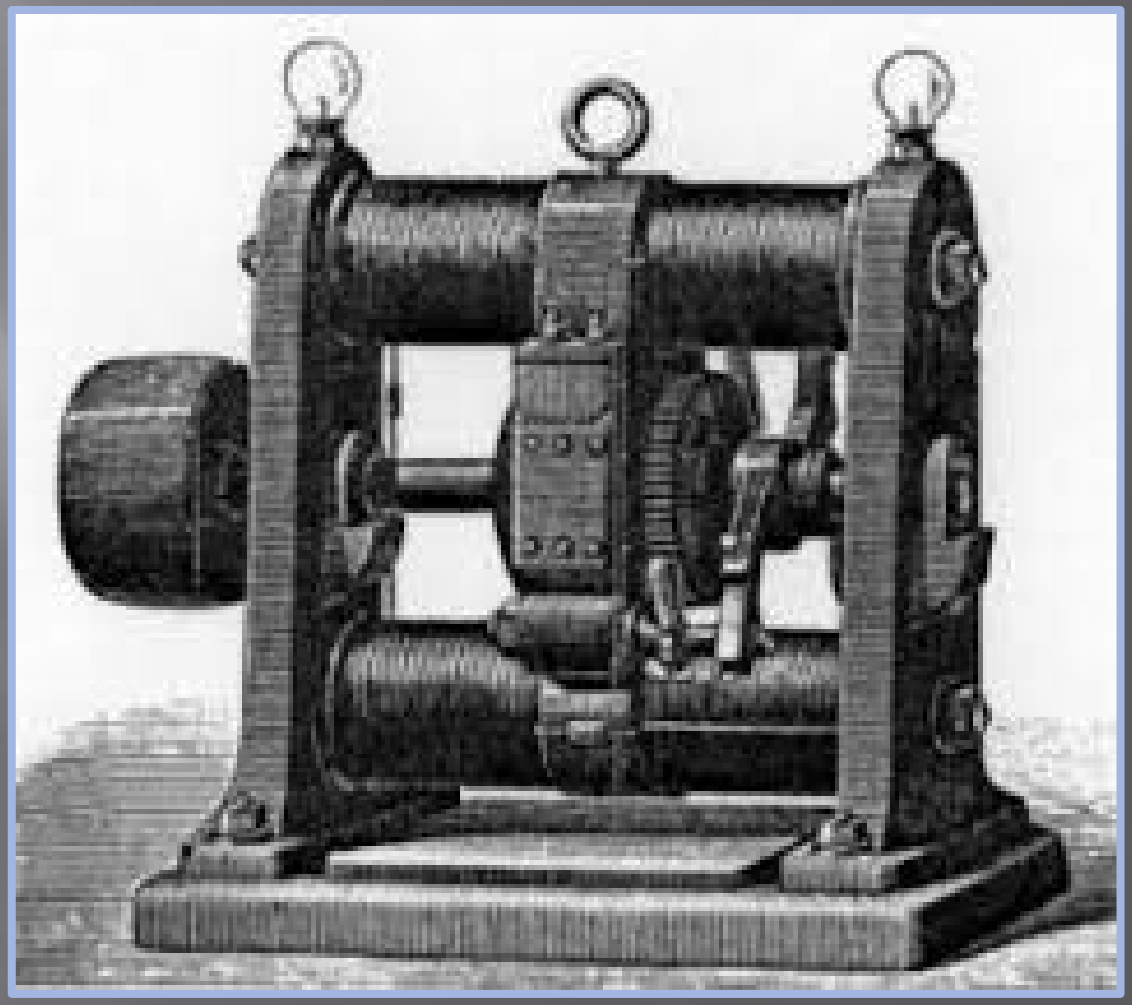
Cleveland Technical Societies Council

CLEVELAND FIRSTS!

A collection of noteworthy technical events, developments and products that have Greater Cleveland as their points of origin.

1876

Charles F. Brush patented the open coil-type dynamo, a forerunner of the modern generator.



1877

Henry Sherwin of Sherwin-Williams patented the resealable paint can in 1877. For many years, Sherwin Williams made paint cans not only for itself, but for their competitors as well.



1879

Electric lighting of public streets - Charles F. Brush.



1880

First standardized formula paints – Sherwin-Williams Co.



