

**Bell**  
1880

# *Telephones Through The Years*



*In 1874 Alexander Graham Bell outlined to his father in Brantford, Ontario, his idea for transmitting the sound of the human voice. From that date on, through years of relentless experimentation and painstaking research, the telephone has progressed from the primitive Gallows Frame telephone set of 1875 to the sophisticated telecommunications services of the twentieth century.*



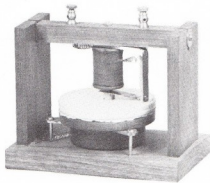
# 1874

## *Telephone Idea Disclosed*

*Alexander Graham Bell disclosed his idea for a telephone to his father, Professor Alexander Melville Bell, at his family home in Brantford, Ontario, now the famous "Bell Homestead". And thus the telephone was invented on July 26, 1874.*



Receiver



Transmitter

# 1875

## *First Telephone*

*Alexander Graham Bell's first telephone, the "Gallows Frame", through which speech sounds were first transmitted electrically on June 3, 1875, in Boston, Mass.*



Receiver

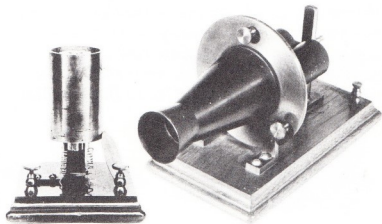


Transmitter

# 1876

## *Successful Voice Transmission*

*"Mr. Watson, come here. I want you." These historic words, the first recognizable sentence ever transmitted electrically, were spoken by inventor Alexander Graham Bell to his assistant, Thomas Watson, over the Liquid Transmitter, March 10, 1876, in Boston, Mass.*



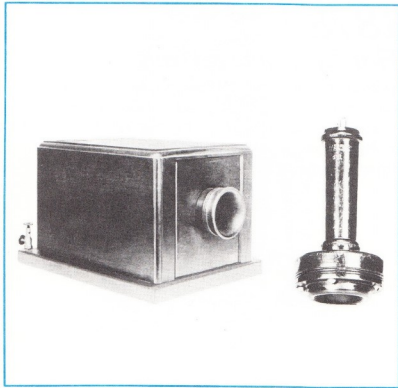
Receiver

Transmitter

# 1876

## *First Long Distance Call*

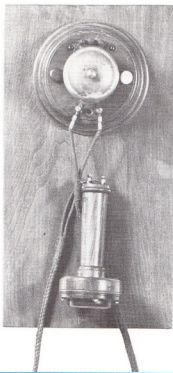
*Bell's Double Pole Membrane Transmitter and Iron Box Receiver were used in 1876 to transmit and receive the world's first one-way long distance telephone call from Brantford, Ontario to Paris, Ontario. Canada's first two-way long distance telephone conversation was between Montreal and Quebec in 1877.*



# 1877

## *First Commercial Telephone*

*Canada's first telephones for commercial use were leased in 1877 to Prime Minister Alexander Mackenzie. The instruments were used in Ottawa, Ontario, on a line from Mr. Mackenzie's office at the Department of Public Works to the Governor General's residence. Both the Wooden Box and Wooden Hand Telephones were capable of transmitting and receiving conversations.*

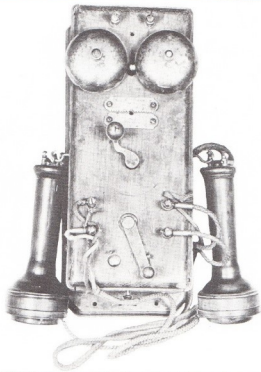


# 1878

## *First Telephone Exchange*

*Subscribers to the first telephone exchange in the British Empire, opened at Hamilton, Ontario, in July 1878, used this hand telephone as both transmitter and receiver by moving it from mouth to ear as they spoke or listened.*





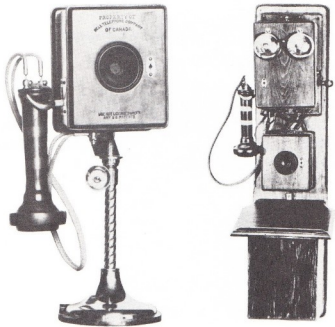
# 1879

## *Subscriber's Wall Telephone*

*Customers claimed that fragments of their conversation were lost while the instrument was being transferred from mouth to ear. An additional receiver-transmitter overcame this problem. The crank in the centre of the panel generated power to call the operator.*

