MARCONI'S "RADIO-SEARCHLIGHT" TAKES TERROR FROM STORMY SEAS

By PAUL F. GODLEY
America's Foremost Radio Authority

A radio searchlight in operation!

That was the demonstration which set American engineers gasping when Senator Guglielmo Marconi, father of wireless addressed them at a meeting recently in New York.



GODLEY

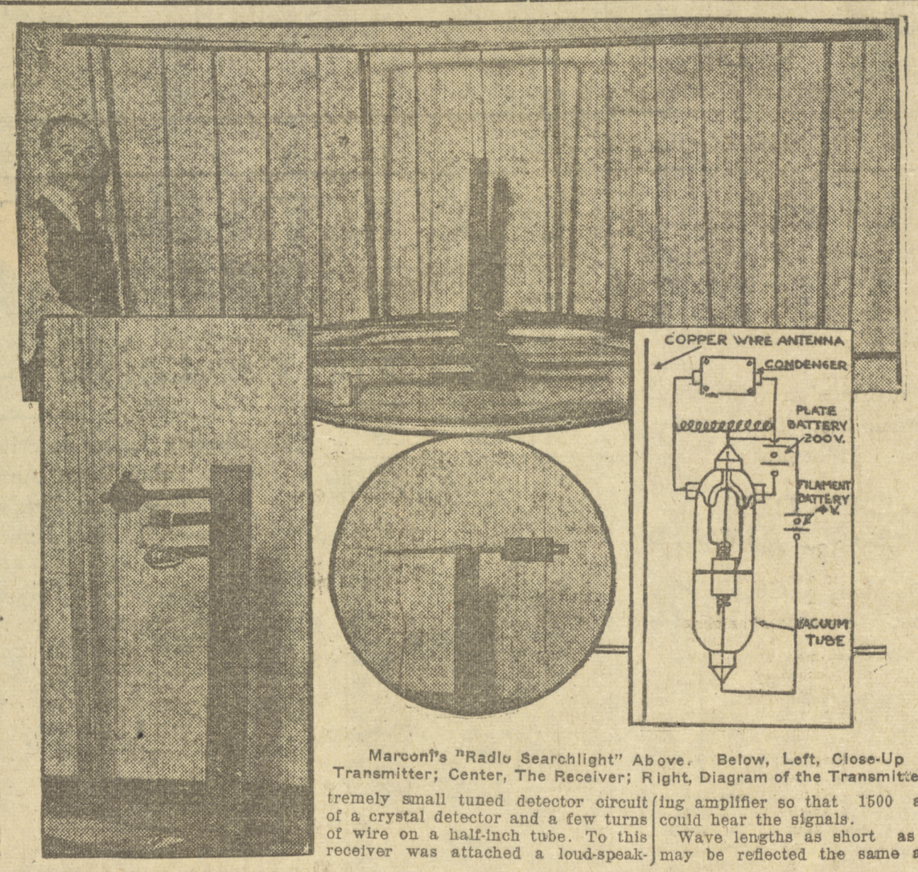
The wave used was exactly one meter in length. The antennae of both the transmitter and receiver were about a foot high. All the auxiliary equipment was of like proportion. Considering the positiveness of the actions produced at the receiver by the transmitter, the demonstration was most remarkable.

The transmitter consisted of a foot of copper wire held up vertically to serve as an antenna, a miniature vacuum tube and an oscillatory circuit comprised of about three inches of wire and a tiny condenser built from alternate layers of tin-foil and mica.

This type of vacuum tube is quite common in England, where it is used to convert the energy supplied by batteries into oscillatory energy having a frequency of 300,000,000 cycles a second.

Simple Receiver

The receiver used a like antenna which had associated with it an extremely small tuned detector circuit of a crystal detector and a few turns of wire on a half-inch tube. To this receiver was attached a loud-speaking amplifier so that 1500 auditors could hear the signals.



Marconi's "Radio Searchlight" Above. Below, Left, Close-Up of the Transmitter; Center, The Receiver; Right, Diagram of the Transmitter.

Wave lengths as short as these may be reflected the same as light waves. The transmitter was housed within a reflector. When this was turned even slightly away from the direction of the transmitter, no signals were recorded at the receiver.

