

## UNSUNG GENIUS CHANGED THE WORLD

By Robert Williamson

There are several mountain neighbourhoods bearing the names of citizens who became well known Canadians: Crerar (army general) Southam (publisher), Buchanan (railways), Balfour (architect), Sackville Hill (builder), and Inch (dairyman/reeve). Perhaps the most significant name on this list should be **Fessenden**, but few people would recognize its importance. Centred on Sir Allan MacNab Secondary School, the neighbourhood is bounded by Mohawk Road West, Upper Paradise, the LINK and Upper Horning.

The source of the Fessenden name is the Reverend Elisha Joseph Fessenden minister of St. John's Anglican Church in Ancaster and his acclaimed wife, Clementina Trenholme Fessenden. She became famous in Hamilton and British Empire history for leading a Loyalist movement to declare Empire Day a national holiday (Victoria Day). In 1900 she founded a branch of the (I.O.D.E.) Imperial Order of the Daughters of the Empire in Hamilton and became the curator of Dundurn Castle, the first woman in Canada to hold such a position.

However, it was Reginald Aubrey Fessenden, their son who added greatly to the distinction of the family name. Despite the fact that his inventive genius changed the world, he remains relatively unknown to Canadians because with the advent of the electronic age, he moved to the United States in 1886, seeking employment with Thomas Edison, the reigning monarch of American science and progressive companies like Westinghouse.

Born on the eve of Canadian Confederation, he spent his youth in southern Quebec. Inspired by the works of Alexander Graham Bell, Reginald applied his inventive genius, inherited from his maternal grandfather, to concepts that must have appeared like science fiction to his generation. Converting intelligible speech to electromagnetic waves that could be transmitted hundreds of miles without wires through the atmosphere and received by a listening device was beyond the imagination of almost everyone.

Teaching grants from Purdue and Pittsburgh Universities and U. S. Government contracts provided the financial resources that he needed in a very competitive world of sound and electrical research. On December 23, 1900, he was the first person to transmit the human voice without using wires - **radio**. After the Titanic sank in 1912, he invented an oscillator to produce sound waves under water. This device, called **sonar** proved very successful in wartime against German submarines. In 1919 he proved that 4,000 electromagnetic waves a minute could not only transmit voice but pictures as well; primitive groundwork for modern **television**.

Reginald Fessenden, the Unsung Canadian Genius, died at age 65 in 1932. He is buried in St. Mark's Church Cemetery in Hamilton, Bermuda, his wife's family home. Fessenden's epitaph reads, "**By his genius, distant lands converse and men sail unafraid upon the deep.**" The woman who gave him life as well as the family name to a Hamilton Mountain neighbourhood, lies next to her husband in St. John's Churchyard Cemetery in Ancaster not far from Fessenden Elementary School. (475 words)



Clementina Fessenden  
1844 - 1918

Reginald Fessenden  
1866 - 1932

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