## 1880's Blake Telephones

*The Blake magneto wall and desk telephones of the 1880's contained the transmitter invented in 1878 by Francis Blake, which relayed the voice with increased clarity. These telephones were in general use in Canada until about 1900. The double red band on the receiver indicated that the instrument was licensed for use in Canada.*





## 1890's

### *"White Solid Back"*

*The "White Solid Back" "Long Distance" magneto telephone of the 1890's was so called because it gave better transmission over greater distances than the Blake telephone. The transmitter used in these sets, with only minor modifications, was used exclusively until 1919.*



# 1900

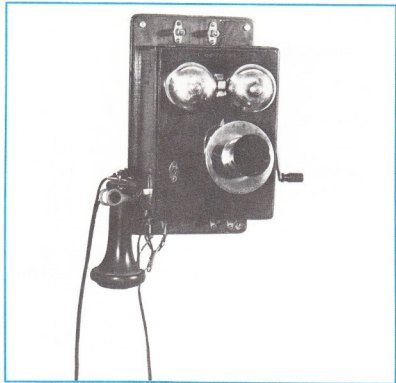
## *Common Battery*

*The first common battery telephone system in Canada was installed by Bell Canada at Ottawa in 1900. Battery power was centralized at the telephone exchange; battery boxes and cranks for operating the magneto generator were eliminated from subscribers' telephones. By 1904 the common battery wall telephones were less than half the size of earlier wall sets and the "daffodil" telephone of 1910 became a popular set.*



## 1907 "One Box" Magneto Wall Telephone

*By 1907, the introduction of dry cell batteries led to a design change for local battery magneto telephones. Gone were the two and three box sets of the 1890's and in their place was a rugged and efficient one box "1317" telephone. Although common battery systems were being installed in most urban centres, the local battery magneto wall sets continued to provide dependable service in rural areas up to the 1960's.*



# 1913

## *"305" Type Magneto Set*

*Although common battery systems had been installed in many places, magneto wall telephones like this number "305" type were still in use and in 1913 became more compact and attractive when the battery box was installed as a separate unit placed out of sight near the telephone.*



# 1924

## *Dial Introduced*

*In 1924 dials appeared for the first time on telephone sets used by Bell Canada subscribers. The "293" type wall set and the "50" type desk set were the pioneer models. Bell Canada's first dial office, Toronto's "GRover" exchange, was opened in July 1924.*



# 1927

## *Combination Handset*

*Telephones took on a new look in 1927 when the combined receiver-transmitter, long used by telephone linemen, was sufficiently improved to be adapted for general use. These sets ushered in the era of combination handset telephones.*





## 1930's

### *Style Innovations*

*Innovations in telephone styles were extensive in the '30's. The square box design of the wall set disappeared and by 1937 the bell was hidden in the base of the desk telephone.*



# 1937

## *Push Buttons Introduced*

*The number "205" telephone of 1937, with push buttons on the base, was one of the early key sets which paved the way for today's widely-used business telephones.*



# 1950's

## *"500" Type Telephones*

*Rugged and functional, the "500" type desk telephone of 1952 and its wall counterpart of 1956, were, and still are, extremely popular and widely used. Telephones became decorative household items in 1955 when they became available in four different colours (green, ivory, grey and red).*



# 1958

## *Speakerphone*

*The Speakerphone, introduced in 1958, provides hands-free telephone conversations by means of a loudspeaker and microphone unit connected to the telephone. It also permits conversations between groups of people at different locations, or may be used as a conventional telephone when privacy is required.*



## 1959 *Call Director*

*Used in business offices, the Call Directors, introduced in 1959, were designed to handle from 18 to 60 incoming, outgoing and interoffice calls at the same time, and can be used with handset, headset or speakerphone.*



# 1960

## *The Princess*

*The desk set acquired a new glamour in 1960. Compact shape, colourful, attractive styling and illuminated dial, have made the "Princess" telephone a favorite bedroom telephone.*



# 1964

## *Touch-Tone Service*

*Heralding a new era in communications, the dial was replaced by push buttons in the Touch-Tone telephone of 1964. Conversion is underway to bring Touch-Tone service to all customers requesting it.*



# 1968

## Contempra Phone

*Designed and produced in Canada, the handset in the Contempra phone of 1968 has everything you need to make a call—including a “recall” button which makes it possible to dial another call without hanging up. Contempra phone is available with either dial or Touch-Tone service.*