Marconi says that when these waves strike metal objects they are reflected. Even in the heaviest fogs, steel vessels many miles away may be located and their course determined by the radio beams reflected from these.

Short Waves

The inventor advocates the use of these shorter waves for the protection of shipping during heavy weather. He points to the successful use of this method up to a distance of 10 miles from lighthouses which are now in operation on the coast of Great Britain.

As much as one horsepower of electrical energy has been used on but slightly longer waves and reliable telephone conversations have been held over distances of 100 miles. Reflectors were used at both transmitter and receiver.

Many amateurs may utilile these wave lengths in their experimental work. It is expected that endless new applications of radio will be forthcoming as a result of their experiments.

RADIO PRIMER

NATURAL FREQUENCY—The natural wave length of an aerial or circuit without the introduction of any other part that would tend to alter this wave length.

Prince of Wales Home Again



The Prince of Wales (arrow) returns salute as the crew of the "Renown" waves farewell to him at the end of the prince's world tour.

Bridge And Sale Very Successful

Duke of Rothesay Chapter Conduct Pleasing Function at Home of Mrs. Wm. C. Allison.

Patriotism is not checked, because of peace conditions, nor the ardor or its advocates dampened by the weather, as evidenced by the very successful Bridge and sale, conducted at the home of Mrs. Wm. C. Allison, Rothesay, yesterday afternoon, under the auspices of the Duke of Rothesay Chapter, I. O. D. E. Peonies in abundance made most attractive decorations in all the rooms, five of which were used for the thirty-three tables of bridge. The object of this profitable afternoon of pleasure was to gather proceeds for the erection of a Memorial Building at Rothesay, in honor of the men who made the supreme sacrifice in the great war.

Mrs. William Pugsley assisted Mrs. William C. Allison in receiving the guests, who came from all around Rothesay, and many from the city. The Bridge committee was in charge of Mrs. Thomas Bell, Miss A. M. Puddington and Miss M. F. Gilbert, who also attended to the scoring. The prize winners were Miss Jennie Clark, Mrs. Walter Gilbert, Mrs. F. S. White, Mrs. Harold Mayes, Mrs. Clark, and Mrs. Ernest Bowman, the prizes being given in the order as listed. Mrs. W. Vassie, senior, won the consolation prize.

Mrs. John H. McIntyre, who is vice-regent of the Chapter, was the able director of all the arrangements, and was assisted by the following ladies:—Mrs. deB. Carrite, Mrs. Hugh Cannell, Mrs. F. W. Roach, Miss Edith Gilbert, Miss McMurray, Mrs. Davidson, Mrs. Peters, Miss Helen Thomson, Miss A. M. Puddington, Mrs. James Henderson, Mrs. Blanchet, Mrs. Hibbert, and Miss M. F. Gilbert.

Mrs. Carrite, Mrs. Roach and Mrs. Henderson poured, and the food was served by the other members of the committee, under the direction of Mrs. Hugh Cannell. Mrs. Bell and Miss Allison had the arrangement of the tables and chairs in charge, and Miss Puddington and Miss Gilbert looked after the tickets and advertising, previous to the affair. The sale of fancy things was in the capable hands of Mrs. Blanchet, Mrs. Hibbert, and Mrs. McMurray, from which a goodly sum was raised for the worthy cause.

The young ladies of the Chapter helped in the serving, and looked very charming in their gowns of organdie and silk, the colors and freshness of their appearance rivalling those of the flowers. All declared the afternoon one of the most delightful they had spent for some time, and there was a general feeling of satisfaction that the good time had brought about beneficial results in the generous amount that will be banked for the future Memorial.

Bad Runaway On Marsh Bridge

Horse Owned by Dennis Knuchson Bolted—Carriage Badly Broken—Driver Escaped Injury.

An incident which caused considerable excitement in the vicinity of the Marsh Bridge, occurred at eight o'clock last evening, when a horse, owned and driven by Dennis Knuchson, 41 North street, became frightened and bolted, throwing the driver and dragging him for some distance on the ground before the runaway could be brought to a stop.

