FIFTEEN MINUTES OF RADIO EACH DAY

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Lesson No. 236.

POINTS TO REMEMBER.

REMEMBER THIS:

The range of a receiving set depends not only upon the quality of the receiving set and the dimensions of the antenna, but also upon the following considerations: the season of the year, the time of day or night, the power of the trasmitting station from which the signals originate, the nature of the intervening territory, and whether the distance is over land or water, as well as the skill with which the apparatus is manipulated.

Doubling the reading of the antenna ammeter of a transmitting station means that the energy in the antenna system has been increased four times, since the energy is proportional to the square of the current.

That a single wire antenna of moderate dimensions, say, seventy-five feet long is more effective in giving selective tuning of a receiving station while antenna systems for trasmitting stations usually copsist of several wires on spreaders.

If a series condenser is employed in either the receiving or transmitting antenna cricuit, the smaller its capacity, the greater the decrease in wave length, but the wave length can never be reduced in this manner to as little as half its original value.

The only practical way to be sure that a trasmitter is radiating on a particular wave length is to carefully tune the set with a wave meter.

It is very difficult to obtain a radiated wave from a spark transmitter which complies with the requirements of the Federal law unless an oscillation transformer with loose coupling is employed and the circuits are in resonance. This is particularly true of amateur stations required to operate on 200 meters.

The addition of inductance to the open circuit of a spark transmitter decreases the damping and therefore lowers the logarithmic decrements. In receiving circuits, increasing the inductance and decreasing the capacity to maintain the same wave length tends to stiffen the circuit and render it more responsive to a particular wave length, thereby reducing the amount of interference.

The addition of a series condenser to he open circuit of spark transmitters so as to reduce the wave length to 200 meters as required by law results in a broadly tuned circuit in which it is difficult to make adjustments to radiate a wave having a decrement of .2 or less.

Every additional stage of amplification employed in receiving sets especially in the case of audio-frequency amplifiers, tends to distort the signals a small tmount, so that it is desirable to use as few stages as will bring in the desired signal.

A vario-coupler circuit using a crystal may be readily converted into a single circuit regenerative receiver, requiring in addition only a tube, socket, rheostat and batteries. The secondary of the vario-coupler may be used as the tickler coil.

RECENT DEATHS

Captain Edward J. Ross.

Captain Edward J. Ross, a well-known shipping man of this city, died yesterday at the home of his son, I. R. Ross, C. N. R. terminal agent for St. John. He was born in Margaree, C. B., in 1881, but made his home in St. John for the greater part of his life. He commanded vessels on the St. John and Miramichi Rivers and ocean ships sailing from this port. Captain Ross is survived by two sons, Edward and L. R. Ross, of this city, and two daughters, Mrs. Charles E. Lordly and Mrs. Mark Ferguson, also of this city, as well as by eight grandchildren, twelve great-grandchildren and four great-great-grandchildren. He was the father of the late Wallace Ross, one time champion oarsman. The funeral will be held on Tuesday afternoon from the residence of Mrs. Lordly, 166 King Street East.

Mrs. Bridget Downing.

The death of Bridget Downing, widow of James Downing, occurred early yesterday morning at her residence, 52 Victoria street. She is survived by five sons, John, of Nebraska, and James, Anselm, William E. and Maynard, of this city; two daughters, Sarah M., of Wellesley, Mass., and Katherine, at home; also one sister, Mrs. D. McLaughlin, of California.

Francis L. Nelson.

The death of Francis L. Nelson occurred on Sunday at the Home of Incurables at the age of sixty-six. He is survived by one sister, in Winconsin. The funeral will be held on Tuesday morning from the Church of St. John the Baptist.

Child of Mr. and Mrs. F. E. MacDonald.

The infant son of Mr. and Mrs. F. F. MacDonald died at their home in Meadow street, yesterday. The funeral was held this afternoon.

Frank Gilmour.

The death of Frank Gilmour occurred in St. Stephen on Saturday at the age of twenty-nine years following an attack of pneumonia. He was a returned soldier. The funeral was held today.