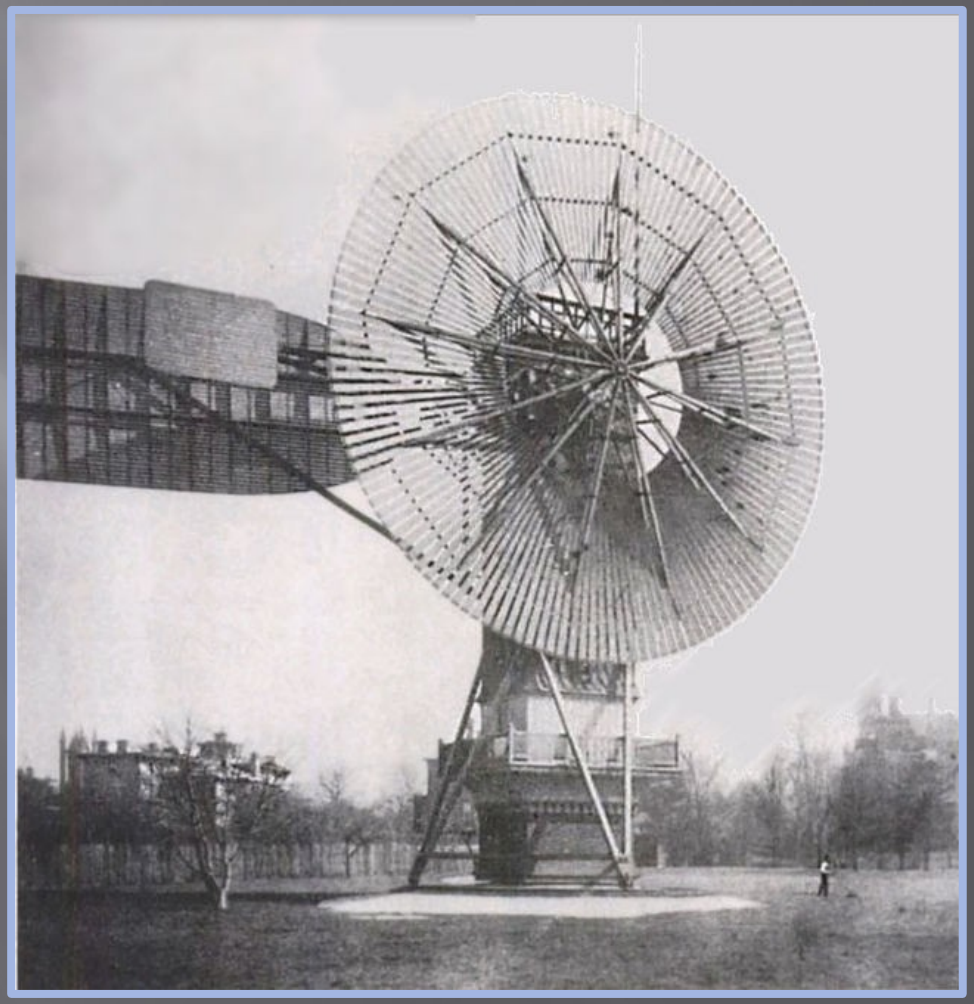
1886

Charles Martin Hall of Oberlin develops an electrochemical method to extract aluminum metal which becomes the Alcoa Corporation.



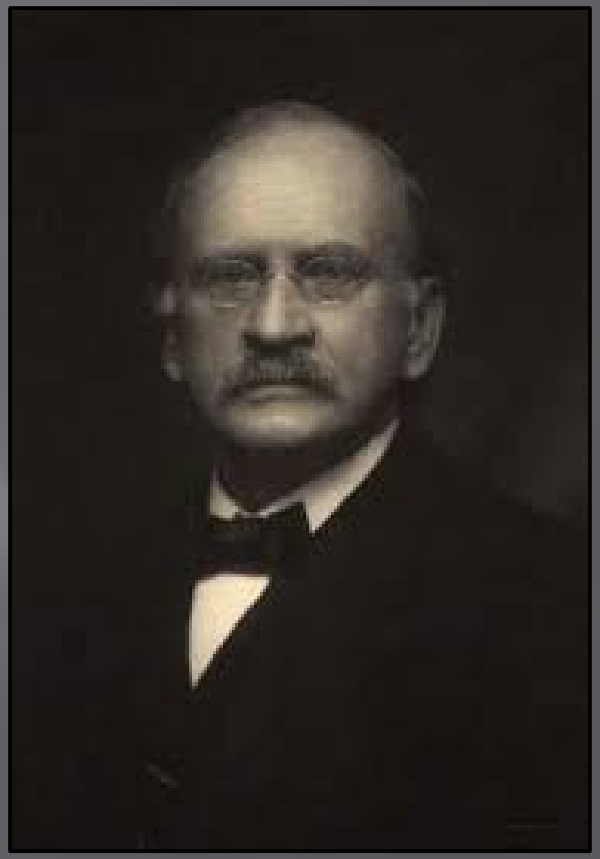
1887

Charles Brush (1849-1929) built what is today believed to be the first automatically operating wind turbine for electricity generation.



1895

Edward Morley, a chemist at Adelbert College of Western Reserve University (later Case Western Reserve University) accurately determined the atomic mass of the element oxygen by chemical means.



1896

National Carbon Company (later Energizer Battery Co.) of Cleveland marketed the first commercially-successful, sealed battery for consumer use.



1899

Murphy-Phoenix Co., the family-owned manufacturer of Murphy's Oil Soap, was organized.



1890

The Arcade — The first indoor shopping center.