Mr. Knuchson was driving into the city from his farm, on the Hickey Rd., and had reached Cooper's Corner when the wheel of the light carriage in which he was sitting, caught in the street car tracks, causing the vehicle to slew around from its course. The horse became terrified for some reason, and evidently decided to seek safety in flight with the result that the driver was thrown violently from the carriage.

He maintained his hold on the reins, however, and was dragged on the ground from Cooper's Corner to the fountain at Haymarket Square before he managed to check the animal in its mad career. By a miracle, Mr. Knuchson escaped injury, but his clothes were almost completely torn from his body. Both front wheels of the carriage were torn off the axle and broken up, but the horse did not sustain any injury.

Quite a crowd of people collected, and the horse was quieted down without much trouble. Its owner, although in a sad condition from a sartorial standpoint, was able to proceed to his home without assistance.

CASTORIA
For Infants and Children
In Use For Over 30 Years
Always bears the Signature of Chas. H. Fletcher

Died

DUNCAN—In this city, on July 4, 1922, Helen Maud, wife of the late Alexander Duncan, leaving two sons, one daughter, and three brothers to mourn. Interment will be at Gagetown, N. B.
Notice of funeral later.

LINGLEY—Died suddenly at the residence of his son, 203 Douglas avenue, James W. Lingley, aged 75 leaving three sons and one daughter.
Funeral on Friday afternoon, at 2.30, service at 2 o'clock.

Large Quantities Of Strawberries

Forty-Four Thousand Boxes Arrive from Up River — Prices from 10 to 12 Cents.

Large quantities of strawberries reached the city from up river yesterday. The steamer Majestic had the heaviest shipment she has had this year, amounting to about 37,000 boxes, and the steamer Hampton, about 7,000. The Majestic also had a few blueberries, which sold readily at 25c. per box. The strawberries were quoted at from 10c to 12c. per box by the crate, according to the quality.

Green stuff is beginning to come in fairly large quantities, new turnips, beets, green peas, radishes and carrots, being among those which were brought down yesterday.

Of the total shipment of strawberries, brought down the river yesterday, nearly one quarter of the number of crates was handled by one North End merchant, J. P. McBay, who had approximately 200 crates in all, 100 of these coming on the Majestic.

Exonerates The Captain And Pilot

Dominion Wreck Commissioner Places Blame of Wreck at Morrissey Bridge on Drawman.

The report of Capt. L. A. Demers, Dominion Wreck Commissioner, on the Morrissey Bridge wreck when the S. S. Canadian Squatter ran into the draw and did quite a lot of damage, has been made public and exonerates the captain and pilot from all blame, placing it on the drawman or those who gave him his instructions.

George Sutton was the pilot and Capt. F. W. Boulton was in command. Their evidence was taken with that of several others of the officers and crew. The evidence was to the effect that the ship signalled her approach twice and finally dropped her anchor, which failed to hold, owing to the nature of the bottom. At the time of the collision the engines had been set astern, so that there was no crash, only a violent push.

The commission, which consisted of Capt. Demers, Capt. R. A. McLean, Chatham; Capt. Mitchell of the S. S. Dront, and Capt. Tedford of the C. G. M. M., found that the responsibility for the accident lay with the man on the bridge or those who issued his instructions, and that the pilot and the captain were not to blame, although the captain had approached dangerously close to the bridge, in this, however, following a bad precedent set by captains in the vicinity of relying on the draw swinging open at the last moment.

BRONZE STATUE FOR HALIFAX GOLF CLUB

Halifax, July 5.—J. Massey Ryan, New York sculptor, has presented the Halifax golf club with a bronze statue two feet high, of "Colonel Boggey," which is to be competed for annually by the Halifax and Chester, N. S., golf clubs on the Chester links.

RENEWING WATER MAINS

Commissioner Wigmore said yesterday that good progress was being made in the work of renewing water mains and he hoped to complete the whole programme outlined early in the autumn. The work of installing the Moore street main was finished yesterday. This is a twelve-inch pipe leading from Paradise Row up Millidge street and along Moore street, and will give the residents of that part of the city a much better service.

CANADIAN LECTURER

Walter MacRaye, the well known Canadian lecturer, is in the city, and will address the Commercial Club today. This is the sixth time within a year that a St. John audience has had the pleasure of listening to this gifted speaker, Mr. MacRaye recently addressed the Commercial Club in Halifax for the second time within a year.

