

Radio News of Canada

and TELEVISION REVIEW

20¢

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ALL



CANADIAN

SPECIAL

NUMBER



ENSCO

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24-in. Polychrome Pedestal
Cone Kit, \$12.95

24-in.
WALL
KIT
\$10.95

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WALL
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\$10.95



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Shown in Illustration

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Over all diameter of cone 9 inches.

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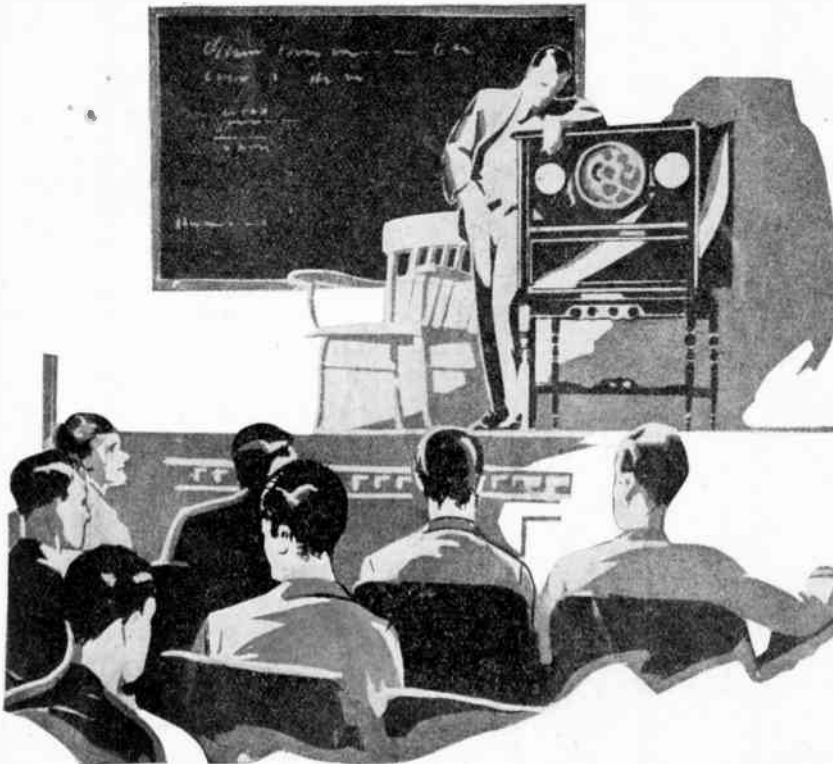
Utah's extensive laboratory developments insure Utah jobbers and dealers at all times the utmost in radio speaker accomplishments.

See the New UTAH SPEAKER Models Before You Buy!

UTAH RADIO PRODUCTS COMPANY, 1737 S. Michigan Avenue, Chicago, Illinois

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"We have personally tried for a long time to secure competent service men with very little success. I am sure you will have no difficulty in placing your students in good positions when their course is finished, as there certainly are many openings for good, clean, intelligent radio service men.

"(Signed) GEORGE C. ALCHIN,
"President."

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We make it possible for you to SPECIALIZE in any particular line which appeals to you. Bear this guarantee in mind—The Canadian Radio College Course Is All You Need to become a "Big-Pay" man in any branch of radio work.

In taking up the Canadian Radio College Course, you are not buying an experiment. The training has behind it a classroom method of personal instruction that teaches a thorough radio knowledge based on long years of experience.

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TURN BUCKLES
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D.C. or A.C.**

AMPERITE automatic filament control increases tube efficiency and lengthens tube life. \$1.10 with mounting (in U. S. A.)

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FREE New "Amperite Blue Book" of latest radio information and circuit diagrams. Write Dept. R. C. 5

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This amazing instrument now makes it possible for you to reach 'round the world. Geo. Morcroft

tuned in England, Holland and Australia on his initial test. Gets stations your regular receiver cannot get. No change or wiring required. All complete, ready to operate. Neat, golden brown, compact metal cabinet in crackle finish. Size, 9x5½x2¼ in. The only converter we know of that really works on all sets. Two models—A.C. and D.C. Write for Catalogue and literature or send \$35.00 and name of your dealer.

AERO PRODUCTS, Inc.

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USELESS WORDS

"Keep off the grass."
"No Smoking."
"I don't want to be kissed."
"No tips."
"Drive slowly through the village."
"You're not to eat any more sweets, Johnny."
"I'll never touch another drop."
"Have you had your cook long?"
"I refuse to give my consent to your marriage."
"Number, please?"
"It's time Income Tax was reduced."
"Safety First."

Manager,
F. V. GRIFFIN

The Dominion wide paid
for circulation of this
paper now exceeds 26,000
copies per month.

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and TELEVISION REVIEW

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Vol. 7

JUNE, 1929

No. 10

A Beautiful Display of Artistic Merit



Radio receiving sets are no longer purchased solely for types of instruments incorporated in them—that is only the husband's side of the question. Nowadays, the wife has her fifty per cent "say-so" and it usually means picking the radio from external appearances in order to "balance" it in the general setting of the home. The above display gives an excellent impression of the various types of radios and shows at a glance the particular type for any individual home.

"Courtesy Federal Radio Corp'n," Bridgeburg, Ontario.

News and Reviews Of Canada's Radio Activities

RADIO LEAGUE OPENED

The Radio League started its fourth successful season on May 16th.

This league is an independent organization and depends entirely upon the support of each team entered. The league will follow the same arrangement on the schedule of games, that is, there will be double headers on Tuesday and Thursday evenings, the first game starting at 6.15 p.m. and the second game will take place at 7.30 p.m.

The league this year will be composed of the same teams with the exception of two new entries, namely: "The Kolster Radio," and "Canadian Westinghouse Company." These two teams should, owing to all reports, provide plenty of competition for the other teams. This will make the league complete with the following teams: Eveready, Prest-O-Lite, Rogers Batteryless, Kolster Radio, Canadian Westinghouse, and Bake-Lite.

The league winners last year were the Rogers Batteryless team, who nosed out the Eveready team by one run in the finals, and were presented with miniature cups donated by the Standard Radio Manufacturing Corporation, and sweater coats donated by the Canadian National Carbon Company.

There have been a few changes in the executives of the League: Mr. F. A. Trestail, of the Q.R.S. Canadian Corporation, has been appointed President in place of Mr. H. E. Pollock, of the Canadian National Carbon Company, who retired owing to business reasons. Mr. Bailey, of the Prest-O-Lite, replaces Mr. S. G. Waters, of the Q.R.S., as secretary. Mr. Waters has been secretary of the league for the past three years and as the league recently inserted a clause in the minutes, that no officer of the league could play ball, this necessarily caused the retirement of Mr. S. G. Waters, who played ball for Rogers. The league decided to retain the services of Mr. Montgomery as official umpire. Mr. Brodie Lowes, of the Q.R.S. Canadian Corporation, is acting as "sporting editor."

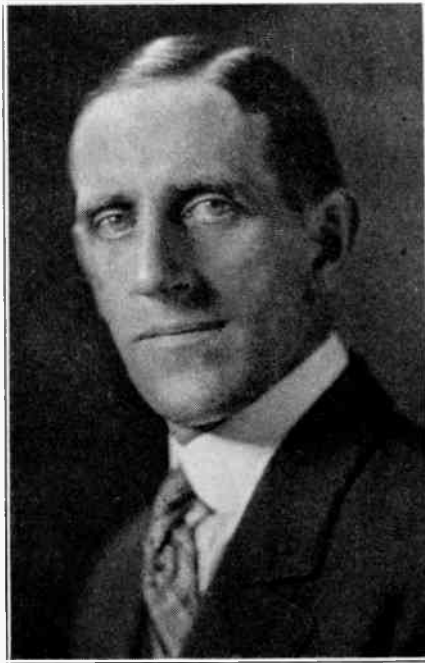
The league issues a warm welcome to anyone who enjoys seeing a good softball game, to all or any of its games. The schedule of the league games will be mailed to anyone who writes to Mr. Bailey, care of the Prest-O-Lite Company, 805 Davenport Road, Toronto.

All games will be played at the Canadian National Carbon grounds, Davenport Road, Toronto.

RADIO STATION CFLC

One of the most interesting low-power radio broadcasting stations of Eastern Canada is located at Prescott, Ontario, and its signal is CFLC, which was arrived at by taking the first three letters from "Canada's Foremost Little Community." This station broadcasts every Sunday and Friday night on a wave length of 296.6 meters and has many highly interesting programmes.

The President of CFLC, which station is known as "The Voice of the Mighty St. Lawrence," is Mr. A. E. Cook, whilst Mr. J. A. Halliday acts as secretary-treasurer. Mr. Carl Lockwood is connected with this



THOMAS H. CARVETH
who featured the "Little Forum" over CFCF, Montreal.

THE "LITTLE FORUM" AT CFOF

One of the outstanding successes in the broadcast programmes emanating from the Marconi Station CFCF is the feature under the heading of the "Little Forum." Here each Friday evening at 7.30 o'clock leaders in every walk in life give addresses not only of an educational value to the listeners but of decided interest. Its popularity is shown in the many excellent comments which reach the station.

The success of this corner can be wholly attributed to Mr. Thomas H. Carveth. Mr. Carveth himself is well-known to Montreal listeners for his talks on Economics of Canada he being one of the outstanding Economists of the country. His many addresses have been received with great favor in higher quarters and what his future will hold rests in the laps of the gods.

In October, 1928, Mr. Carveth in conjunction with station CFCF conceived the idea of the "Little Forum" and the success which has attended it very plainly shows that the efforts have been by no means in vain.

Mr. Carveth is an Englishman of long residence in Canada and at the last Federal election contested one of the most important seats in the Dominion.

station also as one of the announcers and field operators.

This station is up to the minute, both in equipment and broadcasting programmes, and many of our readers no doubt have already enjoyed the splendid service which has created this station's great popularity.

THE WESTERN ONTARIO BETTER RADIO CLUB

One of the most interesting organizations in the Dominion is the Western Ontario Better Radio Club, which operates station CFCO at Chatham, Ontario.

This station has been operating successfully for a number of years and was originally founded through the efforts of Mr. Jack Beardall, the president, who is the local radio inspector for Chatham and district. There is now a membership of approximately one thousand, all of whom work closely together for the general promotion of the club and station activities.

Special club weekly broadcasts are made and highly interesting programmes, both technical and musical, are transmitted. Mr. Con. E. Shea is the club's secretary-treasurer. It is interesting to know that Chatham has the highest radio population in Canada and is considered one of the most law-abiding in securing licenses promptly.

Mr. Beardall has been instrumental in clearing up the greater part of radio interference due to local conditions such as electrical transmission and operation of electrical machinery.

The Western Ontario Better Radio Club is the type of organization which should be highly appreciated by all Canadian citizens and the more organizations of this type that we have formed throughout the Dominion the better conditions will be made for both radio broadcasting and reception.

More power to Mr. Beardall and his associates.

RADIO FOR SCHOOLS

That public school instruction in rural Manitoba will be assisted in the near future through use of the radio was forecast in Winnipeg by Hon. R. A. Hoey, Provincial Minister of Education, when addressing the annual meeting of the Manitoba Educational Association recently.

To what extent the radio will be used in supplementing teaching in the more remote parts of the Province will depend to a large extent on the teachers themselves, Dr. Hoey declared. His department had been studying the radio proposal for some time and a definite move in that direction might be announced soon, he added.

More than 1,600 teachers from all parts of the Province registered for the annual convention.

WESTON RADIO SERVICE MAN'S HAND BOOK

The Weston Electrical Instrument Corporation has just issued an extraordinarily useful booklet on the laying out of the Radio Service man's test equipment, which is a decided addition to an already sizable library of very readable and instructive hand books on the various phases of the use of Precision Electrical Instruments. This booklet, though limited in numbers, is free upon application to the Canadian representative, Northern Electric Company, Limited.

Montreal's Pioneer Broadcasting Station

THE FIRST BROADCAST IN CANADA

"This is XWA at Montreal." Little did the citizens in Montreal realize in December, 1919, the full purport of these words. Little did they realize that only a few years ahead they, themselves, would be listening to other call letters, denoting that at such and such a place, hundreds of miles away, they would be enjoying transmissions in the way of music, speech and song, and sitting back comfortably in their armchairs, becoming familiar with the latest and best that the world could offer in all its branches of entertainment. It has come to pass, and the beginning lay in "This is XWA at Montreal."

December, 1919, to December, 1928, has seen vast changes. There have been developments of such a stupendous nature as to have staggered the average man. First we had the individual station offering of its best in the way of programmes; next followed the linking up of each station in a simultaneous broadcast, and now with television an accomplished fact, we wonder what lies ahead. We, as a people, are no longer sceptical. And the beginning of these wonders lay in that call sign, "XWA, Montreal."

When XWA first came into being, dabblers in experimental wireless were all agog and excited at the prospect of hearing a human voice over the air. They had listened scores of times to morse transmission, but to hear music was a new wonder. The Canadian Marconi Company engineers were in the same state of mind. Would their months of experimentation bear fruit? December, 1919, proved that their efforts were crowned with success, and no doubt to-day they can look back to these early days with pride, and so realize they were the pioneers of work

which to-day has united the world closer together. Radio has been a blessing, and has brought peace and goodwill to thousands of homes.

From December, 1919, until May, 1920, code practice and gramophone records were the chief source of entertainment, and it is interesting to note that in spite of the general opinion that, with the advent of radio, recording companies would be severely hit, they to-day constitute a method of entertainment which is ever popular. In May, 1920, to be exact, the twentieth of the month, a great forward step was made in radio transmission,

namely, the broadcasting of a special programme to Ottawa from Montreal. It would be of interest to readers if the Citizen, Ottawa, dated May 21st, 1920, were quoted:

"At 9.50 o'clock Thursday evening, a perspiring audience which thronged the assembly hall of the Chateau Laurier listened with rapt attention to a song being transmitted to them by means of some mysterious mechanism which they made no pretense at comprehending. It was nonetheless true that 'before their very eyes' a veritable miracle was being evolved and that wireless telephony was an accomplished fact. The sound emanating from the strange mechanism was that of an ordinary gramophone over a hundred miles away in Montreal, and though far from distinct was sufficiently pure to be recognized as that of a gramophone. Later a human voice singing at the Marconi wireless telegraph station at Montreal could be heard quite clearly. Wireless telephony was indeed an accomplished fact, and Ottawa had the privilege of being the first city in the world to hear the human voice at a distance of one hundred miles."

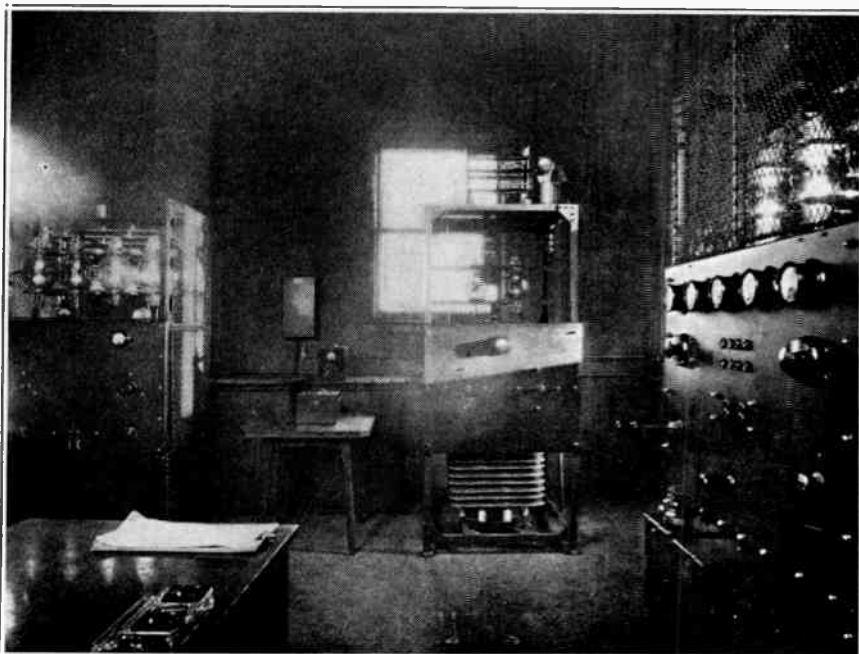
It is worthy of mention that the operators of this successful transmission were Commander C. P. Edwards, O.B.E., and Lieut. J. H. Thompson.

And so the Canadian Marconi Company at Montreal made history; a history which will never be forgotten, although in years to come when such advancement has been made that radio of to-day will appear small, all concerned will look back to these efforts as being mere child's play. Many, however, connected with radio throughout the years since its inception will agree that the early days were the best. There was plenty of work for all, and hard at that, yet there was the human touch, an element in its contact which, to-day, sad to relate, has gone.

(Continued on page 8)



Broadcasting from XWA, Montreal, owned and operated by the Canadian Marconi Company at their factory William Street, in September, 1920.



TRANSMITTING ROOM CFCF, MONTREAL.

AN INTERESTING INTERVIEW

R. W. Ashcroft, Manager of the Trans-Canada Broadcasting Company, operators of the Canadian radio net-work returned recently from a week's absence in New York, Schenectady, Buffalo and other United States points, during which he made arrangements with the American networks for the broadcasting of United States programmes from Canadian stations, if and when it is considered desirable to do so.

