

TRAFFIC CONTROL

Evan John McIlraith (1886-1978)

Engineer and inventor Evan John McIlraith was born, by chance, in Marlborough Township¹, Carleton County, Ontario, on September 28, 1886. He was however born to one Lanark's founding families, and was raised a Lanark boy.

Great grandparents James McIlraith (1789-1881) and Euphemia Stewart, members of the Paisley Townhead Society, arrived in the Lanark Settlement via the *Earl of Buckinghamshire* in 1821, bringing with them three children. James would later remember those first days in rhyme;

*So we settled up in Lenerick,
Among some rocks and stanes,
With neither chick nor chicken,
But three wee laddie weans.²*

One of the "wee laddie weans" was Evan's grandfather, John (1818-1901), who would marry Anne Jane Foster (1833-1905) in 1851. Their son Alexander Foster McIlraith (1858-1945) and his wife Sarah Charland (1859-1930) were parents to Evan John³.



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Educated at Lanark's Primary and Continuation School, Evan moved to the United States in 1893 and graduated with a civil engineering degree from the University of North Dakota in 1907. He was employed as an 'Instructor of Machine Design' at Cornell University, Ithaca, New York, in 1909-1910, and then, in 1911, took a position as 'Superintendent of Way and Structures', for the Puget Sound Railway & Power Company at Seattle, Washington.

In 1912 Evan married Elizabeth Lillian Bemis (1890-1965), at Inkster, Grand Forks, North Dakota. They would be parents of, Beth B. (1910-2005), Janet (1914-1978), Evan John Jr. (1919-2005), Donald (b.1924). As Evan worked at a variety of engineering jobs, from 1919 through 1922 the McIlraiths lived at Philadelphia, Pennsylvania, and then moved to New York in 1920.

¹ Probably at Richmond.

² See *The Lanark Society Settlers* by Carol Bennett (1991).

³ His siblings were, Herbert Carlisle (1844-1951), Anne Laura (1891), Mervyn Charland (1897-1968), Pearl Scott (1898-1983).

In 1928 Evan McIlraith registered patent No. 407.882, for an invention related to,

... methods of treating the exhaust gases of internal combustion engines, particularly to rid them of the poisonous carbon monoxide, which is always present due to the incomplete combustion of the hydrocarbon fuel. An object of this invention is to provide a method of successfully removing substantially all the carbon monoxide by converting it into carbon dioxide, which is relatively harmless.

In about 1930 McIlraith went to work for the City of Chicago and by 1940 was 'Staff Engineer' for the 'Chicago Surface Lines'. It was while working for the City of Chicago that, according to *The Story of Lanark 1862-1962*⁴, McIlraith invented "the stop-light system which regulates traffic in our towns and cities".



In fact, the first traffic light, looking like railroad signal semaphore arms with red and green lamps, operated by gas for night use, was installed outside the London, England, Houses of Parliament in 1868⁵. A more modern version of traffic lights were first installed in Cleveland in 1914 and New York in 1918. The traffic light, more-or-less as we know it today, was patented in 1923⁶.

While McIlraith did not actually invent "the stop-light system" what he did develop was of equal importance in effective motor traffic control; he devised a system of timing/programming traffic light changes.

Evan McIlraith retired in about 1950 and died in 1978 at Laguna Hills, Orange County, California.

- Ron W. Shaw (2018)

⁴ *The Story of Lanark 1862-1962*, by Elizabeth L. Jamieson, published by the Lanark Centennial Book Committee (1962) on the occasion of the 100th anniversary of the incorporation of the Village of Lanark.

⁵ Invented by J. P. Knight a railway engineer.

⁶ By Black American inventor Garret Morgan (1877-1963).