BUILDING SYSTEM TO SOLVE INDUSTRY'S CHIEF PROBLEM

F. D. Roosevelt Reveals Plan to Adjust Costs by Providing Steady Employment.

New York, July 3 — Franklin D. Roosevelt, president of the board of 11 governors of the newly organized American Construction Council, has made public an outline of work planned for the first year. The council, which aims to remedy the fundamental problem in the construction industry, that of unsteady employment, intends to adjust building costs, the housing shortage and winter unemployment by standardization and thorough co-operation of construction activity.

The council also intends to carry on a campaign to have the building trades made a part of the manual training in the public schools so as to provide more efficient carpenters and bricklayers.

The statement made by Mr. Roosevelt declares that the adoption of a construction syste msimilar to that of Canada will enable builders to work successfully all winter. This system has been used in Minnesota, and it has been found that cement can be mixed under conditions which overcome the destructive tendency of the cold weather.

The council intends to gather statistics on materials and the establishment of codes of ethics and standards of procedure to prevent abuses similar to those uncovered by the Lockwood Committee Investigation. Herbert Hoover, Secretary of Commerce, under whose guidance the council organized, has promised the support of the statistical agencies of the Department of Commerce in this work.

The executive council is made up of these representatives: Knickerbocker Boyd, Philadelphia, architects; Chas. D. Lovett, Chicago, engineers; Noble Foster Hoggson, New York, general contractors; Oscar A. Reum, Chicago, sub-contractors; John Donlin, Washington, construction labor; Wm. M. Ritter, Columbus, material and equipment; M. T. Bannigan, Utica, material dealers; Willis H. Booth, New York, bond and insurance interests; Francis Blossom, New York, railroads and public utilities; J. E. Greis, New York, federal, state, county, and municipal officials; Walter Klie, Cleveland, exchanges and building trades employees' associations.

RAILWAY CLERKS TOOK STRIKE VOTE

(Canadian Press)

Cincinnati, O., July 5—It was announced at the headquarters of the Brotherhood of Railway Clerks, freight handlers, express and station employes here today, that returns were being received on the strike vote on each railroad, but that the results will not be made public at this time. It was stated, however, that no strike had been sanctioned on any road by grand president E. H. Fitzgerald.

LOCATE GRAVE AFTER SEVEN YEARS' SEARCH

Toronto, July 5—After seven years of waiting to learn the fate of her soldier son, Mrs. S. Litchfield, this city, has just received word from the records department at Ottawa, that the grave of Private Reginald C. Litchfield, 15th Canadian Battalion, had been discovered in France. The grave was in an isolated position, and was discovered by the graves registration officials while searching the battle areas.

BUNDLE RETURNED

Evidently the article in the Journal on July 4, had some effect upon the conscience of the miscreant who took the bundle of clothing from the baby carriage in front of a King street store, as the parcel was returned on the same day, being dropped there, the bearer modestly refraining from making his or her identity known.

RADIO INDUSTRY ON THE INCREASE

Playing Important Part in Furnishing Work for Former Unemployed.

(Canadian Press.)

Toronto, July 5.—Some idea of the part radio has played in keeping the wheels of industry greased is to be gleaned from the statement of a manufacturing concern in Toronto that it now employs 150 men in the making and assembling of parts and, in addition, gives contracts to another firm employing 150 men on radio.

REMOVING CARGO FROM COMMANDER

Every Likelihood of Refloating C. G. M. M. Steamer Ashore on Little Miquelon Island.

Montreal, July 5—Captain Tedford, Marine Superintendent of the Canadian Government Merchant Marine, spoken to tonight in connection with the stranding of the Canadian Commander on Little Miquelon Island stated that lighters were at present engaged in removing her cargo, and that with the continuance of the present fine weather, there is every likelihood of refloating the vessel shortly.

IRISH LEGENDARY LORE MADE SEAN McCARTHY SINN FEINER

Commandant-General of Insurgent Branch of Irish Republican Army Is Director of Publicity.

Dublin, July 4—Commandant-General Sean McCarthy, who has much to do with the movement which led to the Collins-de Valera agreement, is an interesting figure on the Headquarters Staff of the Irish Republican Army which occupied the Four Courts; he is director of publicity for the executive forces.

