

AND RADIO APPLIANCE SALES



Manufacturing Test Instruments
In a Modern Canadian Plant



What's Ahead in 1947

JANUARY, 1947

World Radio History

BUYERS GO FOR EXTRA VALUE..

in Appliances... or in your SELLING PLAN

Offer the buyer extra value for his money and you'll usually make the sale. That's the theory behind CCC Sales Plans, and thousands of dealers have found these Plans pay off in extra sales and bigger profits.

Check the extra values to the customer — and yourself — in these two Sales Plans—

The CCC Limited Liability Sales Plan

1. Makes it easier for the customer to buy.
2. Under this plan you give the customer extra advantages—such as Creditor Group Life Insurance, which guarantees all payments due (up to and including 60 day arrears) in the event of the customer's death, leaving the merchandise free and clear.
3. Every time-payment sale becomes a cash sale to you.
4. We make collections—direct from the customer.
5. Your liability is strictly limited, depending on the number of payments made.

The CCC Reserve Sales Plan

Contains all the above features, except that instead of limiting your liability, a Reserve is set up on every transaction to protect your profit.

These and other features will enable you to meet any kind of competition. They'll help you build profitable volume sales. Get full details on these profit-packed Sales Plans from your nearest CCC office — now.

Free Booklet on Request



**COMMERCIAL CREDIT CORPORATION
OF CANADA LIMITED**

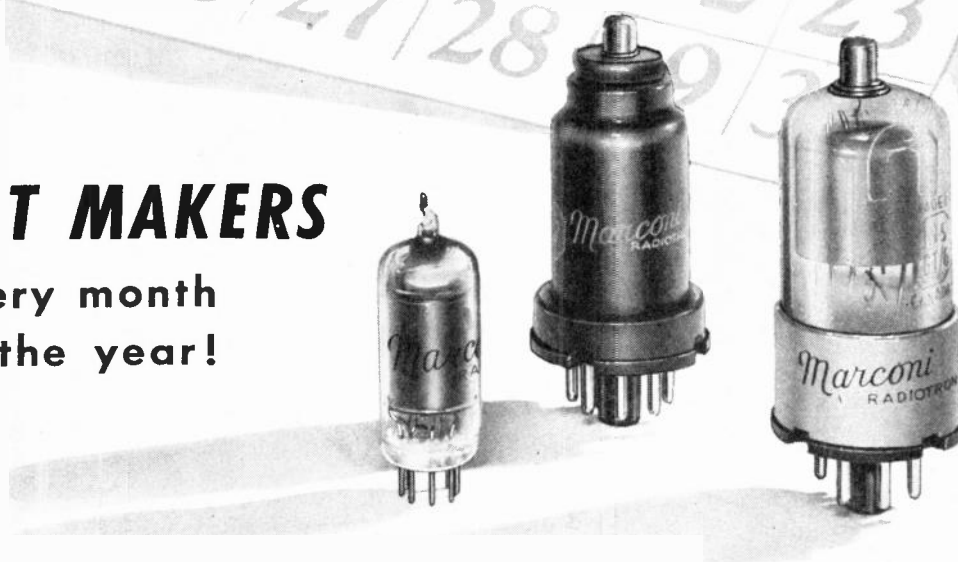
HEAD OFFICE, TORONTO

Branches in all principal cities



PROFIT MAKERS

every month
in the year!



ALWAYS IN demand, Marconi RVC Radiotrons will keep ringing up sales and profits all year round for you.

In their familiar red and black carton they meet with immediate acceptance requiring no sales effort. Precision-made for *greater power, better tone and longer life*, each tube

is fully tested. Manufacturing standards are of the highest—in keeping with the tradition of Marconi—The Greatest Name in Radio.

Keep an ample stock well displayed and they'll keep moving across your counters—bringing in steady profits to you.

To help you get increased business, radio stations across Canada are regularly broadcasting the "Perfection in Reception" announcements of Marconi RVC Radiotrons.



CANADIAN MARCONI COMPANY

Established 1903

MARCONI BUILDING - MONTREAL

Vancouver Winnipeg Toronto Halifax St. John's, Nfld.

MARCONI RVC RADIOTRONS
CANADA'S FINEST RADIO TUBES

You'll be proud to own a name that's known -

Sparton
RADIO'S RICHEST VOICE SINCE 1926

SPARTON MODEL 148RP
RECORD PLAYER ATTACHMENT
Reasonable in price, this quality attachment equips your present radio for playing records. Motor, horn, and cabinet covered in durable fabricoid. You can close the lid to minimize needle noise.
\$24.95

SPARTON MODEL 534KRC
LONG AND SHORT WAVE RADIO PLUS RECORD PLAYER
A beautiful walnut cabinet—highly desirable for its size—plus two band long and short wave radio—built-in antenna—plus quality record player. One handsome package of moderate dimensions contains the ideal compact radio-phonograph combination.
\$109.95

SPARTON MODEL 534BCC
CHARISTON COMBINATION
Blonde wood and gleaming black plastic make up this smart modern combination. The radio is a choice combination. The record player is accurate. The tone control is accurate. The "Public Top" and "Private Bottom" are in constant from the rear of the cabinet. (Album nearby chair or chairfield. (Album shelf space is provided below at rear.)
\$114.95

SPARTON MODEL 5048L
3-Tube AC/DC Radio
This brand new 3 tube AC/DC Radio is far ahead of its class. It is a choice combination. The radio is a choice combination. The record player is accurate. The tone control is accurate. The "Public Top" and "Private Bottom" are in constant from the rear of the cabinet. (Album nearby chair or chairfield. (Album shelf space is provided below at rear.)
\$32.95

SPARTON MODEL 534KRC
Long and Short Wave Radio Plus Record Player
A beautiful walnut cabinet—highly desirable for its size—plus two band long and short wave radio—built-in antenna—plus quality record player. One handsome package of moderate dimensions contains the ideal compact radio-phonograph combination.
\$109.95

WHEN BUYING LOOK FOR THE SPARTON TAG

NEILSON EDDY
in "The Whole World Wants to Sing At The May"

NEW COLUMBIA CHILDREN'S ALBUM SETS

SPARTON
RADIO'S RICHEST VOICE SINCE 1926

MACLEAN'S
Saskatoon Star-Phoenix
The Globe and Mail
The Hamilton Spectator
Liberty TIME
The Montreal Daily Star.

CANADIAN HOMES & GARDENS
NEW WORLD
THE HALIFAX HERALD
SATURDAY NIGHT
VANCOUVER DAILY PROVINCE
LA PRESSE
Edmonton Journal
The London Free Press
TORONTO DAILY STAR
La Presse
MODERNE
The Gazette.
Le Samedi
THE EVENING CITIZEN
Winnipeg Free Press
MAYFAIR
The Windsor Daily Star
THE CALGARY HERALD
The Winnipeg Tribune
The Vancouver Sun
The Evening Times-Globe
L'EVENEMENT
Ottawa Morning Journal
THE LEADER-POST

YOU'LL BE PROUD TO OWN A NAME THAT'S KNOWN -

Sparton
RADIO'S RICHEST VOICE SINCE 1926

SPARTON MODEL 148RP
Record Player Attachment
This attachment equips your present radio for playing records. Motor, horn, and cabinet covered in durable fabricoid. You can close the lid to minimize needle noise.
\$24.95

SPARTON MODEL 448AP
Automatic Changer Phonograph
Automatic changer that plays a stack of records. Motor, horn, and cabinet covered in durable fabricoid. You can close the lid to minimize needle noise.
\$99.95

SPARTON MODEL 6048K
6-Tube AC/DC Radio
This model was specially designed for GOOD SOUND and VOLUME. It is a choice combination. The radio is a choice combination. The record player is accurate. The tone control is accurate. The "Public Top" and "Private Bottom" are in constant from the rear of the cabinet. (Album nearby chair or chairfield. (Album shelf space is provided below at rear.)
\$41.95

WHEN BUYING LOOK FOR THE SPARTON TAG

You'll be proud to own a name -

Sparton
RADIO'S RICHEST VOICE SINCE 1926

SPARTON MODEL 348P
3-Tube Electric Phonograph
This portable phonograph is especially designed for home use. It is a choice combination. The radio is a choice combination. The record player is accurate. The tone control is accurate. The "Public Top" and "Private Bottom" are in constant from the rear of the cabinet. (Album nearby chair or chairfield. (Album shelf space is provided below at rear.)
\$49.95

SPARTON MODEL 534KRC
Long and Short Wave Radio Plus Record Player
A beautiful walnut cabinet—highly desirable for its size—plus two band long and short wave radio—built-in antenna—plus quality record player. One handsome package of moderate dimensions contains the ideal compact radio-phonograph combination.
\$109.95

WHEN BUYING LOOK FOR THE SPARTON TAG

Nationwide newspaper and magazine advertising backs up one of the oldest and most respected names in radio.

H. S. Smith
Vice President In Charge of Sales

Columbia
MASTERWORKS RECORDS
Sparton
RADIO'S RICHEST VOICE SINCE 1926



SPARTON

RADIO'S RICHEST VOICE SINCE 1926

SPARTON OF CANADA, LIMITED - LONDON, ONTARIO

RADIO AND APPLIANCE SALES

S/C SCRAPBOOK

PAGE 1.

COMMENCING with this issue we wish to have you become better acquainted with our products and the products of those whom we represent in Canada. In addition to manufactured items and the uses and applications of them, we intend to present "hints and kinks" of the uses of the parts that go into their manufacture.

Elsewhere in this issue we take pleasure in announcing our appointment as Canadian Distributors for Electronic Laboratories, Inc., Sylvania Electric Products, Inc., and Technical Appliance Corporation.

The Hammarlund HQ-129-X which we will manufacture, will be the first peacetime communication receiver to be made in Canada.

And speaking of Stromberg-Carlson Amplifiers, Model 350 will soon be at your service. It is a 50 watt job for 25/60 cycles, having three high impedance microphone and one phonograph input, with a frequency response of 30 to 12,000 cycles with not more than 3 db. variation. Users of our No. 200 and No. 200P Amplifiers during 1946 know what to expect from this "newest" in an ever-increasing line of Canadian-built Amplifiers and Sound Systems.

As far as the supply of Hammarlunds and S/C Amplifiers for 1947 is concerned, every forecast would indicate that the demand will continue to be greater than the supply. That does not mean that any effort is being spared in our continued practice of producing only the finest in Communication Equipment backed by over "50 Years of Communications."

BCNU next month.



50 YEARS OF COMMUNICATIONS

FOR JANUARY, 1947



Vol. 3
JANUARY

No. 1
1947

Printed and mailed from London, Ontario

A Monthly Magazine Serving Canada's Radio and Appliance Industries
Successor to Radio Sales—Established 1923

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ROBERT C. POULTER, Managing Editor
JOHN T. ROCHFORD, Director of Advertising

MEMBER



CIRCULATION STATEMENT, AUDITED BY CANADIAN
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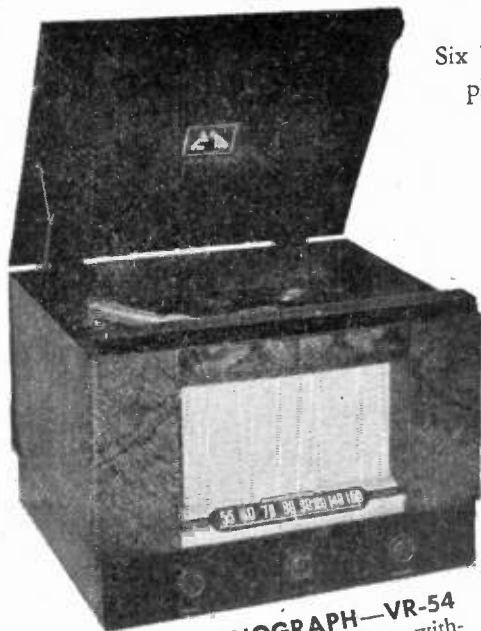
Also Publishers of

CANADIAN FLORIST, CANADIAN GROWER and CANADIAN BEE JOURNAL



*Here's your assurance
of a Happy New Year*

NOW you can start the New Year right!
You've been waiting for them — your *customers*
have been waiting for them — and here they are.
Six brilliant new RCA Victor radios and radio-
phonographs! Well worth waiting for? Just look at them!



VICTROLA RADIO-PHONOGRAPH—VR-54
3-way matched acoustical system. High volume with-
out distortion. New elliptical permanent magnet
speaker. Built in magic loop antenna. The finest toned
instrument on the market below the \$100 price mark.

Packed with exciting new features . . .
best value in their price class . . . each is an
exceptional instrument possessing the finest
tone system in RCA Victor history.

Good news! The production picture is improving.
Models are now rolling off the production
lines in greater quantities. Keep in touch
with your RCA Victor District Office
for latest information on deliveries.
As in the past, RCA Victor the leader,
will lead the 1947 parade!

**VICTROLA
RADIO-PHONOGRAPH
VRA-56**

Smooth-action automatic
record changer. Perfected
jewel-point crystal pick-up
with silent sapphire playing
tip. 3-way matched acoustical
system. Selected walnut veneer
cabinet.



IT'S YOUR SHOW!

From Coast-to-Coast

Canada Listens to

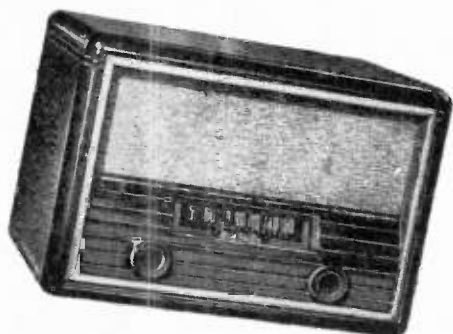
THE RCA VICTOR SHOW
starring

Wayne Shuster

Canada's Ace Comedians

EVERY Thursday Eve.—9:30 EST
Trans-Canada Network

from RCA VICTOR



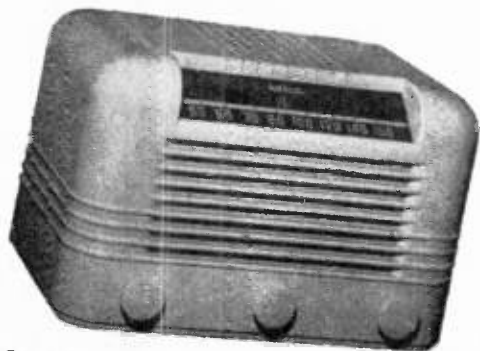
**RCA VICTOR
BATTERY RADIO—BT-40**

New miniature tubes. All batteries contained in cabinet. Improved battery saver circuit. New type 6" oval speaker. Modern-design wood cabinet.



**RCA VICTOR
BATTERY RADIO—BT-42**

Long and short wave. New miniature parts for increased sensitivity. Automatic volume control. All batteries contained in wood cabinet.



RCA VICTOR RADIO—MODEL 60

3-way matched acoustical system. 2-point high-frequency tone control. 6 tubes. Automatic volume control. Built-in magic loop antenna. Colourful full-vision dial.



ELECTROLA—VE-20

Gives excellent, faithful reproduction of recorded music, through newly designed amplifier and new 6" oval speaker. Crystal pick-up; removable needle. Self-starting constant speed electric motor. Self-contained—just plug-in and play records.

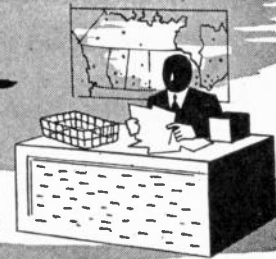


Look to RCA VICTOR for the Finest in Radios and
Radio Phonographs

RCA VICTOR COMPANY LIMITED

Halifax Montreal Ottawa Toronto Winnipeg Calgary Vancouver

The EDITOR *Comments*



The Year Ahead

IN this issue we are pleased to present our annual feature—"What's Ahead in 1947." Last year when this feature first appeared in *Radio and Appliance Sales* it attracted a great deal of attention and many expressions of appreciation were received by us.

In "What's Ahead in 1947," many of the industry leaders state their opinion of conditions as they see them and of trends in the radio and appliance industries which affect everyone employed therein.

These are stirring times. From practically all points of view—scientific, social and economic—the world is moving ahead very fast and under these circumstances no one would attempt to predict too far in advance what the state of affairs may be. However, in the case of individual, related industries, such as the radio and appliance, experienced observers are able to interpret trends with some degree of accuracy, even under the unusual conditions now existing.

We take this opportunity of thanking the industry leaders who responded to our requests for expressions of opinion. We feel sure that our readers will find their comments extremely interesting and helpful.

* * *

Building Public Confidence

WE were interested in a small advertisement which appeared in a recent edition of the *New York Times* to the effect that "You want to know why I advertise when I'm having a time filling orders? I'll tell you. Before long I'm going to have all the tailors and all the woollens and linings I want. It's then that I'm going to want you as a customer."

It seems to us that there is a thought here that dealers and independent service organizations should keep in mind. Advertising is more than merely a means of currently disposing of merchandise. Perhaps even more important, in many cases at any rate, is the cumulative effect it has on the minds of buyers in unconsciously building up a state of friendliness towards the advertiser and a preference for doing business with him. It may seem strange, but it is a fact, nevertheless, that the consumer who sees a firm's advertising week after week sooner or later begins to feel that he knows them well, instinctively trusts them and, therefore, associates the firm's name with good merchandise and sound business practices. This particular effect of advertising is priceless to the advertiser because it places his business upon the solid foundation of public confidence. But it can only be achieved by consistent advertising. Infrequent, hit-and-miss advertising, run only when there are some apparent bargains to offer, is valueless as a permanent builder of good-will. Even in these days of shortages the dealer and the independent service firms would be well advised to look ahead and to plan definite advertising

schedules within their budgets but which will bring the firm's name and its merchandise and service to the attention of readers regularly, week after week. Think about it when planning your budget for 1947.

* * *

Good Business Builders

THERE is a vast amount of study material available these days to dealers and their sales people which can prove of exceptional value in building business in the months and years ahead. To make effective use of it, however, requires a definite plan which staff members should be expected to follow to the letter.

What we are referring to is the practical information on merchandising and general business trends, on store and window arrangement, lighting, better ways of selling, and so on ad infinitum, which trade magazines, manufacturers and others have made available. It must be obvious to everyone that this material, properly employed, is more important to-day than ever before. With increased competition in the offing, both from within and from without the radio and appliance field, the dealer must, in the interests of self-preservation, utilize every possible means of keeping his organization on its toes, alert to newer and better ways of displaying and selling the merchandise and of keeping customers satisfied and loyal.

Great advances have been made in the art of retail merchandising. Aggressive dealers have, through critical observation and experimentation, learned better ways of selling and of training sales people. Manufacturers, publishers, research organizations and others have contributed greatly to the fund of knowledge of the subject.

Many of the larger retailers and utilities have gone to great length to ensure that the full benefits of such material will accrue to their respective organizations. One thing which some of these organizations do is for the manager to go through trade magazines and manufacturers' literature carefully, marking the articles and items he considers important and then pass the magazines along to each staff member, according to an established schedule.

At regular intervals staff meetings are held at each of which one article is studied, with the dealer himself acting as discussion leader. The relative merits of the ideas presented in this article are considered pro and con and a definite conclusion arrived at. In this way every member of the staff can be encouraged to take part in and to profit by the proceedings.

In addition to imparting practical information directly, such discussion stimulates keen interest and promotes mental alertness and receptivity to new ideas. Incidentally, the meetings afford an excellent opportunity to present the features of new items of merchandise to the staff, and to explain prices, the best way to sell, and so on.

FREE!

... THE ONLY COMPLETE WASHER PARTS GUIDE



This is *W.P.G. again, visiting you after a short Christmas vacation, to remind you that there is only one complete source of supply for parts for all types of washing machines. This is made possible by a close tie-up with the leading Canadian and United States manufacturers. It is a new type of service, and there's nothing like it in Canada. As an added service Waugh & MacKewn also carry a comprehensive line of repair parts for electric motors and vacuum cleaners.

"Send for your copy of the 150-page *Washer Parts Guide to-day. Parts for all washing machines made, from one source of supply. Also parts for vacuum cleaners and electric motors. Mark your request 'Attention W.P.G.' and I'll look after it personally."

Waugh & MacKewn LIMITED

368 Dundas St., LONDON, ONT.

10 Pine Ave. W., MONTREAL, QUE.

106 Adelaide St. W., TORONTO, ONT.

Ready for Immediate Delivery!

RANGE OIL BURNER



DEALERS! THESE FEATURES REPRESENT THE LATEST IN OIL BURNING DESIGNING

- No Smoke — No Odor
- Easier to clean
- Less service trouble
- Lights Faster
- Saves Money
- 25% to 50% more heating efficiency

We have distributors all over Canada. For further details write to:

QUIDOZ OIL BURNER 1388 Mt. Royal East - Montreal 34



MORE PROFIT ... LESS RISK

In Appliance Selling with the C.A.C. Finance Plan

No more headaches for dealers in household appliance sales. Your available capital is no longer tied up over a 12 or 18-month period until your customers complete their payments.

With the C.A.C. LIMITED RECOURSE PLAN you make your legitimate profits—at less risk. And you have more ready capital available to promote the flow of trade through your store. You get a 100% advance on all retail sales—with no holdbacks! Your endorsement is effective for only a limited period and you get broader protections during the recourse period.

Why not investigate this modern, Dominion-wide financing service. Write today for information.

A Customer Service available through our Coast-to-Coast network of offices.

There's more to financing than money!