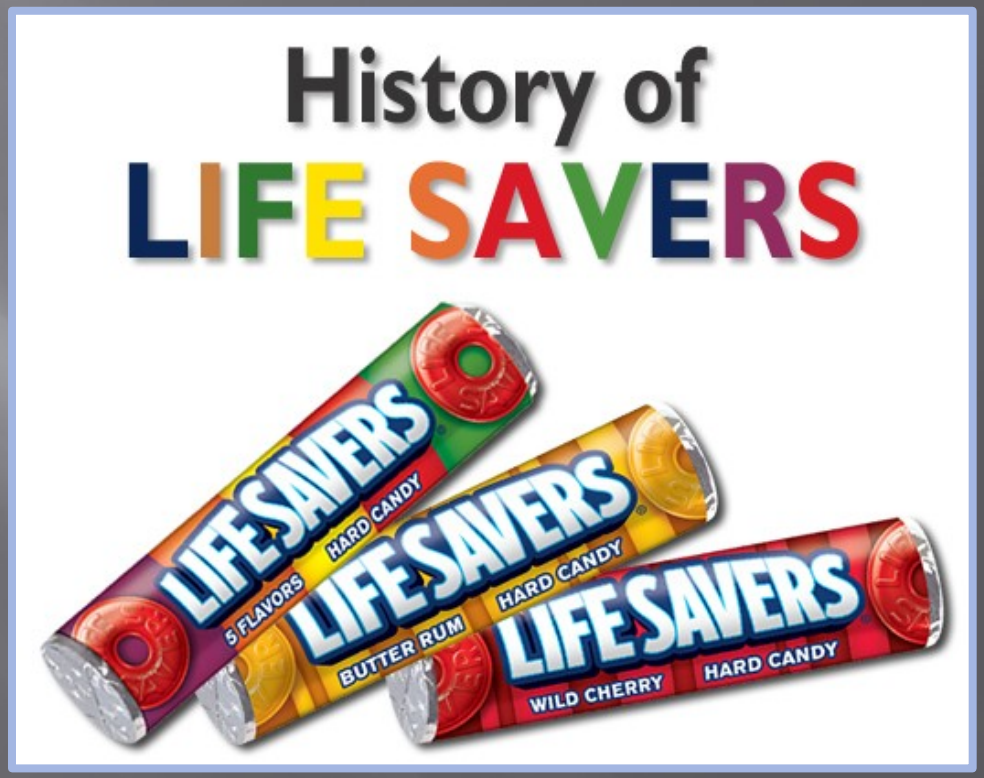
1891

America's first gasoline-powered automobile was built by John W. Lambert.



1891

LifeSavers candy is created by Clarence Crane.



1892

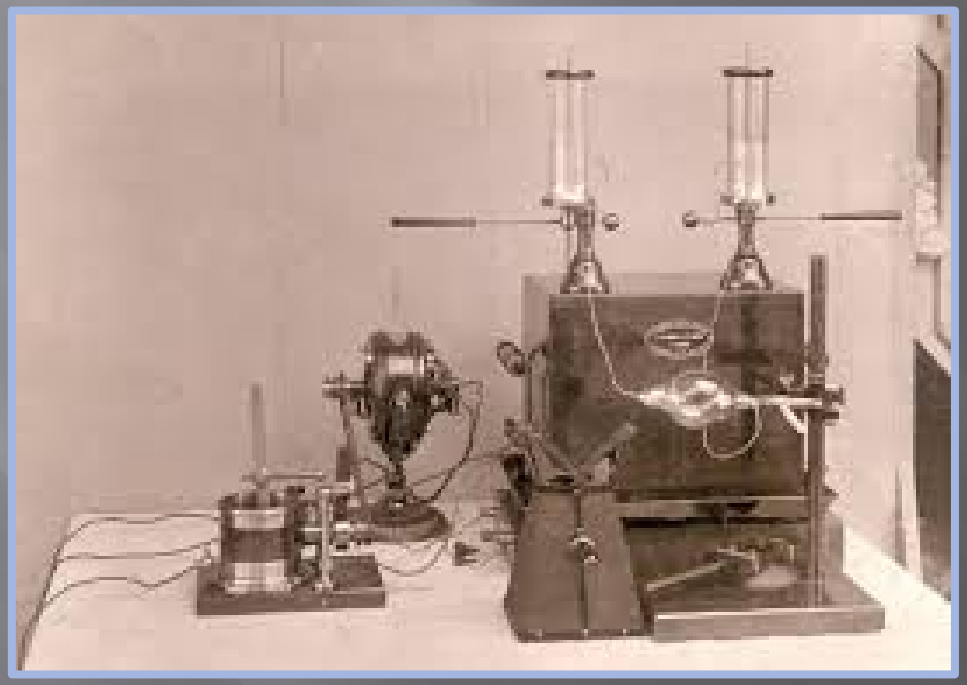
The padded bicycle seat is invented by Clevelander Arthur Lovett Garford.





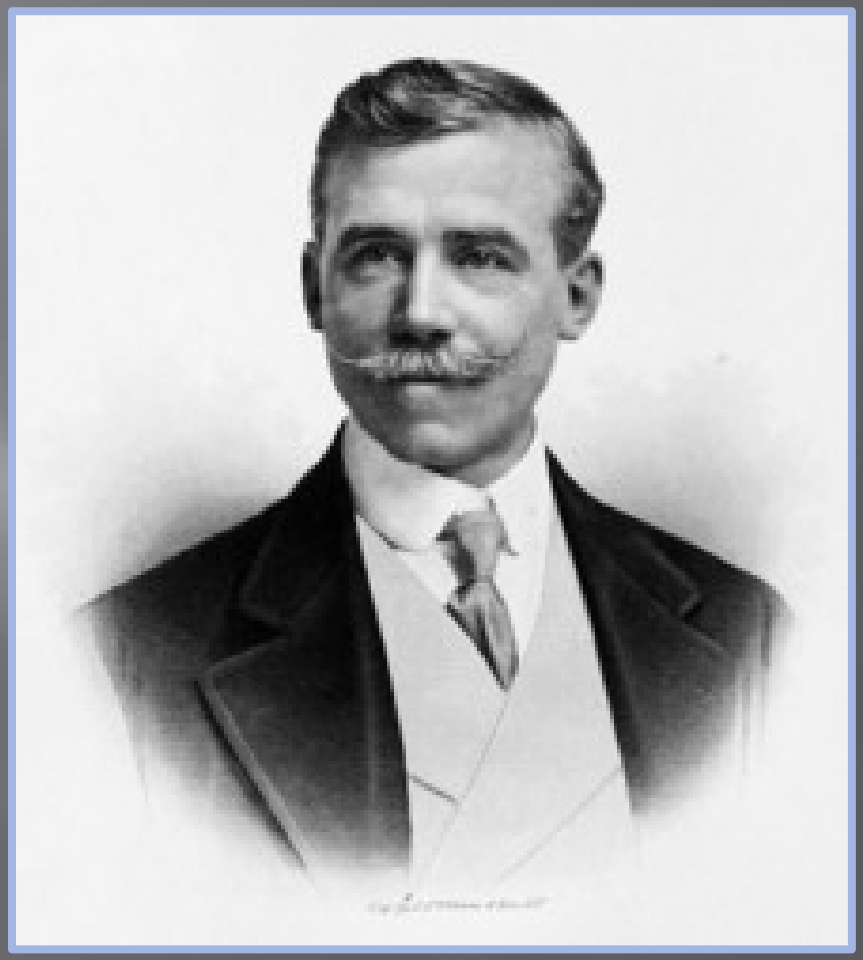
1896

X-ray machine and whole-body scanner is developed by Dayton C. Miller. (Case School of Applied Science) +
The first X-Ray photograph in the U.S. - Dudley Wick.