Below I am reproducing an interview with Mr. Ashcroft, in which the head of the Trans-Canada chain seems to be seeking the views of the Canadian listener on the subject of broadcasting United States network programmes in Canada. In doing so, I would like to add that I do not entirely agree with all of Mr. Ashcroft's observations. Canadians now dial in on United States stations for the better-class programmes broadcast over there, and, when these better-class programmes can be broadcast by Canadian stations so as to overcome the disadvantages of distance and atmospherics, it strikes me it would be a distinct advantage for the Canadian listener. This should not at all interfere with the development of Canadian radio talent, of which at the present time we do not seem to have sufficient to provide first-class programmes for all of the Canadian stations.

"I should very much like to know," said Mr. Ashcroft, "whether our radio public would prefer that all the programmes broadcast from Canadian stations should originate in New York or Buffalo or some other United States point; or whether we should allow only a few of the best of them to come over the border, by connecting the United States and Trans-Canada network; or, again, whether we should refuse to import them, and continue to develop Canadian chain broadcasting, as a separate and distinct unit, as has been done during the last few months by the Trans-Canada Broadcasting Company. In other words, shall radio become in Canada as 100 per cent. American as the movies already are, or shall it be mainly or wholly Canadian?"

"There are a great many angles to the situation that need to be considered," continued Mr. Ashcroft. "I discussed the whole subject with the officials of the National Broadcasting Company, the Columbia Broadcasting System, and the American Telephone and Telegraph Company; also with the executives of several theatrical and musical bureaus, and many other interested parties. They all expect to, presently or ultimately, feed us some of their programmes. Most of them argue that, as United States programmes sometimes come into Canada more or less satisfactorily over the air on American wave lengths, there can be no objection to their admission by telephone to be broadcast by Canadian stations on Canadian frequencies.

"Most of the good programmes staged on the NBC and Columbia chains are sponsored by firms whose products are sold in Canada and which are as familiar to us as to any resident of the United States. Music, too, recognizes no border lines—it has universal appeal and commands worldwide appreciation.

"Why, then, it is asked, should these programme sponsors be compelled to duplicate their efforts—to organize another show, as it were—for the Canadian public, when, by paying the telephone company

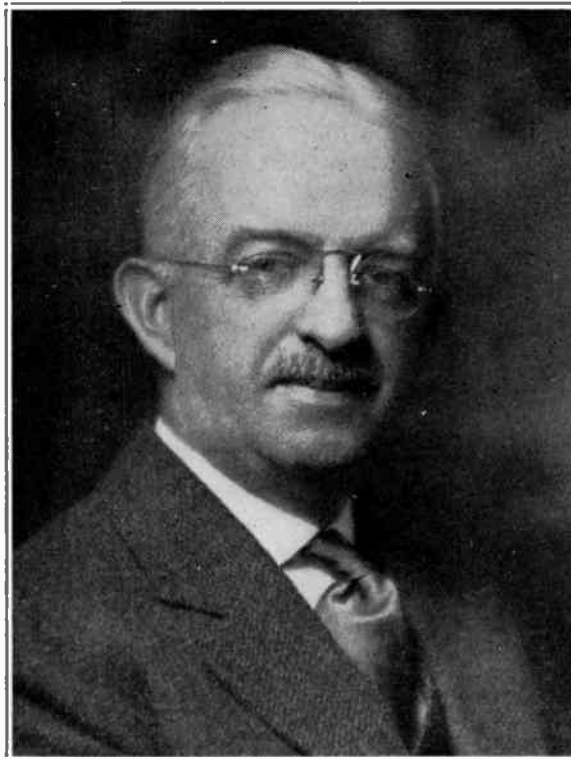
a few pennies for long-distance service, they could avoid the additional expense of employing Canadian musical talent?"

"The reply is obvious," said Mr. Ashcroft, "and takes the form of another question: Why do these self-same United States programme sponsors operate Canadian factories, employ Canadian workmen and use Canadian material to make their products, and employ Canadian salesmen and Canadian newspaper advertising to sell them to Canadians?"

"In the meantime," continued Mr. Ashcroft, "the Trans-Canada Broadcasting Company does not intend to unduly encourage the Americanization of Canadian radio stations, and in this we have the backing and support of all the American networks, with whom we are working in complete co-operation. Let us, by all means, preserve our Canadian radio birth-right, and not sell it for a mess of jazzy Broadway pottage!"

"Not that all American programmes are objectionable. There are some we would welcome with open arms, as they portray and convey the international language and worldwide appeal of music at its best.

"There is one thing to be borne in mind," concluded Mr. Ashcroft, "and this is that our Canadian musicians should co-operate in every possible way with Canadian radio stations, and not create or foster a local situation that would necessitate the importation of United States programmes via the long-distance telephone. Canadian manufacturers and institutions and Canadian advertising agencies should also do their utmost to support Canadian radio. We have the musical talent and studio facilities available, right here in Canada, to provide as good a programme as any that goes out on the air in the United States. In fact, we can truly say, to borrow the slogan of a well-known 'Americanadian' manufacturer: 'It's better, because it's Canadian!'"



R. W. ASHCROFT
Manager of Station CKGW, Toronto

ONE OF CANADA'S MOST PROGRESSIVE STATIONS

One of the best known and most progressive stations in the Dominion is CKGW, known as Canada's "Cheerio" station.

This station, which has been on the air since March 5th, 1928, is owned and operated by Gooderham & Worts, Limited, of Toronto, and is equipped with modern high power apparatus of five thousand watts, the transmitting station being located at Bowmanville, Ontario. The management is under the control of Mr. R. W. Ashcroft, well known throughout radio circles of the Dominion, whilst Mr. Don H. Copeland is chief announcer. The studio is located in the King Edward Hotel, Toronto, wherein also the executive officers are located. No effort has been spared in the preparation of the high class and most interesting types of programmes, and under the able management of Mr. R. W. Ashcroft this station has become one of the most popular on the Canadian Chain.

It will be interesting to know that broadcasts from this station have been received by European stations as far away as the Hawaiian Islands.

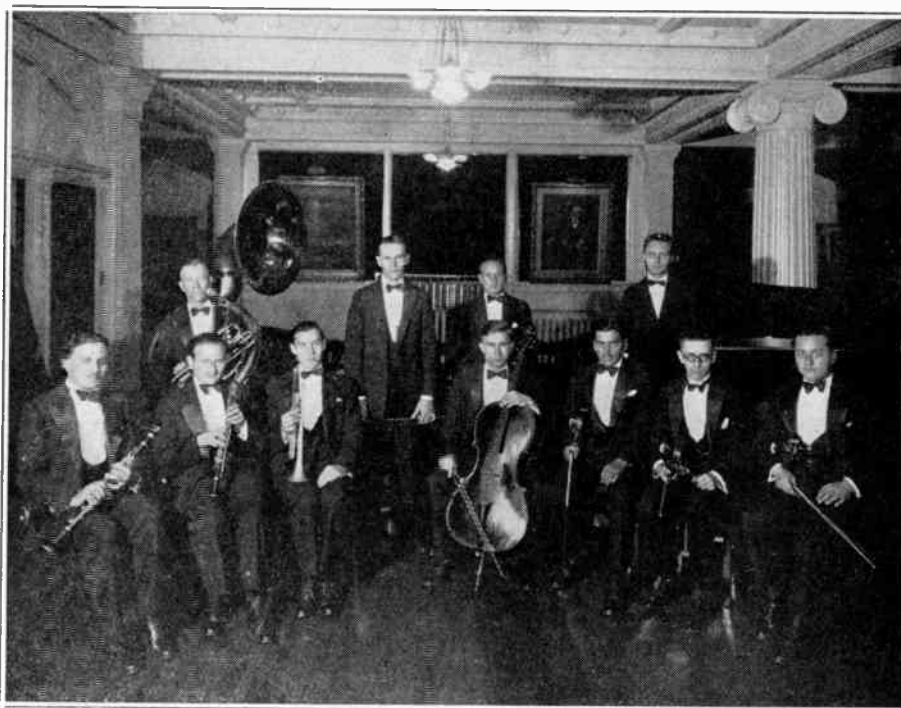
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From XWA the call letters were changed to 9AM, which are now the experimental call letters of the company. Later they became CFCF, the call sign known to radio fans. Much can be said of development work in the intervening years, but it is felt that in the preceding paragraphs a great deal has been said, especially when it is fully realized that the beginning of radio transmission rested in the hands of the Canadian Marconi Company, from which other concerns sprang up until to-day all that is desired in the way of entertaining is at the beck and call of the listener.



Canada's Broadcasting
Stations

ROGERS SYMPHONY ORCHESTRA
Under the direction of Charles E. Bodley



"EVEREADY" SALON ORCHESTRA
With Geoffrey Waddington, director



CANADA HOUR ORCHESTRA
Broadcasting over CFRB, Toronto

Business of Broadcasting Intricate One as Experiences of CJGC Operators Demonstrate

A man walked into the studios of CJGC the other evening and asked to "see you broadcast." A concert band of 18 players was presenting a programme of semi-classical music. As he listened to the loud speaker in one of the studios he was impressed with the smoothness with which the music was being given to the public. "Just the way we get it at home," he remarked. And then he was taken behind the scenes, as it were.

He was transported into a different atmosphere entirely. There was a keen thrill, a tense excitement as operators watched intricate control panels, announcers gave whispered instructions to the leader and the programme director listened to the pace of the programme and kept his eyes glued on the clock as the minutes sped on.

The interested spectator was drawn into the vortex of the presentation. He lost all thought of the broadcast programme when he became wrapped in the thousand and one details that had to be watched. After getting an ear full and an eye full he remarked: "I never knew anything like this went on. Why I thought when you were broadcasting you just sat back and took it easy."

The majority of those who have never been in a broadcasting plant while it is turning out its products have the same opinion. But what goes on behind the scenes during an actual broadcast programme is only a fraction of the work that is necessary in its preparation.

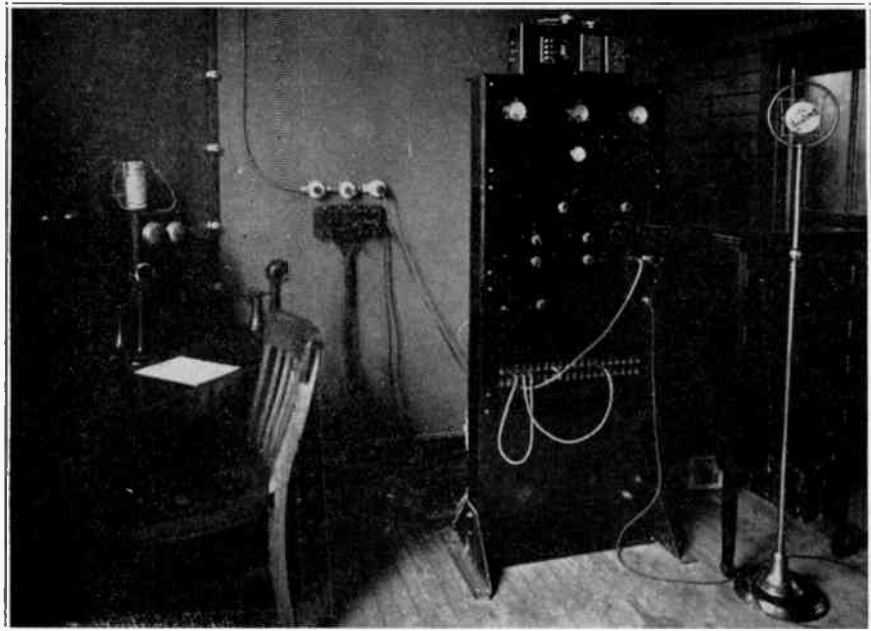
CJGC, The London Free Press station, is every day gaining a more firm foothold in London, Western Ontario and neighboring states of the Union. Comments are coming by the hundreds praising the efforts of CJGC in giving the radio audience real Canadian programmes. Not only have the local programmes won a new place in the hearts of the public, but Canadian stations have stirred a new interest in Canadian broadcasting.

From greatly diversified points CJGC has heard the expression: "I'm proud of Canada and its broadcasting. The Canadian programmes seem so solid, so thoroughly Canadian; it is a pleasure to listen to them."

These are the statements that spur broadcast stations to put on better and more interesting programmes. These are the expressions that are giving Canadian business houses a confidence in radio broadcasting. This situation, backed up by the fact sponsored programmes are talked about in every corner of the country and are making people think in terms of radio broadcasting, is drawing more and more reputable business firms into the radio field.

There is another fact of interest: Of all the sponsored radio programmes put on the air, you'll not find among them one business house that is not a reputable and well-established concern. It seems to have developed into an unwritten law that only those who maintain the highest possible standards in their daily business are accorded the privilege of using the facilities of broadcasting stations.

Since the reorganization and rehabilitation of CJGC, ten years ago, a thousand and one problems have been met and solved. New standards have been created. New equipment has been installed. New programmes are constantly being put on the air. Throughout the expansion, CKGC



THE RELAY CONTROL ROOM IN FREE PRESS BUILDING

In the centre is shown the amplifier panel with mixing controls for several microphones. Mounted on top of the control panel will be seen the signal system used to start programmes. To the right, in the cabinet, is the intricate magnetic pick-up apparatus for record reproduction. On the front of the amplifier panel terminating jacks may be seen. There are some 40 lines connecting with chain stations, churches, theatres and other remote control points.



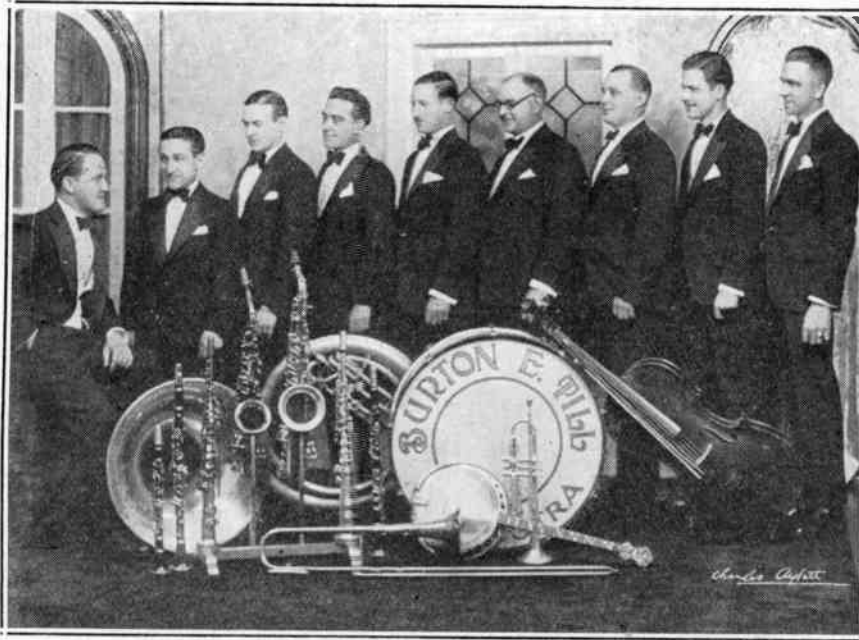
MISS DORIS WATTS,

gifted concert pianist, who is frequently heard over CJGC. Her personality and appearance are even more fascinating than her playing. And her playing is exquisite. This seems to mean, the radio audience is just getting about one-third the enjoyment of her work through not being able to see her.

has been accorded the confidence and moral support of thousands of listeners in the field it serves. Of course, there are some disgruntled and sarcastic criticisms. A radio station, it must be understood, does not set out to please all the people. That would be foolish at the outset. The thing attempted is to please most of the people. For every "disgusted citizen" that does not appreciate his citizenship sufficient to sign his name and give his address, there are hundreds of others who gladly come forward and give their honest opinions and add, "Keep up the good work. Success to you." After all, it is rather useless for a "disgusted citizen" to write, for his communication is treated as fuel for the waste paper baskets and not another thought is given it.

It is strange the comments that come in. For instance, not long ago a letter was received from a London citizen (he signed his name) asking if the station would step aside with its regular broadcast schedule so political addresses could be heard from the United States. In the same mail was a letter from a resident of Bay City, Michigan, who thanked CKGC for putting on such highly entertaining musical programmes when "all I can get from our own stations is a constant jabber of politics. More power to you. Go to it and success," he wrote.

It is not the intention of this article to go into the details of what goes on behind the scenes or to tell of the intricacies of broadcasting and the problems that are met. It is sufficient to say CJGC is developing and developing rapidly. In the very near future more features are to be added that will continue to intrigue the majority of the radio audience.



Burton Till and His Popular Orchestra



SANDY MacFARLANE
Favorite Scottish comedian heard recently over Radio Station CFCF, Montreal.



MR. JACK DENNY
who conducts the orchestra which has been responsible for a large proportion of CFCF's popularity. Mr. Denny specializes in the latest dance numbers and has often been the first to introduce a new hit in Canada.



MAIN STUDIO CFCF, MONTREAL.

A Review From CKNC

By Hartley Currie, Broadcast Manager

Radio broadcasting has become a reality within the memory of practically everyone. Its development has been sensational, in this age of sensational happenings, to such a degree that one can hardly realize that the actual period over which it has been well known is less than ten years. Experiments were conducted earlier than this, but there were but one or two radio stations transmitting programmes and very few radio receiving sets to receive them. Perhaps the most sensational developments from a listener's point of view have occurred in the last few years.

A very few years ago the broadcasting station was an expensive hobby for some person or company. The programmes were made up by volunteer artists who contributed their time in most cases for the thrill of having their voices sent throughout the country. The planning of the programme was a thing unthought of; the wishes of the people who listen were of little importance; organization as represented by efficiency and economy was not applied to radio broadcasting. Then came the advent of commercial broadcasting. The real stimulant. Organization became apparent; the world's finest conductors were engaged at huge figures to plan and prepare programmes; musical directors engaged talent and built up an evening's entertainment with regard to the wishes of the listeners, and in order to afford a full evening of music, vocal and instrumental, of the highest calibre; station managers took hold of the financial and advertising problems and brought in the two old friends of business everywhere, efficiency and economy. Continuity men, announcers, secretaries, all contribute their share, and as a result—radio as today—sensational, rapid development. Sensational because so rapid. A period of a very few years in some cases months, has seen this organization, this planned broadcast come from chaos. A new business with no precedent to follow, and one where the rules are made as you go and altered if wrong, has shown remarkable growth in the case of a great number of the stations.