CANADIAN ACCEPTANCE CORPORATION

Limited



A Canadian Company Serving Canadian Industry since 1922

Executive Offices:
Metropolitan Building, Toronto 1

122

RADIO EQUIPMENT



AT ITS FINEST

THE STAGE IS SET FOR 1947

Stromberg-Carlson takes pride in
announcing this partial program
of famous stars whom it
NOW represents in Canada.

Sylvania

Special Purpose Electronic Tubes, Laboratory and
General Test Equipment, Diode Crystals, Copper
Oxide Rectifiers, etc.

Electronic LABORATORIES

Converters, Frequency Changers, Inverters, Power
Supplies. Vibrators, Permeability Tuners, etc.

TANCO

All wave Noise-Reducing Antenna Systems, AM,
FM, and Television Antennae; and Antenna parts
of all kinds.

*There is
nothing finer
than a*
STROMBERG-CARLSON

SYLVANIA ELECTRIC



SYLVANIA

COUNTER TUBE TESTER, TYPE 139

5 1/2" x 12" x 16 1/4"

15 3/4 lbs.

- ★ Shorts test with proper voltages.
- ★ Tests performed under dynamic conditions.
- ★ Special provision for easy modernization.
- ★ Smooth operating, high speed, roller chart.
- ★ Tests lock-in, standard, acorn and other types of tubes.
- ★ A price to satisfy discriminating buyers.

Portable Tube Tester, Type 140, will also be available. It is electrically identical with Type 139, housed in gray crackle finished steel cabinet with removable cover, weight 19 1/4 lbs. Its unusually professional appearance is a boon to the modern serviceman.

POLYMER

Polymer, Type 134, is a recent addition to the Sylvania line of service instruments. It is designed to measure all the values of current, resistance and voltage needed in service work. The high frequency probe has such a low resistance it may be relied upon for accurate readings up to 300 mc.

Sylvania SPECIAL PURPOSE TUBES*

STROBOTRONS
 SN4 60 p. p. s.
 1D21 240 p. p. s.
GAS DISCHARGE TUBES
 SS501 1,500 volt "U".
 R-4330 100 w.s. Flash Tube
 R-4340 250 w.s. Flash Tube
GLOW MODULATOR TUBES
 R-1130B .050" crater
 R-1131 .093" crater
HYDROGEN THYRATRONS
 4C35 8 kv. 90 amp.
 5C22 16 kv. 325 amp.
MISCELLANEOUS TUBES
 R-1100 Pirani
 R-1111 Thermocouple
 X-6090 Ozonator
 OA5 Miniature Triggertron

*In Toronto stock, for immediate shipment. There is also a complete line of Gas Switching Tubes, Magnetrons, Planar Triodes, etc.

Sylvania CRYSTAL DIODES*



SILICON CONVERTERS
 1N21B 3,000 mc.
 1N23B 10,000 mc.
 1N25 1,000 mc.
 1N26 25,000 mc.

VIDEO DETECTORS
 1N31 10,000 mc.
 1N32 3,000 mc.

GERMANIUM DIODE
 1N34 0 to 700 mc.
 1N35 0 to 700 mc. dual

SPECIAL CRYSTALS
 Designed to meet the most particular application and specifications.

*In Toronto stock, for immediate shipment.

Sylvania

MODULATION METER

This meter measures the percentage modulation in AM radio transmitters on an hermetically sealed 0-120% meter. It employs the 1N34 diode crystal and therefore requires no external power source. A jack is also provided for monitoring by headphones.



UNIQUE LABORATORY TEST EQUIPMENT

Besides the test equipment described, Special Laboratory Test Equipment by Sylvania include X, S, and K-Band Spectrum Analyzers, Capacitance and Vacuum Tube Bridges, Dilatometers, Synchroscopes and Oscilloscopes, etc.

Full particulars on many other types of Gas Switching Tubes, Magnetrons, etc., will be furnished upon request.



STROMBERG-CARLSON combined with SYLVANIA invite inquiries from Canadian engineers and scientists. Please write to Dept. S-4.

ELECTRONICS DIVISION REPRESENTED IN CANADA BY

STROMBERG



CARLSON

STRAIGHT-LINE

COMMUNICATION

211 GEARY AVENUE

TORONTO 4, CANADA

E-L VIBRATOR CONVERTERS AND INVERTERS

DC TO AC CONVERSION

MOD. NO.	INPUT VOLTS DC	OUTPUT VOLTS AC	OUTPUT WATTS	DIMENSIONS (in.)	WT. (Lbs.)	PRINCIPAL APPLICATIONS
308	6	115	10	3 x 3 x 5	2	Electric Razors
*303	6	115	25	7 1/2 x 4 1/4 x 5 1/4	6	Electric Motors, Appliances
*320	6 & 115AC	115 & 6DC	75	14 1/2 x 9 1/2 x 10	23 1/4	Portable Inverter and Battery Charger
307	6	115	100	10 3/4 x 7 1/2 x 8 1/4	23 1/4	Radio Receivers, Appliances
*502	12	115	100	9 3/4 x 6 3/8 x 4 3/8	14 1/2	Radio Receivers, Appliances
507	12	115	150	10 3/4 x 7 1/2 x 8 1/4	25	Radio Receivers, Transmitters, Appliances
2115	32	115	100 max	9 1/2 x 7 1/2 x 6 1/2	13	Dual Outlet Appliances and Radio
102	32	115	100	9 1/2 x 6 3/8 x 4 3/8	12 3/4	Radio Receivers, Transmitters, Appliances
144	32	115	250	10 3/4 x 7 1/2 x 8 1/4	27	Receivers, Transmitters, Coin Phonographs
146	32	115	350	16 x 10 x 8 3/8	48	
267	115	115	5	9 3/8 x 2 1/8 x 2 1/4	2	Flea Motors
2120	115	110	25 max	4 1/2 x 4 x 2 1/2	1	Phonograph Motors
261	115	115	75	7 1/2 x 4 1/4 x 5 1/2	6 1/4	Radio Receivers, Appliances
204	115	115	150	9 1/2 x 6 3/8 x 4 3/8	12 1/2	Receivers, Transmitters, Appliances
262	115	115	250	10 3/4 x 7 1/2 x 8 1/4	27	Receivers, Transmitters, Appliances
268	115	115	750	20 3/4 x 11 3/4 x 7 1/2	66	Motors, Communications Equipment
424	230	115	150	9 3/4 x 6 3/8 x 4 3/8	23 1/4	Radio Receivers, Transmitters, Appliances
*434	230	115	350	10 3/4 x 7 1/2 x 8 1/4	24	Receivers, Transmitters, General Purpose

FREQUENCY CHANGERS

MODEL NO.	INPUT VOLTS AC	OUTPUT VOLTS AC	OUTPUT WATTS	DIMENSIONS (In.)
801	115 at 25 Cycles	115 at 60 Cycles	100	9 3/4 x 8 1/8 x 16 7/8
802	115 at 50 Cycles	115 at 60 Cycles	100	9 3/4 x 8 1/8 x 16 7/8

DC TO DC CONVERSION

MOD. NO.	INPUT VOLTS DC	OUTPUT VOLTS DC	OUTPUT WATTS	DIMENSIONS (In.)	WT. (Lbs.)	PRINCIPAL APPLICATIONS
605A	6	275	19	5 1/2 x 3 1/4 x 6	5 1/2	Power Pack, Tapped Output
601	6	300	30	4 3/4 x 4 x 6	6	Power Pack, Tapped Output
604A	6	300	30	5 1/2 x 3 1/4 x 6	5 1/2	Power Pack, Tapped Output
619	6 & 115AC	300 & 6.3AC	60	9 3/4 x 5 3/4 x 6	14 1/2	Transmitters
616	6 & 115AC	400 & 115AC	100	7 1/2 x 7 x 6 1/8	16	Power Pack, Tapped Output; 115 V AC for Phono-Motor
2606	6	300	30	4 1/2 x 4 7/8 x 5 1/4 (Completely filtered)	6 1/2	Receivers, Transmitters, Sound Equipment
*620	12 & 115AC	400 & 115AC	80	7 1/2 x 7 x 6 1/8	16	Power Pack, Tapped Output; 115 V AC out for Phono-Motor
*618	12	600	200	11 1/4 x 6 1/4 x 7 1/8	25 1/2	Tapped Output; Transmitter

*These Models, as well as many other types of E-L Power Supplies, available on quantity orders only.

RECTIFIER PACKS

MODEL NO.	INPUT VOLTS AC	OUTPUT VOLTS DC	OUTPUT POWER	DIMENSIONS (In.)	WEIGHT (Lbs.)	
902	115	6	10 Amps.	9 x 8 7/8 x 5 1/2	19	Filtered
976	115	6	7 Amps.	8 1/8 x 6 5/8 x 6 5/8	11	Filtered
904	115	6-16	10 Amps.	12 1/2 x 10 x 7 1/2	29	Filtered

E-L VIBRATORS For Dependability, Efficiency and Economy, wise users are demanding E/L Vibrators more and more. Longer life at no extra cost, is the result. Just four E/L types; 1703, 2605, 2689 and 2092 will cover 64% of all replacement requirements. Also, E/L HAS a vibrator for your exacting need!

E-L PERMEABILITY RADIO TUNER

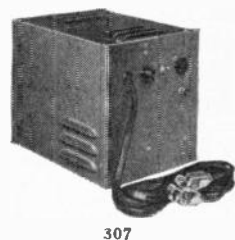
A full band coverage radio tuner, 540 to 1620 kc. It is simple to instal and its ribbon drive prevents backlash. It consists of an r.f. tuned unit and an oscillator section. Eliminate gang condensers and all coils with an E/L Tuner!

STROMBERG-CARLSON combined with ELECTRONIC LABORATORIES invite inquiries on any of your conversion problems. Please write to Dept. E.-4.

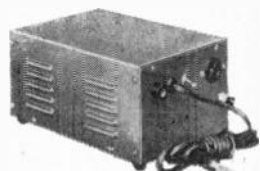
STROMBERG CARLSON
 STRAIGHT-LINE COMMUNICATION
 211 GEARY AVENUE TORONTO 4, CANADA



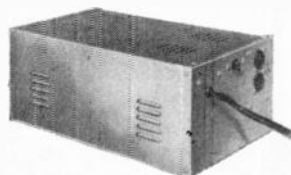
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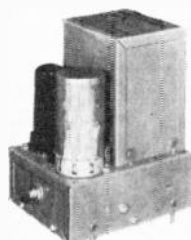
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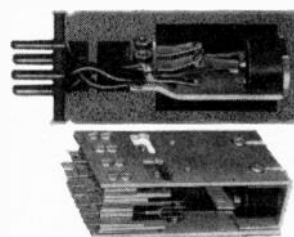
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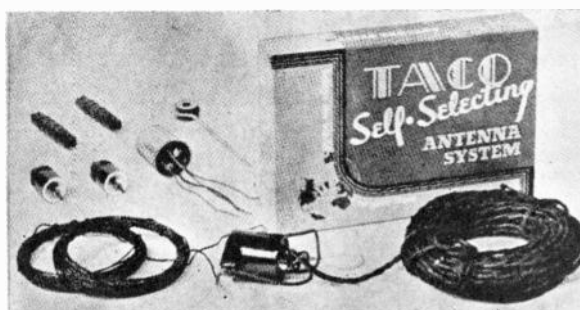


TACO ANTENNA EQUIPMENT

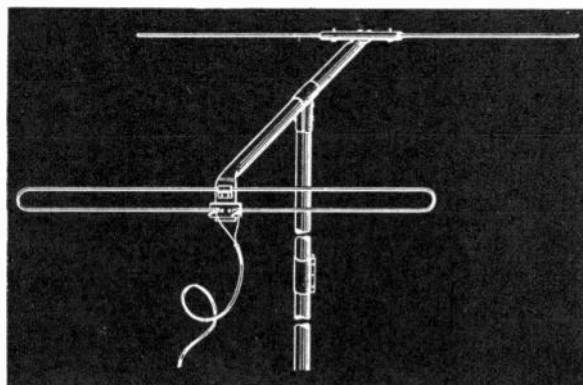
ALL-WAVE NOISE-REDUCING ANTENNA SYSTEMS

● It may be very elementary but it cannot be reiterated too often that the function of an antenna system is to bring to the receiver a clear signal free from interference or noise. The type antenna to select depends mainly on the frequency range to be covered, and the general noise level in the locality. As a rule, apartment houses have a very high noise level, whereas the detached dwelling and even more so the home in the open country may enjoy comparative freedom from man-made static.

The basic advantage to be gained with a TACO noise-reducing antenna system is that of a most favorable signal-to-noise ratio. This gain is even more important to-day, especially with the high-fidelity receivers required for true FM quality reception. In some extremely noisy locations it may even be necessary to use a shielded transmission line, carefully grounding the shield at several points along its run from roof to set.



FOLDED DIPOLE ANTENNA-REFLECTOR



FM ANTENNA

With FM transmitters now in operation in some of Canada's larger cities, and transmitters being built for others, consider an FM antenna. A new thrill of high-fidelity reception awaits us, but only if we provide our receiver with a satisfactory antenna. This is far more true than on the ordinary broadcast bands. As FM develops in Canada, TACO will have an FM antenna for you.

TACO Master Antenna Systems meet all the latest AM and short wave reception developments and attain a degree of noise reduction heretofore not believed possible. Wartime engineering of high-frequency couplers and new transmission lines insure maximum performance, even in especially noisy locations.

Whether an antenna is to be used multiply in apartment house installations, or for store demonstrations of radios, or for the finest reception in your home TACO have engineered one for your particular need.

In addition to Antenna Systems TACO have a complete line of antenna accessories such as:

Line Filters	Store Demonstrators
Antenna Transformers	Mast Brackets
Set Transformers	Mast Couplings
Insulators	Lightning Arresters
Transmission Lines	Insulators

STROMBERG-CARLSON combined with TACO invite inquiries on particular antennae and transmission line problems. A complete catalogue is available upon request. Please write to Dept. T-4.

STROMBERG

STRAIGHT-LINE

211 GEARY AVENUE



CARLSON

COMMUNICATION

TORONTO 4, CANADA

What special problems in supply and demand and in merchandising will the new year bring? When will more merchandise be available? What significance will new technical developments have during 1947?

These are some of the questions radio and home appliance retailers and service technicians all over Canada are asking. To get a clear-cut cross section of considered opinion *Radio and Appliance Sales* has asked many of the leaders in the radio and appliance industries to tell us what they see ahead. Their opinions appear on the following pages. Read them and heed them.

Altogether the situation looks bright but manufacturers are still confronted with many difficulties. Retailers must face up to the fact that to prosper they must sell aggressively, using every merchandising aid at their command.

WHAT'S AHEAD in 1947?

WHAT will the new year bring? How long will the industrial unrest of 1946 continue to affect production? Will console radio sets and major appliances be more readily available? What retail merchandising problems are likely to arise? What about the new developments in radio and appliances? What progress is FM likely to make during the year? Will competition in the retail field really become severe?

These are among the chief questions which retailers and service technicians all across Canada are asking.

In spite of shortages 1946 turned out to be a pretty good year for most retailers. The unexpected obstacles to a return to full production while the public had plenty of money to spend proved, however, to be more serious so far as the industry generally was concerned, than most people realized. Now the trade is wondering what the new year will bring.

To get some idea of the answer *Radio and Appliance Sales* has asked

the leaders of the radio and appliance industries to express their considered opinions as to the future of these great industries and the problems retailers may have to face. These men are in the best position to know what is going on behind the scenes and to predict what the trend is likely to be.

"Shortage of basic materials is still seriously affecting production. With steel, copper and brass all in short supply we do not expect the production of appliances will catch up with demand for some considerable time," says one manufacturer. "Many materials can be procured at fairly short notice but until steel in particular is available in sufficient quantity our prediction is that during the first half of 1947 there will be an acute shortage of many appliances. Should there be no re-occurrence of the disastrous strikes prevalent during 1946 we feel that basic materials will show improvement during the second half of the year and that with increased production manufacturers may then see the green light and hope to

make quite an impression on the enormous backlog of orders," he says.

"The middle of 1947 should bring to the radio industry the long-expected switch from a seller's market to a buyer's market, with 'consumer acceptance' returning to its rightful place of control," says one of Canada's largest manufacturers. In his opinion dealers may expect:

(a) An ever increasing flow of small table models. Deliveries should be sufficient to wipe out any existing backlog of orders at an early date and from there on, should meet requirements created by new demands.

(b) A few de luxe "Radio Only" table models.

(c) A steady flow of table model "Radio-phono" combinations of the low price class, both single record player and automatic record changer types.

(d) Limited quantities of de luxe table model "Radio-phono" combinations.

(e) Very few "Radio Only" console models in the low price field.

(f) Limited quantities of de luxe "Radio Only" console models.

(g) Considerable increase in the deliveries of de luxe console "Radio-phono" combinations.

"The extent to which the above-mentioned conditions are realized

WHAT'S AHEAD IN 1947?

will, of course, depend on the stability of the industrial situation both in Canada and in the United States," he points out. "Any additional labour strikes in the coal, steel or electrical industries would quickly change the projected picture.

"There should be a continuing strong demand for table model radios and radio-phono combinations in the low price field. The general use of these would be as second sets to provide entertainment in utility rooms, rumpus rooms, etc. The trend in consoles should lean heavily toward radio-phono combinations of a semi-de luxe class."

Other manufacturers have also commented upon the uncertainties in the supply of raw materials and in the stabilization of the general industrial situation. At the moment conditions look fairly promising but industrial unrest might easily upset the picture. The demand for all merchandise is heavy, manufacturers reporting large backlogs of orders on their books.

Study the letters on these pages and learn what our industry leaders are thinking.



1947 Should Be Good But Strong Selling Effort Needed

By W. H. FURNEAUX

VICE-PRESIDENT, AEROVOX CANADA LIMITED

THE year 1946 which has just closed has had many trials and tribulations, but in spite of this business has been pretty good. It is amazing the number of radio sets that were produced and put on the market in spite of all the difficulties. I am not too good a crystal gazer but my firm belief is that 1947 should be even better.

We had strikes in 1946 and no doubt will have a few in 1947, but I don't think they will do as much damage. My hope is that prices will now start levelling off, and providing this happens, radio set manufacturers and retailers should have an exceptionally good year. The service technicians had all the sets to repair that they could handle because of the shortage of new radio

sets the last few years. This might slacken off to a certain degree in the coming year, but I still believe that all good service technicians will have plenty of work.

If, however, strikes in major industries happen more frequently than last year and if wages and prices continue to soar, I am afraid that there might be a recession this year. Last year retailers and manufacturers had rather an easy selling job. This year, I believe these companies that are going to do a bigger business will have to look to their sales force to actually sell their merchandise for them.



Deliveries Soon Will Be Back To Normal

By J. W. BURNETT

PRESIDENT, J. WAYNE BURNETT INC.

THE passing of 1946, with all the unrest and strikes, was duly welcomed by the radio parts manufacturers, as during these twelve long months, it was very difficult for most component part manufacturers to have anywhere near the production that was anticipated in the early days of 1946. In the late Fall and the early weeks of December, raw material deliveries to component part manufacturers began to improve, and hopes are high that all deliveries will be back to normal pre-war standards, before the second half of 1947.

Normal deliveries to the component part manufacturers, will mean that a full line of replacement parts will appear on the jobbers' shelves in a very short time.

The over-all picture would seem to show a sizeable business increase over 1946, and we are truly, "Looking Ahead to 1947."



1947 Will Be Biggest Year in Our History

By M. E. JOHNSON

GENERAL MANAGER, AIR-WAY DISTRIBUTING CO.

EARLY in 1946 when we placed our advertising announcing the arrival of the Air-Way SaniTizor

we had already formed a basic selling organization and by the time this copy appeared in your April number and had reached the trade, we were flooded with inquiries. However, we were unable to take on additional dealers because of the great public acceptance of our new vacuum cleaner, the volume being greater than we could handle. We were forced to drop back to six months delivery and although our volume of production continued to increase we are still forced to remain on six months delivery, but we are happy to say all our orders are being filled on time.

We have every reason to believe that although our volume of production will increase monthly in 1947, our dealer organization will also increase and sales volume will therefore be much higher, of necessity keeping sales ahead of production.

We look for 1947 to be the largest in our history with the possibility of earlier delivery date during the latter months of the year.



Good Business Ahead But Competition Stiffer

By M. M. ELLIOTT

ASSISTANT GENERAL MANAGER, CANADIAN MARCONI COMPANY

WITH understandable reservations, I can see nothing but good business ahead for radio manufacturers, distributors and dealers during the coming year. Given reasonable labour peace and a steady flow of materials, production will speed up and dealers will have sets with which to supply the big market which still exists.

I believe radio manufacturers will be out in 1947 with better and more complete lines which will include some sets having FM facilities. However, I also believe that the radio industry will face a year of keener competition, not only from within the industry but from other products and that the fight between industries for a share of the consumer's dollar will bring us much nearer the hard selling conditions of the pre-war years. This, on the whole, will be a good thing. It will

WHAT'S AHEAD IN 1947?

put new life in the industry and sweep away some of the cobwebs which collected during the war years when selling was almost a lost art.

I remember an old slogan which I think applies very well at this time. Here it is with the year changed—"1947 will reward fighters."



Increasing Demand For Records in Year Ahead

By S. D. ROBERTS

SALES MANAGER, THE COMPO CO. LTD.

THE apparently limitless demand for phonograph records is still with us at the present time.

Our output for 1946 has been 35 per cent. greater than 1945, and we are prepared for a 30 per cent. increase in 1947 over 1946.

Of course such large increases cannot continue forever — they never have—but we admit that we have not the slightest idea when the demand will reach its peak.