1898

American-made standard gasoline sale in the U.S. - Alexander Winton



Alexander Winton

1899

Wound-rubber core golf ball

– Coburn Haskell.





1900

The first Automobile Club is established in Cleveland.



1901

Automobile steering wheel is developed by Alexander Winton.



1902

Cleveland's Baker Motor Vehicle Company's streamliner racer is the first motor vehicle to be fitted with seat belts.



1903

Harry Gammeter of Cleveland patented the multigraph duplicating machine, called the "ditto machine."



1903

Dr. George Crile, a founder of the Cleveland Clinic, published "Blood-pressure in Surgery" which led to the development of the antigravity suit (anti-G suit) used in military aviation and space travel.



1903

Oberlin water works is the first municipal lime-soda water softening plant in the world.



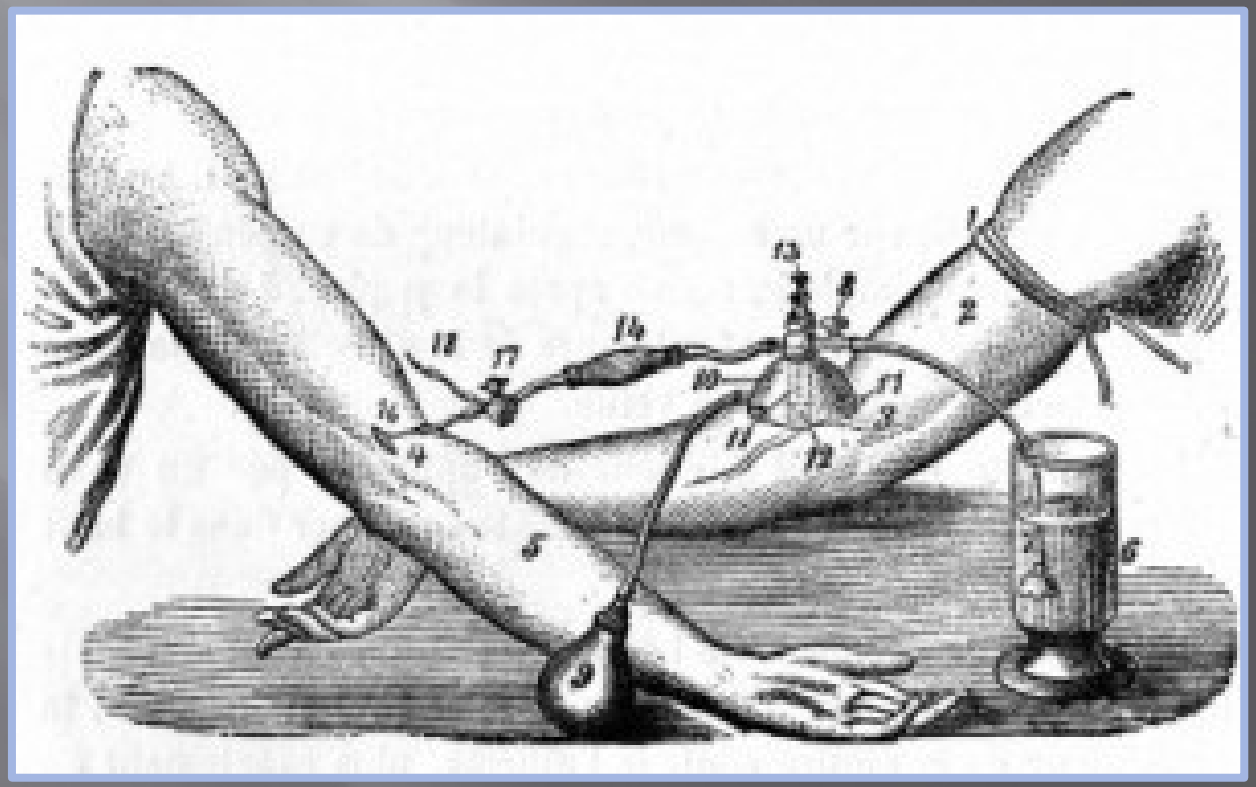
1904

Greater Cleveland developed the first comprehensive modern building code.



1905

The first blood transfusion was performed by Dr. George W. Crile, Sr.



1906

Cleveland's Baker Motor Vehicle Company produces 800 cars making it the largest electric vehicle maker in the world.



1911

First planned industrial research park (General Electric's Nela Park).