Advertising? Yes. Advertising is responsible for the greatest part of this improvement, for the keen executive of today realizes that radio provides him with one form of lasting publicity at a nominal cost when the cost of other forms of advertising is used as a comparison. He is willing to spend huge sums of money in order to have his product and his company have their message told to the people who own radio sets, and he is not asking for more than three or four minutes out of each hour for this message, so that the radio set owner gets fifty-six to fifty-seven minutes of music and entertainment—an ideal arrangement that works to everyone's satisfaction, and in evidence of this we see the improvement in programmes, the huge organized structure built through the co-operation of radio advertisers and the apparent satisfaction of the listening public with the arrangement.

Just a word or two in regard to CKNC. This station started commercial broadcasting just a little over a year ago, and today facilities as offered by no other



Ernest Dainty at the console of the new Franklin Legge concert organ in the Rose Studio at CKNC.

Canadian station are available. Three studios, perfect from an acoustic point of view, and all soundproof, are in daily use. The largest will accommodate with ease

fifty or sixty men. Complete sets of drum traps, including tympani and vibraphone, a grand concert studio organ, five grand pianos, and every convenience and facility for the use of orchestras and artists is installed. The staff presents three announcers, a musical director whose entire time is devoted to improving and supervising programmes, and three engineers who spend every moment working out a perfect broadcast and who have made many refinements in the equipment of our station.

Indications are that the fall and winter season will present over our station a great many of the largest national advertisers in chain hook-ups from coast to coast. Enquiries are being daily received and the time allotted to us is being rapidly booked, so that the listening public is assured of fine programmes on Mondays, Thursdays, and Saturdays on our wave.

We Knew It!

These chaps who set exams and intelligence tests only give the questions to which they know the answers.—Woodstock Sentinel.

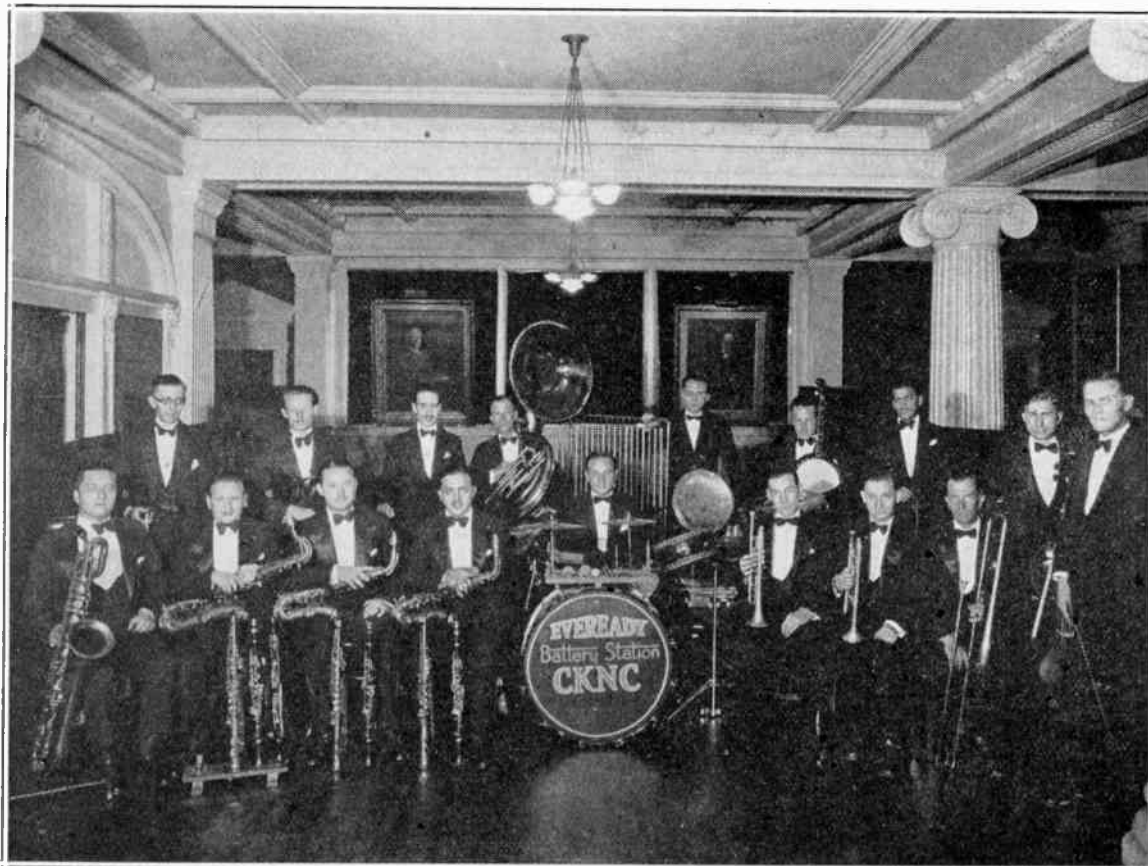
Futile Vision

One interesting event of the millennium will be the spectacle of the mosquito and the camper lying down together.—Prince Rupert News.



HARTLEY CURRIE

Studio Director and Chief Announcer,
Radio Station CKNC, Toronto



Eveready Concert Orchestra, which broadcasts regularly over CKNC, Toronto



The main Studio of CKNC at Hillcrest Park, Toronto

BROADCASTING IN THE MARITIMES

Radio Station CNRA, at Moncton, N.B., is owned and operated by the Canadian National Railways. The building is the Regional Headquarters of the National System, in which the control room is situated. The aerial has been changed from the cage to the four wire inverted "L" type.

An activity of this station during the past winter has been the broadcast of hockey games, which has been much appreciated by the people of the Maritime Provinces. A unique example of the scope of this station was the receipt during one of the hockey broadcasts of a telegram from a lighthouse keeper on the bleak coast of Newfoundland, advising that he was enjoying the broadcast of the game.

STATION CKOC, HAMILTON, ONT.

All radio stations no doubt experience peculiar situations, in that programmes are heard where least expected, and to the radio audience of Canada, it may be interesting to know, that although a comparatively small station, we have the distinction of having a very enthusiastic listener to practically all of our programmes, seventy-five miles north of Fort William. He uses a battery set and in order to keep his batteries fully charged, he sinks a small paddle wheel in the river which drives the generator. During the cold weather he finds some difficulty, due to the freezing of the river and consequently has to keep sinking this paddle wheel lower as the thickness of the ice increases. It seems peculiar that this listener relies on Hamilton for his Canadian programmes.

There is another district where Hamilton in its broadcasting reaches most satisfactorily without any real reason for it. This district is fifty miles long and twenty miles wide, in the province of Nova Scotia, and the people rely on CKOC of Hamilton, Ont., largely for their Canadian entertainment, as we reach that particular area with volume comparable to local stations in that district.

The above information might be of interest to some of our Canadian listeners who have similar experiences to relate and which would be welcomed by other Canadian broadcasting stations.

QUEBEC CITY DOES ITS SHARE OF POPULAR BROADCASTING

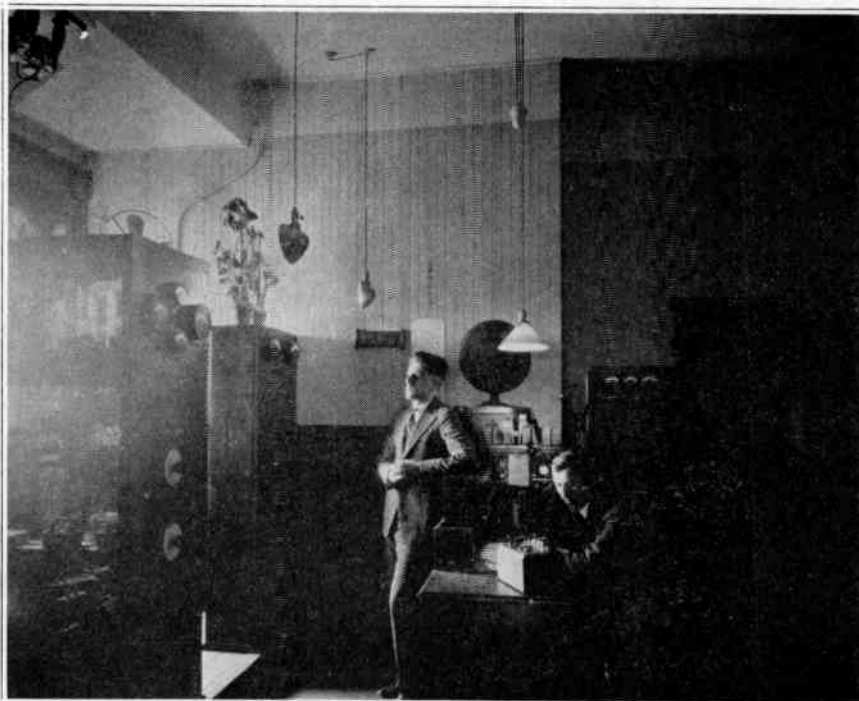
One of the most interesting and highly efficient stations located in the province of Quebec, CKCV, owned and operated by G. A. Vandry, well known radio and automobile accessory distributor of 66 Rue St. Joseph, Quebec.

This station operates on a wave length of 340.7 meters and broadcasts some excellent programmes efficiently rendered by its well known orchestra.

Playing Safe

Rastus and his bride-to-be, Mandy, were on a shopping tour so they could feather their nest. When it came to a choice of bed-room suits the furniture salesman asked, "Do you want twin beds?"

Mandy looked at Rastus, then in an embarrassed voice said, "No, ah things it am best to get an ordinary bed 'n' let de Lawd decide 'f it will be twins."



Showing the interior of control room at Station CNRA, Moncton, N.B.

SUNDAY SERVICES OF CFCT

It is announced by the Victoria Broadcasting Association, owners of CFCT, that the Sunday services of the Victoria City Temple will be broadcast in future, commencing with May 5th.

A great many local radio enthusiasts doubtless have vivid recollections of the fiery sermons delivered by Dr. Clem Davies, originator and pastor of "Canada's First City Temple," and the announcement that the broadcasting of both morning and evening services is to be resumed next Sunday will probably cause many radio sets to be turned to CFCT's wavelength.

While Dr. Davies has filled Victoria's largest auditorium every Sunday for five years, the congregation of the Victoria

City Temple, "Where Religion Cheers," will be multiplied many times when the microphone of CFCT make it possible for countless radio listeners to enjoy every moment of the services.

A group of four business institutions and individuals have underwritten the cost of broadcasting the services, which commence at 11 o'clock in the morning and at 7.30 at night, over CFCT, on 630 kilocycles.

The management of Victoria's radio station also intimated that these Sunday broadcasts are a part of an even larger scheme, embracing a fifteen-minute period daily, and featuring Dr. Clem Davies. Complete details are to be announced later.



The popular Orchestra of CKCV, Quebec

SCIENTIST STUDIES

Those Whose Genius Gave Us Radio



EDWARD S. ROGERS.

Vice-President Standard Radio Mfg. Corporation Limited, Toronto

Night after night, in July of the summer of 1914, a young wireless engineer, just in his early 'teens, sat at his radio set in his summer home in Muskoka. The threat of war hung over Europe. Code messages that filtered through to his home-made set were ominous in tone. Broadcasting stations in Germany and one German station in the United States were sending frantic warnings to German shipping and to four battle cruisers at that time on the Atlantic Ocean.

Then, on the night of August 3, came the greatest thrill of all, first news of the outbreak of war! Picture the dramatic

intensity of the moment, as the boy, ear-phones on head, strained to catch the message that the radio waves were carrying—news of the beginning of the greatest conflict the world has ever experienced.

This youngster was "Ted" Rogers—already, fourteen years ago, giving evidence of the electrical genius which was later to develop the famous "Rogers Batteryless A-C Receiving Set"—the set which has revolutionized the field of radio reception.

The same revolutionary principle was applied by Ted Rogers in the evolution of the world's first batteryless radio station "CFRB" at Toronto.

TO ENCOURAGE OUR FUTURE TELEVISION ENGINEERS

By Arthur M. Pohl.

To make possible Television in the reach of everybody interested and wishing to help pioneer in this new science which has been my ambition in the past and will continue in the future, I am placing on the market a 12 in. "Flexible Card Board Scanning Disk with $\frac{3}{4}$ in. shaft mounting which can be operated on a small size fan motor, also the G-10 Neon Lamp with $\frac{3}{8}$ in. plate which can be magnified to proper size of Scanning frame. For the more advanced experimenter the Standard Aluminum Scanning Disk with or without mounting. All Disks have holes laid out on a spiral accurately using a .018 of an inch drill hole spaced so that overlap will eliminate the black line when in operation. The small size

hole also is used in these disks so that it can be magnified to a size that would ordinarily need a 24 in. Disk, which has so many disadvantages in being clumsy in size, needing a very large control and also very expensive to operate. And also a Standard Neon Lamp, plate size, $1\frac{1}{2}$ in. x $1\frac{1}{2}$ in., all very reasonably priced. There is a greater field for the radio experimenter in this line than there was in radio in the crystal stage. There is nothing else that will speed up the development and perfection of Television than to put the apparatus in the hands of the average radio listener, fan, amateur and experimenter.

Name Please!

A Montreal cost accountant described our sentiments well when he said that there are fifty-seven varieties of taxes, but they are all sour pickles.—Financial Post.



HARRY S. MOORE

Broadcast Manager of CFRB, Toronto

Harry S. Moore is a member of The Association of Accountants and Auditors in Ontario and is Treasurer of the Standard Radio Manufacturing Corp'n, Ltd., having served this Company since its inception.



CHARLES SHEARER

Studio Director at CFRB, Toronto

Charles Shearer, studio director-announcer, is a graduate of the Ontario College of Education and for the past two years has been directly associated with the broadcasting activities of CFRB.

Preceding his radio work, Mr. Shearer was also in more or less close contact with the public as a baritone soloist. A former pupil of Arthur Blight, late of Toronto, and Arthur Middleton, the great American baritone, Mr. Shearer has been frequently heard in concert and recital.

Radio Falls in Line With Aviation

The first practical application of radio as a means of solving the problem of aviation's greatest foe—bad weather—has been made by National Air Transport, Inc., operator of the Chicago-Cleveland-New York and Chicago-Kansas City-Dallas air mail and express lines. Planes of this company flying the mail on the Cleveland-New York Division are already equipped with directional and ground to plane receiving sets, and all other ships of the company's extensive fleet are having the new equipment installed at the Chicago Divisional Repair Shops as rapidly as possible.

The installation of the radio equipment is the culmination of a year and a half of intensive tests carried on by radio engineers of the air transport company and of the Department of Commerce, which has resulted in the twin sciences of radio and aviation being definitely linked for the advancement of air transportation. The radio beacons at Cleveland, Bellefonte, Pa., and Hadley Field, N.J., have been erected and maintained by the Airways Division of the Department. Additional radio beacon stations will soon be in operation on the Chicago-Cleveland Division of the transcontinental airway so that airmen can be guided by radio over the entire distance from New York to Chicago.

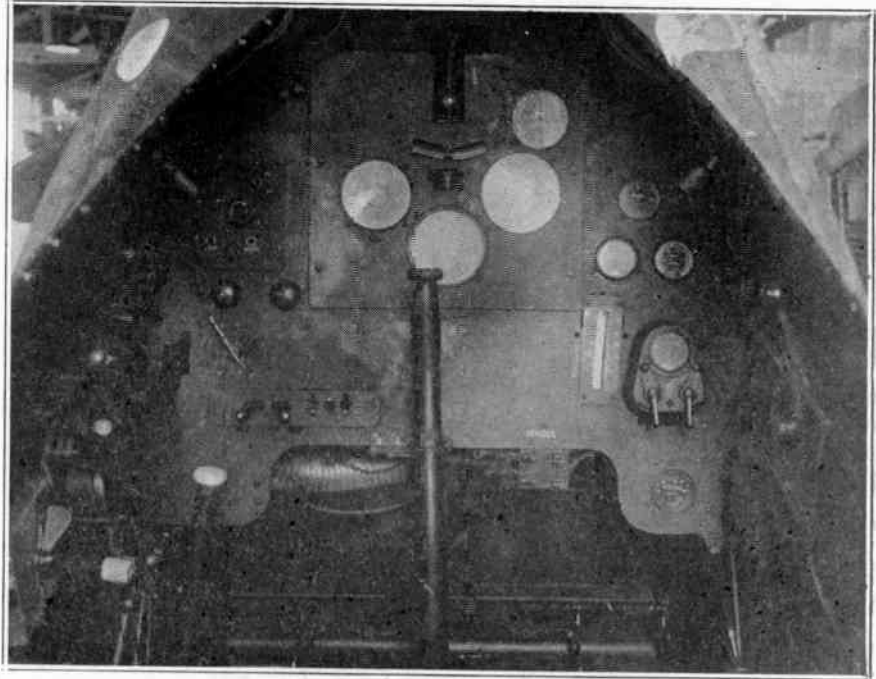
The radio beacon along the Eastern Division is broadcast by transmitters known as equi-signal beacons. The principle upon which these transmitters work is the employment of two cross loops, each radiating a characteristic signal. These signals interlock and form another signal along the bisector of the planes of the loops and when this signal is heard by the pilot in flight, he knows he is following his designated course.