Many Opportunities In 1947 For Aggressive Dealers

By W. DIXON

MANAGER, APPLIANCE SALES DIV.,
CANADIAN WESTINGHOUSE
CO. LTD.

DISCOUNTING a natural tendency to optimism at this time of the year, there are still some excellent reasons for believing that the coming year will be one of extraordinary activity for manufacturers and dealers. For example, there is no element of prediction in the plain fact that production in 1947 will show a big increase over that of 1946. But it will certainly be an uneven or unbalanced production with some models of some appliance lines being plentiful and others scarce or non-existent. Those dealers who are alert to the possibilities of '47 will take advantage of those appliances that will become plentiful to exploit the real market that exists for them in their communities, and the market will be there

but with an important difference. The eager, acquisitive sparkle in the purchaser's eye will have faded, and as models begin to appear in quantity, to be replaced by a more discerning gleam.

"What's new and different about this?" will be the attitude, and dealers will have an opportunity to sell with all that that implies in advertising, promotion, display and salesmanship.

Dealers with the imagination to appreciate the peculiar possibilities that will exist in 1947 will make money and lay the foundation for sound future business.



1947 An Important Year For Radio Industry

By J. G. TUFTS

VICE-PRESIDENT, DOMINION
ELECTROHOME INDUSTRIES LTD.

I AM of the opinion that 1947 will be a very important year for the radio industry in Canada. Within the first half of 1947, the so-called "pent-up" demand for small AC/DC mantels will have been taken care of, resulting in a highly competitive condition and some over stocks. Because radio furniture will be much slower coming on the market, and because of the enhanced demand for combinations, a steady market should continue at good prices for console types of receivers.

FM of course will be introduced during the last half of the year. This will serve to colour the industry picture to a considerable extent. As far as the public is concerned, radio receivers incorporating FM will be the "real" post-war receiver. If properly handled by manufacturers and broadcasters, FM will prove a great boon to our industry.

Altogether, I predict a good year for radio for both retailers and manufacturers who are not stampered into thinking that because there has been a war, and that war has been won, they have any right to expect that their business should be doubled or trebled.

It is to be hoped that inventories

will be kept at a minimum, that sales and advertising policies be of the soundest, and that trade-ins will be treated as purchases.



Some Improvement in Supply After First Quarter

By J. H. McILROY

GENERAL SALES MANAGER,
GENERAL STEEL WARES LTD.

DURING 1946 we had a series of strikes in the United States and Canada. These slowed up the steel, rubber, copper and electrical industries, which are all vital to the production of appliances which we manufacture, namely electric ranges, rangettes, electric refrigerators and gas ranges. The effect of these strikes is still being felt, and we, therefore, cannot foresee any great improvement in supply for at least the first quarter of 1947. If there are no further interruptions, we feel it is safe to predict some improvement for the balance of the year 1947.

We celebrate our 100th Anniversary in 1947, and we plan to do everything possible to make it a banner year for our franchise dealers.



Substantial Volume of Retail Business Available

By J. H. RANAHAN

VICE-PRESIDENT, INDUSTRIAL
ACCEPTANCE CORPORATION LTD.

OBVIOUSLY production of appliances and other durable goods depends on the outcome of the labour difficulties which presently beset the basic industries in the United States. It would seem rather hopeful, however, that a crisis has been reached in this connection, and that the following result will be a levelling off of labour troubles and a consequent stepping up of production.

At the present time, many manufacturers have inventories of raw materials in excess of any previous peaks. These inventories, how-

WHAT'S AHEAD IN 1947?

ever, are not balanced in that they are short of certain essential materials necessary for the complete fabrication of the article. The pipeline of supply for most materials, however, is now pretty well built up, and with the closing of the gap of the few materials remaining in short supply, appliances and other durable goods should flow off the production line in large quantities.

The buying power of the Canadian market is not in my opinion impaired. It is true that due to labour difficulties and resulting layoffs in other industries, savings have been dissipated to a fairly substantial extent. The sale of durable goods in volume has never depended on the savings of the mass market, but rather the masses have usually bought these durable goods out of income. It would be my opinion, therefore, that there would seem to be little doubt that a substantial volume of retail business is available for a considerable period of time as production gets into its stride.



The Radio Outlook For 1947 Is Excellent

By S. L. CAPELL

PRESIDENT, RADIO MANUFACTURERS ASSOCIATION OF CANADA;
VICE-PRES. AND GEN. MAN.,
PHILCO CORP. OF CANADA

THE Canadian radio industry is geared for greatly increased output in 1947 and recent projected production surveys by the Radio Manufacturers Association of Canada indicate that its members are planning—and actually backing up with firm orders for materials—production of radio receivers far in excess of any previous period in the history of the industry.

Monthly unit production has already exceeded the rate of 600,000 sets per year and plans for the first six months of 1947 call for the doubling of this output. The significance of these figures is realized when it is recalled that 1940 was the only previous year in which Canadian radio set production exceeded 400,000 units.

It now appears that, barring strikes or other unforeseen difficulties, 1947 will be the year that everyone thought 1946 would be before the industry found itself hamstrung by conflicting regulations and shortages of essential components.

The unbalanced production between the small table models and the larger consoles and combinations still exists due mainly to the scarcity of cabinets but this condition is gradually being overcome and the present outlook for 1947 is bright for those Canadians that have been patiently waiting for this type of merchandise. Frequency Modulation will become a reality in 1947 for many Canadian listeners living in or adjacent to the principal urban areas and thousands of sets capable of receiving FM broadcasts will be turned out by the Canadian radio manufacturers.

All in all, the radio outlook for 1947 is excellent, production should put all pre-war records far into discard, new and improved sets will be available to the Canadian public and FM with its virtually static-free reception, complete absence of fading, its selectivity and much higher fidelity, will be here to add further enjoyment for radio listeners interested in owning the best that money can buy in home entertainment.



Faith And a Will To Work Needed In Year Ahead

By J. S. BLAY

VICE-PRESIDENT IN CHARGE OF
SALES, KELVINATOR OF CANADA
LTD.

WE, who have been privileged to serve an understanding, cooperative and loyal group of appliance dealers, look forward to 1947, confident that it will be a better year than 1946.

We all continue to hear of, and talk about, shortages of one kind and another. There are no bulging warehouses, and the stores are not gorged with merchandise. The appliance dealer, in particular, is confronted with a clamorous market which he cannot supply.

Outside of our own industry, shortages of automobiles, farm implements, building materials and many other durable items are commonly discussed, along with the value of things. Our homes and many other valued possessions are worth more than ever before. Yes, even our faith—our will to work, enhances in value with the coming of a New Year.

In these bewildering days when the whole world seems to be holding its breath in apprehension of a threatening crisis—when even some of the reliances we have accepted in a somewhat “take it for granted” kind of a way, have become insecure—there seems to be a shortage of faith, as of everything else.

The broadcasters of fright and disaster take their turns fairly regularly in reminding us that civilization is dangling on a precipice. The national and international problems we hear and read about as an aftermath to a war-weary world, are baffling to us. We shudder when we think of the potentialities of weapons that have been produced and which are capable of destroying us all.

However, I prefer to believe this old world and the fine people in it are headed toward some noble destiny. Sure, there will be anxieties and plenty of difficult situations, but we all know, as a result of our fine war effort, that people acquire courage when the going is hard and the way is dark. We are generally the better for dealing with successive emergencies. We must demonstrate our faith and link with it a genuine demonstration of our will to work constructively and hopefully. If we do this, we can all make a substantial contribution to a lasting peace—to an orderly industrial and merchandising pattern that will, with the huge potential market we have for our products, result in prosperity and opportunity for all.

The alert appliance dealer will realize that the so-called “seller’s market” will rapidly disappear as the production of all products is accelerated.

As merchandise becomes more plentiful, the need for a well-

WHAT'S AHEAD IN 1947?

planned sales effort will increase and there must be a genuine demonstration of a will to work and to serve the customer well.



A Very Strong Demand For Appliances And Radio

By H.C. DARROCH

GENERAL SALES MANAGER,
MOFFATS LIMITED

THE year 1947 promises to be the most prosperous year in the history of the appliance industry in Canada. A very strong demand, associated with sustained purchasing power and perhaps a record breaking volume of production, promises to boost appliance and radio sales to an all-time high.

Indications are that price adjustments, if any, in steel goods such as ranges and refrigerators will be upwards during the first six months, and that it will take some time before the urgent demand for these appliances is satisfied.

The radio industry can anticipate interesting and rapid developments including the introduction of frequency modulation and a substantial increase in the number of brands. It is anticipated that the larger models such as console combinations and six and seven tube table models will be available in good quantities and will substantially increase the dollar margin of sales. There will be ample supplies also of small AC/DC models.

The public reaction to frequency modulation has yet to be determined but if an adequate number of high power transmitters are installed, there is no doubt that this new feature and the realistic performance of FM receivers will appeal to many buyers.



We Need Have No Fears About Saturation

By M. P. TUTEUR

PRESIDENT, THE PREMIER
VACUUM CLEANER CO. LTD.

A YEAR ago you were good enough to ask me my views on the Out-

look for 1946 and at that time I said, "it would seem as if the one fly in the ointment is the question not of 'how many can I sell' but 'how many can I obtain delivery of to sell—or perhaps I should say deliver.'"

It is always very aggravating to say "I told you so," but I am afraid that my misgivings were justified by the year's events.

Another point which I brought out was to the effect that we should all avoid, manufacturers and dealers alike, the idea that there was going to be a never-ending demand for our products.

As I write these lines, it would seem as if the first handwriting on the wall has made its appearance, and that during 1947, while there is no question that supplies will increase, however as they do increase we can expect to meet with the first signs of sales-resistance.

However, all my twenty-five years' experience in the electrical appliance business only confirms me in the idea that we need have no fears on the question of saturation.

If we have the right product, at the right price, and merchandise it with energy and efficiency, 1947 should be a distinctly improved year for the electrical appliance manufacturer and dealer.



1947 Should Be A Year of Continued Progress

By F. R. DEAKINS

PRESIDENT, RCA VICTOR
COMPANY LTD.

(Courtesy, the Montreal Gazette)

THE radio industry in 1946 had its first full year to engage in commercial production since the beginning of the war. With the removal of restrictions in mid 1945, the industry immediately began its reconversion task and, making good progress, was ready at the beginning of 1946 with its plants converted and a marked increase in capacity. Some radio sets were placed on the market in the autumn of 1945 and early 1946, when the industry was immediately confronted with numerous material shortages which,

through the year, resulted in greatly unbalanced inventories of raw and semi-finished materials. The reasons for these shortages, of course, are well known in all industry. It is not an exaggeration to say that there has hardly been a strike in any major industry in Canada or the United States that has not adversely affected the Canadian radio industry. Steel, coal, copper, chemicals and transportation all have had their effects. Another important shortage in the industry has been lumber and wood-working labour for the production of cabinets to house radio sets. The cabinet supply has been exceedingly short, and those available were limited almost exclusively to the smaller types. The industry, consequently, while actually manufacturing more units than in any previous year in its history, will still not meet the apparent demand.

Financial results in the industry have been exceedingly disappointing. The scarcity of materials and the irregularity of the flow of those available, resulted in increased costs from idle time and high overheads. The sharp increases in labour and material during 1946 have not been offset by the ceiling price adjustments so far granted. To achieve some semblance of stabilization in 1947, the crying need is for a regular flow of materials and a more constant availability of services. Such a situation can only develop from better labour relations and an improved output by both men and machines. The industry, being dependent on both Canadian and United States markets for its materials, has any changes in these markets immediately reflected in its own cost and volume of output.

The trend in merchandise during the coming year will continue to follow the public demands for more good record playing instruments. This demand, started before the war, has continued to grow and will be met with improved electric phonographs, both in combination with radio sets and as separate record playing attachments for manual and automatic operation.

Frequency Modulation, the new broadcasting service which provides high quality and to a great extent

WHAT'S AHEAD IN 1947?

eliminates static and other electrical noises, will be greatly expanded this year. Broadcasting through this medium is being programmed regularly at the present time in Montreal and Toronto. New transmitters are being built as fast as materials become available and will begin rendering FM service in all the principal cities of the Dominion during the year. A recent survey in the industry reveals that receiving sets for this new service will be placed on the market by several companies during the first half of the year. The trend generally will be to combine this type of receiving set with the standard type of receiving sets, so that customers will be able to have both services housed and available in one cabinet.

The Canadian Broadcasting Corporation recently announced the beginning of an investigation and analysis of television for the purpose of later recommending television service for Canada. Recently announced new developments and the placing of television receiving sets on sale to the general public in the United States, as well as the continuation of the operation of television by the BBC in England, will produce valuable data to be used in connection with this study.

The application of electronic equipment will be broadened during the year in the communication and industrial fields. Police and fire departments are modernizing and expanding their communication systems, utilizing new devices of high frequency three-way equipment for use between mobile and station house personnel. Provincial-wide systems are planned by some provinces for police, highway and forest protection applications. Private industry, particularly those engaged in mining and wood products, are extending their use of this new development for emergency communication and over terrain not suitable for more conventional methods. Wider use will also be made by industry in the electronic heating of plastics, the detection of unwanted metals in manufacturing processes, and by industry and medicine of data obtained by the use of the electronic microscope in research.

The radio industry has a bright

outlook with exciting possibilities of development in the application of electronic principles in many fields. With the concentrated effort of labour and industry, 1947 should be a year of progress.



Good Prospects Ahead

By H. A. FRANKEL

MANAGER, NATIONAL FIBRE
COMPANY OF CANADA

IT would appear to us that prospects for continued good business in radio as well as general industry might be at least equal to that of 1946. Backlogs of orders are greater than ever before and with the gradual release of old and new products to the public indications are that the demands will be as large as the year just past. We believe that domestic and foreign requirements have a long way to go before there is any saturation and these factors should have a favourable bearing on our sales, employment and prosperity.



"Costs Vs. Selling Prices" Problem Must Be Solved

By J. E. REYNOLDS

PRESIDENT, REMINGTON RAND LTD.

WE enter 1947 with a new post-war electric shaver—the Remington Foursome. This model was announced just before Christmas and original plans called for quantities adequate to meet the Christmas demand. Many production problems prevented the delivery of anticipated quantities. Most of these problems now have been met and, from New Year on, we expect to be able to supply Remington Foursome Shavers in ample quantities. Despite the sale of millions of electric shavers in Canada and the United States, the market has only been scratched. With this increasing preference for electric shaving, we anticipate an outstanding year in 1947.

One important problem, however, will face manufacturers during the coming year—the squaring of in-

creased costs with satisfactory selling prices. If costs rise beyond a certain point, selling prices reach a level above the capacity of the market to absorb the product. Should prices reach too high a level, a corrective business recession will follow with the law of supply and demand operating to bring both equitable costs and equitable selling prices. Such an adjustment, if it comes, should be moderate and preferable to the boom or bust type of depression experienced during the early 30's.



Dealers Must Train Their Organizations To "Sell"

By G. A. HOLMES

PRESIDENT, SPARTAN OF CANADA
LTD.

IT is my belief that there will be a considerable improvement in the delivery of radio sets to dealers—starting the early part of 1947.

There will still be fewer of the console combination types than the trade can use, but, on the other hand, there will be sufficient of these so that the dealer should prepare himself for the financing of sales of merchandise ranging in list price from \$200 to \$400. During the latter half of the year, some sets in the higher price brackets—featuring FM—should become available.

With the much greater flow of merchandise to the dealer, it becomes more and more important that he train a selling organization—since the day is not far off when it will be necessary to "sell" merchandise. This almost "lost art" will have to be revived.



Be Confident of 1947

By F. E. BURROUGHS

VICE-PRES. AND GEN. MANAGER,
UNION ACCEPTANCE CORP. LTD.

I FEEL we can look forward with a great deal of confidence to 1947. I have no patience with people who keep talking depression—first thing we know they'll talk us into one. We will get further by working harder and talking less.

WHAT'S AHEAD IN 1947?

A Banner Year With Record Production and Sales

By R. M. BROPHY

PRESIDENT, ROGERS MAJESTIC LTD.

THIS year just passed has been a challenging one for radio and appliance manufacturers. It has been marked by continued shortages of essential raw materials and components: by rising costs and rigid ceilings. It has also seen the transition of the radio and appliance industry from war to peace. At this time last year, war was fresh in our minds. Now we think in terms of peacetime manufacturing and merchandising: we are preparing for a buyers' market. These two changes are significant, for they mark the cycle of transition from war to peace, both materially and psychologically.

This process of change is not yet complete, however. Shortages still exist. There is still a tendency to fail to realize that the coming year should complete the cycle and that before the end of 1947 the radio industry will be producing goods in such quantities that retailers will have well-stocked stores. There is no danger of surplus or over-production so long as radio retailers realize that we have entered a buyers' market where it is necessary to sell goods.

Selling has hardly been necessary since 1939. That is seven full years ago. Much can be forgotten and many faulty habits acquired in that time. There is this advantage, however: we can all start afresh to build a better, saner merchandising technique.

Many of the selling methods of 1939 should stay forgotten. The high pressure "one time" sale, price-cutting, excessive trade-ins — these are three things that have no place in sound business. The New Year should bring one over-all resolution "To sell honest goods, honestly."

If I had to make a specific forecast and one definite suggestion about radio and appliance marketing in 1947, they would be these double-barrelled ones. As to the forecast:—There will be plenty of merchandise to be sold on a buyers' market and, further, that the pros-

perity of Canada during the next twelve months will depend upon the sales ability and merchandising acumen of retail merchants across this Dominion. The suggestion is that all radio and appliance dealers determine upon, and sincerely adhere to, an aggressive policy of sound selling planned to maintain fair prices and repeat business and that all dealers, everywhere, pay particular attention to the development of service-consciousness in their employees.

The future of the whole radio and appliance industry is bright and full of promise but how much it will shine and how well these promises will be fulfilled depend upon the ability of retail dealers to sell goods rather than to accept orders.

It is no exaggeration to say that the prosperity of Canada in 1947 depends upon the country's retailers. I have every confidence in them and their ability. I look for a banner year with record production and phenomenal sales.



Previous Records Will Be Shattered If No Labour Disturbances

By C. L. GULLEY

PRESIDENT AND MANAGING DIRECTOR, SUPERIOR ELECTRICS LIMITED

WE look for an exceptionally busy 1947, one in which previous production records will be shattered by many manufacturing plants if—and it is a big "IF"—there are no serious large scale labour disturbances. Reliable reports reach us that labour in the coal and steel industries in the United States is preparing for still more paralyzing strikes in the first and second quarters of 1947. If these are prolonged they will seriously affect many industries that use cast iron and/or steel in quantity.

We look for the present worldwide shortage of most electrical labour-saving appliances to continue throughout 1947. If labour and management can pull together, 1947 should be one of the most prosperous years ever experienced

by Canadian manufacturers, provided, of course, the crops are not destroyed or seriously affected by abnormal weather conditions during the year.



Must Face Problems Ahead With Fortitude

By J. A. CAMERON

PRESIDENT, UTAH ELECTRONICS (CANADA) LTD.

IT is with regret that we must base our views on the material situation which was extremely difficult in the past year. In view of a postponement of the coal strike and an impending strike in the steel industry, our opinion is of a pessimistic nature.

We feel that the radio manufacturing industry in Canada has done very well in 1946 despite all the handicaps and obstacles which have been encountered, and are sure that they will face the problems with the same fortitude as in the past year. In our opinion, the forecast which they have submitted to the R.M.A. is of a conservative nature, and we can definitely assure them of our co-operation in every way possible.



A Year of Great Promise

By R. A. HACKBUSCH

VICE-PRESIDENT AND MANAGING DIRECTOR, STROMBERG-CARLSON CO. LTD.

WE look to the year 1947 as a year of great promise for the radio industry. It is our belief that a note of optimism should be the keynote for the entire industry.

Many of the problems of the year 1946 are behind us and bigger and better receivers are rapidly coming into production. Later in the year, receivers having provision for reception of FM broadcasting will also be available.

With an aggressive sales and merchandising program, and with a closely controlled production of lower priced models to prevent over-production in this field, 1947 should prove to be a profitable one for the entire industry.

SILENT SALESMEN

SILENT SALESMEN have a place in every radio and appliance retail store. They are the link between advertising and selling. In recent years, however, due to shortages of goods and the growth of the now dying sellers' market, they have almost vanished from the stores. In their place came *Dumb Waiters*—those incompetent and surly clerks—the result of other shortages and the fact that the art of selling was overshadowed by order-taking.

With the present swing back to a buyers' market, retail merchants should make a careful assessment of their selling power. They should bring back the *Silent Salesman* and either fire, or educate, their *Dumb Waiters*. The former are the product of careful study by large organizations working in conjunction with skilled merchandising specialists. *Silent Salesmen* are designed to sell; to emphasize the most important features of goods offered and to provide a sort of "text" on which the trained salesmen can base a talk. The latter, the *Dumb Waiters*, are what their name implies; they are stupid people who stand around waiting for orders. These have no place in our modern economy; stores that tolerate them will lose far more than they may gain in low salary savings. Times have changed. Remember: times have changed. We are rapidly moving into a period where John Public will have to be sold on merchandise before he will part with money that has reduced buying power and an increasing number of outlets.