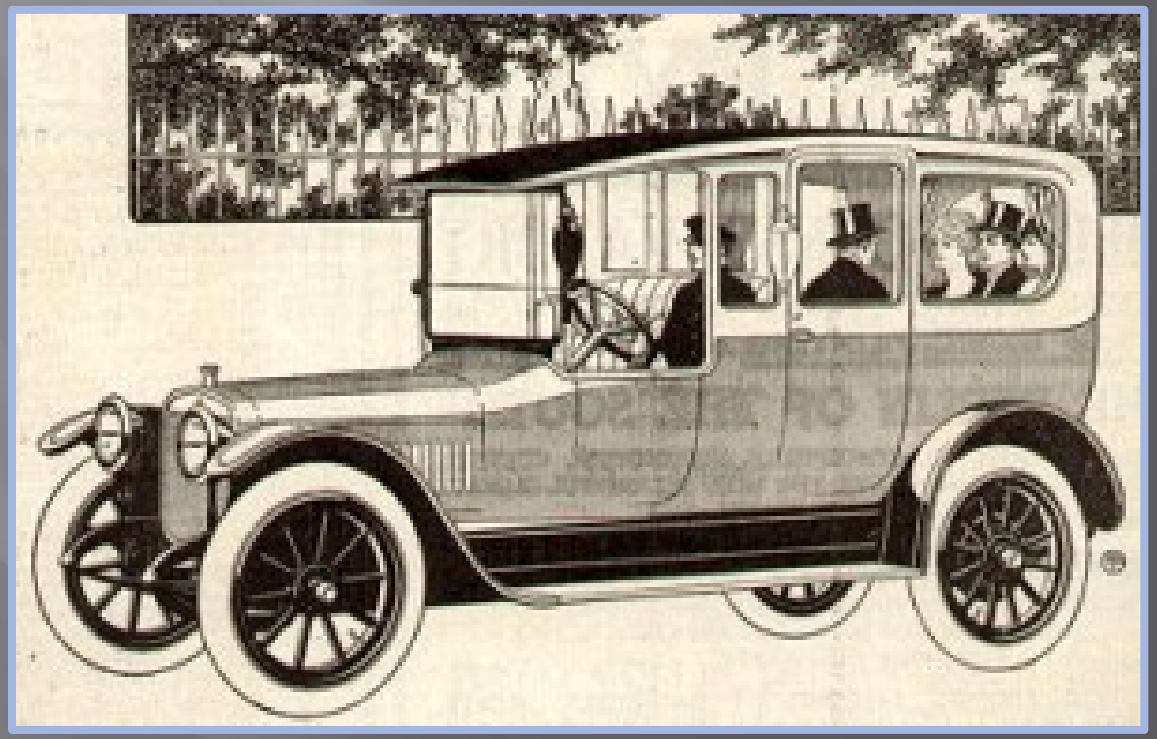
1912

World's first hybrid vehicle was created when Walter C. Baker coupled a gasoline engine and an electric motor in an automobile.



1913

First all American-made diesel engine was developed by the Winton Gas Engine and Manufacturing Company.



1913

E. F. Hauserman Company begins manufacturing modular, moveable interior steel partitions for office and factory “flex-spaces.”



1915

Dr. Henry J. Gerstenberger developed simulated milk formula for infants at Case.



1915

On August 4, 1915, the first electric traffic signal was installed at Euclid Avenue & East 105th Street.



1916

The first gas mask was successfully demonstrated at the Cleveland Waterworks explosion by Garrett A. Morgan.



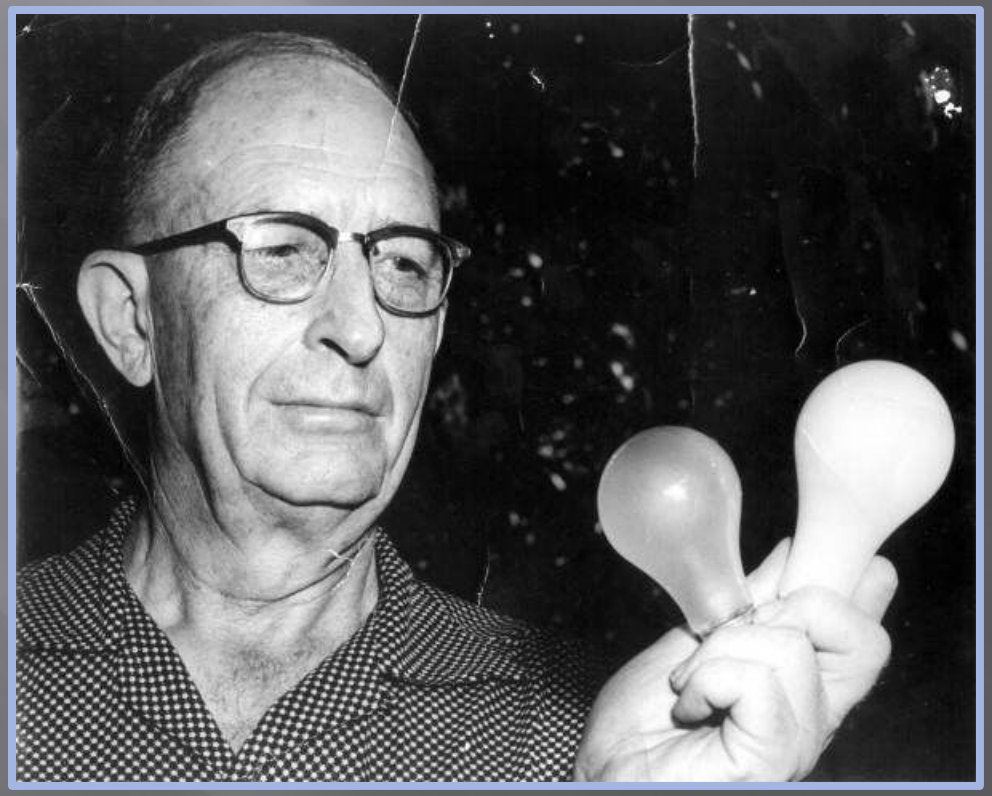
1927

Cleveland Hopkins International Airport is the first municipal airport and had the first air traffic control tower.