For example, the pilot hears a dot and a dash and he knows he is on the left of the course. He swings over and hears a dash and a dot and knows by that, that he is one the right of the course. He turns back to the left a little and when the dots and dashes blend into one dash, he knows he is following the correct path of the airway.

Because the loop transmitters are used instead of the conventional type of vertical antenna system, is the reason given by experts why the beacon radio waves can be concentrated in one direction along the course. The power generally used in transmission is 500 watts.

Weather reports are transmitted to the pilot through means of the voice transmitters from the ground stations to the plane. A different type of transmitting apparatus, tuned to a higher wave length, is used for this voice transmission, which has been the subject of much intensive study and experimentation. Ordinarily, the pilot is given hourly weather reports, but in event of a severe weather change ahead of him the radio beacon can be interrupted as a signal for him to tune to a higher wave length to receive voice transmission. This he can easily do by switching a remote tuning control in the cockpit which adjusts the receiving set placed in a small compartment just to the rear of his seat. The vertical mast antenna is attached to the fuselage about midway to the tail surfaces. Other equipment consists of earphones, a volume control on the instrument board and batteries.

Either code or voice is transmitted one way—from the ground to the plane—at present, but a device is being perfected by



Pilot's cockpit of a N.A.T. radio equipped mail and express plane.

which two-way communication will be possible. All N. A. T. ships will eventually be equipped with this improvement.

In thick weather, the pilot can determine the proximity of an airport where a beacon is located by the narrowing path of the radio beam. The radio beam, like a beam of light, spreads sometimes to the width of two or more miles near the end of its effective path. Conversely, it converges nearer its origin. Thus the pilot can tell when nearing a port by the intensity of the signals and the narrowing of the effective path of the beam. Further aid in locating a field in thick weather is

given by what is known as a marker beacon which sends a strong signal that can be heard through the course signal and informs the pilot that he is above the field. This additional to the signal system is expected to be in general use soon.

Between two airports equipped with the directional apparatus the pilot follows the course indicated by the one he has just left for about half the distance to the next, then the beacon located at the field toward which he is headed becomes effective and he follows its converging beam through his receiving set to his destination.



Here is the method of installing the radio receiving sets in N. A. T. mail planes just to the rear of the pilot's cockpit.



The All-Canadian
Broadcast Entertainer's Gallery



THE LORD NELSON CONCERT ORCHESTRA
Miss Marjory Payne, Leader (sitting ce ntre) broadcasting over CHNS, Halifax.



REGINALD STEWART
Conductor of the Philharmonic Symphony Orchestra, presented in the Maple Leaf Hour, each Monday evening, from 9 to 10. This programme is heard through the Eastern Trans-Canada Chain.



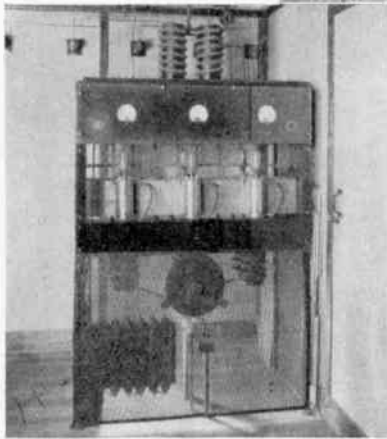
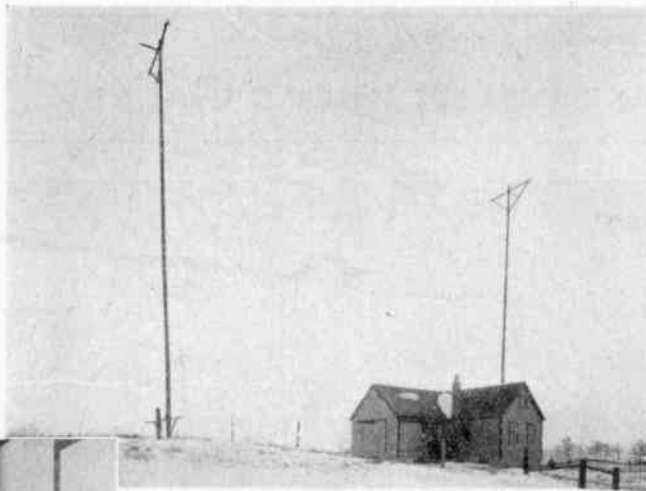
VIOLET SMITH
Toronto artist whose soprano voice is heard and enjoyed frequently from radio station CKCL



REX BATTLE
Pianist-Conductor, Mount Royal Hotel Concert Orchestra, heard over CFCF, Montreal.

STATION CFRB

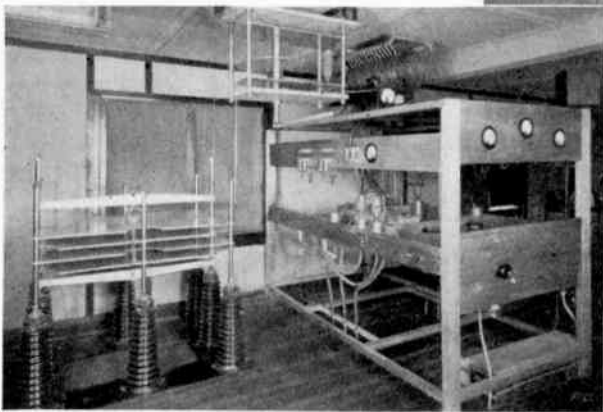
Situated about twenty-five miles north of Toronto and remotely controlled from the studios.



Rectifier Unit



E. J. BOWERS
Control Board



Oscillator Modulator

CJOR, Vancouver, is operating the first Crystal Control Transmitter to be installed in Canada, and is transmitting on a frequency of 1030 kilocycles and a wave length of 291.1 metres with a power of 100 watts.

Mr. Geo. C. Chandler is the managing director of this station, while Mr. C. A. Halls is the business and sales manager. Mr. H. E. Snider announces and writes the continuities.

Application has been made for an increase in power to 1000 watts, but the Dept. of Marine and Fisheries are reserving their decision pending the findings of the Royal Commission which is enquiring into the radio situation in Canada.

Radio station CHGS, owned and operated by R. T. Holman, Limited, Summerside, Prince Edward Island, is probably one of the most successful small power broadcasting stations in Canada. Now in

its fifth year of operation it has a very strong following of radio fans who enjoy the musical programmes, news, sporting events, church services, public speeches and other events which have brought thousands of letters of appreciation from practically every corner of the Maritime Provinces of Canada as well as from California, Newfoundland, Michigan, Ontario, Quebec, Maryland, Florida, Pennsylvania and New Jersey. With a 50 watt power, a wave length of 267.9 metres and operating on 1120 kilocycles.

Safety First

"William," she whispered to her husband, "I think I hear burglars. Are you awake?"

"No," said William.

—American Mercury.

The Advance of Radio Broadcasting at CFRB

Back in 1927—not so long ago in the matter of years, but the "long ago" in rapidly-moving radio history—on winter's nights in the latter part of January and the early part of February, fans sat up at their dials after the stroke of midnight heard a new voice on the air.

Firm and clear it came out of the ether: "Nine—R—B—testing."

That was all the announcer said at the opening, and he gave the same laconic information between numbers and when the station signed off.

Curiosity was afoot in Fandom. The station had a penetration and a clarity of tone that was new in radio. It over-rode static and other interferences and seemed to have the ability to reach out to distant parts of Canada which had never before heard a Canadian station.

"Who is 9—R—B?"

Radio editors on metropolitan newspapers were bombarded with the question. Few of them could answer more than that they understood it was a new Canadian radio station located somewhere north of Toronto, that it was said to be operated on a new principle and that it was designed by a Canadian engineer.

Gradually, however, the news leaked out—as news will—that the Canadian engineer who designed and supervised the building of the station was none other than the youthful E. S. Rogers, familiarly known in the wireless world as Ted Rogers—the same Ted Rogers who had amazed the public with the invention and manufacture of a batteryless radio receiving set just a short time previous.

Later came the official announcement in the newspapers and elsewhere that he call "9-R-B" was experimental and that the station would henceforth be known as "Rogers Batteryless Station CFRB," owned and operated by the Standard Radio Mfg. Corp'n., Limited.

Thus it was that CFRB came into being. Like Solomon's Temple of old, it was laid out and constructed with the knowledge of few others than the designer and his assistant engineers. As he designed and built his first batteryless receiving set, so did E. S. Rogers design and build his batteryless radio broadcasting station, taking his own counsel about it and confiding his plans to none but his immediate assistants. Like the batteryless radio receiving set, the batteryless radio broadcasting station was a success from the beginning.

The new station was opened and went on the air for the first time under its official call-letters at nine o'clock, on Saturday night, February 19, 1927, on an assigned wavelength of 291 metres. The opening was prefaced by introductory remarks by Rev. W. A. Cameron, of Bloor Street Baptist Church, and Attorney-General W. H. Price, of the Provincial Cabinet.

The programme for that evening was an elaborate one and set a new precedent in radio features from Toronto. Among the artists who took part were, Jack Arthur's Symphony Orchestra, Madame Drewett, Frank Oldfield, Luigi von Kunits, Winnifred Hicks-Lynne, the Gelsin Trio, Aeolian Male Quartet, Paul Hahn, Eileen Law, Harold Rich's Versatile Canadians Dance Orchestra, Ben Hokea's Hawaiian Quartet, Harry Binns, Mabel Downing, Nancy Cook, Hazel Hall-Vandevoort,

Arthur Vandervoort, the Rogers Quintet and Freddie Tee.

It is significant to note that among the first of the station's regular programmes was the broadcasting of Denton Massey's York Bible Class and the sermons of Rev. W. A. Cameron at the Bloor Street Baptist Church, two present features with CFRB which each Sunday gain an ever-growing radio audience and are to-day rated to be two of the most substantial and useful programmes on the air.

The history of the station for the first two years of its life was one of successfully meeting many exigencies. Though a district station of greater power than any other in Ontario when it came into being, it had to share time with another Toronto station on the 291 metre wave—a channel which was always badly heterodyned by United States stations supposed to be operating on nearby frequencies. Despite this drawback, CFRB from the first made a new record in Canada for broadcast coverage. Reports of its reception came from all parts of Canada, from the Atlantic to the Pacific and from every state in the Union to the South. Sailors and travellers wrote in telling how they had heard CFRB programmes far out on the Atlantic and on the Pacific.

Then came a shift in Canadian wavelengths when CFRB for a time shared a wavelength of 475 metres with another Toronto station. This shift was followed by a move up to 517 metres, which channel had been occupied but a short time when there was another change about in Canadian wavelengths. CFRB was asked to share the channel at 312 metres. All this shifting about the broadcast spectrum meant much trouble and expense; but in each case CFRB cheerfully met the wishes of the Canadian radio authorities, and it surely is to the credit of the station that in the low, middle and high waves it has been able to meet the exigencies of the occasion on short notice. It is a fact worthy of note that on each and every one of the channels which it has occupied during its comparatively short career, CFRB took with it its remarkable clarity of tone and high penetrating driving power. On each of the wavelengths which it has occupied it has received proofs of reception from all parts of Canada, even from exploring and expeditionary parties in the Arctic Circle, as well as reports of clear reception in foreign countries and aboard ships on the high seas.

A NEW CANADIAN ORGANIZATION

Chas. Freshman Co., Inc., in conjunction with influential Canadian interests, has organized the Freshman-Freed Eisemann Radio Ltd., with headquarters located at 20 Trinity Street, Toronto, Canada. The new Canadian Corporation has \$400,000 preferred stock and one thousand shares of common stock, all of which has been absorbed by private subscription. Mr. C. A. Earl, President of the Chas. Freshman Co., Inc., heads the new corporation, and Mr. George H. Gooderham, of Toronto, is Vice-President. The Board of Directors includes the Messrs. C. A. Earl, Joseph D. R. Freed and Warren J. Keyes, representing the Freshman interests, and the Messrs. George H. Gooderham, H. S. Gooderham, W. S. Turnley and K. S. MacLachlan, representing the Canadian interests.

The Gooderhams are important figures in Canadian financial life, Mr. G. H. Gooderham being associated with the



CFRB STUDIOS
In Ryan's Art Galleries,
Toronto, Can.
Side View.



Entrance to Studios



Studio Control Room



Ryan's Art Galleries—Front View

Bank of Toronto. Over half a million dollars worth of business has already been booked by the Canadian Corporation and the new distributors and dealer outlets for both the new Earl and Freed Radio Receivers are being contracted for every day.

The sets will be assembled in Canada under special Canadian licenses which have been granted by the Neutrodyne and other patent owners to the new corporation.

RADIO PHONE IN B. C.

The British Columbia Telephone Company have gone to radio to fill the gap across the channel between Vancouver Island and the mainland at a particularly badly indented shore line where there is a settlement that must be kept in constant touch with Vancouver.

Similar to the transatlantic telephone

system, this phone service must be automatic, necessitating duplex circuits and a complex technical layout. There will be a telephone line to Campbell River, where the land line will merge into a radio telephone transmitter, which crosses the channel to Powell River, a small town with its local and surrounding telephone exchange. A similar service will operate back from Powell River to Campbell River, and the radio will bridge the gap which it has been impossible to fill by either cable or land line service.

Should this prove workable, the telephone problem of many of the small towns in the northern part of British Columbia will be solved. The radio transmitter will be powerful enough to jump the channel gap during all kinds of weather. It will operate on a wave-length of 150 metres, and for the present under an experimental license.

STATION CKCL TO THE FORE IN CANADA'S BROADCASTING ACTIVITIES

One of the most familiar and outstanding buildings on University Avenue is that occupied by the studios and general offices of Station CKCL, well known for its excellent broadcasts of musical perfection and classical interest under the able direction of Mr. J. P. Howells.

Located in this up-to-date building of recent structure the studios are probably the best equipped of any North American Broadcasting Station, all the various studios and reception rooms being very spacious and beautifully finished. Station CKCL is owned and operated by the Dominion Battery Co., of Toronto, and broadcasts on a wave length of 516.9 meters. Some of the Dominion's best known artists have broadcast over this station and thousands of radio owners have expressed their delight at the excellent type of their programmes.

AN INTERESTING HAMILTON STATION

The Maple Leaf Radio Company, Limited, has been operating radio station CHML continuously since the inauguration programme in September, 1927.

This station operates on 340.7 meters with a frequency of 880 kilocycles and though only a fifty-watt station, it has received communications from listeners in practically every state in the United States, including California. The location of the aerial and transmitter perhaps has something to do with this. They are situated on the Hamilton Mountain or what is commonly known as the Niagara Escarpment, overlooking the city and reach a height of approximately 550 feet above the surface of Lake Ontario.

The studio is conveniently located at 222 King Street East, in the heart of Hamilton where it may be easily reached.

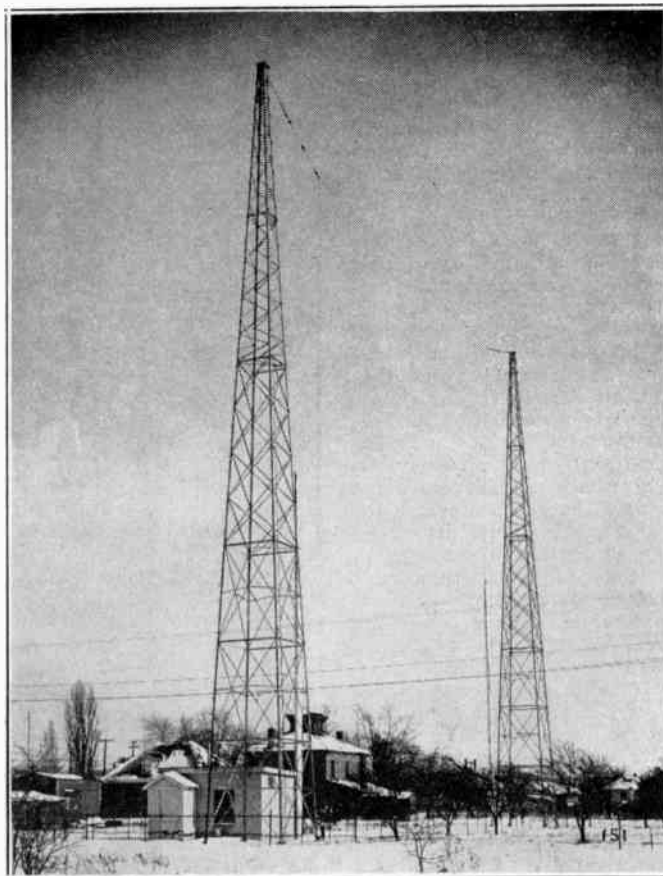
Some of the artists performing regularly over this station are Harry J. Allen, famous organist, F. M. Howard, of the Howard Studios, Zeke Woods and his Dance Orchestra, while the announcing honors are shared by Leo Daly and Bob Dickey. The station operator, Roy Ware, received his training in the hard school of the British Broadcasting Company.

CKCL, TORONTO

CKCL have one of the most beautiful studios on the American continent, being specially built for the purpose, the entire building at 104 University Avenue, Toronto, being exclusively devoted to broadcasting. It has frequently happened in the past that American broadcasters passing through Ontario have stopped specially in Toronto to look over this studio, which is one of which Canada can be justly proud.

Stevens & Wood Incorporated, New York, designed and are constructing the great power plant at Deepwater Point, N.J., which is being put into the motion picture records by Visugraphic.

Construction activity at Deepwater Point, N.J., across the Delaware River from Wilmington, is being recorded on film by Visugraphic. The complete story of the mammoth Deepwater plant will be told in motion pictures.