## 1973 Logic 10

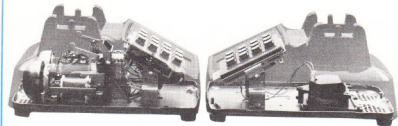
*A 10-button business phone, designed by Bell-Northern Research and manufactured by Northern Telecom, Logic 10 provides business customers with a multi-button product capable of providing more lines than the familiar 6-button desk set and fewer than the 18 lines available in the smallest Call Director.*



# 1977

## *Script*

*In 1977, Bell Canada took its first step in the marketing of telephone sets. The Script, (or Doodle) is marketed according to an unprecedented formula: the housing is sold outright while the electromechanical parts are rented by the customer. Made by Northern Telecom and entirely designed in Canada, the Script is a rectangular desk set with either dial or Touch-Tone, and it comes with a note-pad and pencil. The Script is available in six colours (white, yellow, brown, forest green, harvest gold and orange). It can also be decorated with a "beanbag" in corduroy, leatherette or denim.*



## *What does the future hold?*

*100 years of research has lead to many advances in telephone technology. But the future has still more in store for us. The electronic telephone is now a reality. Designed by Bell-Northern Research and manufactured by Northern Telecom, this telephone is different from the others in that it contains miniature integrated circuits instead of cumbersome electro-mechanical parts. Thus, thanks to the wizardry of electronics, the telephone will be equipped with features not found in our ordinary sets of today. Furthermore, the space saved by the absence of electro-mechanical parts will make possible the design of more compact and futuristic telephones.*

## *Other significant dates in telephone history*

- 1874** *Alexander Graham Bell invents the telephone at Brantford, Ontario.*
- 1880** *The Bell Telephone Company of Canada, now known as Bell Canada, incorporated by special Act of Parliament.*
- 1890** *Bell Canada introduces night and Sunday service in exchanges serving at least 100 customers.*
- 1917** *First repeater units used in Canada were installed at Kingston, Ontario, to amplify voice currents on long distance calls.*
- 1920** *Service to any place in Canada and the United States.*
- 1926** *Long distance calls put through while caller remains at telephone.*
- 1927** *Canada-Britain telephone service via USA opened by Prime Ministers Mackenzie King and Stanley Baldwin.*
- 1928** *Bell Canada introduces carrier system, allowing several conversations over the same wires simultaneously.*
- 1932** *Trans-Canada Telephone System organized to facilitate long distance service.*
- 1947** *Mobile radiotelephone service inaugurated in Montreal and Toronto.*
- 1953** *Opening of microwave radio relay system for telephone and television transmission: linking Buffalo, Toronto, Ottawa and Montreal.*

**1958** *Direct Distance Dialing (DDD) permits customer-dialing of millions of telephones in Canada and the USA.*

*Microwave system links Ontario-Quebec centres with the rest of Canada and with American telephone and television networks.*

**1967** *Canada's first electronic switching system (ESS) begins operations in Montreal.*

**1969** *Telesat Canada Corporation is established to guide communications satellite program.*

**1970** *Trans-Canada Telephone System introduces multicom service, capable of transmitting data at high speeds throughout the country.*

*Bell Canada opens the world's most northerly telephone exchange: Grise Fjord on Ellesmere Island, 1,000 miles from the North Pole.*

**1971** *SP-1 (stored program), the world's first electronic switching system of this type, designed by Bell-Northern Research and manufactured by Northern Telecom, installed in Aylmer, Quebec.*

**1972** *Anik I, the world's first domestic communications satellite, launched from Cape Kennedy to provide live television and improved telecommunications services to Canada's North.*

**1973** *Dataroute—the world's first nationwide digital data communications system.*

**1974** *The world's first long distance SP-1 begins service in Thunder Bay, Ont.*

**1975** *The LD-4, a high capacity underground digital cable system carrying telephone calls, video signals and digital data, goes into service linking Montreal, Ottawa, and Toronto.*

**1976** *The SL-1 one of the first fully electronic digital business communications systems is introduced.*

**1977** *Direct dialing of station-to-station long distance calls overseas and to the Caribbean becomes available to some Bell Canada subscribers.*

*Datapac, one of the world's first packet-switched data networks, serving Canadians with coast-to-coast data transmission service goes into operation.*

*Fibre optics, whereby hair thin glass fibres use light waves to conduct telephone, television and data signals, has its first Canadian field trial linking two Montreal switching centres.*

**1978** *TOPS (Traffic Operator Position System), a new computerized and automated system for operators, is introduced in Toronto.*

*The world's first trial of fibre optics in subscribers' homes begins in the Yorkville district of Toronto.*

*The first electronic telephones begin field trials in London and Sarnia.*

