

## Professor Varaztad Hovhannes Kazanjian (1879-1974)



## Literature

### KEYWORDS :

### Xavier Riaud

DDS, PhD in Epistemology, History of Sciences and Techniques, Winner and Associate member of the French Dental Academy

#### A man of Armenian descent

Varaztad was born on March 18, 1879, in Erzincan, in Turkish Armenia. He did most of his scholarship in the French Jesuit Mission of Sivas. In 1893, he moved to Samsun to live with and work for his older half-brother. Then, he later worked in the local post-office. (<http://www.armeniapedia.org>, 2006, pp. 1-3).

In 1895, he left for the United States where he arrived in October. He lived in the Armenian community of Worcester, Massachusetts.

#### In the U.S.A.

On October 15, 1900, he officially became a US citizen. In 1902, he attended the Boston English High School. He also started in the Harvard Dental School in 1902. On June 28, 1905, he graduated in the class of 1905. He immediately established his private dental practice in Boston (Deranian, 2007, pp. 200-202).

In 1906, he was appointed assistant in mechanical dentistry, then assistant in dental prosthesis in 1907 and finally, demonstrator in dental prosthesis at the Harvard Dental School in 1909.

In 1911, he entered the second year class at the Boston University Medical School. In 1912, he was appointed Head of the Prosthetic Dentistry Department, Harvard Dental School. He left the Boston University Medical School on the same year.

On December 21, 1912, he married Sophie Augusta Cuendet in Boston. She died on August, 10, 1919. During World War One, he mainly worked as a dentist (Deranian, 2007, pp. 65-102, 200-202).

#### World War One

In 1915, he was appointed Chief dental officer at the Harvard Medical Unit which was part of the British Expeditionary Forces. He served with the rank of honorary lieutenant. He officiated in Camiers, France at the General Hospitals No. 21 and 22. In September, he met Dr Hayes in Paris at the Dental Department of the American Ambulance. He worked relentlessly at the hospital No. 22 where he treated no less than 22 wounded soldiers in one month. His prosthetic achievements were innovative and original. None were similar. By means of a great amount of dental wires, he immobilized and held together the bone fragments of fractured jawbones and fixed them to the original occlusion. In October, 1915, he returned to the USA. He then went back to England along with a second Unit coming from Harvard on November 17. On December 3, he visited Oxford. The same month, he became part of the Unit's services at General Hospital No. 20 which was under English command. When he would enter the main ward, the wounded would kiss his hand as a token of respect and gratitude.

Kazanjian's innovations were so impressive that newspapers made editorials about him. His original techniques became benchmark surgical proceedings. In April 1916, he was the guest speaker of the American Society in Paris. In June, he was promoted Honorary Major of the Royal Army Medical Corps. On June 15, he released his article entitled "Immediate Treatment of Gunshot Fractures of the Jaws" to the British Dental Association. In his article, he gave a list of his treatment protocols as well

as a classification of fractures. On November 7, 1917 and April 7, 1918, the Armenian doctor received two citations signed by Churchill. Kazanjian led and worked with six dentists who, despite their small number, tried to give support to the wounded soldiers. This is when Varaztad invented the Kazanjian clamp which controlled arterial hemorrhages, the Kazanjian Button, to be used during immobilization of the jawbones with dental rubber band and the Kazanjian splint for nasal fractures. Kazanjian's technique consists in the vestibular sulcus extension surgery to better the prosthetic conception of toothless crests (<http://medical-dictionary.thefreedictionary.com>, 2009, pp. 1-2). On June 3, 1918, he was appointed "Companion of the Order of St. Michael and St George". His works became more and more famous. Gillies and Fry were his close friends and faithful allies. On the same year, he was appointed Professor of Military Oral Surgery at the Harvard Dental School (Deranian, 2007, pp. 65-102, 200-202). In 1919, he was discharged from the British Army after treating around 3,000 patients. He received his decoration by King George V at Buckingham Palace in May. Upon his arrival to the USA, he was admitted as a third year student to Harvard Medical School, in the Class of 1921. He rejoined faculty at the Harvard Dental School as Professor of Military Oral Surgery (Deranian, 2007, pp. 200-202).