The Towers of Station CHML, Hamilton, Ontario



R. N. Cornfield's Arcadians, a popular Dance and Concert Orchestra, heard over CKCL, daily from the Robert Simpson Arcadian Court.

LAUGH
and the
WORLD
LAUGHS WITH
YOU



The wayfarer was making an appeal for charity from a well-dressed gentleman.

"Well," said the other, "I seem to remember you. Didn't you have a little business of some sort once upon a time? Don't tell me you've taken up begging?"

"Yes, I have, sir," returned the other. "I've got no other way to get along since I lost me business."

"But how did you come to lose it?"

"My business was a one-hand laundry," said the mournful soul, "an' one day my wife just up an' left me."



Drawn by Wal Law.

1st RADIO FAN: "What station did you get over your wireless last night, Tom?"

2nd RADIO FAN: "The police station. They somehow discovered I hadn't got a wireless licence!"

A certain lady who had given a dinner-party met her doctor on the following day and stopped to speak to him.

"I am so sorry, doctor," she said, "that you were unable to come to my dinner-party last night. I feel sure you would have enjoyed yourself, and it would have done you good, too."

"My dear madam, it has already done me good," replied the doctor tersely. "I have just prescribed for three of your guests."

They were looking over a house the agent warmly recommended. It was in rather poor condition, and one room appeared to be particularly dilapidated.

"But look, man!" cried the prospective tenant. "We couldn't live in a place like this! Why, there's actually moss growing on that damp wall."

The house agent flushed.

"My dear sir," he retorted indignantly, "at the rental I'm asking, you surely don't expect orchids, do you?"

The Easy "Out"

When a man doesn't want to lie himself he'll quote statistics.—Fernie Free Press.



Drawn by Beauchamp.

WIRELESS ENTHUSIAST: "I wish that beastly bird would shut up—they're broadcasting a nightingale singing in a few minutes!"

FIRST RADIO HEARING HELD

Radio listeners and station operators in Vancouver are agreed that the establishment of a Canadian broadcasting chain is desirable, they told the Federal Radio Commission, meeting in the Vancouver Board of Trade auditorium recently. There was difference of opinion, however, as to how such a system shall be established.

The need for an all-Canadian system to compete with more powerful American stations, was emphasized in a memorial presented by the Vancouver Board of Trade. Representatives of stations spoke in favor of such a system.

But later Mr. George Hubbard, appearing for broadcast listeners, declared in favor of a government-owned and financed system, while Mr. J. Edward Sears, representing two radio stations, made an attack on the government-owned system of Great Britain.

Mr. Sears' statement characterized the British Broadcasting Corporation as an autocratic monopoly, inefficient in operation, arousing irritation among listeners in, offering "dull and dry" programmes and falling behind Continental and American systems in operation. He also cited unfavorable criticisms of programmes appearing in independent wireless papers and an unfavorable criticism of the appearance in Canada of Mr. J. C. Stobart, educational director for the B.B.C.

These remarks drew a reply from Commissioner C. A. Bowman that the commission is not concerned with the British Broadcasting Corporation. He denied that he was defending it, but cited the circulation of its official publication to prove its popularity. He said that he felt it was not fair to cite a criticism of Mr. Stobart while he is a guest of Canada. Mr. Sears withdrew the criticism of Mr. Stobart.

In conclusion, however, Mr. Sears declared that private station owner in Vancouver offer the following five suggestions for control of radio in Canada:

1. The government should not enter the broadcasting business, which can better be handled by private enterprise.
2. By regulation and inspection private broadcasts should be forced up to a standard or lose their licenses.
3. Outside noises which interfere with radio reception should be eliminated.
4. Competent men should be appointed from time to time to advise broadcasters how to increase their service to the public.
5. A commission similar to the American Radio Commission.
6. More exclusive radio broadcast channels should be obtained for Canada and for Vancouver. It is suggested there should be five broadcast channels available.

Mr. Sears also advanced some criticism of CNRV, which, he claimed, is being supported by public taxation. If the Canadian National Railways would buy time from private stations, better programmes would be maintained, he contended.

Later, in reply to questions by Commissioner Bowman, Mr. Sears said that if subsidies were to be granted they should be on an efficiency basis. Privately-owned radio stations do not need governmental subsidies, he said, providing they receive support from the public.

The tendency of American broadcasting to supplant Canadian stations in the regard of listeners was mentioned by all speakers. The Vancouver Board of Trade memorial mentioned the possibility of an inter-Empire and inter-Canadian chain of broadcasting to meet this problem.

INCREASED POWER AT CJCJ STATION

Radio station CJCJ, owned and operated by the Albertan Publishing Company, Calgary, is on the air with a power of 500 watts, a power ten times stronger than it operated on less than eight months ago. It still operates on the old wavelength, 434.5 metres, 690 kilocycles.

Several years ago station CJCJ was built by the Radio Service and Repair Shop with a power of 50 watts. Shortly after its completion The Albertan Publishing Company broadcast over this station, using the call letters CHCA.

In September, 1928, The Albertan took over the station and at that time increased the power to 250 watts. This was the first step and increased the power five times. At that time the station was in Grandview Heights, where it still is, and the studio was in the Alexandra Hotel.

On November 1, 1928, the services of David E. Daniels, expert radiotician and announcer, were engaged. Steps were then taken to improve the quality of the programmes.

Benefits Seen

When plans for the new Albertan building were drawn up, a modern radio station was planned, and now officials see the benefit of their work in one of the most modern and up-to-date broadcasting studios in Western Canada.

As one walks into the studio his first impression from the doorway, as he looks through a double pane of glass from the waiting room into the studio, is a harmonious blend of color.

Opening the door in the studio, one is conscious of a lack of echo in the voice. This is explained by the fact that the walls are covered with sheets of flax-linum and the ceiling with celoflex. Behind these are walls built of gypsum tile, one of the most soundproof of building materials.

The walls and ceiling are covered with drapes, which also help to deaden the sound, besides making the room look attractive.

On the east side of the waiting room is the control room. From here the music and sound is relayed from the sound-proof studio to the station on Grandview Heights and from there is put on the air.

Many Use Station

Both the waiting room and control room have large windows, consisting of two panes of glass, with an air space between them, which allow perfect visibility into the studio, but make the studio almost absolutely sound-proof.

Gradually working things into shape, steps were taken early in the year to double the power of the station and last week actual operations were begun.

The work is being supervised by Mr. Daniels. The broadcasting set will be enclosed in a neat and compact stand, extremely small in comparison with some of the other stations of the same power.

Many firms and individuals are using this station as a medium of advertising. It is a well known fact that radio advertising is one of the best advertising mediums known to-day.

Among the firms broadcasting over CJCJ are the International Bible Students, H. G. Love and Company, Gospel Tabernacle, Heintzman and Company, Limited, Upper Hot Springs Hotel, Dr. M. E. Church, Hunt's Bone Yard, Hebco Wind Electric, I. J. Haug and Sons, Ltd., H. R. Chauncey and the St. Louis Hide and Fur Company, and others.

BROADCASTING EQUIPMENT AT CKY, WINNIPEG

It is a far cry from the first crude broadcasting set of a few watts to the ultra modern 5 kilowatt equipment recently installed at CKY, the broadcasting station of the Manitoba Telephone System, situated in Winnipeg, and which went on the air officially on October 17th, 1928, when Premier Bracken pressed the button, setting in operation the equipment eight miles away.

From the beginning, CKY has been in the forefront of broadcasting in Canada.

The first transmitter which went on the air on October 7th, 1922, was a Northern Electric 100-watt set, using five 50-watt tubes, the only one of its kind in Western Canada and the second in the Dominion. The following year this was replaced by a 500-watt transmitter in which were used four 250-watt and one 50-watt tubes—equipment such as was to be found in the best stations in the U.S.A. This served the requirements of the prairie province for the next five years, during which time CKY became known east and west and far to the south, for its excellent programmes, often introducing new features such as educational talks, city and province boosting and advertising of the country's resources and industrial opportunities, maintaining all this time a high standard for its programmes.

The growth of the city and the developments of the province, however, according to Premier Bracken, warranted the establishment in Winnipeg of a more up-to-date and efficient equipment. It was, therefore, decided once more to step into the van of Canadian broadcasters by the erection of a most modern station.

The Northern Electric Company was accordingly commissioned to instal their newest type five kilowatt broadcasting equipment—the only one in Canada—which to the lay observer resembles a power substation more than anything else, comprising as it does six large panels in the following order: A.C. power, rectifier, oscillator, amplifier, power amplifier and tuning units, in which are used in the same order, three water-cooled rectifier tubes, three 50-watt oscillators, four 250-watt and one 50-watt amplifiers, one of which is the modulator, and 2 water-cooled 5-kilowatt power amplifier tubes.

This equipment is so designed as to take advantage of a new method of modulation known as "low level" and so attains 100 per cent. modulating efficiency, a feature hitherto impossible, which enormously increases the efficiency of transmission, as the entire 5 kilowatts available in the antenna circuit, has superimposed upon its oscillations the slightest variations of the microphone current caused by the sounds emanating from the studio.

In the past the suppression of harmonics has been a problem increasing in importance as the power of the transmitter was increased. The design of the new equipment, however, provides a means of completely suppressing this pest by means of a double tuned circuit which prevents the effective transfer of harmonic power into the antenna circuit.

This new plant is situated in the Agricultural College some eight miles out of the city, whilst the studio is housed in a downtown telephone exchange, where the most up-to-date facilities have been provided for handling all manner of programmes, and it is the hope of Mr. Bracken and his associates that this station will participate in chain broadcasting from Canada, the United States and other lands, in the immediate future.

Broadcasting Activities of University of Alberta

Much has been and is still being said about education by radio. As far as Canada is concerned the possibilities have hardly been explored, but the work that is being carried on by the University of Alberta by means of its own station

on the campus overlooking the city of Edmonton, two 100 foot steel towers surmounted by masts carrying the antenna. The transmitting equipment is under the control of the Department of Electrical Engineering, of which Professor H. J.

feature of the week is given, and this programme is looked forward to by listeners all over the west. Although there is no college of music within the university, it is in a peculiarly happy position for programmes, with much talent on its staff and in its student body; one of the finest pipe organs in the west, the War Memorial Organ in Convocation Hall; several student organizations such as debating, dramatic, glee club, orchestra, brass band (C.O.T.C.); and a host of sympathetic friends outside its walls. These include Mrs. J. B. Carmichael, the leader of the University Radio Orchestra of 35 pieces playing a monthly concert, the Women's Musical Club of Edmonton and various schools of music, and in fact the great majority of the musical and educational institutions and societies in the city. Athletic sports and games are frequently broadcast from the University stadium, and various conventions and special lectures from the halls. A special programme is given on Sunday afternoons, with organ recitals, church choirs, etc., and a lecture recording by some outstanding British speaker in the International Educational Society's series of lectures records. One week it is Viscount Cecil on the League of Nations, another Baden-Powell on Scouting for boys, Sir Oliver Lodge and so on. These are quite popular with the listeners as the response shows.



The Ukrainian National Choir of 60 voices from the M. Hrushevsky Institute, Edmonton, singing from CKUA, the University of Alberta.

CKUA, is well worthy of notice. A beginning was made some five years ago by university professors speaking from a commercial station. Later an amplifier and microphone were installed in one of the university offices and lectures broadcast by remote control from the same station. Still later a studio was constructed in order to vary the talks with music. On November 21st, 1927, the University station was opened under the call letters CKUA, the 500 watt transmitter housed in a separate building on a knoll

MacLeod is director, and is used for technical instruction as well as for broadcasting. The programmes are arranged by the Department of Extension and the studios are in that department. In addition to programmes for children, young people, and women, lectures are given from affiliated colleges, one extension lecture and two farm talks weekly. A popular concert programme is given on Thursdays from 8 to 9 usually from the soldier patients' recreation hut in the university hospital. On Mondays at 9 the

Although the University station CKUA is now on the air 12 hours weekly, it is planned to expand the work next winter to include actual teaching courses, broadcasts to schools, and teacher training lectures. There is no doubt from results already achieved that the kind of broadcasting the University of Alberta is doing has a very definite place in the scheme of radio, and the future of this enterprise will be watched with a great deal of interest.

ALBERTA WILL ASSIST IN RADIO PROJECTS

Radio service in Alberta might be materially improved by closer connection with broadcasting stations in Eastern Canada, with national broadcasts as a means of stimulating Canadian spirit and consciousness. This was the general opinion expressed by various speakers and discussed from various angles at the public hearing held by the Royal Radio Commission at the Parliament Buildings, Edmonton, recently.

Sir John Aird, Chairman of the Commission, presided over the meeting, and with him were Charles A. Bowman and Dr. A. Frigon, Commissioners, and Donald Manson, Secretary.

Representatives of local stations were present and submitted views on the present radio situation and how it could be improved.

Co-operation from the Provincial Government was formally assured in a statement to the Commission by Premier Brownlee, following consideration of the matter in Executive Council, as follows:

"The Government of Alberta is ready and willing to enter into negotiations with the Government of Canada and the Governments of the various Provinces of

Canada with a view to the organization of radio broadcasting on a basis of public service, by some method that may be

will be the likely lines upon which such organization will be undertaken, but it developed during the hearing that a good



Studio of CKUA, University of Alberta

mutually agreed upon by the said Governments."

Sir John Aird did not intimate what

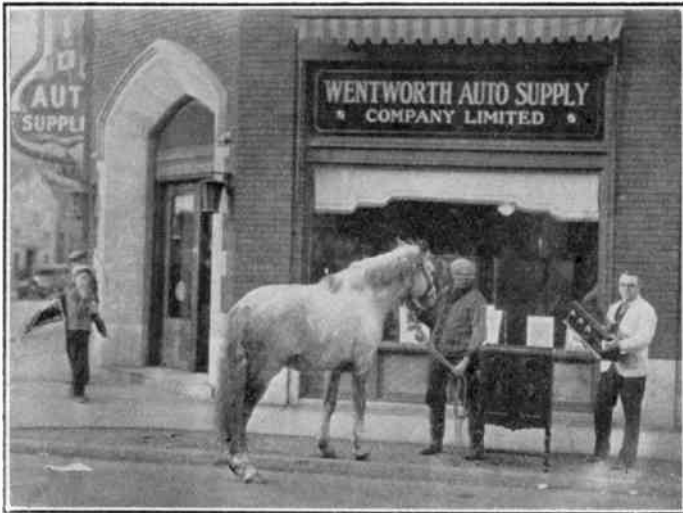
deal of attention is being given by the Commission to a study of the broadcasting system in other countries.

"Horse Sense" in Radio

"Just plain common horse-sense" is an expression frequently heard but not usually in connection with radio, until quite recently when "horse-sense" was displayed in more than one way in a very unusual trading deal, by the Wentworth

radio and the horse, which were no longer needed by him.

The Wentworth salesman was also in a very happy frame of mind, for he very quickly found a sale for the horse, in which they made an excellent profit,



A HINT TO FARMERS
Trade your spare horse for a radio—picture shows first deal of this kind made in Canada

Radio and Auto Supply, of Hamilton, Ontario.

The accompany picture tells the story in itself—a Lancaster farmer walked into the Wentworth store recently for the purpose of purchasing a new radio set, bringing in his old radio set for a trade-in, and after picking out the new set, he took the salesman outside of the store and introduced him to a horse hitched up, which he also had in mind to use in part of the deal.

Then the general discussion began, and the final result was that the farmer wended his way back home with his new radio set, which cost him considerably less in actual cash and relieved him of his old

turned over the old radio set to an immediate buyer, also at a good price, so that they got a considerably better price in the new set than they would have done in the ordinary way.

The purchaser of the horse got an exceptionally good deal, so he was happy, the second radio also pleased the new purchaser at a low price, both parties to the original deal came off considerably better than they would have done in the ordinary way, and the whole deal worked out happily and highly satisfactory for four people.

So "horse-sense" used right in the radio business is most certainly a wonderful result producer.

NEW C.G.E. RADIOLA AND SPEAKER SHOW MODERNISTIC INFLUENCES

Attractive modernistic designs and much lower prices are the outstanding features of the new Radiola 33 and Radiola Loudspeaker 100B which are announced by Canadian General Electric Company.

The cabinet of Radiola 33, although modern in tendency, is yet so rich in the simplicity of its lines that it harmonizes perfectly with any type of home surroundings, and in its circuit and design are incorporated refinements which include the latest developments of the radio art. With its trim detachable legs, Radiola 33 is adaptable for use either as a table model or a console.

Radiola 33 operates direct from the AC lighting circuit—is sturdily constructed of the finest materials—has beauty and substantial volume of tone—and finely balanced sensitivity and selectivity. It is mechanically correct.

Loudspeaker 100B is an improved and simplified design of the famous model 100A. It is housed in a newly-designed

cabinet that fits in appropriately with home furniture and harmonizes in particular with Radiola 33. When used with Radiola 33, it forms an integral part of the cabinet design. It is placed on a level with the listener's ears—the height of which insures undistorted reproduction of music and speech. Acoustically, Loudspeaker 100B gives an excellent response to all frequencies employed in broadcasting.

STATION CHNS, HALIFAX

The Halifax Herald and Evening Mail Radio Station CHNS is located in the new Lord Nelson Hotel at Halifax, N.S.

It is a Northern Electric installation of 500 watts output, operating on 322.6 metres, 930 K.C. It broadcasts daily programmes starting each morning at 10.30 a.m. with the Women's Radio Institute. This is followed by a musical programme until 12.30, when news items and stock market information is given out.