Goods Aplenty

Limited means of spending money, due to limited supplies of merchandise, are coming to an end very quickly. Before many months have passed, John Public will be offered a tremendous variety of goods of all kinds of both Canadian and foreign makes. There are indications that prices will be rising and history teaches us plainly that wages and salaries never rise as fast as prices. Organized labour may secure wage increases but never forget that organized labour represents only a very small fraction of the buying public. Unorganized labour, white collar workers, small businessmen, farmers, fishermen, those on pension and living on fixed income will

Display material, handouts in the form of envelope stuffers and folders, display stands and window streamers are beginning to become available to retailers. These "Silent Salesmen" have an important place in retail merchandising. In this article these "Silent Salesmen" are contrasted with ineffective salesmen, the Dumb Waiters who are short on selling ability and long on apathy. The forecast on 1947 in relation to selling and advertising is straight from the shoulder talk that deserves careful consideration

By "L. D. Y."

have increasing demands made upon their buying power. Some of these demands are very high priority; there is housing, food, clothing, basic recreation and education. Astute merchants will be so presenting their wares that John Public will be persuaded that their goods are essential, even when they are not.

Perhaps a series of articles on advertising is not the normal place in which to speak about the future or to risk forecasts of what will happen. However, the writer of these articles feels that he would not be fulfilling his obligations to the readers if he did not, in this first article in 1947, endeavour to impress upon them that *the year ahead is a critical one for every retail merchant*. Forecasts by economists are practically unanimous in their expectation of a recession before the end of the year. Too much money is going in-

to housing and the value of buildings, both domestic and commercial, is grossly inflated. The carrying charges on costly premises is going to be like the Old Man of the Sea who was light enough when Sinbad the Sailor first lifted him but who became a crushing burden later on. A boom market may well tempt retailers to buy heavily in expectation of rising prices and continued volume sales. In theory this is true, but it is a smart man who can accurately estimate what will happen during an inflationary spiral. Big profits made on a rising market can be wiped out even more quickly by being caught with high priced inventory in a time of falling prices and diminishing sales.

It is worth noting that there are many reduced prices in stores now—that is, before Christmas—when, normally, one would expect prices to be maintained and any reduc-



"Dumb Waiters"—the so-called salesmen who don't believe in signs. They are stupid, ineffective creatures and merchants who tolerate them are bound to suffer. They should be fired!

and DUMB WAITERS

tions held over until the traditional "January Sales." Large scale operators are not waiting. Small retailers would do well to consult with their bank managers before committing themselves to any program that involves substantial expenditures at this time.

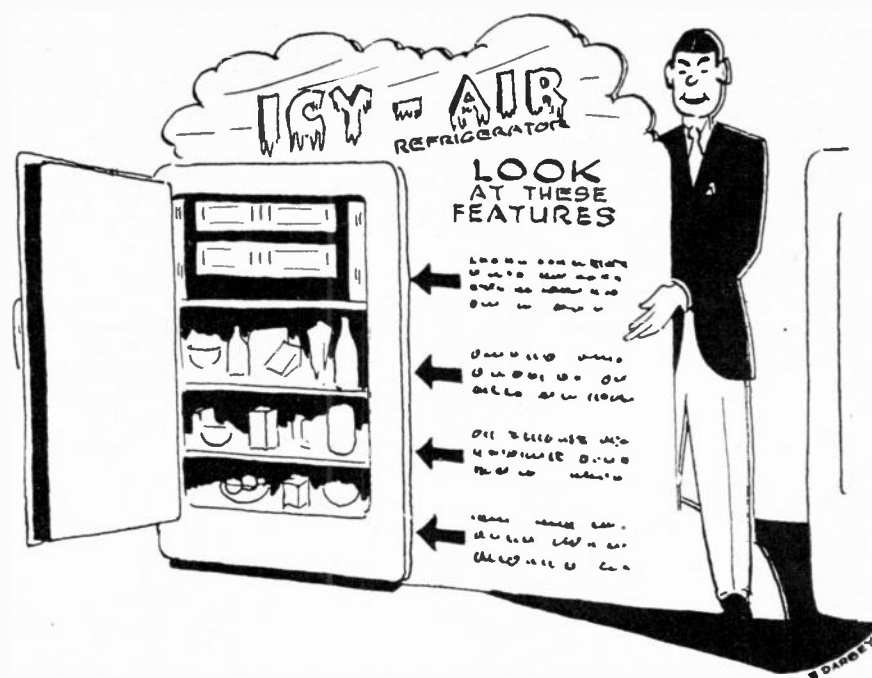
Strong Competition Ahead

Now is the time to prepare for a year of strong competition not only among radio appliance dealers, of whom there are almost too many for normal business needs, but among all retailers of all non-essential goods who will be battling for their share of the buyers' dollars. The retailers who are successful in maintaining sales volume will be those who follow sound merchandising practices; those who use all the selling aids that they can find and who train their staffs to be overwhelmingly sales-conscious.

Silent Salesmen

Among those selling aids that can be of real help to retailers are *Silent Salesmen*, which are offered free, at less than cost or at cost by the manufacturers of the goods they sell. These displays, stands, cards and window streamers are planned to do a selling job for retailers; to increase their sales; to help to part John Public from his money in exchange for a radio, refrigerator, a range or what-have-you. They are not given away for amusement. They cost a lot of money and they are designed to be efficient in their functions. All too many retailers seem to look on them as clutter; something to be stuffed away in a cellar or attic; something that is worthless. That is entirely the wrong viewpoint. To ignore, or not to use this material properly, is about the same as refusing the free help of trained salesmen. The *Silent Salesman* may be silent but it does a job; it tells people about the products and lays stress upon the salient points that deserve special consideration. They help to brighten the store; they contribute toward developing a good environment. They should be used.

True, all *Silent Salesmen* cannot be used all the time. But they should be kept ready for use in rotation. They should be handled with care. Because they are free, or very cheap,



The "Silent Salesmen" may be made of cardboard but as the products of skilled merchandising specialists they are far more effective than the "Dumb Waiters." Properly used, they will do a real selling job.

does not lessen their value. Set up a clean, dry storage place for displays and the like. Index them and use them as much as possible. The same is true of envelope stuffers and give-away material, that might be called the children of *Silent Salesmen*. They are legitimate children, too, that tie in with their poppas and mommas. Use them; do not waste them. They will make profits for you.

Expensive Carelessness

Many retailers are careless with *Silent Salesmen*. These same merchants are also, all too often, careless about their *Dumb Waiters*. They carry men and women on their pay roll who have none of the qualities of the scorned *Silent Salesman*.

These *Dumb Waiters* have no training; they are not developed, at great expense and with much thought, to do their work. If you want to look at one, drop into almost any store in your neighbourhood and watch how a salesman drapes the human form over a counter; how casual the sales person is toward customers; how little effort is made to sell the potential money-spender any related products. Does the record clerk try to sell albums and needles to those who buy

records? Record sales tell of these needs. Does he speak about your newly arrived radio-phonograph combination and demonstrate how well the new records sound on it? Does he take an intelligent interest in other departments so that when he sees a customer looking at a range, or a refrigerator, without being waited on, he does something about it? Or does he chew gum as he leans against the wall? Is he cleaning his nails as the customer looks through a catalogue? Does the radio salesman promote the sale of records? Does the refrigerator salesman use the opportunity to mention other kitchen equipment that will blend with the fine new range? How does your own sales staff compare?

The days of making a good living by sitting back and taking orders are over. The year ahead will only show profits in exchange for work and acumen. Every selling help must be used. *Silent Salesmen* are competent free help for you. *Dumb Waiters* are a liability. Now, this very month, is the time to decide to make all your salesmen efficient; to plan for aggressive selling; to determine that your store will greet 1948 larger and more prosperous. May 1947 be, indeed, a Happy New Year.

Chatham Refrigeration, operated by Bud Houston, opens attractive new appliance store featuring a large single show window which reaches from sidewalk to ceiling. Exposes entire showroom to view of passers-by. Attractive display units made of plywood and fibre board.



BUD HOUSTON



Dramatizing the Merchandise

Full Vision Window Makes Entire Store a Showcase

By RONALD J. COOKE

WHEN Bud Houston opened his new appliance store on Queen Street, Chatham, Ontario, last July, the public had a taste of what the store of the future will look like, because Chatham Refrigeration, Bud's official name, is as modern as a new car.

The building is 97 feet long and just 22 feet wide. About half of this space is devoted to the store proper, the rest to repair rooms, office, and storage space.

Passersby first notice the huge single show window which reaches almost from the sidewalk right to the top of the 11-foot ceiling. The window is about 18 feet wide, and slants back from the sidewalk on one side to where the entrance is. To the right of the entrance a small wall display has been built into the black glass and here is displayed small accessories. The large front window acts as a show case with the entire store being on display. At night a neon sign at the rear of the store brightens up the whole premises.

Mr. Houston designed the store, based on plans put out by Admiral of Chicago. Display units are made from plywood and fibre board and finished in cream enamel. The walls are finished in soundproof material, and trim is done with white painted wood. All the display units are movable so that the entire interior may be switched around depending on the type of merchandise on display. These units, of which there are about six, are 6 feet long, 4 feet high and 4 feet deep. They have curved ends and make an ideal backdrop for any type of appliance.

An alcove has been built at the left of the display room, and here are a desk, and office girl who looks after books. The young lady is credited with being quite a saleswoman. The electrical man says that as soon as a new model comes in she examines it and asks a million questions, so that no matter what the customers want to know, she has the answers.

There is plenty of parking space

at the rear of the shop, and here the work on car radio receivers is conducted. For inclement weather a large garage has been built at the rear, into which cars may drive. There are two service rooms at the back of the store, one is for radio and the other for work on refrigeration. An attractive grey truck is used for service calls.

While Bud Houston calls his firm "Chatham Refrigeration," he does a substantial business in radios, washers and other types of appliance sales and service. Commercial refrigeration, of which Bud is master, constitutes a large part of his business. A recent installation was a frozen food locker which ran to \$12,000. The boss goes out and looks for the jobs himself, and leaves the operating of the store pretty much to his three employees. Butcher boxes are another specialty and the firm has just finished installing a refrigeration box, and a "behind glass" meat cutting room for a new super market. Complete

(Continued on page 54)

RADIO AND APPLIANCE SALES

IT'S YOURS AGAIN... WITH NEW LAURELS!



• Originally designed as a radio serviceman's test unit, the Simpson 260, because of its sensitivity and wide range was found adaptable during the war to general service duties in the entire electronics and electrical fields. It was given thousands of essential war jobs in the production and servicing of communications equipment.

Over 300 government agencies and university laboratories of the United States and Canada procured every one of these test instruments Simpson could deliver on an expanded war production schedule. They were turned out by the thousands. Every branch of the armed services — Army, Navy and R.C.A.F. — carried them to the far ends of the earth.

Chosen on its merits, the 260 became uniquely *the* test instrument of the war.

AVAILABLE NOW TO YOU

Now the Model 260, always the preferred instrument of radio servicemen, is available again to a widened field of peacetime services. We ask you to remember its record as an example of the quality and advanced engineering that goes into all Simpson instruments, as evidence that other new Simpson developments during 1947 are well worth waiting for. They are being released as soon as Simpson standards for their manufacture are satisfied. They will continue the leadership that has given Simpson a world-wide reputation for "instruments that stay accurate" with ideas that stay ahead.

BACH-SIMPSON LIMITED
71 Corling St., London, Canada

SIMPSON 260, HIGH SENSITIVITY SET TESTER FOR TELEVISION AND RADIO SERVICING

Ranges to 5000 Volts—Both A.C. and D.C.
20,000 Ohms per Volt D.C.—1000 Ohms per Volt A.C.

At 20,000 ohms per volt, this instrument is far more sensitive than any other instrument even approaching its price and quality. The practically negligible current consumption assures remarkably accurate full scale voltage readings. Current readings as low as 1 microampere and up to 500 milliamperes are available.

Resistance readings are equally dependable. Tests up to 10 megohms and as low as 1/2 ohm can be made. With this super sensitive instrument you can measure automatic frequency control diode balancing circuits, grid currents of oscillator tubes and power tube, bias of power detectors, automatic volume control diode currents, rectified radio frequency current, high mu. triode plate voltage and a wide range of unusual conditions which cannot be checked by ordinary servicing instruments. Ranges of Model 260 are shown below.

Price, complete with test leads.....\$49.95

Volts D.C. (At 20,000 ohms per volt)		Volts A.C. (At 1,000 ohms per volt)		Output	
2.5		2.5		2.5 V.	
10		10		10 V.	
50		50		50 V.	
250		250		250 V.	
1000		1000		1000 V.	
5000		5000		5000 V.	
Milliamperes	Microamperes	Ohms			
D.C.					
10	100	0-1000	(12 ohms center)		
100		0-100,000	(1200 ohms center)		
500		0-10 Megohms	(120,000 ohms center)		

(5 Decibel ranges:—10 to + 52 DB)

Simpson
INSTRUMENTS THAT STAY ACCURATE
MADE IN CANADA

SELL the BIG

*Look at this New Model



Model F73

\$ **9.95**

RETAIL PRICE
INCLUDING CORD
AND PLUG

CANADIAN GENERAL
HEAD OFFICE

*Automatic
Iron*

MARKET

GENERAL ELECTRIC *Automatic* IRONS

THIS IS YOUR BIG MARKET. There are 1,500,000 old-fashioned, non-automatic irons to be replaced. Every woman wants an automatic when she knows its advantages. G-E will produce *the* automatic irons to help you cash in on this grand opportunity. G-E automatics have the backing of national advertising and public acceptance of the General Electric name.

A BIG SELLING POINT—the exclusive G-E Hi-Speed Calrod Element... cast right in the sole plate... heats faster... lasts years longer than ordinary elements.

ELECTRIC COMPANY LTD
TORONTO



R.M.A. News

1947 Annual Meeting

The 1947 Annual Meeting of the Radio Manufacturers Association will be held at the General Brock Hotel, Niagara Falls, Ontario, on Friday, May 30th.

1947 Joint Meeting—Canadian and U. S. Directors

The Fourth Joint Meeting of the Directors of the Canadian and American Radio Manufacturers Associations will be held at the Seaview Country Club, Absecon, New Jersey, on Thursday and Friday, April 24th and 25th. The Directors of the Canadian RMA will be guests of the American RMA and, following the usual procedure at these joint conferences, each Board will hold a regular meeting, with members of the other Board invited to sit in as observers.

January Board Meeting

The next meeting of the Board of Directors will be held at the Mount Royal Hotel in Montreal on Tuesday, January 28th.

A number of the active Standing Committees of the Association are expected to hold meetings in conjunction with this Directors' meeting.

Service Committee

The RMA Service Committee was held at the Royal Connaught Hotel in Hamilton on Wednesday, January 15th. At this meeting, G. H. Baldwin presented a special paper on "Construction of Oscilloscopes."

Canadian Radio Technical Planning Board

The Second Annual Meeting of the contributing sponsors of the Canadian Radio Technical Planning Board was held at the Ritz-Carlton Hotel, Montreal, on Tuesday, December 10th. Reports on the activities of the various Panels and Committees were given by the Co-ordinators and Panel Chairmen. R. M. Brophy was re-elected president; R. A. Hackbusch, vice-president; and S. D. Brownlee, secretary-treasurer.

School Equipment Committee

The newly appointed School Equipment Committee, under the Chairmanship of F. W. Radcliffe,

will meet in Montreal prior to, or immediately following, the January 28th meeting of the Board of Directors. Members of the Committee will be notified of the specific time and location of the meeting.

Engineering Committee

The last meeting of the RMA Engineering Committee, held in Toronto on November 27th, was devoted almost exclusively to consideration of the draft CSA proposal for Specification C22.2 No. 1, "Power-Operated Radio Devices" (Third Edition), to replace the present Specifications C22.2 No. 1(A) and No. 1(B). The recommendations of the Committee in the form of suggested amendments, deletions and additions have been forwarded to the CSA for consideration.

The Transmitter Sub-Committee of the RMA Engineering Committee held its first meeting in Montreal on December 5th. F. A. A. Baily was elected chairman and J. B. Knox, vice-chairman. The sub-committee has appointed C. G. Lloyd as liaison with the RMA Engineering Committee and has recommended the appointment of J. P. Aston as the Canadian RMA representative to the American RMA Transmitter Committee.

Projected Production

On a recommendation approved by the Board of Directors at their meeting in Toronto on December 4th, projected production figures for the entire twelve months of 1947 will be compiled by the RMA office this month.

FM Brochure

The FM Committee, under the Chairmanship of R. A. Hackbusch, is working in conjunction with the Public Relations Committee, the Sales and Merchandising Committee and the Engineering Committee compiling an FM brochure designed for use by dealers and providing simplified explanations of FM operation and what to expect from FM receivers.

Canadian Electrical Council

The Canadian Electrical Council (a central Council comprising

representatives of the various trade associations in the electrical industry, including RMA) has appointed a sub-committee to deal with the question of consumer credit legislation. Two meetings of this sub-committee have been held to consider a sixteen-point program recently suggested by the Credit Management Committee of the Canadian Retail Federation as a result of their review of a proposed Consumer Credit Act of the Province of Saskatchewan. A third meeting of this sub-committee was held in Toronto on December 19th for the purpose of reviewing a draft "Proposed Bill Relating to Installment Sales" that was presented to the Saskatchewan Government on December 12th by representatives of the Retail Merchants Association of Canada. RMA representatives are not included on the sub-committee but observers have been sent to the meetings.

1947 Trade Directory

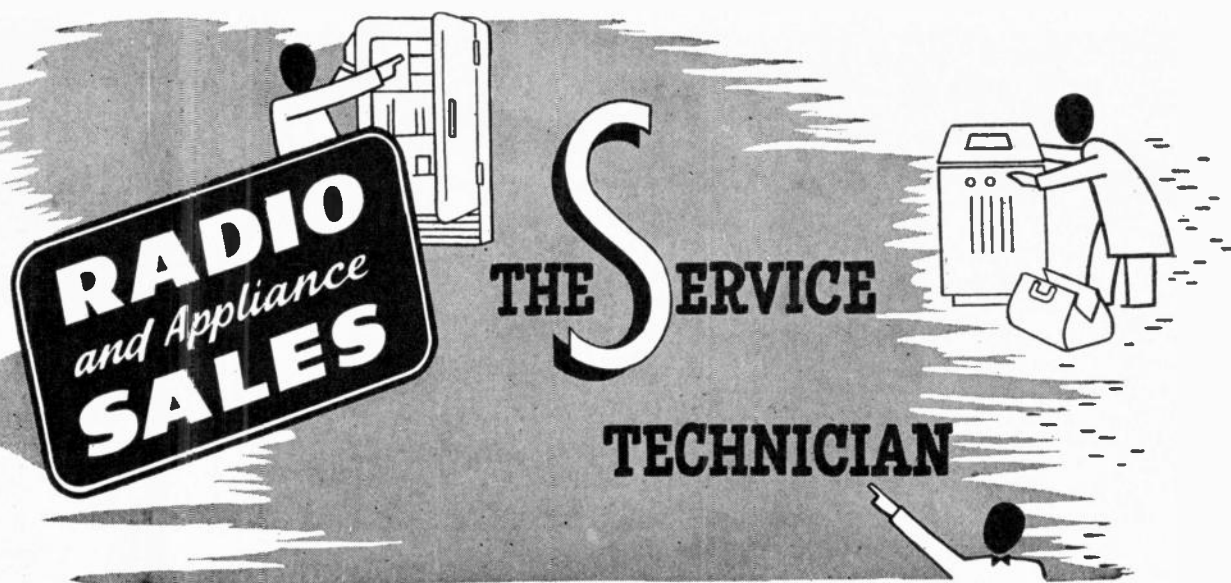
The second edition of the Trade Directory of Canadian Radio Parts Manufacturers and Representatives, sponsored by the Parts and Accessory Division of the RMA, was turned over to the printers last month and is expected to be ready for distribution early in 1947. The 1947 Directory will follow the general form of the original 1945 issue but will incorporate a number of changes and additions that have been submitted by the members in replying to a recent questionnaire.

New Set Production Records

In spite of shortages of certain components and other production difficulties, the RMA production figures indicate that more radio receivers were produced in Canada in the past twelve months than in any previous twelve months in the history of the Canadian radio industry. If the current production rate of over 55,000 units per month was maintained until the end of the calendar year, 1946 will have set a new annual record of over 550,000 sets. The only previous year in the history of the Canadian radio industry in which over 400,000 sets were produced was 1940 when production reached approximately 482,000 sets.

U.S. production was also establishing new monthly records and indications were that over 15,000,000 receiving sets would be turned out in the United States in 1946 as compared with their 13,600,000 record in 1941.

RADIO AND APPLIANCE SALES



Vol. 3

JANUARY, 1947

No. 1

Frequency Modulation

Well Designed, Correctly Installed Antennas Are Essential to Noise-Free FM Reception—Part 4 of a Series

By M. C. PATTERSON

FOR noise-free FM reception an adequate signal input is essential. An FM set with insufficient signal input may actually be as noisy as an AM set under similar conditions. The signal pick-up is, of course, the antenna and so, like AM radio, good reception begins there.

The antenna necessary for satisfactory pick-up will depend on the signal strength at the receiver and in your particular locality this will become a matter of experience. However, because of "line of sight" transmission at these frequencies it is obvious that an antenna located high up in the air and connected to the receiver by a transmission line will be a great advantage and will permit very satisfactory reception when a short piece of wire along the baseboard of the home would not suffice.

No doubt there will be FM sets sold with built-in aerials but let us begin by assuming the receiver to be located on the edge of the transmitter's service area where good signal pick-up is imperative.

A very effective antenna for reception of these frequencies is the dipole or half wave-length antenna;

this is simply a length of conductor cut to the formula,

$$L \text{ in feet} = \frac{462}{\text{Freq. in Mc.}}$$

The electrical length of such a conductor antenna is one-half a wave-length and at 100 Mc/s this is 4 ft. 7½". This formula takes into account so-called end effect which reduces the physical length below that of one-half wave-length.



