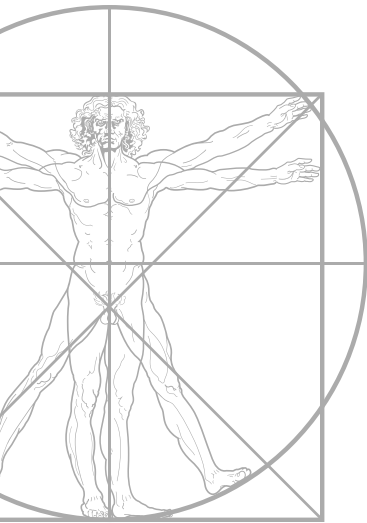


Inspired by generations of engineers



Leonardo Da Vinci
Artist & Inventor

Driven by unending curiosity and creativity, this famous artist also designed mechanical devices for manufacturing and transportation.

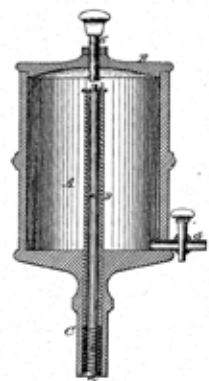
Pre 1800s

Sir Sandford Fleming
Railway Engineer

A Scottish-born Canadian engineer and inventor, he proposed worldwide standard time zones, designed Canada's first postage stamp, surveyed for the first railroad route across Canada and engineered much of the Intercolonial Railway and the Canadian Pacific Railway.



1800s



Elijah McCoy
Mechanical Engineer & Inventor

McCoy accepted a position as a fireman and oiler for the Michigan Central Railroad. After studying the inefficiencies in the existing system of oiling axles, he invented a lubricating cup that distributed oil evenly over the engine's moving parts, which allowed trains to run continuously for long periods of time without pausing for maintenance.



John Smeaton
Building Material Inventor

An English civil engineer responsible for the design of bridges, canals, harbours and lighthouses. He was also a capable mechanical engineer and an eminent physicist. Smeaton was the first self-proclaimed civil engineer, and often regarded as the "father of civil engineering."



Olive Dennis
Service Engineer

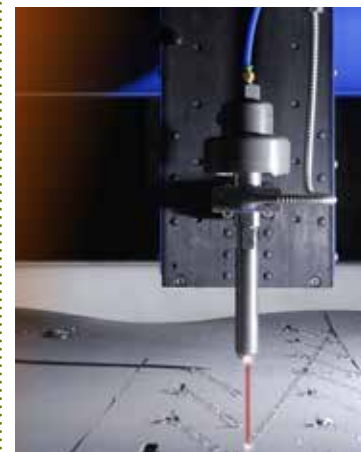
The Cincinnatian is most famed for its original dedicated equipment, rebuilt in the B&O Mount Clare Shops. The design work was done by Olive Dennis. She was a pioneering civil engineer employed by the railroad and appointed to a special position focused on passenger service.



Orville & Wilbur Wright
Aviation Pioneers & Inventors

Perhaps the most influential brothers in history, the Wrights' creative and technological genius revolutionized transportation. The two owned a bicycle repair shop and spent their spare time creating a powered and controlled flying machine. Modern aviation was born December 17, 1903 when they realized their dream.

1900s



Chandra Kumar Naranbhai Patel
Electrical Engineer

He developed the carbon dioxide laser in 1963, now widely used in industry for cutting and welding, as well as a laser scalpel in surgery and in laser skin resurfacing.

The Confederation Bridge
Civil Engineering

The Confederation Bridge was planned and designed in Calgary by Strait Crossing Inc. A large number of civil engineers, including professors from the University of Calgary, were closely associated with this major engineering project working on the planning, designing, constructing and monitoring of the bridge.

In June of 1997, the Confederation Bridge linking New Brunswick to Prince Edward Island across the Northumberland Strait opened for traffic.

Leon Katz
Biomedical Engineer
Officer of the Order of Canada

A pioneer in the field, he used his expertise and ingenuity to invent and modify needed medical apparatus. Among his many accomplishments, he designed and operated the original heart-lung bypass machine used for the first open-heart surgery in Canada. Katz also developed other specialized equipment such as a fetal heart monitor, an infant incubator, and a scanner and printer that detects and records thyroid cancer.



Grace Murray Hopper
Software Engineer

She was one of the first programmers of the Harvard Mark I computer in 1944. Hopper invented the first compiler for a computer programming language and helped popularize the idea of machine-independent programming languages, which led to the development of COBOL, one of the first high-level programming languages.

John Bardeen
Electrical Engineer & Physicist

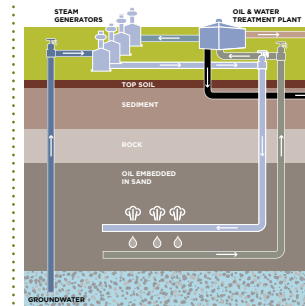
The only person to have won the Nobel Prize in Physics twice: co-winner of the Nobel Prize for Physics in 1956 for inventing the transistor and in 1972 for the theory of superconductivity.

The transistor revolutionized the electronics industry, allowing the Information Age to occur, and made possible the development of almost every modern electronic device from telephones to computers.



Roger M. Butler
Inventor of Steam-assisted gravity drainage (SAGD)

He invented the concept of injecting steam into horizontal well pairs to access deposits of bitumen in the oil sands that were too deep to be mined. The former Schulich School of Engineering researcher paved the way for companies to further develop and enhance oilsands production using SAGD technology in northern Alberta.



Dr. Robert Thirsk
Engineer, Physician & Astronaut

A former Canadian Space Agency astronaut, he holds the Canadian records for the longest space flight (187 days 20 hours) and the most time spent in space (204 days 18 hours).

He received a bachelor of science degree in mechanical engineering from the University of Calgary in 1976.



Eden Full
Software & Mechanical Engineer

As the founder of SunSaluter, her low-cost solar panel tracks the sun across the sky using an ingeniously simple system of dripping water bottles. As water drips from bottles attached to one side, a counterweight swivels the panel, while a filtration system cleans the water. She has deployed early models to countries like Kenya, Uganda and Tanzania, helping 6,000 people get both clean water and power.

2000s

George Roter
Engineers Without Borders Canada (EWB) Co-founder

EWB is a movement of professional engineers, students, overseas volunteer staff, and supporters across Canada. The organization aims to create opportunities for rural Africans to improve their lives, to connect Canadians to Africa and to harness the skills and creativity of the Canadian engineering sector to bring about positive change in the world.

In 2014, Roter received an honorary doctorate from the University of Calgary to recognize his achievements.



Elizabeth Cannon
Geomatics Engineer & Leader

She was at the forefront of Global Positioning Systems through her geomatics research and she has commercialized technology to over 200 agencies.

She was also the founder of Cybermentor, an online mentoring program for girls in science and engineering, and helped create ExploreIT, a program to promote computer-related professions to young women.

On July 1, 2010, Cannon became the president of the University of Calgary.