Every other Friday afternoon school broadcasting takes place, Nova Scotia having the honor of being the first Canadian province to have taken up this feature and placed it on a regular schedule

under the direction of the Provincial Department of Education through CHNS.

Each evening at 6 p.m. news items and stock quotations are broadcast, followed by dinner music by the Lord Nelson Orchestra. This is followed by a talk by some department of the Provincial Government, such as Forestry, Natural Resources, Agriculture, Health, etc. On Mondays and Wednesdays from 8 p.m. to 12 midnight commercial programmes are broadcast. On Sundays at 7 p.m. church services, followed by musical programmes from the Lord Nelson Hotel.

During the winter all important Maritime hockey games are broadcast.

CHNS has been the Eastern Terminus of the Trans-Canada Confederation Broadcast and also tied in with the CNR on special occasions.

It is the busiest and most up to date Canadian Radio Station east of the Toronto stations and covers the Maritimes, Newfoundland and Eastern New England States.

The station staff are:

Station Director: Major Wm. C. Borrett.

Programme Director: Lionel L. Shatford.

Secretary and Asst. Director: John L. Redmond.

Operator in Charge: Cecil A. Landry.

Women's Feature Directress: Mrs. A. H. Dexter.

Children's Feature Directress: Miss Dorothy Henrion.

Hon. Station Hostesses: Mrs. Wm. C. Borrett, Mrs. Lionel L. Shatford.

Leader Lord Nelson Concert Orchestra: Miss Marjory Payne.

Leader Lord Nelson Dance Orchestras: Mr. Joe Mills, Miss Mae Henrion.

When testing B-eliminators for maximum output with a low-reading milliammeter, the meter should be protected against burn-out by a fixed resistance of 1,000 ohms or more placed in series with the meter.

Navigators may soon be obtaining sea depths by means of a novel apparatus which sends a sound to the ocean bed and denotes the depth by the time taken to hear it again. This secret device, which is already fitted to most naval vessels, is said to add greatly to the safety of a ship in shallow waters during foggy weather.



The C.G.E. Radiola 33 and Loud Speaker 100B

The Radio Voice of the Northland



E. C. SWAN
Manager of CKPR, Midland Ontario

WHAT THE RADIO HAS DONE FOR MENTAL DISEASES

By M. B. Bodington (CKGW Announcer)

Some time ago I visited one of our Hospitals for the Insane, where my father had been the medical superintendent, and I was particularly struck with the excellent living conditions of the patients.

My father had always advocated outdoor work for patients and before his death had planned to have a large farm where the milder cases could occupy themselves with useful and interesting work.

The other thing that he was especially keen about, was music as a soothing for cases of melancholia, and encouraged the patients to play instruments and formed an orchestra from the inmates of the hospital, the leader himself being quite a desperate man and quite violent at times, but who always conducted himself with the greatest calmness while leading his orchestra, and I have heard since that he is quite cured and a leading bandmaster of one of our western bands. Now as to radio, which, of course, was after my father's time, in speaking to the matron, she informed me that there were far less cases of melancholia amongst women since the advent of the radio. This particular asylum was in the west, and in the old days nearly all the women patients came from the lonely prairies, out-of-the-way ranches where perhaps their nearest neighbor was thirty miles away. A great many of them were suicidal cases, and in many cases were quite hopeless.

The matron went on to say that the radio had changed all that and she stated in a most definite way the fact that the radio was a God-send to the mentally afflicted not only outside the hospital but in it. There are so many good things the radio has done that carping critics haven't got much to "carp" at any more.

It has been one of the greatest benefactors of man at sea, one of the most wonderful and useful inventions on land, and I think the tale that hospital matron

Mr. E. O. Swan is Manager and Chief Engineer of the Midland Broadcasting Corporation, owners of Station CKPR. Mr. Swan is one of Canada's pioneer radio men, though still quite young in years. He began in 1919, and guided his station through the lean days when commercial broadcasting was unknown. Like many other Canadian stations, CKPR is handicapped in its competition with nearby United States stations because the Canadian Government has not seen fit to permit it to use sufficient output power. Despite this difficulty, it is steadily forging ahead as the "radio voice of the Northland."

Of the low powered stations, the Midland station has made tremendous progress, in spite of "the dead zone," wherein it is located, and the congested wave, which it shares with American and Canadian stations.

Having been a connecting link of the Maple Leaf, Blue Bell, and Trans-Canada Chains this station has been in the front line of the main broadcasting activities.

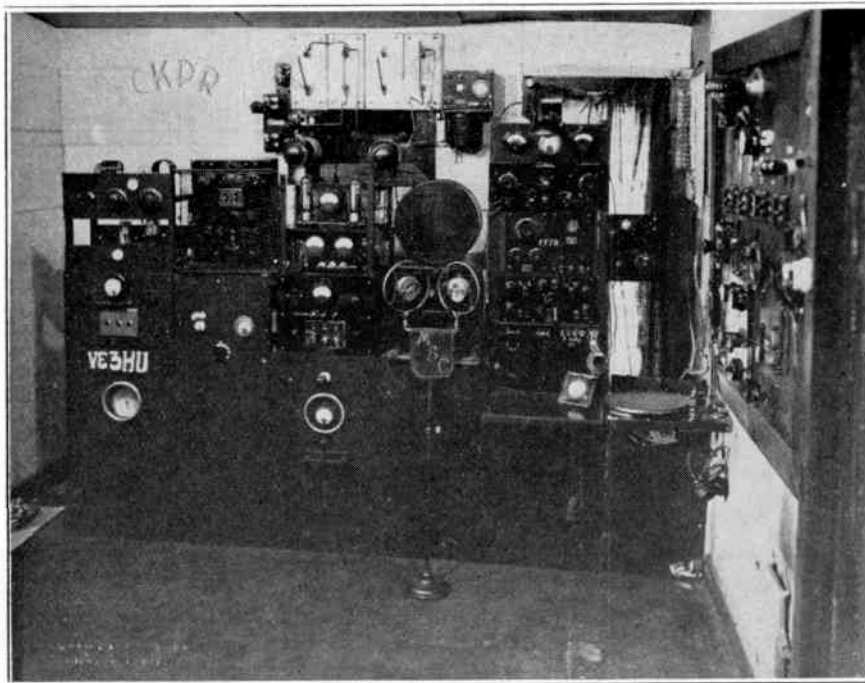
As it is well known, certain dead areas block out practically all Canadian programmes in the North. It is anticipated by the great Northern districts, that the Government will be able to arrange to have this station's output increased greatly.

The constant check of the output of CKPR is a notable feature of the Northern station, as the volume control is supervised at all times with 3 visible and 2

audible checks. Two of the visible checks are of the ordinary nature, one in a receiving set and the other connected to the output of the power amplifier. The third visible check, however, is of an unusual type, as it is located in the control room and connected by telephone lines to the output of a receiving set which is located two miles from the station. In this way the Midland Broadcasting Corporation keep track of every fluctuation of its output.

Mr. Swan, Chief Engineer, believes in keeping right up to the minute or in this last case one step ahead of present radio conditions.

Many people wonder where the talent is obtained for the splendid programmes which are featured daily from the Northern station, but, Mr. Parker, the studio director, claims that it is easily remedied by having something new and different every day. There are many different stunts, even in the smallest villages, that could be used to a great advantage. For instance, what could be more interesting than a 15-minute programme from a general store in Perkinsville Centre, which happens to be one of the many original programmes which are regularly featured. Then there are the kiddies programmes, the old time fiddler, variety hours, operas, and the chain features to choose from. The planning of these splendid programmes are all in the day's work, says the studio director of CKPR.



STATION CKPR, MIDLAND, ONTARIO
Showing Left to Right—Short Wave Panel

(VE3HU) which is used by the operator, nightly, to keep in touch with the amateurs. The next panel is the grid and modulation panel, while in the centre is the Marconi Oscillator Unit. Directly behind the microphones, is the power amplifying panel, followed by the control rack, housing the various instruments, monitors and mixing apparatus. While to the extreme right is the power panel.

told me, shows us yet another phase of the radio, because there can be no greater and humane accomplishment in this fretful

world of ours than to benefit the sick, and to help the mentally sick is still a greater achievement.

CJRM, MOOSE JAW

Station CJRM, located at Moose Jaw, contributes very largely to the entertainment of the Westerners through its snappy and interesting programmes under the direction of Mr. Ward, generally known as Uncle Billie Ward, who for the year 1927 was presented with a silver cup, emblematic of the most popular announcer in Canada.

Great childrens' interest and amusement is created through the broadcasts of "Auntie June," who in private life is none other than Mrs. Billie Ward, who handles the childrens' hour over the station. CJRM is owned and operated by James Richards & Sons, Limited, and broadcasts on a wavelength of 296.9 meters—its power of input is 500 watts.

Mr. D. R. B. Coates is broadcasting manager, Mr. S. Morley, radio manager, Winnipeg; Mr. F. Barnett, operator at CJRM.

"And what is your pleasure, madam?" asked the superbly dressed shopwalker, as a little woman in black bustled in.

"I want a cap for my husband."

The shopwalker introduced her to a young man who knew all about headgear.

"What size does your husband wear, madam?"

"Er—well, really I forget," admitted the little lady, with a blush; "but his collars are sixteen. I expect he'd want an eighteen or a twenty for a cap, wouldn't he?"

RADIO PERSONNEL

Through the ever-increasing growth of the radio business in Canada there have been many new fields of employment opened up, and in fact the industry has grown beyond the supply of competent radio men, particularly with regard to experienced service men.

It will be interesting to note that the Canadian Radio School of Toronto has recently been organized for the purpose of filling this demand through its pupils who are put through a very rigid course on all branches of the technical and service end of radio.

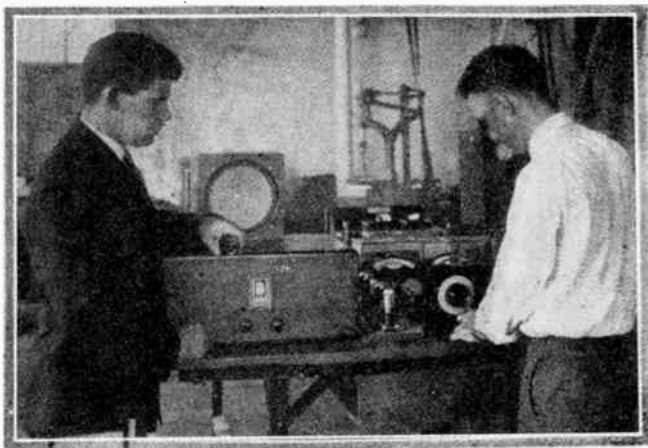
Two interesting pictures are shown below of pupils at work in their laboratories, which are very efficiently equipped with the most up-to-date apparatus, and they have such a system of teaching that it positively grips the students' interest so that the automatic result is the production of excellent men for the field. Young men seeking a channel for their future business endeavors will find great opportunity in the radio field.



Billy Ward, Manager of CJRM, Moose Jaw



"AUNTIE" JUNE
Who tells the bed time stories over station CJRM,
Moose Jaw, Sask.



Students at work—Canadian Radio College—Toronto

A CANADIAN PIPE ORGAN FOR CANADIAN BROADCASTING

On page 6 of our May issue we published a highly interesting article covering the recent organ installation in the studios of broadcasting station CKNC, owned and operated by the Canadian National Carbon Company, Limited. This, the first organ installation in any Canadian broadcasting station, was made and erected by the Franklin Legge Organ Company of Toronto. It has been enjoyed by countless thousands of radio owners since its installation, and the interest created has been so great that we feel the following particulars of the stops and instruments in it will be appreciated by organists and music lovers as the greatest accomplishment in its field:

GREAT ORGAN

(Under Expression).

- 1. Double Open Diapason 16'
- 2. Open Diapason 8'
- 3. Tibia Clausa (large scale) 8'
- 4. Voiles Celestes (2 rks.) 8'
- 5. Salicional 8'
- 6. Octave 4'
- 7. Waldflote 4'
- 8. Twelfth 2 2-3'
- 9. Fifteenth 2'
- 10. Tuba 16'
- 11. Tuba 8'
- 12. Tuba 4'

- 13. Harp Celeste.
- 14. Cathedral Chimes (20 bells).
- 15. Xylophone (37 bars).

Tremulant.

- i. Swell to Great.
- ii. Swell sub to Great.
- iii. Swell super to Great.
- iv. Choir to Great.
- v. Choir sub to Great.
- vi. Choir super to Great.
- vii. Great super octave.
- viii. Great to Pedal.
- ix. Swell to Great (2nd touch).
- x. Choir to Great (2nd touch).

SWELL ORGAN

(Solo) (Expressive).

- 16. Bourdon 16'
- 17. Morn Diapason 8'
- 18. Gedact 8'
- 19. Violes Celestes (2 rks.) 8'
- 20. Salicional 8'
- 21. Flute d'Amour 4'
- 22. Violina 4'
- 23. Piccolo 2'
- 24. Tierce 1 3-5'
- 25. Dolce Cornet 3 rks.
- 26. Fagotto 16'
- 27. Trumpet 8'
- 28. Orchestral Oboe 8'
- 29. Vox Humana 16'
- 30. Vox Humana 8'
- 31. Vox Humana 4'
- 32. Harp 3'
- 33. Chimes (20 bells).
- 34. Xylophone (37 bars).

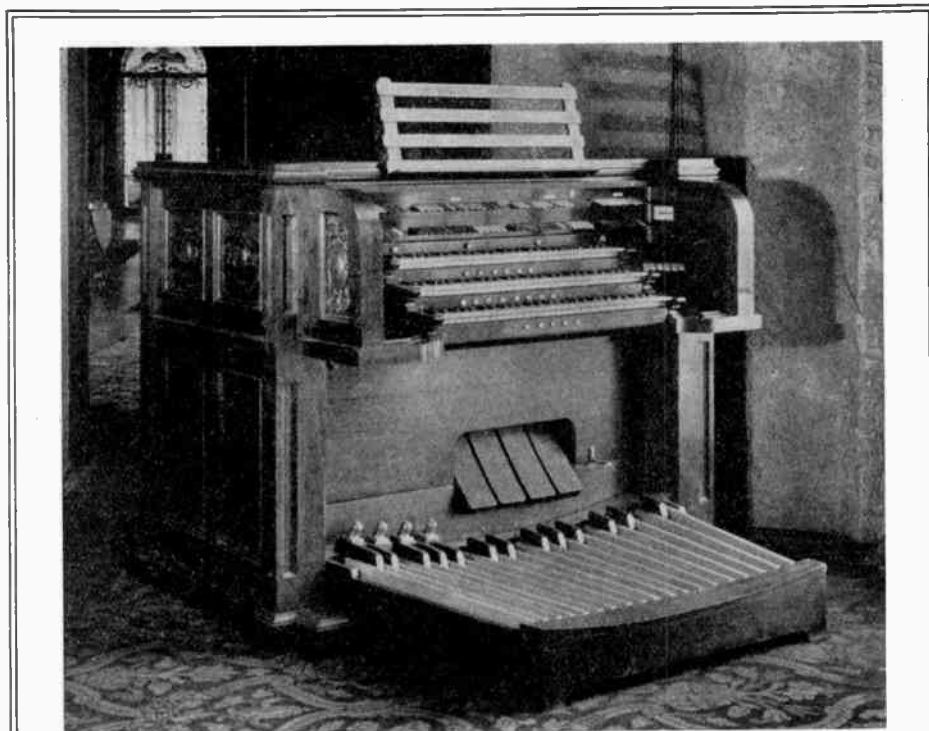
Tremulant.

- xi. Swell sub octave.
- xii. Swell super octave.
- xiii. Swell to Pedal.
- xv. Choir to Swell (2nd touch).

CHOIR ORGAN.

(Accompaniment) (Expressive).

- 35. Quintation 16'
- 36. Concert Flute 8'
- 37. Violes Celestes (2 rks.) 8'
- 38. Gedact 8'
- 39. Salicional 8'
- 40. Quintadena 8'
- 41. Salicet 4'
- 42. Rohrflote 4'
- 43. Nazard 2 2-3'
- 44. Flautino 2'
- 45. Saxaphone 16'
- 46. Clarinet 8'



Three Manual Concert Organ for broadcasting, recently installed in the studios of

CKNC, 517 metres

Tune in For the Broadcasts of This Beautiful Organ

Franklin Legge Organ Company Limited

918-20 DUFFERIN ST., TORONTO

- 47. Vox Humana 8'
- 48. Harp 8'
- 49. Tibia (2nd touch) 8'
- 50. Clarinet (2nd touch) 8'
- 51. Xylophone (2nd touch (37 bars). Tremulant.
- xv. Choir sub octave.
- xvi. Choir super octave.
- xvii. Swell to Choir.
- xviii. Swell sub to Choir.
- xix. Swell super to Choir.
- xx. Swell to Choir (2nd touch).
- xxi. Great to Choir (2nd touch).

PEDAL ORGAN.

- 52. Resultant Bass 32'
- 53. Violone 16'
- 54. Dolce Bourdon 16'
- 55. Diapason 8'
- 56. Flute 8'
- 57. Violoncello 8'
- 58. Quint 5 1-3'
- 59. Trombone 16'
- 60. Fagotto 16'
- 61. Tuba 8'
- 62. Bass Drum (stroke).
- 63. Bass Drum (roll).
- 64. Chimes (20 bells).

- xxii. Great to Pedal.
- xxiii. Swell to Pedal.
- xxiv. Choir to Pedal.
- xxv. Great super to Pedal.

PERCUSSION.

- 65. Drum Cymbal.

- 66. Crash Cymbal.
- 67. Castanets.
- 68. Tambourine.
- 69. Chinese Block.
- 70. Tom Tom.
- 71. Snare Drum.