#### A flawless career

He graduated in medicine in the class of 1921 and received his M.D. degree. In Boston, he established a private practice in plastic surgery of face, surgical prosthesis, and oral surgery. On August 25, 1923, he remarried. In 1931, he was named Surgeon for Plastic Operations at Massachusetts Eye and Ear Infirmary and Special Consultant in Plastic Surgery at Massachusetts General Hospital. In 1932, he received an award from the Rhode Island Dental Society. In 1937, he presided over the American Academy of Dental Science and in 1940, the American Society of Plastic Surgeons. In 1943, he received the Alfred E. Fones Medal from the Connecticut State Dental Society. In 1947, he was appointed Guest Lecturer in the Oral Surgery, Graduate School of Medicine, University of Pennsylvania (Deranian, 2007, pp. 200-202).

In 1949, he published his first book co-authored with Dr John Marquis Converse, entitled « The Surgical Treatment of Facial Injuries ». In 1951, he received the Special Honorary Citation of the American Society of Plastic and Reconstructive Surgery for his leadership and devotion in the organization and development of the practice of plastic surgery. In 1952, Bowdoin College awarded him an Honorary Doctor of Science degree. In 1953, he was awarded the Honor Key Award of the Academy of Ophthalmology and Otolaryngology and the Society Award from the American Society of Oral Surgeons in 1954. On the same year, he was awarded Honorary Membership of the Chalmers J. Lyons Academy of Oral Surgery at the University of Michigan. In 1956, he received the Honorary Award from the American Society of Maxillofacial Surgeons. That same year, he was awarded the Leonard Wood Memorial Medal, Boston City Hospital Alumni Association and was also made Honorary Member of the Massachusetts Dental Society. In 1957, he was made Honorary Member and received an award from the New England Society of Oral Surgeons. On the same year, he was awarded Honorary Membership at the Worcester Dental Society. In 1959, he received an award from the American Association of Plastic Sur-

geons. The Second Edition of "The Surgical Treatment of Facial Injuries" was released on the same year. In 1960, he served as the first President of the New England Society of Plastic Surgeons. In 1962, he was awarded the New York University Presidential Citation for his work (Deranian, 2007, pp. 200-202).

In 1964, he retired from private practice and stopped his work. In 1966, he became Honorary Fellow of the British Association of Plastic Surgeons in London and in 1967, of the Royal College of Physicians and Surgeons in Glasgow. On that same year, he was honored with the Harvard Dental Centennial Award, an award illustrating a century of dentistry in Harvard. He died on October 19, 1974, at his home in Belmont, surrounded by his family (Deranian, 2007, pp. 200-202).

#### A man with values

Kazanjian was a simple, humble and humanist man who was close to his family, faithful in friendship and passionate about his work, estimated by his students but also by his colleagues, enjoying nature and fishing above everything. Never denying his Armenian origins where his heart truly was and serving his new American nation with all his spirit, Kazanjian is internationally known as the pioneer in maxillo-facial surgery in the 20<sup>th</sup> century. Kazanjian was described by his patients and colleagues as a lancet virtuoso. Medical and media organizations kept paying tribute to Kazanjian and even more after he died.

#### Two famous patients

Kazanjian treated two famous patients: Francis Monroe Hawks (1897-1938), a famous pilot, and Sigmund Freud (1856-1939).

Passing through Europe for conferences in London and Paris in 1931, Kazanjian made a detour through Vienna on July 31 and August 1. There, he saw the philosopher who had a palate cancer, who had been treated since 1923 and who was suffering from prosthesis of bad quality fixed to his mouth. Despite the doctor's efforts, Freud could not bear the new prosthesis made by Kazanjian in Hans Pichler's laboratory, a famous stomatologist (Hardt, no date, pp. 6-9).

On April 6, 1932, during aerobatics, Hawks was seriously wounded to the face. His jawbones were seriously fractured. Kazanjian examined his x-rays on April 9 and Hawks had surgery on May 3. On June 15, Hawks was flying again (Deranian, 2007, pp. 159-176; Riaud, 2010, pp. 71-77).