M. C. PATTERSON, B.A.Sc.,
Member of the Faculty,
Radio College of Canada.

Such an antenna will resonate at this frequency and we shall obtain some gain and noise discrimination as a result of this. However, the tune of the antenna is not so sharp as to cause tuning difficulties.

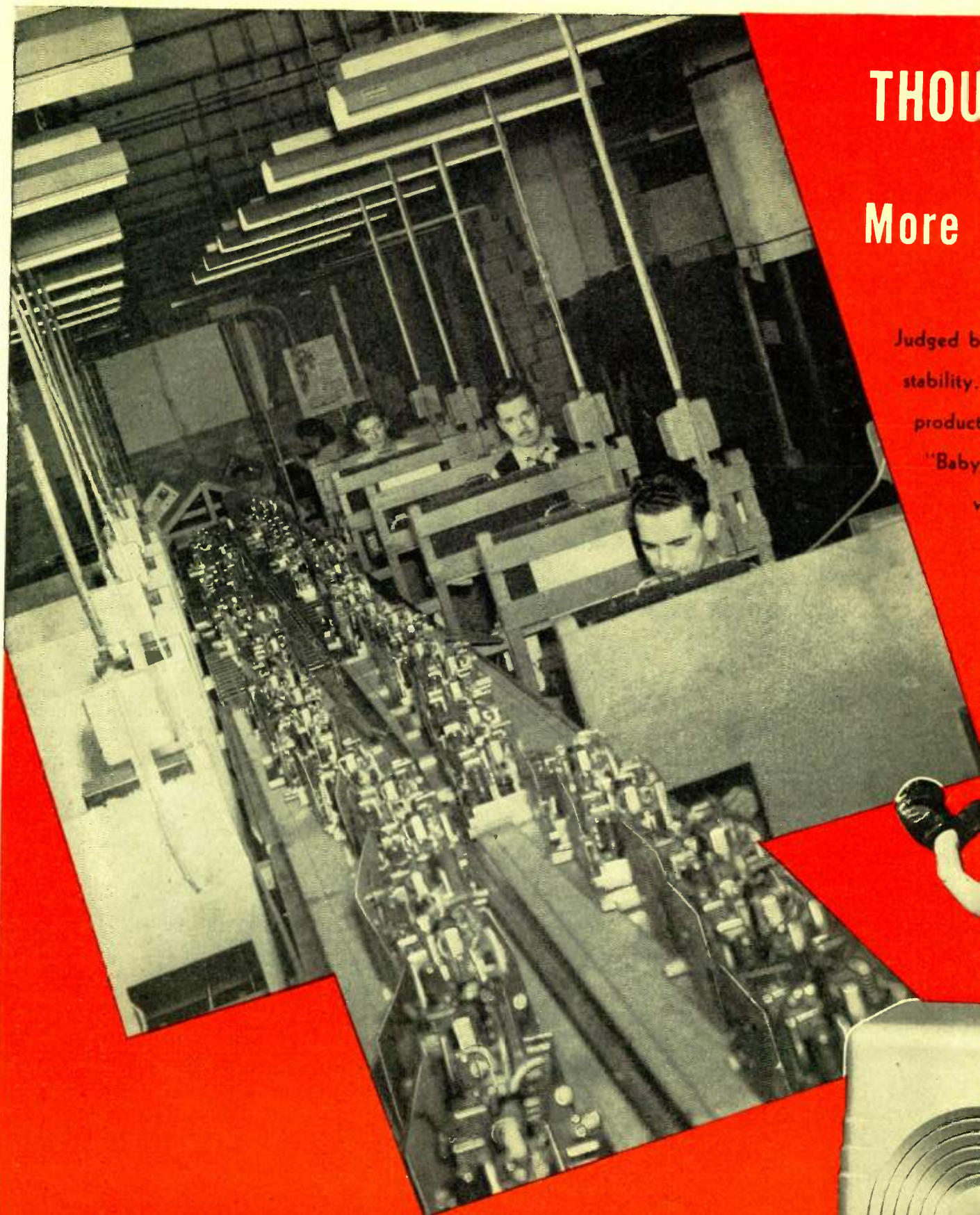
This dipole will be somewhat directional, receiving best in a direction broadside to its length. If it is horizontal to the ground it is horizontally polarized and this is the usual arrangement. To connect the antenna to the receiver a transmission line is used. For maximum energy transfer from the antenna to the line, the line should "match" the antenna. Since the impedance of a dipole at resonance is 75 ohms, approximately, the transmission line might be of this impedance but for other reasons a 300 ohm line is used. Actually there would be a mis-match anyway if a 75-ohm line were employed since the antenna cannot be cut to resonate at all the FM station frequencies and the impedance, therefore, would not be exactly 75 ohms. The 300-ohm line which has been accepted as standard is a good compromise.

However, a better match may be obtained by using a folded dipole antenna. Such an antenna is shown in Fig. 1. This antenna has

THOU

More

Judged b
stability.
product
"Baby



No. 5002—Five tubes. Short or Long Wave.

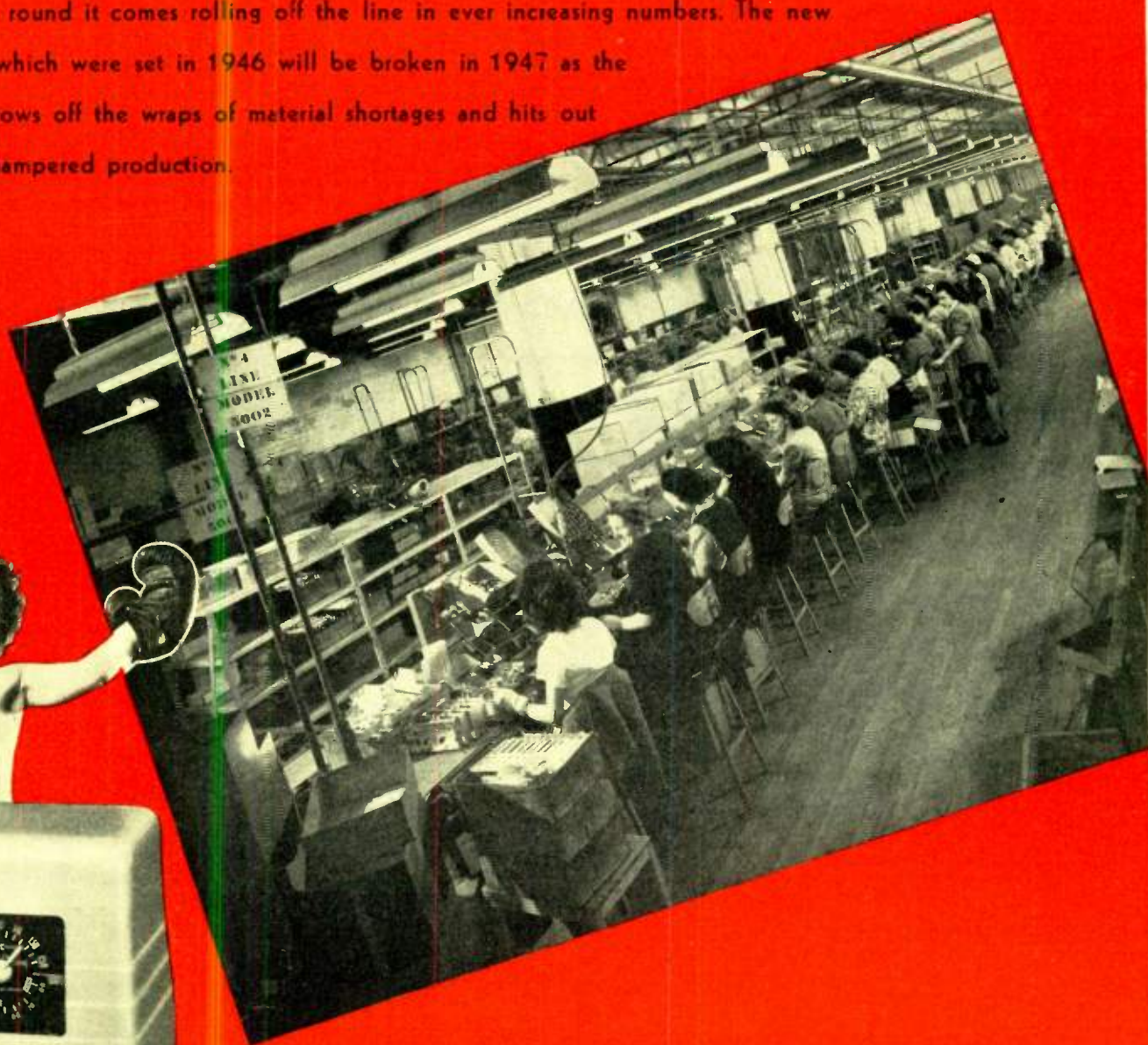
No. 5000—Five tubes. Long Wave only.

No. B-4100—Four tubes. Battery operated.

ANDS HAVE ROLLED OFF THE LINE...

The Way THE *Baby Champ*

By standards the "Baby Champ" is the winner. It has what it takes . . . performance and
and after round it comes rolling off the line in ever increasing numbers. The new
records which were set in 1946 will be broken in 1947 as the
mp" throws off the wraps of material shortages and hits out
full, unhampered production.



Northern Electric
COMPANY LIMITED

25 BRANCHES ACROSS CANADA



an impedance, where the line is connected, of approximately 300 ohms and the match to the line is much better.

The transmission line is connected to the set through an antenna transformer as illustrated in Fig. 2. The impedance of the line will, of course, affect the tuning of the r-f coil. This is the reason why the industry has standardized on 300 ohms for the line. If a 75-ohm line is connected to the set it may throw the alignment off.

Fig. 1 shows the construction of one type of antenna that is used. Two copper or aluminum rods or tubes, approximately a quarter wave long (2 feet $3\frac{3}{4}$ in. at 100 Mc.) are supported on insulators. The transmission line is attached to each quarter wave-length section at the centre. The mast should be properly guyed so the installation is stable in high winds because passers-by quite properly resent being hit by a dipole.

Fig. 3 shows an illustration of the twin line that is commonly used. This "twin line" has an impedance of 300 ohms and consists of two stranded conductors moulded in a flexible solid dielectric of polystyrene. The losses are very low and it is weather-proof.

Fig. 4 shows a schematic of the folded dipole. This is really two parallel dipoles fastened at the ends and tapped at the centre of one where the transmission line is connected. Like the dipole this antenna receives best in a direction broadside to it. This directional effect may be used to advantage to increase the signal strength from a desired station, decrease the signal from a strong interfering station and reduce noise emanating from a certain direction providing it is not in the same line as the desired signal.

Use of Reflector

The directional properties of the dipole may be enhanced by a director or reflector or both. The simple reflector consists of another half wave-length antenna parallel to the dipole. This serves to increase the signal strength in direction broadside to the antenna still further and to reduce the comparative pickup from other directions. A director has a similar effect and is placed in front of the antenna. The director is slightly shorter than the dipole feeding the transmission lines and the reflector slightly

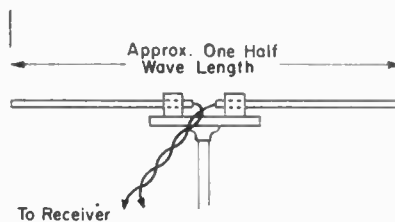


Figure 1

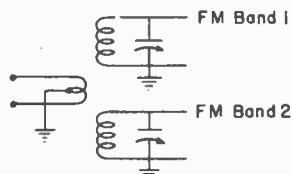


Figure 2

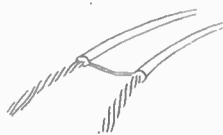


Figure 3

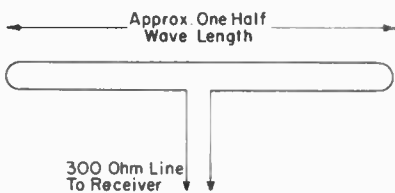


Figure 4

longer. A director and reflector give a very substantial gain in pickup in one direction.

It is important to locate the antenna well up in the clear whenever the receiver is known to be situated near the fringe of the transmitter's service area or should the set be located in a depression or valley. There are a number of reasons for this. First of all "line of sight" transmission dictates that the antenna be well up to be on the clear for best reception. Mind you, this may not be necessary in many instances and may be impossible in many others, but in all cases where the signal strength is low it is always desirable. The second reason is that in doing so you not only increase the signal but you also reduce the noise. Tripling the signal strength and cutting the noise to a third gives a noise to signal increase of 9 to 1 and although there is much attenuation of noise in the FM system it is by no means noiseless when the signal is weak.

Usually the antenna coil is centre-tapped and grounded there. This

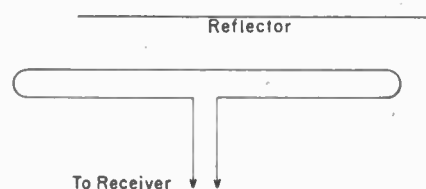


Figure 5

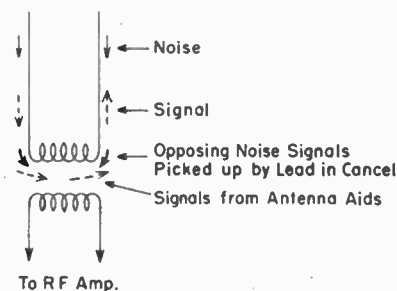


Figure 6

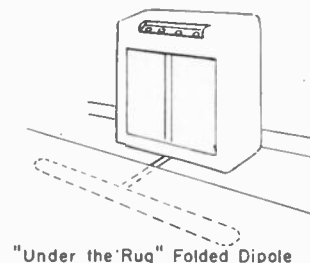


Figure 7

places both sides of the transmission line at the same impedance to ground. If the transmission line is supported clear of down pipes, eave troughs, etc., an equal signal from noise and radio transmitter will be induced in each lead of the transmission line. That these noise signals are cancelled is illustrated in Fig. 6. The signal from the dipole will be up one side and down on the other, adding in their effects at the receiver but the noise pick-up by the transmission line itself (and any signal as well) will cancel.

Proper Installation Important

The rules of good mechanical and electrical practice apply to the installation of FM antennas as well as to AM antennas but, because the transmission line will be almost universally used, this point may be mentioned. Be sure that all connections are soldered. The lower the impedance of the line the more important this is, since a little resistance in a joint is a larger proportion of the total impedance.

(Continued on page 54)

Service Associations

R.E.T.A. Branch Formed in Kingston Recently

A dinner meeting of radio technicians of the city of Kingston and district was held on December 10, in the Prince George Hotel. A large number were present and the results of the meeting were very encouraging.

Mr. Moring, president of Belleville R. E. T. A., spoke on the desirability of a sound organization for this city and district.

It was decided that regular monthly meetings would be held on the second of each month at the Prince George Hotel.

The following officers were elected for a term of one year: President, O. H. Donnelly; vice-president, B. Prichard; secretary, B. W. Martin; treasurer, L. Des Champs; directors: J. J. Chisnall, H. Woods, F. Sheppard, B. Stone; publicity chairman, O. E. Jackson.

Hamilton

The regular monthly meeting of the Radio Electronic Technicians Association, Hamilton, was held on Monday, December 2nd, in the Radio Theatre of CKOC, an exceptionally large number of members and visitors being present. Under the chairmanship of the president, Ed. Waddington, the meeting got under way with the reading of the minutes of the previous meeting by Hamilton's hard working secretary, H. Bennett, after which came the business session, which produced some lively discussions on matters affecting the association, particularly advertising. The Hamilton Section is now conducting an aggressive advertising campaign over both local stations, and will continue to do so for some time to come.

The feature of the evening was an address and practical demonstration of FM, conducted by C. Duncan, of Rogers Majestic Ltd., who was introduced and ably assisted by an old friend, M. W. Hodsell, service manager of Rogers Majestic Ltd. At the conclusion of Mr. Duncan's address there was a question period which proved highly informative. The meeting was then closed by a sincere vote of thanks to both Mr. Duncan and Mr. Hodsell.

Orangeville

M. C. Patterson of Radio College of Canada was guest speaker at a meeting of the Orangeville Branch, Radio Electronic Technicians Association, held on December 16. Mr. Patterson spoke on FM and what it means to the service technician.

In spite of bad weather conditions which limited attendance the evening turned out to be a very successful one.

R. C. Poulter described the activities of the Ontario Council of the R. E. T. A. and expressed faith in the future of the organization.

In his address Mr. Patterson dealt with many phases of FM starting with an interesting description of the fundamental principles which he compared with those of AM. Mr. Patterson described the more prominent features of FM transmitters and receivers, and used a series of posters to illustrate his talk.

Ed. Packwood, president of the Orangeville R. E. T. A., was chairman of the meeting.

Kitchener

A general meeting of the R. E. T. A., Kitchener Branch, was held at the Y.M.C.A. on December 10th, 1946. C. Schekene acted as chairman for the evening.

A Christmas ad was the main subject of discussion, and after a vote it was decided to place a Season's Greeting ad similar to previous years but with the names of members brought up-to-date.

A discussion on the officials for the 1947 season was held and as a result it was decided to have the duties of the secretary and treasurer combined for this season.

It was also decided by all members that the meetings for the 1947 season would be held at the various service shops of the members.

The mailing of notices of meetings for the following season was discussed and it was decided by all concerned that these notices were to be typewritten, giving the place of meeting, usual date and the topic of interest for that meeting.

The first meeting was on the second Tuesday of January, the

14th, at Norman Friedmann's service shop, 259 Louisa Street, Kitchener, at 8.00 p.m. Technical information on "Amateur Radio Transmitters" was supplied by Mr. Friedmann.

The president stated that due to the amount of work involved for one person by combining the secretary-treasurer duties, it was suggested that a gift of some sort be given to this officer, possibly at the annual banquet.

Toronto

The regular monthly meeting of the Toronto Branch, R. E. T. A., was held on Monday, December 16th, at 50 Gould Street, Toronto. President Ken Banton presided and opened the meeting at 8.20 p.m. There was a good attendance of members and visitors.

In view of the length of the program which had been arranged, the business portion of the meeting was curtailed, and Bill Winter, vice-president, was asked to introduce the speakers of the evening, all of whom are members of the staff of Canadian General Electric Co. Ltd., Toronto District Office. First to be introduced was C. J. LaDouceur, service specialist, who was in charge of the program. He, in turn, presented W. J. McWhirter, sales promotion manager; H. G. Ionson, service specialist and technical lecturer; B. F. Wiggins, member, Engineering Service Division, Toronto District Office, and J. Fiddler, Appliance Sales Division, Toronto District Office.

The program then opened with a colour sound film, "The Story of FM," which was very well received.

Mr. McWhirter then presented a story on the evolution of tone, taking his listeners back to the beginning of time when the crudest means were used to produce rhythm, on through the centuries to the era of the music box in the middle of the 19th century, the development of the cylindrical phonograph record, the old disc type record, the orthophonic, the more modern combination, and its culmination in the new Alnico Magnetic pick-up as used in the latest type C. G. E. radio-phonograph combination. As the speaker reached each era in his talk, an instrument similar to the one to which he referred was brought out on to the stage and it reproduced a number which was

(Continued on page 54)

These Men



C. G. YOUNG
Assistant Sales Manager



J. C. HERITY
Advertising Manager



CHARLES R. CONN
General Manager



G. A. SIMMONDS
Sales Promotion Manager



R. V. FOX
Regional Sales Manager
(Western)



F. C. HOLMES
Regional Sales Manager
(Central)



GUS PAILLARD
Regional Sales Manager
(Eastern)



Salesmen, left to right,
are Byron Andre,
George McPhail. Bot-
tom row, left to right,
Arthur Flood, George
Milburn, Ross Living-
ston, Gaston Girard.

and





this Factory

WILL

HELP YOU SELL MORE

Coleman PRODUCTS IN 1947!

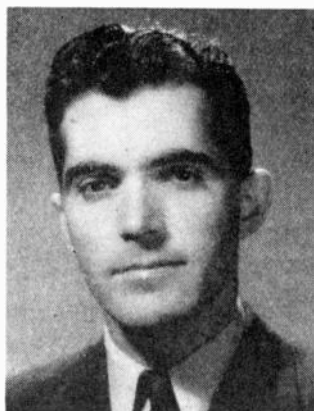
Three sales divisions have been established across Canada—Western, Central and Eastern—to provide closer contact and friendly co-operation with distributors and dealers. The new Coleman merchandising plans for 1947 will be the best in which you have ever participated.

The big Coleman Production Departments are geared to deliver more Coleman Heating Equipment in greater variety as materials become available in 1947. Right now Coleman Oil Burning Water Heaters are being delivered. Order now from your distributor.

The Coleman Lamp and Stove Co. Ltd. - Toronto 8, Canada

Toronto Representative Stromberg-Carlson Co.

T. P. Hord, general sales manager, Stromberg-Carlson Company, Limited, announces the appointment of Bob C. Habbeshaw as direct representative for



BOB C. HABBESHAW

the City of Toronto for the sale of radios and combinations. Bob Habbeshaw was a Flight Lieut. in the Air Force where he served for five years, three of them overseas.

Holub Appoints A. C. Simmonds and Sons

Holub Industries, Inc., of Sycamore, Illinois, announces the appointment of A. C. Simmonds and Sons, 301 King St. East, Toronto, as its representative in Canada.

Holub Industries products include: commutator and slip ring repair tools, industrial vacuum cleaners and blowers, fuse specialties, wire connectors, wire strippers and lathe live centres.

