify or deny proof of the existence of vertebral subluxations (Cantebury & Krakos, 1986). The PSC offered a **spinography**elective course in 1910 or 1911, which became a required subject at the "Fountainhead" in 1924. Early Palmer faculty radiologists taught and practiced diagnostic as well as spinal analytic procedures, and included dental views, contrast techniques and fluoroscopy in their repertoire (Cantebury & Krakos, 1986). By the early 1920s faculty at the PSC's rival, the Universal Chiropractic College, were experimenting with the first weight-bearing views of the spine and pelvis. This is ironic, since the Palmer/Loban split came over PSC's introduction of x-ray....

Carver's theories also gave impetus to the basic anatomic studies of the pelvis conducted during the 1940s by Fred Illi, D.C. of Switzerland and Joseph Janse, D.C., long-time president of the National College of Chiropractic. Illi was the first person to demonstrate (Illi, 1951), by means of **cineroentgenography**, the motion of the sacro-iliac joints (Rosenthal, 1981). Baker (1985) credits Illi with a three-pronged approach to study of the pelvis: motion x-ray investigations, model-building and human dissection. The life-long work of this Swiss chiropractor provides a model for clinically relevant basic science investigations in chiropractic.



Joseph J. Janse, D.D.T., D.C.

Also noteworthy for early research efforts in cineroentgenography are studies by Earl Rich, D.C. at the Lincoln College in Indianapolis during the 1960s. Rich collaborated with the Picker X-ray Company to develop special equipment, and attracted several tens of thousands of dollars from FACE (the Foundation for Accredited Chiropractic Education, now the FCER: Foundation for Chiropractic Education & Research) to underwrite his work. When Dr. Rich died in 1967 the project was transferred to Joseph Howe, D.C., D.A.C.B.R., and was funded (\$10,000) jointly by the FCER and the ACA...

The past two decades have witnessed growing attention among investigators to the characteristics of measurement in chiropractic. Exemplary have been a number of studies of the validity and reproducibility of the observation systems used in practice, and of potential value in manipulation research. Much of this effort has been focused on the evaluation of measurement methods already in use by chiropractors, especially palpation (e.g., DeBoer et al., 1985; Herzog et al., 1989; Keating, Bergmann et al., 1990; Nansel, Peneff et al., 1989), relative leg length inequality (DeBoer et al., 1983; Shambaugh et al., 1988; Venn et al., 1983; Youngquist et al., 1989) and x-ray analysis (e.g., Haas et al., 1990; Phillips et al., 1990). However, several novel assessment procedures have also been quantitatively explored by chiropractors, including contourography (Speijers et al., 1975), videofluoroscopy of cervical spine motion (Antos et al., 1990), para-spinal tissue-compliance (Jansen et al. 1990), electronic recording of reflex phenomena (Humphreys et al., 1989) and para-spinal electro-myography during full lumbar flexion (Triano & Schultz, 1987)...

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Interesting Facts Concerning Cleveland Chiropractic College* Kansas City, MO.

OUR STANDARD

The profession generally is united on what constitutes the correct standard. The majority of States have enacted laws requiring a three-year course of six months each training. The better schools have an understanding that such period of time should include 4,000 hours (30-minute hours) of class work. this school exceeds that mark.

OUR CURRICULUM includes the study of Anatomy and dissection, Physiology, Symptomatology, and Pathology, Histology, Chiropractic Orthopedy, Chiropractic Philosophy and Principles, Hygiene, Pediatrics, Gynecology, Obstetrics, First Aid and Minor Surgery, Palpation and Nerve Tracing, Adjusting Drills and Clinics, Ethics and Jurisprudence, X-Ray and Spinography. Instruction is given in the proper use of certain proven mechanical appliances such as the sphygmomanometer, stethescope, clinical thermometer and other instruments used in the making of a better Chiropractic Analysis.

We believe that it is within the Chiropractor's field to use the above methods to gain information concerning their case. We further believe and advise that the Chiropractor handle only those conditions which yield to spinal adjustment, and send medical and surgical cases to physicians and surgeons who are best qualified to handle them. CHIROPRACTIC IS NOT, AND IS NOT RECOGNIZED AS GENERAL PRACTICE. We are Chiropractors, not Physicians. As medical textbooks omit Chiropractic, we use Chiropractic textbooks, as the basis for our instruction.

OUR METHOD OF ADJUSTING: While emphasis is placed on the Palmer Method as it is considered standard and so universally used, we teach Thumb Moves of various kinds, Rotaries, Breaks, Knuckle Moves, etc.; also various Holds, Contacts and Postures. Any move with a specific application is meritorious.

THE FACULTY pictured above, together with a corps of Special Lecturers, assure Cleveland College Students the best in Chiropractic. Our Faculty are Straight chiropractors, the majority of whom are graduates of the Palmer School and have the additional advantage of eight to ten years of actual Field Experience.

Remember Our Latch String Is Hanging on the Outside. Every day is Visiting Day and you are cordially invited to make this day, your day.

*Advertising brochure published by CCC/KC circa 1924

From: Keating JC. *Toward a philosophy of the science of chiropractic: a primer for clinicians*. Stockton CA: Stockton Foundation for Chiropractic Research, 1992, p. 62



Carl S. Cleveland, Jr., D.C., circa 1956. Dr. Cleveland is the grandson of Sylva L. Ashworth, D.C., a founder of the National Chiropractic Associaton and the Foundation for Chiropractic Education & Research. He earned his Bachelor of Science in physiology from the University of Nebraska in 1938 and his Doctor of Chiropractic from Cleveland Chiropractic College in Kansas City, Missouri in 1942. The Cleveland College, founded by his parents, Carl Sr. and Ruth Cleveland in 1922, has been Carl Jr.'s life focus. After serving as Dean and President of the Kansas City school and later the Cleveland Chiropractic College of Los Angeles, he was recently appointed Chancellor of the Cleveland Colleges. Dr. Cleveland has served in various executive capacities in the International Chiropractors' Associaiton and the Council on Chiropractic Education. He has been a proponent of the static model of spinal subluxation. His investigations have included and experimental model of subluxation in animals and studies of plain film distortions.