Dentist
Inventor
Scientist
By Ida D. Jeffries

FORTY years ago, he was hailed nationally as a hero—a pioneer in the field of X-ray dentistry and the developer of many devices which are now standard equipment in modern dental offices. Today, only a few persons living in New Orleans remember him, and C. Edmund Kells Jr. is almost forgotten, like a prophet without honor in his own city.

Kells was born in 1856 in a house on Canal Street near where the Boston Club now stands. He grew up tall, spindly. Even in manhood, his frail appearance would belie the fact that he was constantly at work—both mind and body energetically pursuing the wondrous scientific discoveries of his day.

At 18, young Kells entered the office of his father, a practicing New Orleans dentist—perhaps to see what the profession was all about. Liking what he saw, Kells enrolled in the New Orleans Dental College, then attended New York College of Dentistry. When he returned home in 1879, however, it was with more than just a dental education. Frequent visits to the Edison laboratory in Menlo Park had fired an interest in the uses of electricity, so much so that by the turn of the century, the young dentist had patented dozens of inventions including an electric thermostat, fire extinguisher, burglar alarm and electromagnetic clock and engine.

Dr. M. B. Varnado, who began practicing with Kells in 1918, recalls visiting him at home and seeing his electromagnetic clock. "It would trigger the opening of the door downstairs, even the running of warm bath water at an appointed hour."

After marriage in 1882, Kells quickly learned he was the lucky person who had to stop what he was doing every time it rained—so he invented a mechanical window closer. "Darndest thing I ever saw," chuckles Varnado.

The crowning achievement of Kells' inventing career was an automatic electric suction pump which found use in dentistry and every field of surgery where rapid aspiration of fluids was required to clear the operating field. Dr. Rudolph Matas said of the models he tried, "This invention alone is sufficient to immortalize the name of Dr. Kells and has won for him the eternal gratitude of every working surgeon in the
Dr. C. Edmund Kells Jr., one of the outstanding pioneers in field of X-ray dentistry, is shown in his office in 1920s.

The crowning achievement of Kells' inventing career was an automatic electric suction pump which found use in dentistry and every field of surgery where rapid aspiration of fluids was required to clear the operating field. Dr. Rudolph Matas said of the models he tried, "This invention alone is sufficient to immortalize the name of Dr. Kells and has won for him the eternal gratitude of every working surgeon in the land."

A progressive thinker in business, too, Kells instituted a system of monthly settlements of all accounts, installed young women in his office for both secretarial and dental assistant chores—all innovations for Southern dental offices in the early 1890s.

Midway in his career, Kells' genius was especially inspired by an event in
Kells also saw to the preservation of natural teeth by using small fillings whenever possible. The standardized cavity preparation in the late 19th and early 20th Centuries called for sacrifice of good, solid tooth structure for the transformation of small cavities into larger holes that were easier to fill. Kells went about solving the problem of small cavity fillings by devising the proper tools and filling preparations for them. His procedures are described in his final book, "The Conservation of the Natural Teeth," written in late 1927 and early 1928—when the author spent more time in than out of hospitals.

Then, on Monday evening, May 7, 1928, the New Orleans item's bold black headline screamed, "Dr. C. E. Kells Commits Suicide." In New York City, doctors had told the famed dentist no hope remained. His left arm gone, his right hand deteriorating, Kells ended his life at his dental office. Like other X-ray victims, he was held martyr to science.

Before his death, Kells earned the highest honors bestowed on anyone in his profession, the Jarvis Fellowship of the American Dental Association. Tulane honored him with a Doctor of Laws and founded in his honor the C. Edmund Kells Memorial Library and Museum. The nucleus of the library was the sandy-mustached dentist's private library, objects of mechanical interest, models of dental inventions and many of his early X-ray devices.

"I arranged to send much of that equipment to the Smithsonian Institution in the 1950s," says Varnado, explaining how he found it stashed away, neglected, in a storeroom under Tulane Stadium. Today, some of the Kells' collection, including pioneering dental X-ray tubes, are on public display in the northwest wing on the first floor of the Museum of History and Technology, Smithsonian, in Washington, D.C. The purpose of the display in which the Kells' items appear is "to explain through instrumentation and artifacts some phases of man's ingenuity and professional efficiency in tackling health problems," writes Sami Hamarneh, curator, Division of Medical Sciences.

But, for the man who proclaimed "the progressive dentist must be constantly imbued with a spirit of constructive discontent," the most pleasing memorial is a local, monthly dental study group proudly bearing his name.

"We named it the C. Edmund Kells Study Group," says L. C. Sansovich, D.D.S., a member, "because of his high ideals in dentistry."

Dr. Sansovich explained the group's composed of 14 active New Orleans members and one out-of-town associate member. "Often, we invite a guest clinician from whom we feel we may learn something," he says, "and twice a year we sponsor out-of-state clinicians to give a two-day seminar." All members of the C. Edmund Kells Study Group also belong to the Academy of General Dentistry which requires its members to complete 100 hours of continuing education every three years.
writing, but some contemporaries questioned the content. Kells’ crusade for the use of X-ray by all dentists went unheeded for decades. Even though the X-ray’s beneficial aids were well known by 1916, relatively few dentists used it in their daily work. It was not until the 1920s that the X-ray was thoroughly incorporated into the practice of dentistry, something Kells had been doing and advocating since 1896!

Kells also went against the majority of his colleagues by calling for “the preservation of every tooth, whether vital or pulpless, just as long as it can be made to function properly and is not a menace to the patient’s health.” While dentists across the country (even at the famed Mayo Clinic) were dealing in the wholesale pulling of good pulpless teeth, Kells advocated the treatment of abscesses and root canals. He utilized to its fullest extent the X-ray in checking up on these treatments.

Dr. Bansovich explained the group’s composed of 14 active New Orleans members and one out-of-town associate member. “Often, we invite a guest clinician from whom we feel we may learn something,” he says, “and twice a year we sponsor out-of-state clinicians to give a two-day seminar.” All members of the C. Edmund Kells Study Group also belong to the Academy of General Dentistry which requires its members to complete a certain amount of postgraduate study each year.