A. C. Simmonds and Sons are well known in Canada, having represented a number of dependable manufacturers since 1918. The present partnership, formed in 1941, consists of A. C. Simmonds and his sons, Herbert A. Simmonds, and L. Claude Simmonds.

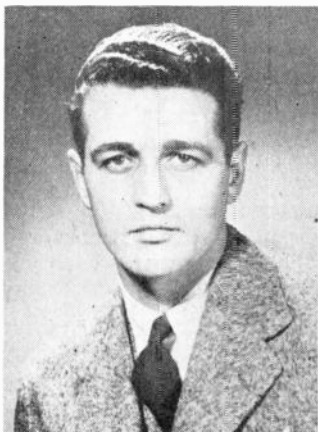
Ontario Power Loads Show Increase

Primary power loads throughout the Province showed an increase of 5 per cent. or 120,000 horse-power over the corresponding month of last year, according to the load summary for November, released by The Hydro-Electric Power Commission of Ontario.

Combined primary and secondary loads receded from approximately 2,625,000 horse-power in November, 1945, to 2,610,000 horse-power for the same period this year.

Bill Ball Appointed Sales Representative

Wallace R. Johnston, manager of the radio and electrical division of Anthony Foster & Sons Limited, Toronto, announces the appointment of William (Bill) Ball, Jr., as sales representative in the Toronto and suburban area. "Bill," as he is known to his many friends in the trade, has been associated with the company for the past twelve years with the exception of three years in the naval service of Canada as wireless operator on the "Uganda." He will be contacting the dealers and the service trade on radio parts and small appliances.



WM. BALL

Radio Production Hits New High—Outlook Bright For 1947

TORONTO, December 4—S. L. Capell, President of the Radio Manufacturers Association of Canada, announced to-day that the radio industry has now surpassed its best pre-war production records and is planning to double present output early in 1947.

"The Canadian radio industry is geared for greatly increased output in 1947 and recent projected production surveys by the Radio Manufacturers Association of Canada indicate that its members are planning—and actually backing up with firm orders for materials—production of radio receivers far in excess of any previous period in the history of the industry," stated Mr. Capell.

"Monthly unit production has already exceeded the rate of 600,000 sets per year and plans for the first six months of 1947 call for the doubling of this output. The significance of these figures is realized when it is recalled that 1940 was the only previous year in which Canadian radio set production exceeded 400,000 units.

"It now appears that, barring strikes or other unforeseen difficulties, 1947 will be the year that every one thought 1946 would be before the industry found itself hamstrung by conflicting regulations and shortages of essential components.

"The unbalanced production between the small table models and the larger consoles and combinations still exists, due mainly to the scarcity of cabinets, but this condition is gradually being overcome and the present outlook for 1947 is bright for those Canadians who have been patiently waiting for this type of merchandise. Frequency Modulation (FM) will become a reality in 1947 for many Canadian listeners living in or adjacent to the principal urban areas and thousands of sets capable of receiving FM broadcasts will be turned out by the Canadian radio manufacturers.

"All in all, the radio outlook for 1947 is excellent, production

should put all pre-war records far into discard, new and improved sets will be available to the Canadian public and FM, with its virtually static-free reception, complete absence of fading, its selectivity and much higher fidelity, will be here to add further enjoyment for radio listeners interested in owning the best that money can buy in home entertainment."

Manager, Taylor & Pearson Ltd., Edmonton

Taylor, Pearson and Carson (Canada) Limited announce the appointment of H. McMahon as manager of Taylor and Pearson Limited, Edmonton.

Mr. McMahon first joined the firm in the winter of 1927 in



H. McMAHON

charge of radio servicing and has been in turn manager of the radio department and merchandise manager.

J. M. Taylor will continue as managing director of the automotive operations in the Edmonton, Calgary and Lethbridge branches of the organization.

COMING...

THE GREATEST SERVEL IN 20 YEARS OF REFRIGERATION PROGRESS



Operates on Gas, Electricity or Kerosene

SERVEL (CANADA) LIMITED • 457 King St. West, TORONTO

FOR JANUARY, 1947

37

Your Winter Profit-Maker . . .

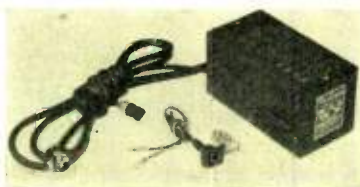
THE **CTL** BATTERY BOOSTER

Winter driving and cold weather rapidly drain the battery and leave it weak or dead. The CTL BATTERY BOOSTER replenishes its life and brings it back to normal overnight . . . and provides quick, easy starting in below-zero temperatures.

Tell your customers about this essential car accessory and cash in on the tremendous possibilities it offers for profit-making through Winter sales.
Literature and Prices on Request.



SIMPLE ECONOMICAL DEPENDABLE



- No Danger of Overcharging.
- Noiseless—No Moving Parts.
- No Tubes . . . Rugged.
- No Radio Interference.
- Quicker Starting.
- Brighter Lights.
- Better Radio.
- Prevents Battery Freezing.

BUILT BY
CANADIAN TRANSFORMER LIMITED
WATERLOO - ONTARIO

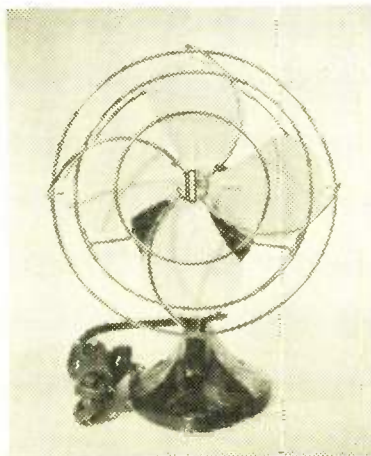
JOY RECORD PLAYERS—Canada's Leading Line

Joy's Big Four Invades on a Fan



Model 46-3A
25 cycle
Model 46-4A
60 cycle
LIST
\$49.95

●
PORTABLE
RECORD
PLAYERS
●



The Newest in Fans

ORDER NOW FROM
DISTRIBUTORS IN
YOUR TERRITORY

ELECTRONIC
RECORD
PLAYER

Model 46-1A
25 cycle

Model
46-2A
60 cycle

LIST
\$54.50



OPEN
FACE
MODEL



RECORD
CHANGER

Model 46-1C—25 cycle **LIST \$44.50**
Model 46-2C—60 cycle **LIST \$39.95**

JOY ELECTRICAL INDUSTRIES
LIMITED

Manufacturers of Fine Record Players and Changers
293 KING ST. WEST TORONTO



No. 46-5P—**LIST \$19.75**
No. 46-6P—**LIST \$19.50**

The Nation's CAPITAL

Written exclusively for
Radio and Appliance Sales
by Staff Correspondent

OTTAWA—It is hinted in well-informed quarters in Ottawa that price decontrol actions are likely to produce all-important problems for the credit men in various centres across Canada, including those in the radio and appliance field, with the strong possibility that in the period ahead there may be considerable confusion in the general situation before definite trends are disclosed for the benefit of these credit men.

Activities in sales of radio and appliance merchandise are now reaching a most intense period as demands and supplies indicate in almost every section of Canada, but, it is hinted in Ottawa, when the market may be given the element of free reign, the effects of such competition can cause a return of former credit problems on a large scale. In other words, it is suggested that credit men may have to face the realities involved in more competitive business.

There may be accounts which will be unable to stand such keen competition. There may be others which will be loaded down with inferior stocks. There may be accounts which will lack financial backing sufficient enough to withstand consumer resistance against their lines. There may be many more reasons why credit men may have to watch much more carefully the accounts to whom suppliers continue to let out merchandise in a freely competitive market of high prices.

"Right now," said Wilf. Hodgins, president of the Ontario Radio and Appliance Dealers Association, addressing the Ottawa Radio Dealers' Association at their monthly dinner, "Ottawa is lucky in having 60-cycle current. It obtains more electrical goods than other parts of Ontario because of this."

Mr. Hodgins also told his audience in this capital that, if the United States coal strike had lasted for any lengthy period, Canada would have seen fewer electrical appliances in the coming year.

Tenders have been called in

Ottawa for the supply and installation of a modern cooling system in the House of Commons and it is now whispered along Parliament Hill that radio systems are being studied so that, when and if this modern innovation is considered acceptable, it may be established readily.

A Radio and Electronic Club has been organized in the capital.

Officers elected for 1946-47 are: president, Desmond Doyle; vice-president, Frank Cooper; secretary, Maxime Viau; publicity and press,

Douglas Way, and A. A. Kinniger is in charge of supervising the activities of the organization.

In giving a summary of the monthly indexes of retail sales in Canada of radio and electrical stores for the period between 1941 and 1945, it is reported in Ottawa that the annual averages were 138.8, 133.7, 112.5, 108.6 and 124.1 for 1941, 1942, 1943, 1944 and 1945, with 1935-1939 being considered equal to 100.

Sales in these radio and electrical
(Continued on page 52)

IT CAN'T HAPPEN HERE!

No Sir...
No Shock

because
VACO
screw drivers are shock-proof!

In addition, these gleaming
Amberyl handles are break-proof
... fit the hand correctly... grip
firmly... do each job requiring the
use of a screw driver
better, faster, easier!

Write for
catalog.

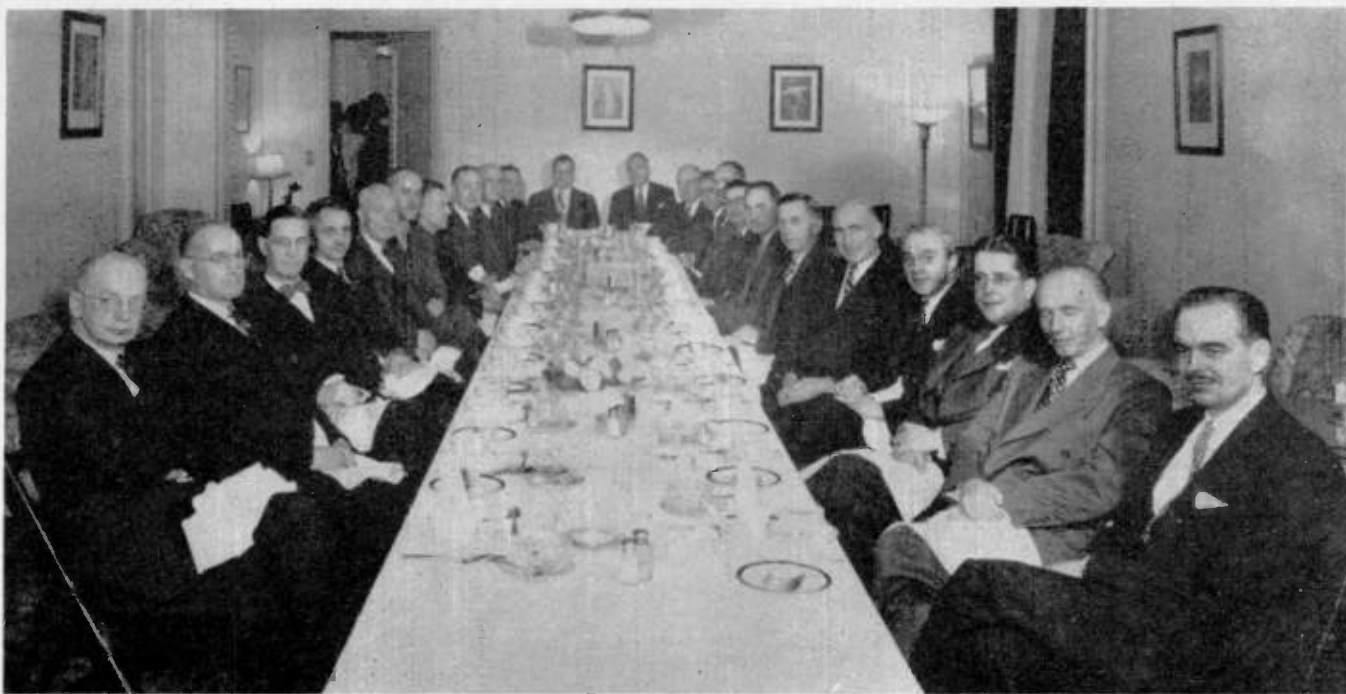
There are **173** types
of Vaco screw drivers. Type
shown is especially
suited for electrical
maintenance work.

VACO 317 E. ONTARIO ST.
PRODUCTS CO. CHICAGO 11, ILL.
CANADIAN WAREHOUSE
560 KING STREET WEST - TORONTO 2, ONT.

Canadian Factory Distributors:

ATLAS RADIO CORPORATION, LTD.
560 King St. West
Toronto 2, Ont.

Annual Meeting of the Canadian Radio Technical Planning Board



R. M. Brophy, president; R. A. Hackbusch, vice-president, and S. D. Brownlee, secretary-treasurer, were re-elected to office at the Second Annual Meeting of the Canadian Radio Technical Planning Board held in Montreal on Dec. 10. Group Captain C. J. Campbell addressed the meeting on "International Frequency Allocation Problems." Shown above, left to right: L. S. Payne, chairman, Panel A, C.R.T.P.B.; J. M. Thomson, A.I.E.E.; J. F. Neild, C.T.A.; S. Sillitoe, chairman, Panel C, C.R.T.P.B.; A. Reid; W. G. Southam; Noel Wright, A.R.R.L. (Can. Sec.); J. A. Brass, R.A.C.; F. S. Howes, I.R.E.; R. A. Hackbusch, R.M.A.; Group Capt. C. J. Campbell, O.B.E. (guest speaker); R. M. Brophy, president, C.R.T.P.B.; A. S. Runciman, C.E.A.; R. V. Macaulay, T.A.C.; A. B. Hunt, E.I.C.; G. J. Irwin, co-ordinator, C.R.T.P.B.; H. S. Dawson, C.A.B.; A. H. Frampton, H.E.P.C. of Ont.; J. S. Keenan, CEMA; A. B. Oxley, general co-ordinator, C.R.T.P.B.; T. A. Evans, CAB; D. Manson, CBC; S. D. Brownlee, sec.-treas. C.R.T.P.B.

Philips House Opening Marks Forward Step In Canadian Electronics

Attended by many leading figures in Canada's industrial, electronics and medical fields, the recent opening of Philips House, new Montreal headquarters of Philips Industries Limited, marked another forward step in the expansion program of this relatively new Canadian company. Affiliated with the world-wide Philips organization, Philips Industries Limited is making available in Canada a wide variety of electronic equipment, X-ray and electrotherapy apparatus and diamond dies. Also being introduced are electrical devices entirely new to this country which have been developed during and since the war by Philips scientists.

"These new electronics discoveries and devices will accelerate the wheels of Canadian industry and enhance the living standards of all Canadians," stated J. P. Pettigrew, managing-director, at the opening of the new offices and showrooms. "With our Canadian production facilities, and drawing on the research and manufacturing resources of the Philips organization in Britain, the United States, Holland and elsewhere, Philips Industries Limited is equipped to fill an increasingly insistent Canadian demand for post-war electronic equipment of advanced design for use in industry, medicine and the household. The opening of the new, larger Philips House, appropriately located in Montreal's Philips Square

—along with substantial additions to our employee staff—will enable us to provide more efficient service. As materials become more plentiful, we will employ, directly and indirectly, many more Canadians. Philips sees a great future for Canada as a leader among the nations in the development and manufacture of electronic goods, not only for domestic use, but for export to all the world."

As an example of recent

achievement in electronic science, Mr. Pettigrew cited the Philips Electromyograph, a new and versatile instrument invaluable in neurosurgery. Developed by the Canadian government during the war, in conjunction with the Neurological Institute of McGill University, the Electromyograph enables surgeons to accelerate greatly the recovery of sufferers from nerve and muscle injuries.

In a demonstration of the apparatus at the Philips House

opening, W. O. Forde, who, with Dr. Jasper, head of the Department of Electro-encephalography, Montreal Neurological Institute, was one of the original designers of the equipment and is now a Philips Industries Limited technical executive, explained what the Electromyograph means to doctor and patient in cases of nerve injury and muscle paralyses due, for example, to poliomyelitis.

The equipment, he said, en-

(Continued on page 53)



The smart new offices of Philips Industries Ltd., Montreal.

Everything in REFRIGERATION

Specialization CONTRIBUTES TO PERFECTION

1947 marks Universal Cooler's 25th year in business. A quarter century!

Electrical refrigeration was a new industry when Universal Cooler was founded.

Universal Cooler has developed with refrigeration.

And Universal Cooler has had a lot to do with refrigeration development.

Numerous discoveries and developments which have made refrigeration more efficient and more economical have come from Universal Cooler laboratories and test rooms.

With the exception of war years, when our resources were devoted to the manufacture of weapons and equipment for our Navy, Army and Air Force, and the forces of our allies, Universal Cooler has devoted attention exclusively to refrigeration.

. . . a quarter century . . . doing just one thing . . . doing one thing well.

UNIVERSAL COOLER



UNIVERSAL COOLER CO. OF CANADA LTD. • Automatic Refrigeration since 1922
BRANTFORD, ONT. MARION, OHIO

A QUARTER
CENTURY

IN THE MANUFACTURE OF
REFRIGERATION EQUIPMENT

Nothing but REFRIGERATION

Optimistic Over Western Outlook

"I find the West prosperous and full of sober optimism for the coming year," stated W. T. Burnham, general sales manager of Rogers Majestic Limited upon his return from a trip to Vancouver during which he called on Rogers Majestic Limited and DeForest Radio Limited distributors and dealers in principal cities.

During his trip Mr. Burnham presented the new Rogers Majestic and DeForest radio phonograph combinations which feature matched walnut cabinets built on a welded steel frame that assures stability. This ultra-modern construction was well received by distributors and dealers everywhere but the great acclaim, states Mr. Burnham, came from the magnificent reproduction given by the set. Music critics were enthusiastic about the way in which the full musical value of phonograph records was reproduced and the fine reception of the radio.

Asked about the future of the radio business in the West Mr. Burnham said that he felt that there would be a growing market there for years to come and he is confident that the development of the Western Provinces will go forward steadily.

Attractive Card

A picture of the new plant at Leaside on a snowy, starlight winter's night featured this year's Christmas card sent out by Rogers Majestic Limited with suitable greetings to all dealers. The same card with a special message from R. M. Brophy, president of the company, was also sent to all employees.

C-L-M Employees Get Silver Dollars

Canadian Line Materials Ltd., Scarboro Junction, Ont., used a novel plan in distributing profit sharing to employees for December . . . silver dollars.

Prior to the second Great War, L. E. Messenger, president and general manager of the company, inaugurated a plan whereby every employee, in the plant or office, received a percentage of the company's monthly profit.

After three full calendar months' service, every employee becomes eligible for a share, usually distributed by cheque. The amount paid to each recipient is calculated on the basis of length of service and salaries received.

Owing to the proximity of the Festive Season, the management decided to do something novel and extraordinary and made the gifts in silver dollars. It was not easy to obtain the silver dollars. Practically every bank in Canada was called upon to help supply the requirements.

The C-L-M Profit Sharing plan has proved highly successful. It tends to reduce absenteeism, prevents considerable lateness, has a tendency to make the workers, in the plant and office, more business "conscious." It also has a

The New Plant of T. S. Farley Ltd. in Hamilton



The accompanying picture shows the new plant and offices of T. S. Farley Limited, Canadian Manufacturers of fine quality radio coils. Now located at 426 Cannon Street East in Hamilton, T. S. Farley Limited plan to move into their new, larger quarters on or about May 1st.

The building is located at 174 Catherine Street North in Hamilton. It is a four-storey structure of brick comprising 70,000 square feet of floor space of which T. S. Farley Limited will at first occupy 30,000 sq. ft.

T. S. Farley, president of the

organization, stated that the move will provide new extensive facilities for a substantial production increase in the manufacture of Farley coils to provide more and better service to manufacturers, service technicians and amateurs.

tendency to keep the company's product up to the highest quality and, of course, incentive helps considerably in keeping up a maximum production.

In fairness to the employees who are always on time and rarely absent, certain deductions are made from the profit sharing payment from those employees who absent themselves from work, are late or tardy in returning to desks or benches. These deductions are made known to the employees affected and such tends to make them more thoughtful and careful in the future.

The incentive helps to conserve materials, light, power, etc., as all workers realize that the more money they can save for the company means greater profits, hence a larger distribution to all employees of the company.

Deplores Lack of Action On Non-essential Building

TORONTO—The Department of Reconstruction, though fully aware of the situation insofar as non-essential building is concerned, has taken no steps to correct it, says the Canadian Electrical Distributors Association (CEDA).

The drive put on by CEDA to have this situation cleared up has run up against a blank wall. The Department refuses to do anything claiming it is a local municipal matter, it is said.

"We understand the depart-

ment is now trying a new set of tactics by expediting materials to manufacturers to use on A.P.H. rated orders," says CEDA. "Even this will not fill the bill for there are many contractors working on houses who cannot obtain an A.P.H. rating. They will be left out in the cold."

Televised Bullfights

MEXICO CITY—Broadcasting officials from the Central and South American countries witnessed the highly successful pick-up and transmission of the first bullfights ever televised, recently staged by RCA in Mexico City as a feature of the First Inter-American Broadcast Congress.

The bullfights were televised at the Plaza Mexico, new 60,000-seat bullring in Mexico City, and the program was transmitted by microwave radio relay to the Hotel del Prado, six miles away, where 7,500 spectators viewed the event on the screens of RCA Victor television receivers.

Technical aspects of the bullfight pick-up underscored the adaptability of the new portable field equipment. For this television premiere of Mexico's favourite sport, RCA engineers placed their new RCA Image Orthicon Camera under the judges' box at the Plaza Mexico, facing the gate through which the bulls charge into the arena. Monitoring equipment was placed a little farther up the side of the deep-dish stadium, and a portable microwave radio relay parabola

was installed near the rim of the bowl to permit the line-of-sight transmission to a receiving reflector on the roof of the Prado.