Thomas McGrath.

Thomas McGrath, of George street, died yesterday at the infirmary after an illness of three weeks following an accident in which his leg was broken. He is survived by his wife, two sons, Matthew, of Milford, and John, at home; two daughters, Mrs. J. Preston Bolch, of Alberta, and Mrs. Lester Rogers, of this city, and one brother, Matthew, of Black River.

Mrs. Margaret Rowe.

The death of Mrs. Margaret Rowe, wife of Charles F. B. Rowe, formerly of St. John, occurred at her home in Weston, Ont., yesterday after an attack of pneumonia. She is survived by three brothers and one sister, one of the brothers being Dr. William MacIntosh, curator of the Natural History Museum, St. John.

Michael Bohan.

The death of Michael Bohan, occurred at his home in Little Ridgeton on Saturday at the age of seventy-four.

Joseph Farthing.

Joseph Farthing of St. Stephen, a returned soldier, died on Friday at his home following an attack of pneumonia. He is survived by a wife and three children. The funeral was held yesterday under the auspices of the Great War Veterans Association.

Mrs. Frederick Hannan.

The death of Mrs. Frederick Hannan, of Dufferin, occurred at her home on Friday night after a short illness. She is survived by her husband and several children.

FUNERALS

The funeral of Mrs. Abigail Adams took place yesterday at 3.45 o'clock from 60 Gilbert's Lane. The service was conducted by Rev. H. E. Thomas. Interment was in Fernhill cemetery.

The funeral of Michael Cullinan took place yesterday afternoon at 2.30 o'clock from his late residence, 234 Britain street, to St. John the Baptist church, where service was conducted by Rev. J. J. McDermott. Interment was in the new Catholic cemetery.

The funeral of Mrs. Elizabeth F. McNeeley took place on Saturday morning from the residence of her son-in-law, W. L. Williams, 212 Princess street, to the Church of the Assumption, Carleton, where high mass of requiem was celebrated by Rev. H. Ramage. Interment was in Holy Cross cemetery. Relatives were pallbearers and there were a large number of spiritual and floral offerings.

That people should not leave so many cards on the floor of the lobby of the Post Office was among the first suggestions contained in the "suggestion box" which has been placed in the Post Office with an invitation to the general public to place inside it any suggestions which they think might help improve the Post Office service. Postmaster J. S. Flaglor said last evening that he heartily concurred with the spirit of the first suggestion which concerned the public very closely.

Colonel C. A. Hodgetts, C. M. G., M. D., Ph. D., Director-General of the St. John Ambulance Association, is in the city. He will be here for a few days and has a fairly full programme during his visit. He is completing a tour of the Dominion, holding examinations for first aid trophies. New Brunswick is the only eastern province which has entered teams in the various Dominion contests.

MONTCLARE BRINGS 650 PASSENGERS

The Canadian Pacific steamer Montclare, Captain Hamilton, arrived in port on Saturday and docked at midnight at berths 2 and 3 at Sand Point. She brought 650 passengers and 2,000 tons of cargo besides 2,520 packages of mail matter and three carloads of baggage. The passengers debarked yesterday morning and left by trains at 12.30 and 2 o'clock yesterday afternoon. Dr. C. F. Martin, professor of medicine at McGill University, returned from a trip to France and Italy. He said the discovery of "Insulin," claimed to be curative treatment for diabetes discovered by a professor at Toronto University had created widespread interest in European medical circles. Thirty-three English female teachers in charge of Rev. P. J. Andrews under the auspices of the Fellowship of the Maple Leaf arrived for distribution from Regina and Edmonton. Several families to settle in this province arrived and were welcomed by Supt. Sharp of the N. B. immigration department. J. Y. Jeffs, wife and two children, were listed for St. John.

Rev. F. L. Orchard, B. A., B. D., of the Olivet Baptist church, Montreal has been extended a call to the First Baptist church of Amherst, which pastorate becomes vacant March 31 when Rev. Dr. Rose leaves for Petersboro, Ont.