COMBINATIONS.

(Visibly Adjustable).

- 4 thumb pistons to Swell and Couplers.
- 4 thumb pistons to Great and Couplers.
- 4 thumb pistons to Choir and Couplers.
- 3 thumb pistons to Pedal and Couplers.
- 3 foot pistons to all stops and couplers (one adjustable).
- 1 foot piston to Full organ reversible (signal light).
- 1 thumb piston to Great to Pedal reversible.
- 1 thumb piston to Swell to Great reversible.
- 1 thumb piston to Swell to Pedal reversible.
- 1 thumb piston to Choir to Pedal reversible.
- General release to each manual and pedal.

ACCESSORIES.

- Balanced Crescendo Pedal.
- Balanced Swell Pedal.
- Balanced Great and Choir Pedal.
- Coupler all shutters to Swell Pedal—all tremolos off.
- Crescendo Indicator.



CANADA

Warning to Users of Radio

*All Radio Receiving Sets
MUST be Licensed*

Penalty on summary conviction is a fine
not exceeding \$50.00

License Fee \$1.00 per annum

Licenses, valid to 31st March, 1930, may
be obtained from: Staff Post Offices,
Radio Dealers, Radio Inspectors, or from
Radio Branch, Department of Marine,
Ottawa.

A. JOHNSTON,
Deputy Minister of Marine

No Capital is Needed in This Well Paid Profession

To become a doctor or a lawyer requires
years of study and a rich father to pay the col-
lege bills, and then afterwards the pay is
small.

There is one excellent profession where the
pay is high—for good men. The best part of
this profession is that no capital is required.
Its requirements are good character and a
natural ability to sell. Good men can make
anything from \$5,000 up, per annum.

If you think you can sell—study this sub-
ject by sending a dollar for "Life Insurance
and How to Write It," which gives the facts
and arguments necessary to sell life insurance.

Published by

STONE & COX LIMITED

80 George Street, Toronto

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Gentlemen:—

I enclose One Dollar, for which please send me post
free one copy of "Life Insurance and How to Write
It."

Name _____

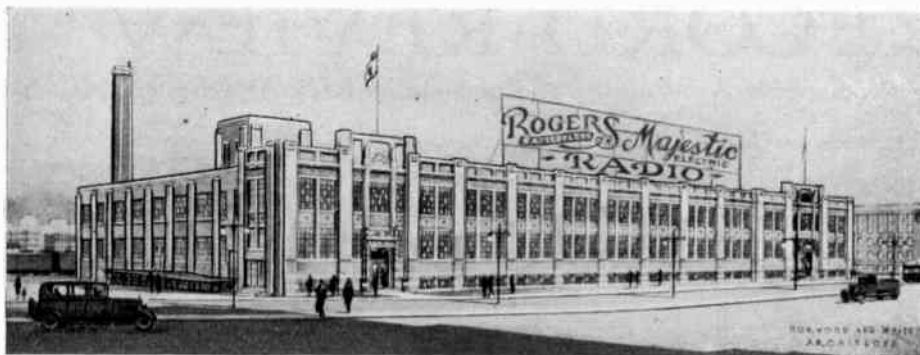
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Exhibit of the Rogers Batteryless Radio
and the Majestic All-electric Radio which
were features at the Toronto House Ex-
hibition at the Coliseum, Toronto, by the
Q. R. S. Canadian Corporation Distributors
for the Standard Radio Mfg. Corp.





STANDARD RADIO MANUFACTURING CORPORATION LIMITED

The above illustration shows the new factory of the Standard Radio Mfg. Corp'n, Ltd., being erected (February, 1929) on the north side of Fleet Street just west of Bathurst Street. In this factory will be manufactured both Rogers Batteryless and Majestic Electric Radio Receiving Sets.

The building is of the most modern reinforced concrete construction, 250 feet long by 80 feet deep, two stories and a basement, the total floor space being approximately 60,000 square feet. This splendid structure adds another link to the chain of outstanding industrial buildings on Toronto's fine new boulevard.

Special automatic machinery of the most modern design for radio production will be installed and extensive laboratory facilities are being provided to keep step with the rapid development of the Radio industry.

Early in 1925, the Standard Radio Mfg. Corp'n, Ltd. was incorporated for the purpose of manufacturing and marketing batteryless radio receiving sets (an unheard of product at that time). In the summer of 1925, the first Rogers Batteryless Set, designed and engineered in its entirety by Mr. E. S. Rogers, was offered to the public: the response was imme-

diately. These revolutionary sets had not been in the hands of the public for more than a few weeks before letters began to come in from enthusiastic owners telling of delight and surprise at the new standard of radio reception which they were experiencing with the Rogers Batteryless.

Since that time the growth has been steady and rapid—starting with three floors and part of the fourth floor at 90 Chestnut Street. It was soon necessary to occupy the whole of the fourth floor, and in 1926, the basement of the same building was also occupied. In 1927 it became necessary to rent outside space, and in 1928 two additional floors of the next building were pressed into service.

Even these enlarged facilities proved so hopelessly inadequate during the 1928-1929 season, that it was finally decided to move from the old premises and build a factory that could more adequately cope with the demand which had been created for this type of radio receiving set, and which would give engineering and production facilities impossible in the old building.

Clever Critters

You'd never suppose, looking at a little thing like a boll weevil or a corn borer, that it could teach economics to a one-cop farmer.—Kingston Whig-Standard.

CHARLES E. BODLEY



CHARLES E. BODLEY
Director of Rogers Symphony Orchestra
CFRB, Toronto.

Mr. Chas. E. Bodley, who has been actively connected with the Rogers Batteryless Station for the past two years as an orchestral conductor, began his musical studies at the early age of twelve years. For the past ten years, he has occupied a prominent place in Canadian radio circles. His Symphony Orchestra was ranked by the "Radio Digest" among the five world's greatest. This splendid organization played for H.R.H. the Prince of Wales on the occasion of his first visit to Toronto. Mr. Bodley was one of the first regular broadcasting artists in Toronto and he has been before the radio public continuously since the opening of Toronto's first station. Mr. Bodley conducts the Rogers Little Symphony Orchestra, The Rogers Novelty Orchestra, The Rogers Studio Orchestra, and also the Canada Hour Orchestra.

"How do you guard against microbes?"
"First I boil all my water."
"Yes, and then?"
"I filter it."
"Yes."
"And then I always drink beer."

Have You Heard This One?



"Why doesn't your husband apply for a post when he sees one vacant? He has been out of work for a long time."

"Yes, but he is afraid of not getting it—the disappointment would be too great."

Nature and nature's laws lay hid in night; God said, "Let Newton be!" and all was light. (Alexander Pope).

It did not last; the Devil howling "Ho! Let Einstein be," restored the status quo. (J. C. Squire).

Friend: "Where are you going so hurriedly?"

Tailor: "To the dentist."

Friend: "And yet you are smiling?"

Tailor: "Yes, I am to measure him for a suit."

Willie Mosquito: "A man clapped his hands at Daddy."

Mother Mosquito: "What if he did pet?"

Willie Mosquito: "Yes, but Dad was in between them."

Diner: "What do you call this stuff?"

Waiter: "Mock turtle soup, sir."

Diner: "Well, tell the chef he has carried his mockery too far."

"Is the professor really short-sighted?"

"Yes, in the Zoo I saw him looking at the elephant through a magnifying glass."

"My husband's so jealous."

"Isn't that embarrassing?"

"Yes. Isn't yours jealous?"

"Not a bit."

"Isn't that humiliating?"

Judge: "Before I pass sentence, have you anything to say?"

Accused: "Yes, sir, I have already been sentenced ten times and it has done no good."

Both Socks

We have found the hardest job under the sun. It's trying to wear all we got for Christmas without showing any favoritism.—Port Arthur News Chronicle.

And in Private

It is too bad that most men don't take time to arrange their thoughts before speaking in public.—Soo Daily Star.

Vain Hope

Our favorite announcer is becoming addicted to grammar and we expect any morning to hear him call them "sitting-up exercises."—Prince Albert Herald.

Unavoidable

It may be chivalry to give the woman right of way now, but it's common sense also.—Exeter Times-Advocate.

THIS MONTH'S RECORD REVIEW

A Service to Our Readers Having Gramophone Attachments or Combination Radio-Phonograph Models



Columbia Records

Made in Canada—for sale by all Columbia dealers. If no dealer near you, write us for information and Catalogue.

COLUMBIA PHONOGRAPH CO., Limited
22 FRONT ST. W., TORONTO



DANCE

- 1789-D—Roses of Picardy—(Incidental singing by Ted Lewis).
Limehouse Blues—Fox Trots—Ted Lewis and His Band.
1782-D—I'm Still Caring—(Vocal Refrain).
Love Me Or Leave Me—(From "Whoopee")—Fox Trots—Guy Lombardo and His Royal Canadians.
1791-D—My Kinda Love—(Vocal Refrain).
Sweet Seventeen (That's What I Call My Baby)—Fox Trots—Ted Wallace and His Campus Boys.
1800-D—Honey—(Vocal Refrain).
My Sin—(Vocal Refrain)—Fox Trots—Ben Selvin and His Orchestra.
1771-D—Blue Hawaii—Waltz—(Vocal Refrain).
Louise—Theme Song from Motion Picture "Innocents of Paris"—Fox Trot—(Vocal Refrain)—Paul Whiteman and His Orchestra.
1765-D—Lady Divine—Theme Song from Motion Picture "The Divine Lady"—(Vocal Refrain).
Sweet Suzanne—(Vocal Refrain)—Waltzes—The Cavaliers.
1766-D—On With the Dance!—(Vocal Refrain).
My Annapolis (And You)—Theme Song from Motion Picture "Annapolis"—Fox Trots—Paul Specht and His Orchestra.

POPULAR VOCAL

- 1768-D—When the World Is At Rest.
If I Had You—Vocal Duets—Layton and Johnstone.
1781-D—Old Fashioned Lady.
Dream Mother—Vocals—Tommy Weir.
1790-D—My Troubles Are Over.
Huggable Kissable You—Vocal Duets—The Sunshine Boys.
1792-D—My Sin.
Heigh-Ho! Ev'rybody, Heigh-Ho!—Vocals—Charles W. Hamp.
15378-D—Wreck of the N. & W. Cannon Ball.
Low Bridge, Everybody Down (Or Fifteen Years on the Erie Canal)—Vocals—Vernon Dalhart.
1769-D—Lover, Come Back To Me (From "The New Moon").
You Wouldn't Fool Me, Would You?—(From "Follow Thru")—Vocals—Annette Hanshaw.
1770-D—My Angeline (My Angel-cen).
My Castle in Spain is a Shack in the Lane—Vocals—Frank Munn.
1763-D—Makin' Whoopee!—(From "Whoopee").
I'm "Ka-Razy" For You—Vocals—Eddie Walters.

INSTRUMENTALS

- 16050-D—In A Persian Market—(Kettelbey).
In A Chinese Temple Garden—(Kettelbey)—Organ Solos—Quentin M. Maclean.
1369-D—Mai Poina Oe Ia'u (Incidental Singing).
Aloha No Au I Ka Maka (Incidental Singing)—Hawaiian Instrumentals—Sol Hoopii's Novelty Trio.
59052-F—Blue Paradise—Medley—Parts 1 and 2—Columbia Concert Orchestra.



- 8926—Honey—Fox Trot (Voc. cho. by Rodman Lewis)—The Rounders.
Pretty Little Thing—Fox Trot—(Voc. cho. by Phil Dalton)—Rose Room Orchestra.
8927—Lady Divine—Waltz (Theme song of "The Divine Lady") (Voc. cho. by Jerry White)—Adrian Schubert's Salon Orchestra.
You Wanted Someone to Play With, I Wanted Someone to Love—Waltz (Voc. cho. by Rodman Lewis)—Adrian Schubert's Salon Orchestra.
8928—I Used to Love Her in the Moonlight, (But She's in the Limelight Now)—Fox Trot (Voc. cho. by Rodman Lewis)—The Rounders.
Some Sweet Day—Fox Trot (Theme song of "Children of the Ritz") (Vocal chorus by George Beaver)—Fred Rich and His Orchestra.
8929—Coquette (Theme song of the picture "Coquette")—Tenor with Orchestra—Rodman Lewis.
Dream Mother—Tenor with Orchestra—Rodman Lewis.
8930—I Wish I Had Died in My Cradle—Tenor with Orchestra—Rodman Lewis.
My Heart is Your Heart—Tenor with Orchestra—Rodman Lewis.
8931—I'll Always Be in Love With You—Waltz (from the picture "Syncope")—(Vocal chorus by Rodman Lewis)—Adrian Schubert's Salon Orchestra.
The Rose You Gave to Me—Waltz (Vocal chorus by Frank Luther)—Adrian Schubert's Salon Orchestra.

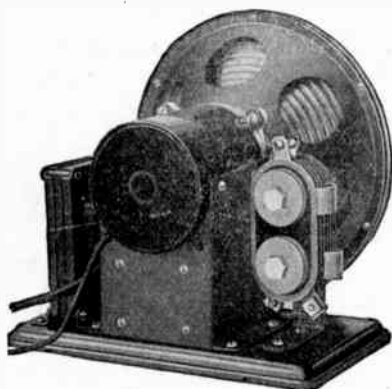


- 21881—That's How I Feel About You—Fox Trot—Davis-Gottler—(Vocal refrain by Fred Waring and Chorus)—Waring's Pennsylvanians.
That's Her Now!—Fox Trot—Yellan-Ager—(Vocal refrain by Burt Lorin)—Nat Shilkret and the Victor Orchestra.
21891—Mississippi Here I Am—Fox Trot—Grossman-Sizemore—(Vocal refrain by J. L. Sanders and C. A. Coon)—Coon-Sanders Orchestra.
Rhythm King—Fox Trot—Trent-Hoover—(Vocal refrain by C. A. Coon)—Coon-Sanders Orchestra.
21886—You Were Meant For Me—Fox Trot—Freed-Brown—(From the Motion Picture "Broadway Melody")—(Vocal refrain by Burt Lorin)—Nat Shilkret and the Victor Orchestra.
Broadway Melody—Fox Trot—Freed-Brown—(From the Motion Picture "Broadway Melody")—(Vocal refrain by the Four Rajahs)—Nat Shilkret and the Victor Orchestra.
21900—My Castle in Spain Is A Shack in the Lane—Fox Trot—Caesar-Friend—(Vocal refrain by Clare Hanlon)—Waring's Pennsylvanians.
I Used to Love Her in the Moonlight—Fox Trot—Fiorito-Young—Vocal refrain by Clare Hanlon—Waring's Pennsylvanians.
21903—That Good Old Sunny South—Fox Trot—Yellen-Ager—(Vocal refrain by Johnny Marvin)—Bennie Krueger and His Orchestra.
When I'm Walkin' With My Sweetness—Fox Trot—(Down Among the Sugar Cane)—(Tobias-Clare-de-Rose)—(Vocal refrain by Johnny Marvin)—Bennie Krueger and His Orchestra.
21896—Lady Divine—Waltz—Kountz-Shilkret—(From the Motion Picture "The Divine Lady")—(With vocal refrain)—Nat Shilkret and the Victor Orchestra.
Some Sweet Day—Fox Trot—Shilkret-Pollack—(From the Motion Picture Production "Children of the Ritz")—(With vocal refrain)—Nat Shilkret and the Victor Orchestra.
21908—I'm Thirsty For Kisses, Hungry For Love—Fox Trot—(Vocal refrain by Dick Robertson)—(From the Motion Picture Production "Why Be Good?")—Nat Shilkret and the Victor Orchestra.
One For All—All For One—Fox Trot—Trent-Riesenfeld-Alter—(Theme song of the Motion Picture "The Iron Mask")—(Vocal refrain by Frank Munn)—Nat Shilkret and the Victor Orchestra.
216540—Melodie—Gluck-Arr, Kreisler—(Violin Solo with Piano)—Boris Lasa.
Valse Sentimentale—Schubert-Arr. Francko—(Violin Solo with Piano)—Boris Lasa.

Brunswick

- 4272—My Annapolis (And You)—(Theme song of the Motion Picture, "Annapolis")—F.T. with Vocal Chorus by Jerry White—Novelty Dance Orchestra—The Eight Radio Stars.
I Found Happiness (When I Found You)—(From the Motion Picture, "The River")—Waltz with Vocal Chorus by Chester Gaylord—Novelty Dance Orchestra—The Eight Radio Stars.
4274—My Castle in Spain Is A Shack in the Lane—Fox Trot with Vocal Chorus by "Scrappy" Lambert—Ben Bernie and His Hotel Roosevelt Orchestra.
Mean To Me—Fox Trot with Vocal Chorus by "Scrappy" Lambert—Ben Bernie and His Hotel Roosevelt Orchestra.
4278—Louise—(From the Motion Picture, "Innocents of Paris")—Vocal with Guitars and Ukuleles—Randolph's Royal Hawaiians.
Lonely One—Vocal with Guitars and Ukuleles with Solo by Raymond Kinney—Randolph's Royal Hawaiians.
4282—(When I'm Walkin' With My Sweetness) Down Among the Sugar Cane—Vocal Duet with Clarinet and Piano—Ed Smalle and Dick Robertson.
Where Did You Get That Name?—Vocal Duet with Piano—Ed Smalle and Dick Robertson.
4284—Coquette—(From the Motion Picture, "Coquette")—Waltz with Vocal Chorus by "Scrappy" Lambert—Ben Bernie and His Hotel Roosevelt Orchestra.
Till We Meet—Fox Trot with Vocal Chorus by "Scrappy" Lambert—Ben Bernie and His Hotel Roosevelt Orchestra.
4288—Fioretta—F.T. with Vocal Chorus by Dick Robertson—Bob Haring and His Orchestra.
Dream Boat—Waltz with Vocal Chorus by Dick Robertson—Bob Haring and His Orchestra.
4291—Kansas City Kitty—Comedienne with Orchestra with Ray Mayer at the Piano—Edith Evans.
My Kinda Love (One Way to Paradise)—Comedienne with Orchestra with Ray Mayer at the Piano—Edith Evans.
4293—Parade of the Wooden Soldiers—Organ Solo—Eddie Dunstetter.
Ah! Sweet Mystery of Life (The Dream Melody)—(From "Naughty Mariette")—Organ Solo—Eddie Dunstetter.