No special lighting was required, for the super-sensitive camera and although the camera location was a hundred yards from the centre of the ring, the use of a 15-inch telephoto lens enabled spectators to see on the television screens such details as the gleam of the matador's sword and the braid on his jacket.

In the painting of new lumber, the initial or priming coat is of extreme importance. The old idea that practically any kind of leftover paint will do as a first coat has long been exploded; for it is known now that the priming coat—the coat upon which all future painting depends—is the basis of good painting.

The priming coat should be designed especially to seal the surface of the wood and provide the type of coating to which later applications of paint can adhere with best results. Never waste time and money by using a cheap priming coat or one that is not designed for that purpose.

Amazing as it seems, fatigue tests given two pieces of duralumin, 1/16" thick, cemented together with a new plastic cement, show that under bending stresses the adhesive is actually stronger than the metal. Repeated alternating loads up to five million cycles were applied.

ROGERS MAJESTIC

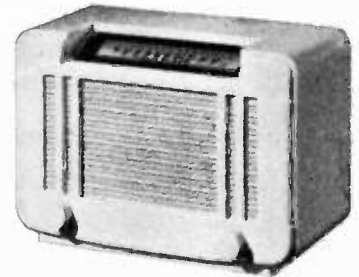


R-326

*...breaks through with **NEW** triumphs!*

A beautiful new ROGERS MAJESTIC radio-phonograph combination model is here—a musical instrument introducing a new high in radio entertainment—faithful reproduction of every shade of tone—a streamlined walnut cabinet. Again, ROGERS MAJESTIC scores with new triumphs in listening pleasure, ultra-modern cabinet design and engineering with this superb console radio-phonograph. It is equipped with Automatic Record Changer, playing fourteen 10" or ten 12" records, Standard Broadcast and Short Wave, Electrical Tuning Eye, High Fidelity PM Speaker, "International Dial" covering Standard Broadcast and the whole range of popular shortwave stations.

Listen to its quality of tone—what you hear is tone, pure and crystal clear—look at its beauty as a fine piece of furniture. From the deep-throated voice of the bassoon to the lyrical lilt of a piccolo, this new ROGERS MAJESTIC masterpiece gives everything your most discerning customers demand. Yes, its tone is so true it is like listening to the artists face to face. You can't miss with this great new radio!



R-156—Here is a dainty ivory plastic mantel model to harmonize in boudoir, breakfast-nook or kitchen, A 5 Tube Superheterodyne AC/DC Standard Broadcast 25/60 Cycle. Gives exceptionally full, rich tonal quality and unusual freedom from noise.



ROGERS MAJESTIC LIMITED
Toronto • Montreal



Left: Pausing during his tour of Rogers Majestic Ltd., the Governor-General has a word for Mrs. Ada Harvey who served for four years in the W.A.A.F. in England. Behind him, left to right: R. M. Brophy, president; G. T. McNeill, works manager. Centre: His Excellency stops to chat with W. Morwood who served overseas with the Governor-General's Footguards. To the right is W. G. Robertson, vice-president of Rogers Majestic. Right: One of the latest Rogers Majestic chassis is explained to the Governor-General. Left to right: W. Wilson, production superintendent; R. M. Brophy, president; His Excellency; G. T. McNeill, works manager; Major-General H. F. G. Letson, secretary to the Governor-General.

Governor-General Visits Rogers Majestic Plant

During the recent visit of the Governor-General to Toronto, His Excellency toured a number of different industries in the city. Among them was the plant of Rogers Majestic Limited at Leaside where he spent a considerable time viewing the manufacture of radio receiving tubes, radio chassis and radio components. He expressed great interest in the various operations and asked many questions about the work. He was accompanied by his secretary, Major General H. F. G. Letson, and his aide-de-campe, Squadron Leader Tolle-mache. R. M. Brophy, president of the company and W. G. Robertson, vice-president, escorted the distinguished visitor through the plant.

Appointed Beatty Divisional Manager

Harry Baker of Orillia, Ont., has been recently appointed Divisional Manager by Beatty Bros., Fergus, for Northern Ontario Beatty Household Appliance Sales.

Mr. Baker is a veteran in the Beatty Appliance business. He

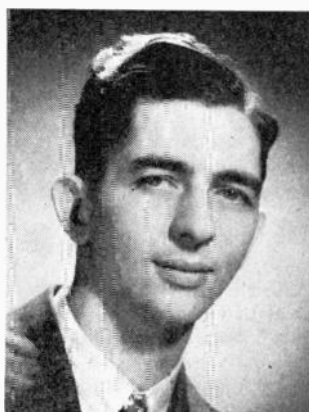


HARRY BAKER

has had fifteen years' service with the firm, all in the sales department. Prior to the war he was promoted from salesman to branch manager in charge of operations in Orillia.

Radio Service Manager Stromberg-Carlson Co.

T. P. Hord, general sales manager, Stromberg-Carlson Company, Limited, announces the appointment of Frank Tewsley as Radio Service Manager for the



FRANK TEWSLEY

company. Frank Tewsley has had wide experience in this type of work and will assist Stromberg-Carlson jobbers with their service departments.

Hamilton Club's Christmas Party

HAMILTON — The Electrical Appliance Club of Hamilton held their annual Christmas party at Fischer's Hotel in that city on December 17th. The party was preceded by a committee dinner at the Royal Hamilton Yacht Club under the chairmanship of Dan Hyde, who was also in charge of the evening's activities. About 150 members of the various branches of the radio and electrical business attended and 56 of them took home turkeys won during the evening.

"Design in Industry" Exhibit Features RCA Victor's BT-40

Featured as an example of how Canadian design in the radio industry compares with that of other countries, is the display showing RCA Victor's BT-40 battery radio set in the radio section of the "Design In Industry" exhibition which was opened in Ottawa by Rt. Hon. C. D. Howe and is now being shown in major industrial centres across Canada.

Sponsored by the National Research Council of Canada, the National Gallery, the Department of Reconstruction and the National Film Board and prepared in co-operation with the Canadian Manufacturers' Association, the exhibition shows the evolution of the radio design from the stage where it is no more than a rough sketch on a scratch pad until it is a finished model. The display includes actual sketches made during progressive stages in the development of the design with the original pencilled notes by the designer detailing various suggestions for improvement by

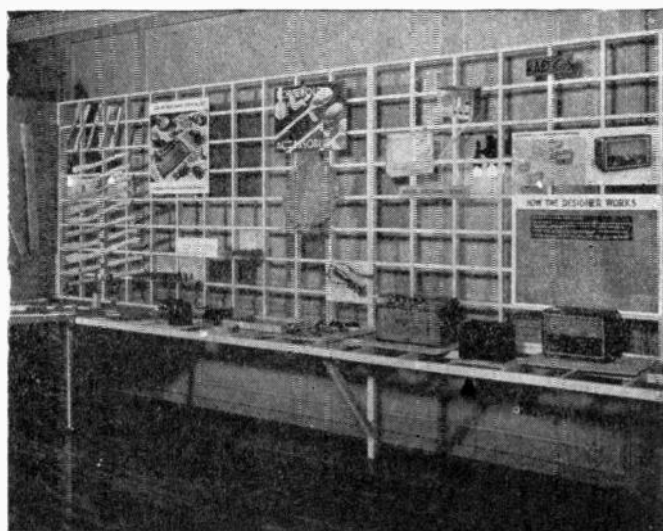
the engineering staff and the cabinet factory. Also included is the full size airbrush sketch as presented to the sales department for approval, together with the accompanying blueprint.

The BT-40 was designed by F. A. Richards of Montreal, head of RCA Victor's Styling Department, and the work was carried through by his assistants, Leo Henry and Jack Goldman.

McLennan, McFeely & Prior Appointed Duo-Therm Furnace Distributors

McLennan, McFeely & Prior, Ltd., of Vancouver, British Columbia, have been named Duo-Therm furnace distributors for the province of British Columbia and the Yukon Territory.

The announcement was made by M. F. Cotes, vice-president of Motor Wheel Corporation, of which Duo-Therm is a division. McLennan, McFeely & Prior are already distributors for Duo-Therm fuel oil space heaters and water heaters.



"Design in Industry" Exhibit featuring RCA Victor's BT-40

RADIO AND APPLIANCE SALES

Current LITERATURE

RCA Victor Releases New 1947 Bluebird Catalogue

Distribution of RCA Victor's new 1947 Bluebird Catalogue is already being made to dealers across the country and it helped to provide a valuable sales help during the heavy Christmas buying season.

Smartly turned out in an attractive new cover especially slanted to catch the eye of the large group of Bluebird fans, the new catalogue is larger and more comprehensive than ever before. It includes such improvements as an alphabetical listing of titles under each artist's name and the addition, where the record is listed by title, of the title on the reverse side. Featured in the new catalogue are Hillbilly top tunes and latest songs and perennial classics in the popular field.

New Marconi RVC Radiotron Characteristics Manual

The new edition of the Marconi RVC Radiotron Characteristics Manual, just published, constitutes an up-to-date, fact-filled guide in handy pocket size. It includes information on all recently released types.

Comparison with the previous edition provides striking evidence of the tremendous advances achieved in tube development during recent years. Over five hundred tube types are listed in this latest edition. It includes: table of characteristics of Marconi RVC receiving Radiotrons; tube base diagrams; illustrations and dimensions of the Radiotrons; a section on characteristics indicating interchangeability; tube substitution list.

The new edition is available through radio tube jobbers, and should prove of valuable assistance to radio service technicians and to all interested in radio receiving tubes.

Burndy Pocket-size Connector Catalogue

A new convenient pocket-size catalogue, containing 52 pages and covering all popular types of electrical connectors for contracting and industrial maintenance require-

(Continued on page 58)

MANUFACTURERS OF
All types of
FIXED CAPACITORS
EACH ONE *Individually* TESTED

AEROVOX
Capacitors

Standardizing with AEROVOX

AEROVOX CANADA, LIMITED • HAMILTON, ONTARIO, CANADA

NEW PRODUCTS

The New "Eveready" High Energy Flashlight Battery

Canadian National Carbon Company Limited, announces an important development in flashlight battery construction. Now available for the first time is the new



The new "Eveready" High Energy flashlight battery just announced.

High Energy "Eveready" Flashlight Battery—packing nearly twice the electric energy and almost double the service life of famous wartime "Eveready" Batteries.

This new battery is the result of a completely new formula and advanced manufacturing techniques. Its jacket has been attractively redesigned, retaining the familiar, eye-catching colours of red, blue, and gray—and the battery remains "fresh and dated" as before.

Full-page advertisements in full colours will announce this new battery to readers in more than two and a half million Canadian homes during January and February. These full pages will appear in most of the national magazines and rotogravure feature sections. Follow-up advertisements will appear regularly and there will be special display cards and window streamers for dealers.

Flat Wire Wound Resistors New I.R.C. Type FRW

International Resistance Company has announced a new flat wire wound resistor, known as Type FRW. Specially designed for assembly in stacks or "gangs," this resistor offers a practical solution to the problem of space limitations which continually confronts engineers.

Fulfilling requirements of high wattage dissipation in limited space applications, the I.R.C. Type FRW

flat wire wound resistor has a higher space-power ratio than standard tubular wire wounds. For different operating conditions, these compact resistors are available in two coatings. The Type "B" coating is designed for high-temperature requirements where wire size is large enough to insure dependability, while the Type "C" coating is a specially developed organic cement coat, designed to withstand the most extreme conditions . . . such as on shipboard, in tropical countries and in extremely humid climates.

Non-magnetic mounting brackets extending through the resistor, serve as conductors and aid in heat distribution. Mounting is easy and economical.

Among the many other outstanding features of this resistor are its light-weight construction combined with exceptional mechanical



I.R.C. Type FRW Resistor

strength and the ability to withstand severe vibration.

For complete information, write for Bulletin C-1, International Resistance Company Limited, 11 King Street West, Toronto, Ontario.

Rogers Majestic Delivering Radio-Phonograph Combinations

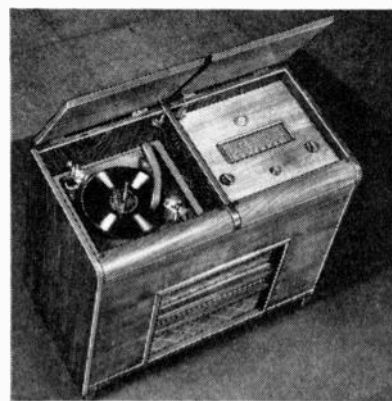
Outstanding tonal quality with amazing fidelity of reproduction of recorded music, together with an entirely new cabinet construction are the two principal features of the new Rogers Majestic and DeForest walnut radio-phonograph combinations, now being delivered to dealers as models R-326 and D-726.

Great care has been given to fidelity of reproduction of recordings, as well as to assuring that there will be good selectivity and sensitivity on radio reception. W. T. Burnham, general sales manager of Rogers Majestic Limited, says

"I consider this new model is a great advance over anything in pre-war days," he said. "This is a musical instrument."

Asked about the new cabinet construction, Mr. Burnham explained that it is revolutionary in that a welded steel frame is used to which all the components of the cabinet are screwed. "This is something really new. And it means a great deal to both dealers and consumers," stated Mr. Burnham. "With this new 'automobile' construction, there is no risk of the heavy cabinet walls working loose and causing distortion of reproduction through vibration. Besides this, there is the important point that any component of the cabinet may be readily replaced merely by unscrewing it from the frame and replacing with another piece." Mr. Burnham also mentioned that the high-grade walnut veneers are moulded to the heavy core with the same synthetic resins as were used for bonding the plywoods in the famous Mosquito aircraft. "I am convinced," Mr. Burnham concluded, "that these new radio-phonograph combinations mark a milestone in the development of musical reproduction. This is more than a radio; more than a phonograph. It is a musical instrument designed and built to satisfy the most critical."

This new model covers the standard broadcast band and all the popular short wave stations by use of the "International Dial" that makes for



Rogers Majestic automatic radio-phonograph combination

easy, exact tuning. The automatic record changer will take 14 10-inch or 10 12-inch records at one time. The pick-up arm is well-balanced and there is only 1½ ounce needle pressure. The 10-inch speaker is of the permanent magnet type. It has six tubes with performance equal to a pre-war model of at least eight tubes.



Elementary, My Dear Watson!

For nineteen years the Radio College of Canada has been training personnel to fill the important positions offered in the field of radio and electronics. It is the only private institution in Canada specializing in all phases of radio technology. RCC graduates are engaged in key positions throughout the world and are constantly in demand.

Courses Include

- Radio Technology
- Radio Communications
- Advanced Radio Engineering
- Applied Radio and Electronics
- Electrical Technology

A Placement Bureau is operated for the convenience of employers and graduates. There is no charge for this service. It is yours, Mr. Employer, for the asking. Just give us a call or drop us a line and tell us the qualifications you require in the man you are seeking. *We can put you in touch with the trained employee you want. All inquiries are treated in strictest confidence.*

RADIO COLLEGE OF CANADA

PLACEMENT BUREAU

54 BLOOR STREET WEST

TORONTO 5, ONT.

CANADIAN ELECTRICAL 1947 CATALOGUE

Our NEW 1947 Radio and Electronic
Catalogue illustrates and fully describes

10,000 ITEMS

Radio Parts	Radio Books
Amateur Supplies	Radio Tools
Test Equipment	Auto Radios
Radio Hardware	Public Address Equipment
Electrical Supplies	Fluorescent Lighting
and a large variety of accessory parts	

CANADIAN ELECTRICAL
MONTREAL
285 Craig St. W.
Phone LA. 7151

SUPPLY CO. LTD.
TORONTO
387 Yonge Street
Phone AD. 6366

WHOLESALE DISTRIBUTORS



WRITE FOR IT TODAY

Name.....
Street.....
Town.....Prov.....
Occupation.....
License Number.....
(R&AS JAN)

Printer's delivery may occasion a few weeks delay.

WAR ASSETS Bulletin

To MERCHANTS

The following war surplus items are available
ASK YOUR DEALER

Aircraft Radio Equipment

RECEIVERS—Aircraft Equipment, Type R1155 (English manufacture). Circuit Type and Electrical Characteristics.

1. Standard Superheterodyne. (A.V.C.) or manual according to position of a Master switch.
2. Intermediate Frequency 560 Kc's.
3. Range: 75 Kc's to 18.5 Mc. In 5 Ranges: Range 1, 7.5-18.5 Mc's; Range 2, 7.5-3.0 Mc's; Range 3, 600-1500 Kc's; Range 4, 200-500 Kc's; Range 5, 75-200 Kc's.
4. Beat Frequency Oscillator (B.F.O.).
5. Automatic Volume Control
6. Visual Tuning Indicator (Magic Eye Type)
7. Provision for D.F. Loop (Loop not provided)
8. Tubes—10 English type, but sockets are standard American octal.
9. No loudspeaker (Receiver Output for headphones only.)

RADIO HAMS
this ad
will interest you
SEE YOUR DEALER NOW!

Power Requirements:—

Filament: 6.3 Volts A.C. or D.C. approximately 4 amps.
H.T. 217 Volts at approximately 75 Ma.

These voltages were normally supplied from a Dynamotor operating from a primary supply of 12 or 24 Volt D.C.

Conversion to A.C. and Loudspeaker Operation.

These receivers are readily adaptable to 25 or 60 cycle, 110 volt operation by inclusion of a standard transformer, rectifier, and filter arrangement and to Loudspeaker operation by the addition of 6F6, 6V6 or similar output tube and Loudspeaker Coupling Transformer. Under normal circumstances sufficient room is available in the Receiver proper for inclusion of all the above additional components.

TRANSMITTERS—Aircraft Equipment, Type T1154 (English Manufacture) Companion Transmitter for the R1155 Receiver.

Electrical Characteristics

1. Frequency Range.
In 3 ranges: Range 1, 5.5-10 Mc; Range 2, 3.0-5.5 Mc; Range 3, 200-500 Kc.
2. Power Output Approx. 30 Watts R/T MCW, 100 Watts CW depending upon Antenna.
3. Frequency Stability Master—Oscillator.
4. Percentage Modulation 70%.
5. Type of Modulation System—Class A suppressor grid modulated.
6. Tubes—4 English type 2VT 105 triodes, 2VT 104 pentodes.

Power Input

Normally used with dynamotor (not supplied) capable of supplying 1200 Volts ma. and 6 Volts at 4 amp.

Dimensions 17½" x 16¾" x 11¼".
Weight Approximately 47 lbs.

Articles such as these are directed to the public through regular wholesale and retail outlets.

Watch For Further Announcements

WAR ASSETS CORPORATION

Canada's First FM Radio Equipped Fire Department



Director R. E. Pare of the Montreal Fire Department, seated at his desk, makes use of the new RCA Victor FM radio system to contact with one of his District Chiefs. Inset shows one of the department's FM Radio equipped cars reporting in to headquarters. Director Pare finds FM radio a vital factor in speeding up the dispatching of equipment.

Montreal has become the first city in the Dominion to equip its fire department with three-way FM radio, according to an announcement by Director R. E. Pare, the Department's Chief. Engineered and installed by RCA Victor, this system which operates in the 30-40 megacycle band, is now in regular use and Fire Department officials find it of the highest value in speeding up communications within the city's fire service.

Coupled with the particular requirements of the department, the unusual topography of the city presented an engineering problem the solution of which required the setting up of a somewhat unique system of communications. Not only was it imperative that three-way communication be possible within the fifty-square mile area covered by the department, but also in the neighbouring municipalities on Montreal Island which sometimes require assistance from the city in handling large fires. Mount Royal, which rises out of the centre of the city to a height of 750 feet, was a physical obstacle which rendered the setting up of an ordinary system impracticable. Early rests carried out around the mountain by Director Pare and R. D. Quart, RCA Victor sales engineer, showed that the high standard of communication demanded by the Department could not be obtained at these frequencies when the mountain was between the transmitting and receiving stations. With the mountain itself as an ideal location for the transmitter antenna a 75-foot

pole was erected at the top and on it the antenna was mounted. A co-axial cable was used to connect the antenna with the transmitter situated in a nearby building. The transmitter is operated by remote control from Central Fire Alarm Headquarters and as a result perfect two-way communication can be maintained between Headquarters and cruising cars at all times.

Director R. E. Pare of the Montreal Fire Department looks to this new system to step-up considerably the efficiency of his department through greater flexibility of control. Montreal has 45 station houses and more than 130 pieces of fire fighting apparatus which, until the installation of FM radio, had to be controlled entirely by telephone. All dispatching of equipment is done from Central Fire Headquarters and when an alarm comes in, apparatus is automatically sent from the nearest station. When an additional fire occurs nearby stations must cover off for the busy station. Hence these stations must be kept informed as to the disposition of all equipment. A single-alarm fire may occasion as many as twenty telephone calls by headquarters operators. As Montreal had more than eight thousand alarms last year this averages out to between two and three hundred thousand telephone calls a year. The reduction in the number of telephone calls by headquarters and the consequent speeding up of dispatching brought about by the use of FM radio, can not yet even be estimated.