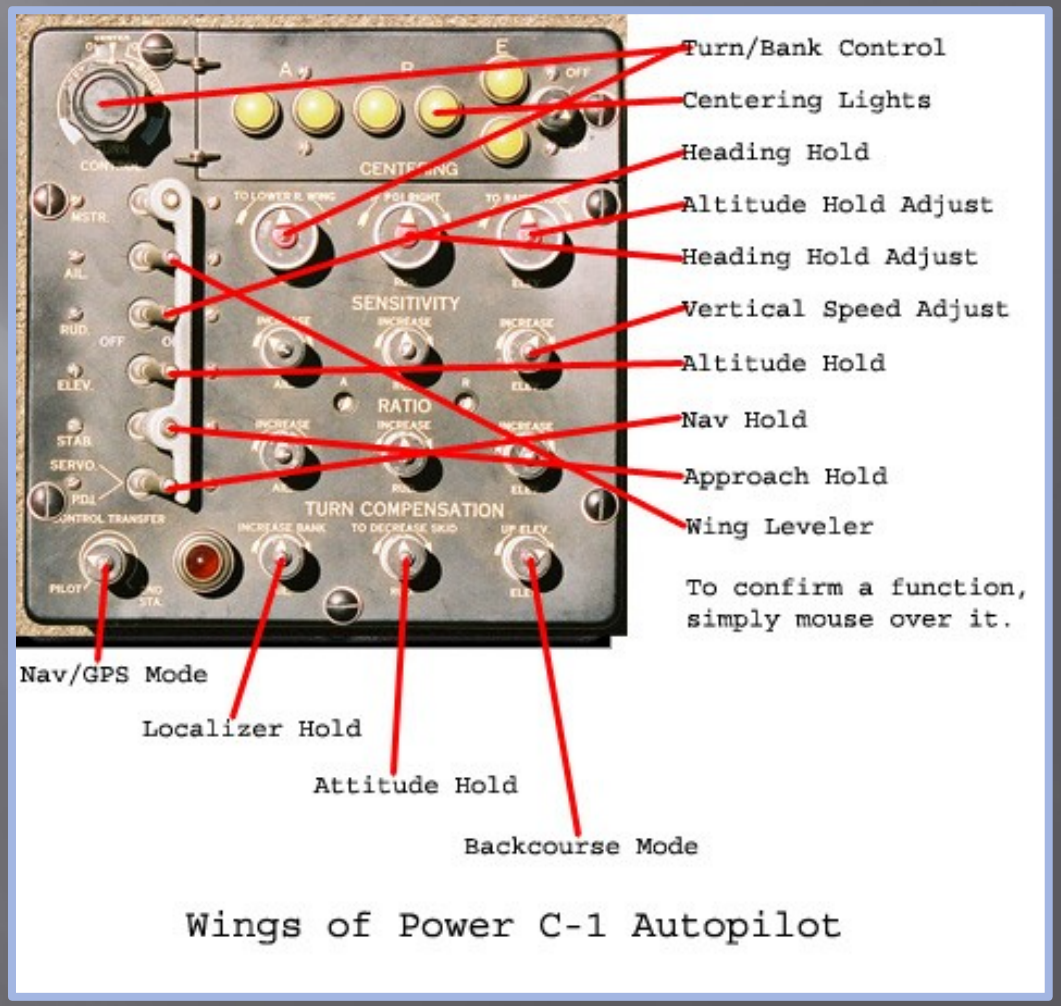
1928

The first frosted light bulbs were developed by Marvin Pipkin at Nela Park.



1929

First airplane automatic pilot was tested in Cleveland.



1935

Dr. Claude S. Beck pioneered surgical treatments of coronary heart disease at University Hospital.



Dr. Claude S. Beck

1941

The Sherwin-Williams Company introduced Kem-Tone© Wall Finish, the first commercially successful, durable, water-based interior wall paint.



1947

First successful defibrillation of a human heart by Dr. Claude S. Beck and colleagues at University Hospitals.



1952

Dr. Claude S. Beck developed Cardiopulmonary Resuscitation (CPR) at Case.



1955

Standard Oil of Ohio (Sohio, later BP Chemicals) in Warrensville Heights developed a new catalytic process for the inexpensive production of acrylonitrile, now used to produce about 90% of acrylic plastics worldwide.



1957

The Switzer brothers of Day-Glo Corporation in Cleveland patented a process for producing “daylight fluorescent” dyes that stood out from other pigments under normal lighting conditions.



1958

Accessible suspended ceiling construction is pioneered by Donald A. Brown.