#### Substantial works

He released 154 publications in American, British, French (7), Spanish (2) and German (1) journals from 1911 to 1975, the last one being posthumous. Among them, there are 50 scientific collaborations. In 1917, he published the proceedings of five communications at the Inter-allied Dental Conference which took place in Paris from November 9 to 13, 1916. These proceedings were published into two volumes by Professor Georges Villain. Kazanjian's five articles were: "Early Treatment of Facial and Mouth Injuries", p.116; "Some Problems of Prosthesis as a Result of Destruction of the Superior Maxilla," p.557; "Artificial nasal bridge", p.606; "Appliance to reduce cheek contracture as scarring", p. 741; "Universal external appliance to support the face, nose, maxillary teeth", p.963. Furthermore, from 1915 to 1920, during and after World War I, Kazanjian released 26 publications (Deranian, 2007, pp. 208-215; Riaud, 2010, pp. 71-77).

#### Hospitals....

Not to mention both General Hospitals No. 21 and 22 in which he worked in France, Kazanjian worked in 18 clinics and hospitals, notably at the Harvard Dental School (1906, 1908, 1909-1916), the Peter Bent Brigham Hospital (1920, 1922), the Boston City Hospital (1921, 1923-1928, 1930-1961, 1963-1965), the Laryngological Clinic of the Out-Patient Department (1921-1922),

the Massachusetts General Hospital (1923-1927, 1929-1934, 1936, 1938), the Cambridge Hospital (1925-1930, 1932-1936, 1938-1947), the Massachusetts Eye and Ear Infirmary (1928-1938), the Beth Israel Hospital in Boston (1939, 1959, 1967-1970), the Jordan Hospital in Plymouth (1939), the Burbank Massachusetts Hospital in Fitchburg (1940), the Henry Heywood Memorial Hospital in Gardner (1946), the Glover Memorial Hospital in Needham (1948), the Mount Auburn Hospital in Cambridge (1949-1954, 1957-1958), the Santa Maria Hospital in Cambridge (1952), the Cleft Palate Institute in Tufts University School of Dental Medicine (1960) and at the Deaconess Hospital in Boston (1967). Even when he retired, his name could still be read on the consultation chart of the Massachusetts General Hospital (1970, 1973-1974).

#### Academic works

He taught orthodontia at Harvard Forsyth Post-graduate of Orthodontia (1919-1920), Otolaryngology at the Tufts College Medical School in 1944. He was Professor of Clinical Oral Surgery at Harvard in 1922. He was appointed Professor Emeritus of Plastic Surgery at the Harvard Medical School in 1947.

He was appointed Honorary Surgeon at the Massachusetts General Hospital (1965, 1967-1970). He became a member of the Honorary Staff of New England Deaconess Hospital (1968-1974) as well as of that of the Symmes Hospital in Arlington (1967-1973). Finally, he was Honorary Consulting Surgeon for Plastic Operations at the Massachusetts Eye and Ear Infirmary (1968-1969, 1971-1974) (Deranian, 2007, pp. 203-207 ; National Archives of Plastic Surgery, 2009 ; Massachusetts Eye and Ear Infirmary Archives, 2009).



Professor Varaztad H. Kazanjian (1879-1974)

(© Francis A. Countway Library of Medicine).



Dr Kazanjian's patients and nurses in General Hospital n° 20

(© Francis A. Countway Library of Medicine).

#### References:

1. Deranian Martin, *Miracle Man of the Western Front*, Chandler House Press, Worcester, 2007.
2. Francis A. Countway Library of Medicine, Harvard Medical Library, personal communication, Boston, USA, 2009.
3. Hardt Nicolas, « Sigmund Freud, his oral neoplastic disease and oral, maxillary,

- and facial surgery », in *AO Dialogue*, no date, pp. 6-9.
4. <http://medical-dictionary.thefreedictionary.com>, *Kazanjian's operation*, 2009, pp. 1-2.
  5. <http://www.armeniapedia.org>, *Varaztad Kazanjian*, 2006, pp. 1-3.
  6. Massachusetts Eye and Ear Infirmary Archives, Boston, 2009.
  7. National Archives of Plastic Surgery, Francis A. Countway Library of Medicine, Harvard Medical School, Boston, 2009.
  8. Riaud Xavier, *Pioneers in maxillofacial surgery (1914-1918)*, L'Harmattan (ed.), "Medicine throughout the centuries" Collection, Paris, 2010.