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*Look to the Leader***UTAH****DYNAMIC****SPEAKERS**

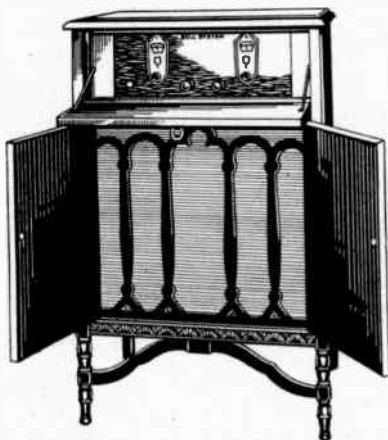
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CONSOLE ELECTRIC MODEL



This exquisite model complies with the demands of the Elite. Simple in operation, unsurpassed and unequalled in tone by any other Musical Reproducing Instrument ever made. Retaining volume.

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The granting of Patents No. 282210 and No. 1679347 by the Canadian and United States Governments respectively on August 7th, 1928, to the Inventor of Bell System Radio, proves beyond all doubt that here is something new in Radio.

To state, as we do, that the Bell System presents "The Ultimate in Radio," is to make a big claim. We do so deliberately and submit our claim to the challenge of comparison. If you are not already acquainted with Bell System Radio we urge you to consider the following essentials to produce the Ultimate as claimed:

Economy over a period of years.

Simplicity of operation.

Tone colour.

Retaining volume and selectivity bring in distant stations clear, as only a Bell can be. Quality material that has stood the exacting test of Scientific Laboratories.

Bell System Dealers will be pleased to demonstrate these features, and all Bell System sets and products are guaranteed for 12 months, insuring your investment for that period.

WRITE TO-DAY FOR PARTICULARS OF OUR FULL RANGE OF MODELS

Manufactured by

BELL SYSTEM RADIO & MANUFACTURING CO.

32 King William St., HAMILTON, ONTARIO



YOUR
Monthly
MAIL BOX

Correspondence is invited on any matter pertaining to subjects in this magazine. Tell us what you want to know—how you like Radio news or why you don't like it. All letters will be answered in this section. Address "Mail Box," c/o Radio News.

Canadian Radio News.
Toronto 2, Ont.

Dear Sirs,—I would like to suggest that "Radio News of Canada" give our local station and club a write-up in the near future.

Station CFCO was founded largely through the efforts of our local radio inspector, Mr. Jack Beardall.

Through his efforts was started "The Western Ontario Better Radio Club" also. The membership fee is 10 cents and the membership is now about one thousand. CFCO conducts special weekly club broadcasts. Mr. Jack Beardall is president, Mr. Con. E. Shea is secretary-treasurer.

This locality has one of the highest radio populations in Canada and is also one of the most law-abiding in securing licenses promptly.

Mr. Beardall has succeeded in clearing up practically all of our radio interference, due to electrical transmission and operation of electrical machinery in Chatham and all the surrounding towns and territory.

If you see fit to act on my suggestion I will make sure that Mr. Beardall, who is a friend of mine, receives a copy of "Radio News of Canada" so that he can read the article during a "Club Broadcast."

Please regard this letter as of interest to radio in general and to our "Club" in particular.

C. H. Dafeo.

29 Richmond St., Chatham, Ont.

Answer—We shall have much pleasure in mentioning your station in our columns. Please send more detailed particulars.

Dear Sirs,—Although I have not previously been a subscriber to Radio News, I have often read it with interest in the studio. I am one of the announcers and field operators of Radio Station CFCL at Prescott, Ont., the terminal town, broadcasting every Sunday and Friday nights. It might interest you to know that the initials stand for Canada's Foremost Little Community.

Karl M. Lockwood.

Box 77, Prescott, Ont.

Answer—We are highly interested in your station and if you will send some further details we would be glad to write them up.

Toronto 2, Ont.
April 30, 1929.

Editor of Radio News of Canada,

Dear Sir,—As a subscriber to your valuable paper, would you inform me where to write to in Great Britain to obtain a blueprint of a 2 or 3-tube set that an amateur could build, just to see how reception compares with this country? Thanking you in advance,

Mrs. Alex. Porter.

Box 168, Portage La Prairie, Man.

Mrs. Alex. Porter,
Box 168, Portage La Prairie,
Manitoba, Can.

Dear Madam,—Your letter to the Canadian Radio Service Co., re an English two or three-tube circuit has been forwarded for our attention.

From time to time we receive a number of English radio publications in this office and shall be glad to forward these to you when the next batch arrives.

This will probably be the quickest way in which you could get the desired information. On the other hand, if you do not see exactly the information you require you will find innumerable manufacturers with whom you would not doubt be willing to give you whom you could communicate direct, and the fullest possible information.

It may also be of interest for you to write direct to the editors of the magazines which we will send you.

Trusting this will be of service to you,
Stone & Cox Limited.

R.R. No. 3, Shelburne, Ont.,
Radio News of Canada.

Gentlemen,—Although I see no section in your magazine for queries, I make bold to write you regarding my set.

I have a batteryless model radio which gives splendid satisfaction except when the electric iron or toaster are in use or when my neighbor is using his electric iron or motor. At such times it produces such noise that I am forced to shut it off. I might say we are on a rural line and my neighbor and I are on the same transformer.

Even when my neighbor or I merely turn a light off or on, a snap is emitted from the radio.

A man, living a couple of miles from me, but getting his power from another line, has a radio exactly like my set, and a two-burner hot plate which they have does not affect his radio in the least.

I would appreciate it very much if you could explain this and suggest some way of overcoming the trouble. Thanking you,
Elwood Foster.

May 3rd, 1929.

Mr. E. Foster,
R.R. No. 3,
Shelburne, Ont.

Dear Sir,—Your letter to the Canadian Radio Service Co. has been forwarded to this office for attention, and we would offer you the following remarks:

Through the fact that your receiver performs perfectly when there is no other load on the line we have proof that your trouble is through an outside source.

If you are not already using an aerial we suggest that you erect one immediately as this will at least do away with the interference from your neighbor.

On the other hand, if you are already using an aerial, there must be some loose connection on your toaster or electric iron. This is found to be a common source of trouble, and in many household appliances the plugs loosen in course of time, and although the contact is sufficient to operate the appliance, it leaves sufficient room for partial sparking, thereby causing induction and interference in your radio.

We suggest you carefully look over all your electrical appliance plugs, also those of your neighbor, and if you still find them in perfect order, please communicate with us again, and inform us of the type of aerial you are using and we shall be pleased to make further suggestions.

Trusting this will be of service to you,
Stone & Cox Limited.

Radio News of Canada,

Dear Sirs,—In the May issue of Radio News of Canada, I saw a Portable Screen Grid Find—All Four. I think it would make a wonderful set and I would like to build one—less the portable part. I wonder if you have any Screen Grid Find—All Four prints that I could purchase, or if there are any places where I could purchase a back number of Radio News of Canada with a home model Screen Grid in it; that would be better.

Wishing you every success,

Cecil Fischer.

Replying to your letter of the 2nd re Portable Screen Grid Find—All Four, we would suggest that you get in touch with the Allied Engineering Institute, Suite 429, 30 Church Street, New York City.

We believe you will get the desired information direct from them, which would be better than our turning back numbers of this publication, as naturally the further back we go the nearer to obsolete the type of circuit will be.

Box 362, Chappleau, Ont.
Radio News of Canada,
Toronto, Ont.

Dear Sir,—Have you a circuit for a four-tube set controlled by a single dial? If so, will you kindly publish it or let me know how much it will cost?

Joseph Muir.

Answer.—We have referred your inquiry to Silver-Marshall of Chicago who will communicate direct. However, we would suggest that there is no particular object in building a four-tube set when a five-tube will give much better results and cost but little more.

R. R. 1, Sebringville, Ont.
Canadian Radio News,

Dear Sirs,—We have been reading "Radio News" since 1924, more or less regularly, and are glad to be able to read "Radio News in Canada." Canadian magazines are the best for Canadian people.

Beatrice Richardson.

We trust you will always be interested in our magazine, and if we can be of service to you at any time, please do not hesitate to call upon us.

Many thanks.—Editor.



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10 DAY FREE TRIAL

Send \$2.00 with order, and the Safe Drive will be sent you prepaid, if after 10 days you are not satisfied return at our expense and your \$2.00 will be returned to you.

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The Most practical and lowest price Anti-Glare sold.

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Enclosed \$2. Please send Safe-Drive on 10 day free trial offer.

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HAS DEVELOPED FOR YOU
THE NEW

**BELL
B
ELIMINATOR**

Supplies 180 volts B power—40 volts C power—5 volts to 2 power tubes with steady, unvarying flow and absolute silence.

Thoroughly tested and proven efficient.

List Price, \$65.00

Write for particulars

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HAMILTON, ONTARIO

SMOOTH Your Circuits

With

HYDRA

CONDENSERS

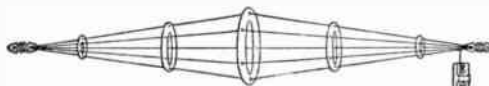


The reliable condenser used in the finest sets of foremost British, Canadian and American manufacturers, including Marconi Radios. Quality built throughout for safe, long lasting, and dependable service.

Sold by all good Radio Dealers.

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Guaranteed Double Volume and Sharper Tuning

material. The aerials used by largest Broadcasting Stations. Sharpens tuning of any set, because of short length, but has enormous pick up because 150 ft. of enameled 12 ga. wire is used. Insures more uniform reception. Non-corrosive feature insures long life and 100% efficiency at all times. "Truly a Life Time DX Aerial." List **\$10.00**

No. 60—Length 60 ft. Price, \$12.50.

"Big Boy" size. Best for European tests. (Same description as above, except that 300 ft. of wire is used making this the most efficient and powerful aerial ever made).

Manufactured by

THOROLA RADIO PRODUCTS

110 E. 21st St., Chicago, Illinois

No. 30

Length 30 ft.

Non-corrosive—30 ft. length—volume of 150 feet aerial with selectivity of 30 foot antenna. Assembled—ready to string up—all connections soldered or riveted. Rings are heavy gauge solid zinc. Permits using a powerful aerial in 30 ft. space. Duplicates in design and

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FILTERS**

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**ELIMINATE ALL BATTERIES AND
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CANADIAN BROADCASTING STATIONS

Alberta		
CNRC—Calgary	434.5	
CFCN—Calgary	434.5	
CFAC—Calgary	434.5	
CHCA—Calgary	434.5	
CHCT—Red Deer	356.9	
CJCJ—Calgary	434.5	
CJCR—Red Deer	356.9	
CJOC—Lethbridge	267.7	
CNRE—Edmonton	516.9	
CHMA—Edmonton	516.9	
CJCA—Edmonton	516.9	
CKUA—Edmonton	516.9	
CKLC—Red Deer	356.9	
British Columbia		
CFJC—Kamloops	267.7	
CJCU—Mission City	247.8	
CHLS—Vancouver	410.7	
CHWK—Chilliwack	247.8	
CJOR—Sea Island	291.1	
CNRV—Vancouver	291.1	
CKFC—Vancouver	410.7	
CKWO—Vancouver	410.7	
CKCD—Vancouver	410.7	
CKWX—Vancouver	410.7	
CFCT—Victoria	475.9	
Manitoba		
CNRW—Winnipeg	384.4	
CKY—Winnipeg	384.4	
New Brunswick		
CFBO—St. John	336.9	
CFNB—Fredericton	247.8	
CNRA—Moncton	475.9	
Nova Scotia		
CHNS—Halifax	322.4	
Ontario		
CKGW—Toronto	312.3	
CKMC—Cobalt	247.8	
CKOC—Hamilton	340.7	
CHCS—Hamilton	340.7	
CHML—Hamilton	340.7	
CFCH—Iroquois Falls	499.7	
CFMC—Kingston	267.7	
CFRC—Kingston	267.7	
CJGC—London	329.5	
CKPR—Midland	267.7	
CNRO—Ottawa	434.5	
CKCO—Ottawa	434.5	
CKCR—Brantford	296.9	
CFLC—Prescott	296.9	
CKPC—Preston	247.8	
CKNC—Toronto	516.9	
CNRT—Toronto	356.9	
CJSC—Toronto	516.9	
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Partial List Table of Contents

CHAPTER ONE
Airfoils, Lift and Drag
Airfoils; flat plate and curved plate—Cambered Airfoils—Airfoils for different purposes; high lift, general purpose, high speed—Drag—Head Resistance—Streamlining—Fairing—Wind Pressure at various velocities.

CHAPTER TWO
Control
Control by Flaps—Ailerons and their Functions—Flippers and their Function—Rudder—Co-ordination of Controls.

CHAPTER THREE
Inherent Stability
Stability Defined—Relation of Momentum to Stability—Longitudinal Stability—Why a Plane Flies “Hands Off”—Directional Stability—Propeller Torque—Dihedral—Losses due to Dihedral.

CHAPTER FOUR
Interesting Points in Design
Aspect Ratio—Stagger—Monoplane or Biplane—Tail Skid—Airplane Engines—Water Cooling vs. Air Cooling—Cost of Airplane Engines—The Propeller.

CHAPTER FIVE
Construction of Airplanes
Wings—Fuselage—Monocoque Fuselage—Landing Gear—The Empennage.

CHAPTER SIX
Practical Flying—The Slotted Wing
Stalls—Result of a Stall—More About Flying Speed—Air Speed in Turns—The Slotted Wing.

CHAPTER SEVEN
The Weather and Aviation
Wind—Gales—Squalls and Gusts—Rain, Snow, Sleet and Hail—Fog—Lightning—Bumps—“Air Pockets.”

CHAPTER EIGHT
Airports—Airways—Safety
Airports and Airways—Safety in Aviation—Aviation Accidents—Structural Failure—Error of Pilot—Accidents due to Weather—Crashes in the Air—Parachutes—Fires in the Air.

CHAPTER NINE
Pilot Licenses—The First Lesson
How to Become a Pilot—Inspection—Taxiing—Taking-off—Climbing—Flying Level—Turns and Banks—Landing.

CONCLUSION
Terminology.

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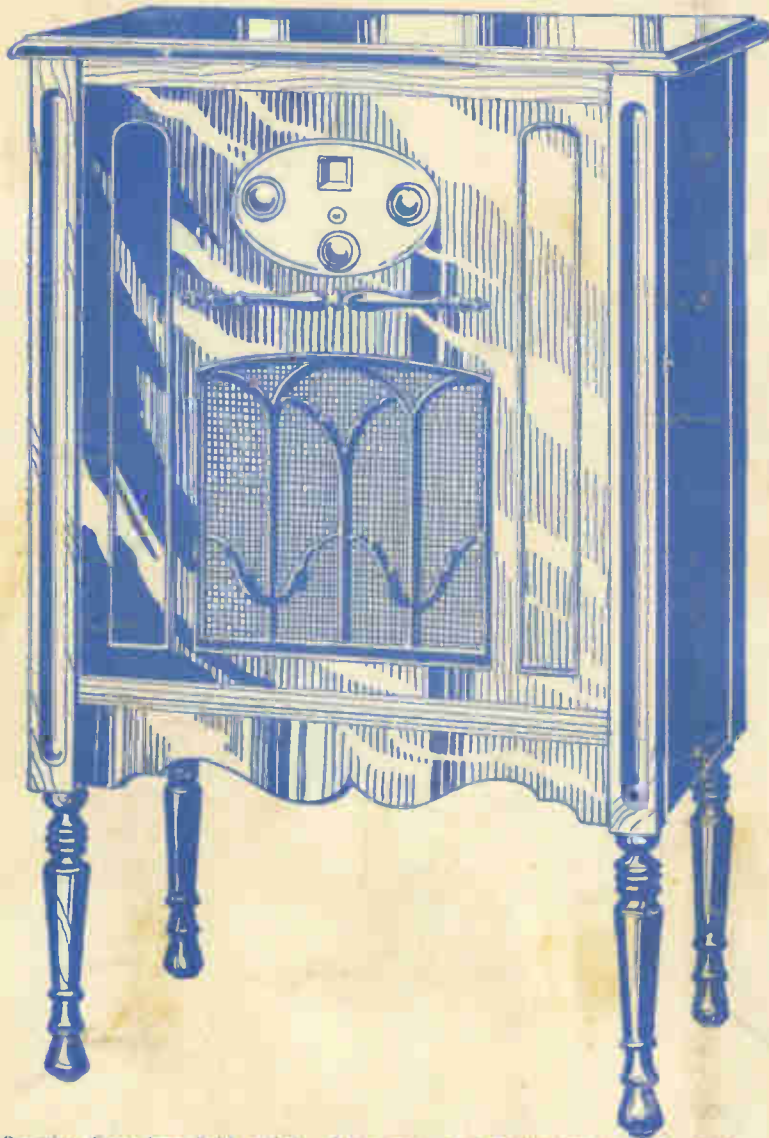


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