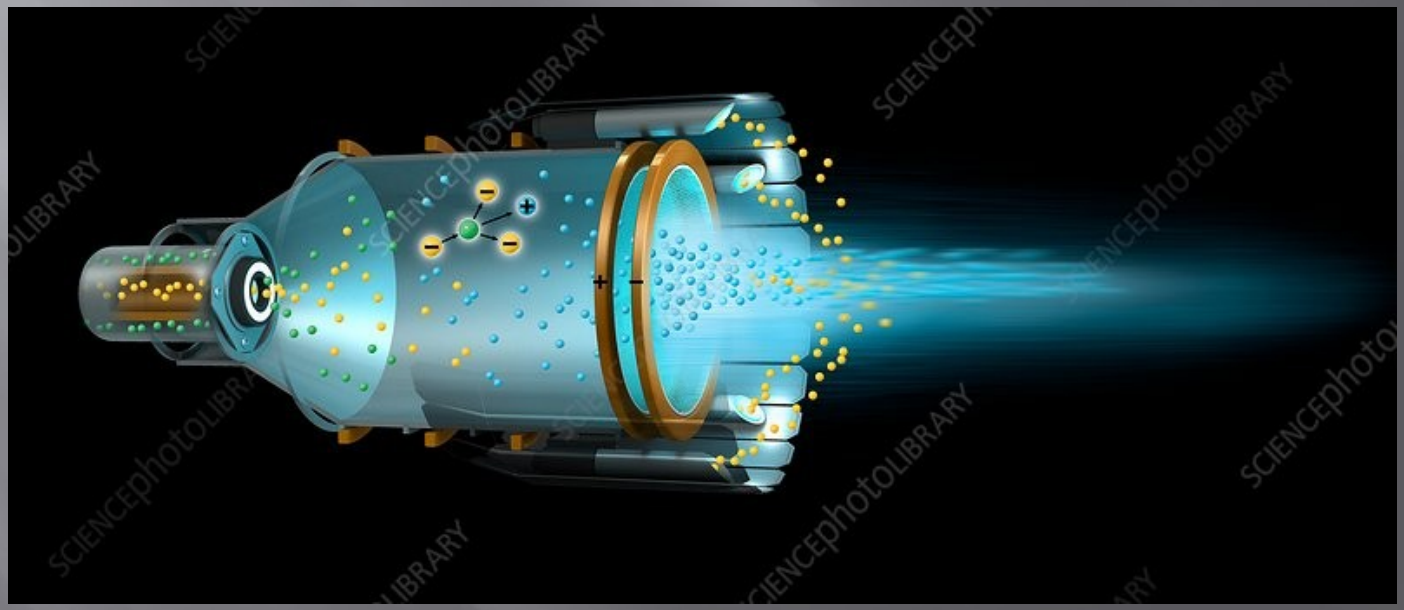
1958

Union Carbide (now GrafTech International) in Parma developed a process for producing high-quality carbon fibers, now used in a wide range of composite materials.



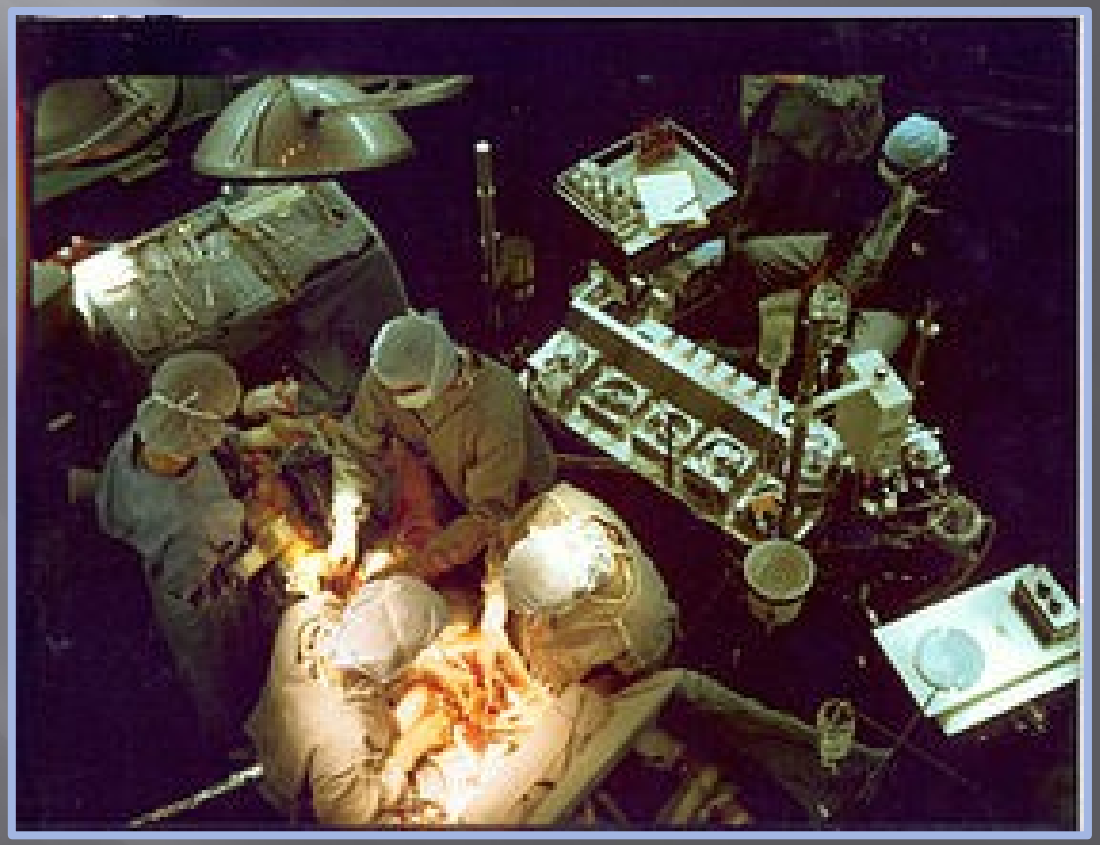
1959

A working ion thruster was built by Harold R. Kaufman at the NASA Glenn Research Center. Applications include control of orbiting satellites and as a main propulsion engine for low-mass robotic space vehicles.



1967

The first coronary artery bypass surgery is performed by Dr. René Favaloro at the Cleveland Clinic.