When the representative of The Christian Science Monitor asked him what made him join the Sinn Fein movement, he said: "Reading the history and hearing the fireside stories of Ireland did more than anything else to arouse my early interest in the Sinn Fein movement. At night my parents used to tell of the deeds of the Irish heroes and martyrs and sing the songs that thrilled me with youthful hopes; the neighbors used to drop in, too—a feature of Irish life in that part of the country—and they interested the company with folk-lore tales of many kinds. They spoke mostly in English, but used many Irish expressions, and they had a dialect which introduced into their speech a kind of phraseology really derived from the Irish language."

Secretly Joined Sinn Fein.

"Were the fireside stories altogether Irish, or did they bring in hatred of England? asked the representative. "They frequently brought in England, of course," was the reply, "and were connected with the life and death of Tone, Emmet, Lord Edward Fitzgerald, the Manchester martyrs, the Fenians, and the outstanding leaders of Land League days."

"I have four brothers and four sisters, and they are all in this movement on the same side as myself. They are active workers, too, and have been in some of the local fights. My eldest sister was first chairman of the Cumann na Ban in our district. My home was raided by the military during the war and two of my brothers were arrested and taken away, but they were soon released. I graduated in the first division of the scholarship for teachers, and entered De La Salle College, Waterford, where I qualified for the National Education Board's diploma in 1911, also securing a certificate to teach the Irish language. Under the existing conditions of appointments national school teachers were forbidden to take part in politics, but I secretly joined the Sinn Fein organization toward the end of 1916.

Outlook "Dark."

"From 1917 onwards I was actively connected with the Volunteers, collecting intelligence, transmitting information, discussing plans and operations, and encouraging and co-operating with the members."

In reply to a question as to what he thought of the present situation Commandant McCarthy said: "The outlook at the moment is rather dark; but not by any means hopeless." He adimtted that he believed the majority of the people were prepared to accept the treaty under present conditions, but insisted that it was common knowledge that the vast bulk of the pro-treatyites were Republicans at heart. "The people have already established the Republic, proclaimed for them by the Irish Republican Army in Easter week, 1916," he declared, "and they would not of their own free will disestablish it. There must be leaders to give the lead and to show by their sacrifices that they really mean what they say. We give credit to many supporters of the treaty for sincerity, but at heart they are still Republicans." He added, "We will not force war on them and every effort has been made by the executive forces to avoid civil war.

Adjustment Desired.

"It is certainly the duty of a properly constituted government to uphold order in conformity with the purposes for which it was established. The disorders in Ireland at present are partly the result of the war and partly due to a few of the worst elements in the country which are taking advantage of the unsettled and divided counsels in the national Government. Much ill-feeling has been introduced lately by professional soldiers recruited by Berggar's Bush. Officers formerly British are in charge of responsible departments of the army. These men may have a good knowledge of shooting, discipline, and army routine, but they are not inspired by the same motives and ideals which animate the Irish Republican Army and would not preserve the intense traditional outlook and volunteer spirit for which the Irish Volunteers are remarkable. The army here was built up on a different basis from any other army in the world, and it should be perfected on that basis. The Volunteers should be kept in touch with their home life and with the Republican ideals and aims of their comrades who have fallen nobly in the fight, rather than with the ideals of professional soldiers trained in the art of war for war's sake. With good will on both sides I can see no insurmountable obstacles in the way of an honorable adjustment of the distracting differences which at the moment give cause for anxiety, because no man has the right to set bounds to the march of a nation on the road to freedom; no man has the right to say, "thus far shalt thou go and no further.' We have never set a barrier to Ireland's rightful destiny and we never shall."

HALIFAX MAN MISSING

(Canadian Press.)

Halifax, July 5.—Frank Jennex, 38, is missing from his home at 272 Upper Water street, since Friday. He has a wife and three small children.

May Get Medal



The mayor of New Orleans has recommended bestowal of a Carnegie medal on Val Lewis, 19, who rescued Andree Cartier and Grace Gerard from drowning. She kept both afloat until aid arrived.

THE GUMPS—NOT FOR ANDY