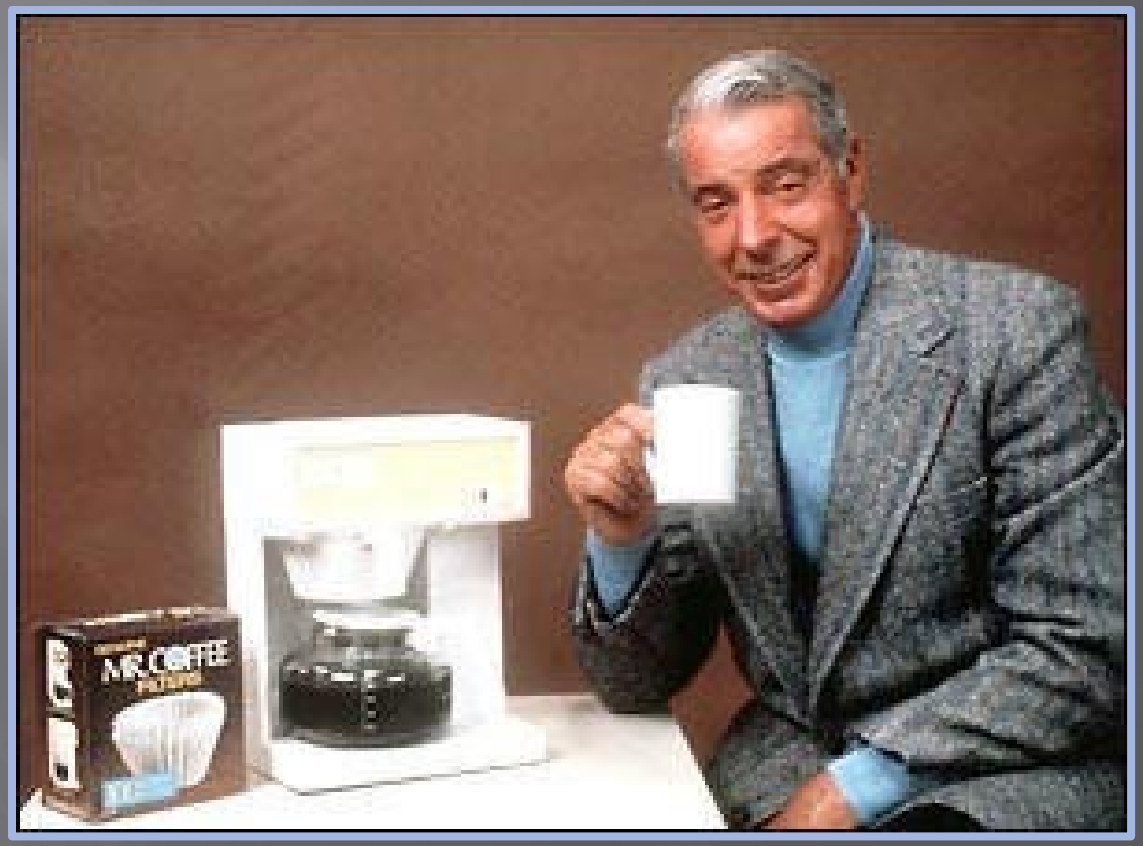
1968

First transit rail service from a city's airport directly to its downtown is unveiled in Cleveland.



1972

Cleveland native Vincent Marotta invents the Mr. Coffee coffee maker.



1978

A team of Cleveland-based engineers developed the first hot-air popcorn popper for home use.



1997

Professor Huntington F. Willard [CWRU] created the first artificial human chromosomes.



2002

As part of Sherwin-Williams, Dutch Boy introduced the revolutionary Twist & Pour paint container. The all-plastic, square gallon container featured a twist-off lid, integrated handle and built-in pour spout.



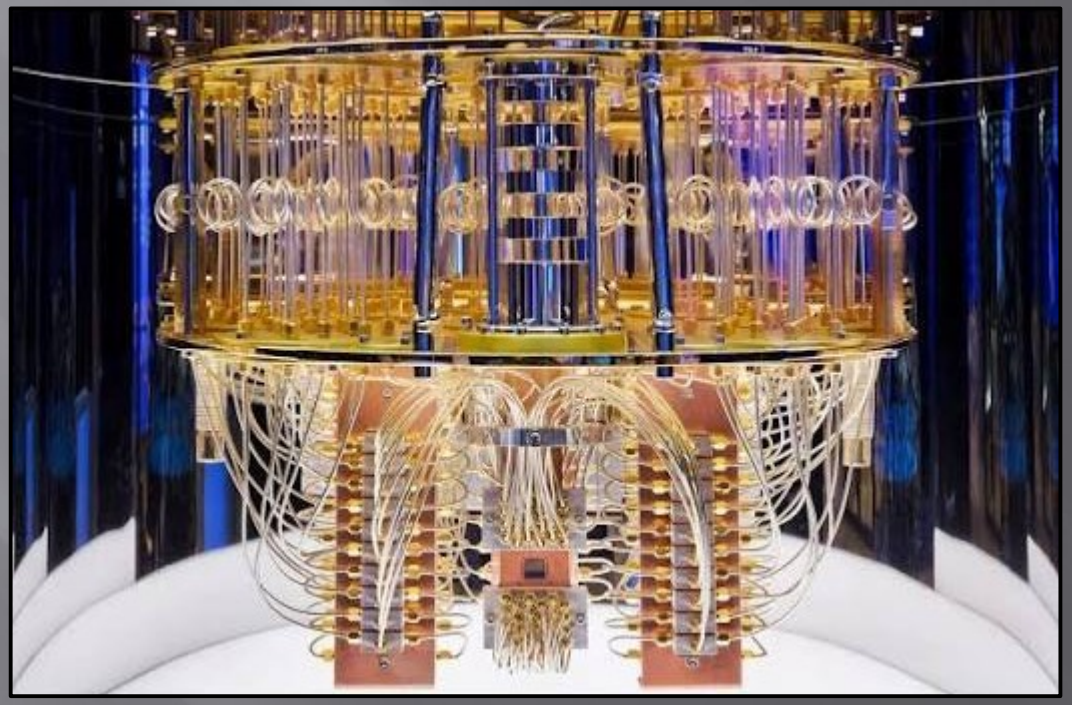
2008

Cleveland Clinic performed the first partial face transplant in the United States.



2023

The IBM Quantum System One at the Cleveland Clinic's Lerner Research Institute, is the first quantum computer dedicated solely to healthcare research.



Cleveland Technical Societies Council

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