RADIO AND APPLIANCE SALES

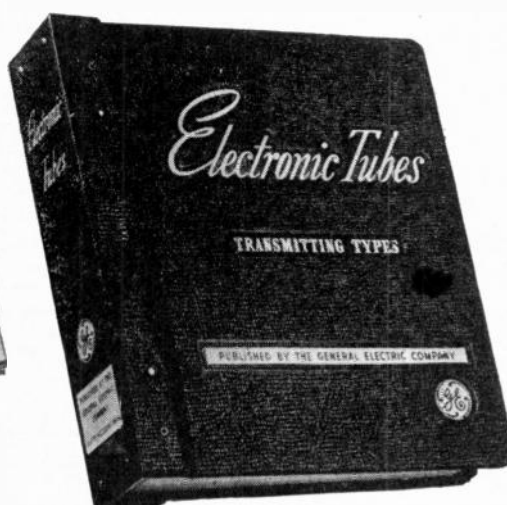
ELECTRONIC TUBE DATA..

Send for One or More of these

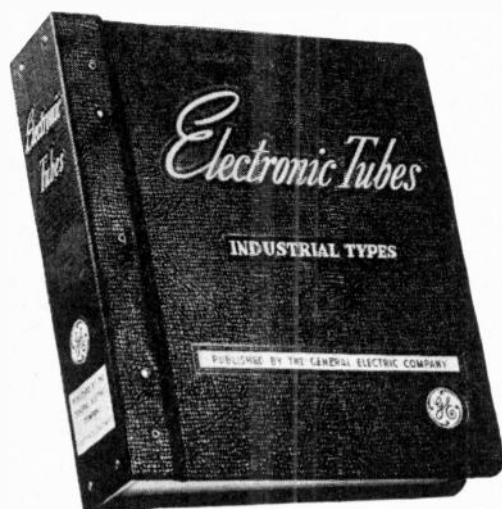
GENERAL ELECTRIC Publications



Transmitting and industrial tubes bulletin free from your nearest CGE office



Electronic Tubes bulletin free from your nearest CGE office



Above

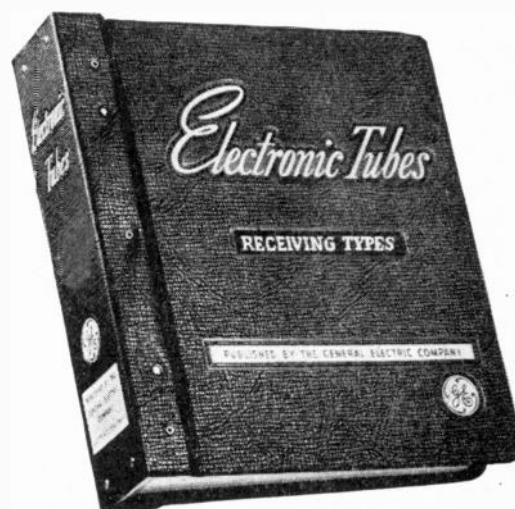
Transmitting Types refillable manual - \$3.00
Yearly revisions 1.50

Right (available soon)

Receiving Types refillable manual - - - \$3.00
Yearly revisions 1.50

Left

Industrial Types refillable manual - - - \$3.00
Yearly revisions 1.50



These books provide accurate and detailed information covering every type of electronic tube manufactured by General Electric. They contain technical data, type numbers, prices and ratings as well as outline drawings, interchangeability charts and warranties.

The books bound in hard, loose-leaf covers allow for

replacements and additions and are priced at \$3.00 each. An additional \$1.50 a year per book automatically brings you the new pages and sections as new up-to-date information becomes available. The other books shown are free.

Write your nearest district office or the Electronic Division of C.G.E., 212 King St. W., Toronto. 47-WR-1

CANADIAN GENERAL ELECTRIC CO LTD
HEAD OFFICE — TORONTO



Waugh & MacKewn Ltd. Incorporate "Stop and Shop" Plan in Their New Montreal Warehouse

Waugh and MacKewn Ltd., the "one-stop source of supply for electrical motor and appliance parts," is well known to the appliance trade right across Canada. The company, with head office in London, Ontario, first opened a stock room in Montreal in May, 1945, primarily to serve the users of their lines of electric motor parts. Due to the ever-increasing demand for washing machine and vacuum cleaner parts, it was decided to install a complete warehouse stock in Montreal. The new Halbro Building at 10 Pine Avenue West was chosen as a central location and, fortunately, has adequate parking facilities for the trade.

Careful planning was given to the stock layout in the new building. Stock bins were designed to display clearly the thousands of items carried. When a customer calls to pur-

chase his requirements, he is escorted through the aisles by a salesman who places his purchases on a free-wheeling merchandise table. When the customer's selection has been completed, the salesman checks out the purchase at the counter. No merchandise is hidden from view—first come, first served!

There are many trades in Canada being served by organized distributors, such as automotive parts jobbers, refrigeration service parts houses, etc. Waugh and MacKewn Ltd., however, are believed to be the only people who have undertaken the task of supplying parts for electrical motors, washing machines, and vacuum cleaners. The manufacturers of Canadian equipment and appliances have recognized the importance of "one-stop" parts service to the trade, and in most cases have authorized the com-



Photographs of Waugh & MacKewn's fine new warehouse in Montreal. Upper left: a portion of the office and the stock control system. Upper right: counter and shipping facilities of the company. Lower right: warehouse interior from the service counter.

pany to carry their service parts lines. This co-operation on the part of the manufacturers has contributed to make the service possible.

Waugh and MacKewn Ltd. are firm believers in direct mail and trade paper advertising. Com-

plete service parts catalogues are available to the trade. Copies of the Washer Parts Guide, Carbon Brush Catalogue and Electric Motor Bearing Catalogue will be mailed on request by addressing the company at London, Toronto or Montreal.

View Thor 1947 Line

Members of the sales organization, Canadian Fairbanks-Morse Company—Northern Ontario distributors of Thor household appliances—recently attended a preview of the Thor 1947 Line, including such radically new developments as the Automagic Clothes Washer, the Gladiolus Dish Washer and the Gladiron.

The delegation, headed by P. W. Bowers, general manager, and W. L. Foote, manager, Dealer and Appliance Department, also reviewed Thor's widespread and aggressive sales promotional program for the coming year.

Luncheon was served in the Thor cafeteria preceding the foregoing programs. This year the visit to the Thor plant was timed to form an integral part of Cana-

dian Fairbanks-Morse Company's Annual Toronto Sales Conference.

\$50,000 Addition To Fawcett Foundry

SACKVILLE, N.B. — N. A. Hesler, president and managing director of Enamel & Heating Products Limited, announced at a special meeting of the Board of Directors held recently, that approval has been given to plans calling for a \$50,000 expansion of the Sackville plant. A building 100 feet by 140 feet will be erected at the plant; new and modern moulding machinery, sand cutters and one new cupola will be added to take care of the increased production needed to meet the demands for Fawcett products across

Canada. The building will be of frame construction, and completely equipped with a fire sprinkler system.

Rogers Majestic Renews Collective Agreement

TORONTO — Negotiations have been concluded between Rogers Majestic Limited, jointly with Rogers Electronic Tubes Limited, and Local 512 of the United Electrical Radio and Machine Workers of America for renewal of their collective agreement.

Highlights of the new contract include an increase of 12 cents an hour on basic hourly wage rates; increase in existing incentive bonus proportionate to the revised hourly rates and a starting

rate for women and boys of 55 cents.

Annual holidays with pay will be one week after one year; two weeks after two years, and three weeks after fifteen years' service. Pay will also be given for four statutory holidays a year.

D. Lou Harris on Western Trip

D. Lou Harris, of Atlas Radio Corporation Limited, Toronto, recently left on an extended trip through Western Canada calling on all Atlas jobbers in the territory. His trip took him as far as Victoria and he is returning by way of California and the Western States, calling on his various principals en route. He will return to Toronto at the beginning of February.



Beatty

WASHERS IRONERS

ONE HELPS TO SELL THE OTHER

The woman who owns a Beatty Washer is the first to buy a Beatty Ironer. Hundreds of thousands of Canadian women have Beatty Washers — it is the leading washer in use in nearly every community in Canada. A great many are ready and waiting for someone to come and talk ironer to them. Other women with other makes of washers will buy the Beatty ironer because none other can compare with it in efficiency, serviceability, and popularity — many more in use in Canada than all other makes combined. And they Buy Beatty because the Beatty organization knows how to sell Ironers. This "know how" is at the command of every dealer who has the Beatty Franchise. Climb on the Beatty Band Wagon and we'll show you how to play tunes on your cash register.

YOU CAN DO BETTER WITH *Beatty*



BEATTY BROS. LIMITED

HEAD OFFICE - FERGUS, ONT.

ESTABLISHED 1874

HOUSEHOLD *Beatty* APPLIANCES



FACTORY BRANCHES: FERGUS, MONTREAL, ST. JOHN, WINNIPEG, EDMONTON, LONDON, ENG.
B. C. REPRESENTATIVE: McLENNAN, McFEELY & PRIOR LIMITED • VANCOUVER, B. C.

RECORDS INCREASE SALES RECORDS

- ★ LYRIC RECORD RACKS—Hold 50 records—\$4.95 List.
- ★ CO-ART (César Franck Trio, D'Varga and His Piano, Etc.)
- ★ FORD (Early American Dances)
- ★ GALA (Dwight Fiske, Nan Blackstone, etc.)
- ★ SAVOY (King Cole, Errol Garner, Don Byas, etc.)

Full Dealer Discount. Write for List and Prices.

Exclusive Canadian Distributors for these Fast-Selling Records

DOMINION MUSIC DISTRIBUTORS LIMITED

83 Bloor Street West

Midway 2437

Toronto, Ontario

The Nation's Capital

(Continued from page 39)

stores were 14.3 per cent. higher in 1945 as compared with the preceding year. The increase of 14.3 per cent. prevailed in the Maritime Provinces and Quebec but rose to 16.1 per cent. in the case of Ontario, with the gains in the Prairie Provinces being 11.0 per cent. and in British Columbia 13.3 per cent.

In 1945, continued this report, indexes of monthly sales in radio and electrical stores moved from 97.9 in January to 200.0 in December and indexes corrected for seasonal variations changed from 117.1 in January of that year to 156.9 in December. In the previous twelve months' period, the January standing was 99.8 and December 137.7 for monthly sales, with indexes corrected for seasonal variations in that year showing 124.2 in January and 108.10 in December.

Incidentally, sales of radios, musical instruments and supplies in

Canadian department stores in 1945 increased 17.8 per cent. over the preceding year.

"In durable consumer goods, the shortages are still acute," said Rt. Hon. C. D. Howe, Minister of Reconstruction and Supply, in outlining the progress of reconversion in Canadian industry during the first year of peace. "But it is often forgotten that in many of these trades, output by May had reached and exceeded the pre-war level. Factory shipments of radios, for example, during the first half of the year, amounted to 225,000 sets, and was, in fact, slightly higher than in the same months of the record year of 1940. The June production of electric refrigerators (5,670 units) was also above the 1941 average. Similarly the output of washing machines and other appliances compared favourably with pre-war years."

Moreover, Mr. Howe made it quite clear that, in effect, present conditions, which were not placing a satisfactory amount of commodities in the hands of Canadian consumers, remind the people of this country that full employment is not

enough. "Full employment that carries with it low productivity per man-hour, or any restrictive or 'feather-bedding' practices, whether by management or labour, cannot yield high living standards at the same time," he stressed most significantly.

Department Store Sales

According to information in Ottawa, Canadian department stores sold 211.2 per cent. more radios, musical instruments and supplies in October of this year than last. With comparisons based on dollar sales and no corrections being made for price changes, retail sales of the radio and electrical stores across Canada in October this year were 72.6 per cent. higher than in October, 1945, or 63.7 per cent. more than October, 1941, and 6.4 per cent. over September, 1946, with such sales in the period between January and October this year being 45 per cent. higher than in the same period of 1941 or 75.9 per cent. more than in this period of 1945.



THE QUEEN RANGE OIL BURNER

Oil stove convenience with a coal or wood range.

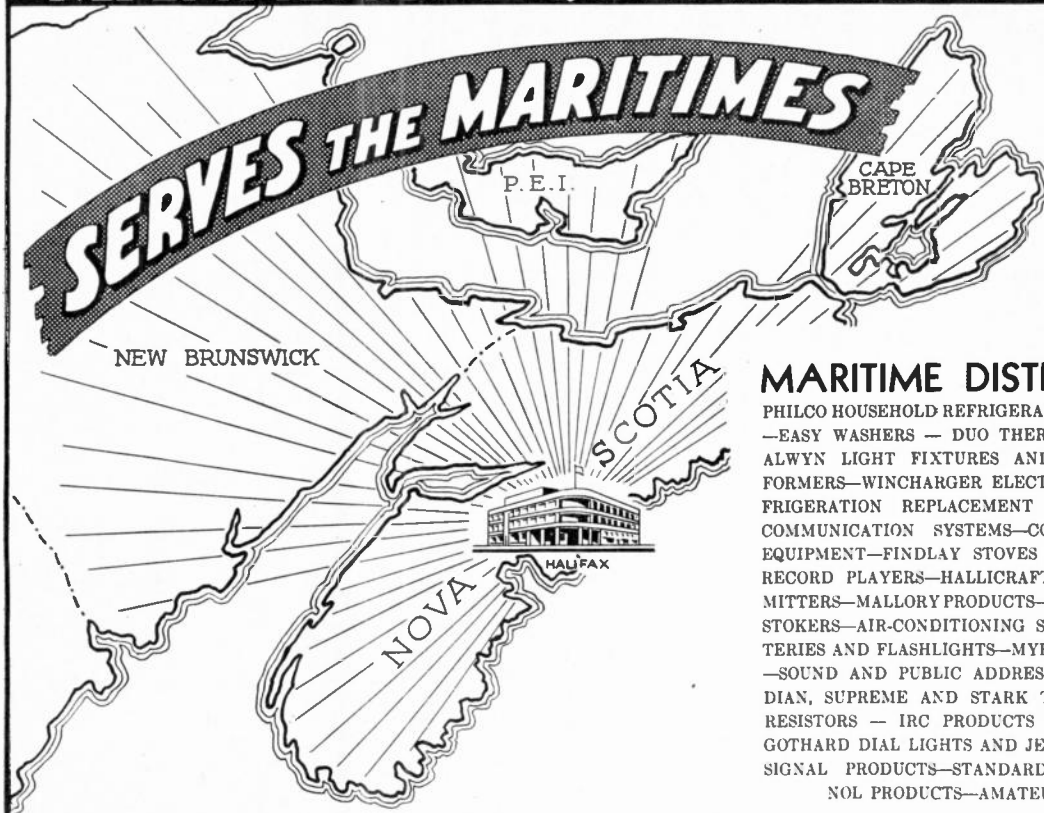
New Safety and Simplicity—Starts Instantly—Perfect Control.

Now the convenience of oil for cooking. The Queen unit is easily installed in any coal or wood stove. It operates with remarkable economy due to the tremendous volume of air used in the heating flame.

Dealers' Inquiries Invited

H. J. PARR & CO. - 69 Dundas Street - London, Ontario

MANNING EQUIPMENT LIMITED



MARITIME DISTRIBUTORS FOR:

PHILCO HOUSEHOLD REFRIGERATORS—MOTOROLA AUTO RADIO—EASY WASHERS — DUO THERM OIL BURNING HEATERS — ALWYN LIGHT FIXTURES AND LAMPS—HAMMOND TRANSFORMERS—WINCHARGER ELECTRIC PLANTS—RADIO AND REFRIGERATION REPLACEMENT PARTS—ELECTRO-VOX-INTER-COMMUNICATION SYSTEMS—COMMERCIAL REFRIGERATION EQUIPMENT—FINDLAY STOVES AND RANGES—PHONO MOTOR RECORD PLAYERS—HALLICRAFTERS RECEIVERS AND TRANSMITTERS—MALLORY PRODUCTS—UTAH PRODUCTS—AUTOMATIC STOKERS—AIR-CONDITIONING SYSTEMS—GENERAL DRY BATTERIES AND FLASHLIGHTS—MYERS ELECTRIC WATER SYSTEMS—SOUND AND PUBLIC ADDRESS SYSTEMS—TRIPLETT—CANADIAN, SUPREME AND STARK TEST EQUIPMENT—MARSLAND RESISTORS — IRC PRODUCTS — RECORDING EQUIPMENT—GOTHARD DIAL LIGHTS AND JEWELS—CENTRALAB PRODUCTS—SIGNAL PRODUCTS—STANDARD RADIO PRODUCTS—AMPHENOL PRODUCTS—AMATEUR RADIO EQUIPMENT.

UNITED SERVICE
BUILDING

100 SACKVILLE ST. • HALIFAX, CANADA

High Powered FM Station For Montreal

MONTREAL—According to an announcement issued by S. M. Finlayson, general manager of Canadian Marconi Company, owners and operators of Canada's first radio broadcasting station, CFCF, the Department of Transport has granted a license permitting the company to establish and operate in conjunction with

Station CFCF, the first commercial high-powered FM broadcasting station in Canada.

This new broadcasting station will be installed in the Sun Life Assurance Building in Montreal and the transmitting aerials will be erected more than four hundred feet above the city streets. The transmitting equipment for the station is the very latest Marconi design based on Major Armstrong's "wide swing" system and is being manufactured in the company's plant in the Town of Mount Royal.

The new station will operate on a frequency of 106.5 megacycles. It is expected that the necessary technical and construction features can be completed so that service will be commenced early in 1947.

The inauguration of this most modern broadcasting system will bring to Canada's metropolis not only the ultimate in realism of musical and tonal qualities, but also the great advantage of virtually noise-free reception at all times.

We Express Our Regrets

It has been drawn to our attention that the wording of an item which appeared in the October, 1946, issue of *Radio and Appliance Sales* concerning the resignation of Henry McCardle from the managing directorship of Electronic Devices Limited may have

created an adverse impression so far as Mr. McCardle is concerned. This was, of course, not the intention and if such is the case, we wish to express our regrets.

Philips House Opened in Montreal

(Continued from page 40)

ables the surgeon actually to "see" into nerve centres or muscles, observing a visual "picture" of their functioning on the screen of a cathode ray tube. At the same time, tiny electrical impulses generated in the muscle are amplified many thousands of times and made audible through a loudspeaker. By observation of the cathode ray "pictures" and listening to the sounds emanating from the speaker, doctors can accurately determine the exact site of the injury and measure the progress of recovery. Now in use in several leading hospitals, and in the armed services, the Electromyograph in many cases enables medical men to discharge patients in a relatively short time — as against the long months and even years of treatment frequently required heretofore to be certain of complete recovery.

As viewed by the many visitors at the opening ceremonies, Philips House represents the last word in modern design applied to busi-

ness premises. The exterior facade of the building is lit up at night by an impressive neon sign carrying the name "Philips" in red, gold and green and the world-renowned Philips trademark.

Entrance to the offices from the street doors is through a spacious lobby, paneled in light-coloured wood and decorated in simple, yet effectively modern style. The large general offices are keynoted by the same simplicity of decor, and functionally designed for efficiency of routine with special attention to providing excellent working conditions for employees. Indirect lighting, of the fluorescent type, is installed throughout and combines with the light tone of walls and ceilings to achieve a refreshing effect of airy spaciousness. Separate from the office quarters is a large showroom, specially designed for the exhibition and demonstration of electronic and other apparatus. Off the main showroom is a studio for the demonstration of radio products.

Officers of Philips Industries Limited include J. P. Pettigrew, managing director, and wartime Assistant Deputy Minister of the Department of Munitions and Supply; M. Bourbonniere, secretary-treasurer; M. S. Hartley, manager, Technical-Commercial Division; T. A. Lawrence, export manager, and F. C. Higgins, X-ray department manager.



S. M. FINLAYSON

QUALITY RADIO KITS

5-Tube AC-DC Superhet. 550-1750 kc.

Walnut Plastic Cabinet 9½" x 6" x 5".

5" Alnico PM Speaker

Matched I.F.'s, Loop and Oscillator Coils assure high gain reception.

All parts mounted for easy assembling.
Only first quality standard parts supplied.
Instructions and diagrams assure easy wiring.
Uses 50L6, 35Z5, 12SA7, 12SQ7, 12SK7.

LAURIER RADIO COMPANY

WHOLESALE DISTRIBUTORS

1078 LAURIER AVENUE WEST

OUTREMONT 8, QUE.

Telephone: CALumet 8037

This Month's Cover

This month our cover photograph shows a scene of interest to all our readers, whether they be engaged in radio manufacturing, jobbing, servicing or retailing — in Canada and elsewhere. The view shows a large section in the assembly and calibration department of Stark Electronic Instruments Limited, Toronto. From a humble beginning some 15 years ago this wholly Canadian organization has grown and its business expanded to world proportions in the manufacture of electronic test instruments and radio service equipment. The present plant is a section of the former John Inglis group of buildings and the 12 assembly lines shown are feeding a 100-foot calibration bench at the rear. It may be assumed that the volume made possible by foreign business is working out to the advantage of Canadian customers through reduced manufacturing costs and greater engineering and development facilities. A tribute to the aggressiveness and enterprise of Canadian industry, the Stark name is to-day recognized by radio men in practically every country in the world.

Frequency Modulation

(Continued from page 32)

The radio technician will need to brush up on the steeple jack's technique and that of proper and safe rooftop installations if he is to do a good and a safe job on installations of this kind. Manufacturers have fabricated excellent aerial kits with instructions for installation and it is up to us to familiarize ourselves with their products.

In localities where the signal is strong, "under-the-rug" antennas may be used. Such an antenna can be made from a piece of twin-line by soldering the ends and tapping it, as illustrated, with another piece of the line to feed the set.

Some receivers may have these folded dipoles built into the cabinet.

Service Associations

(Continued from page 33)

popular at that particular time. At the conclusion of Mr. McWhirter's very interesting talk the presentation and demonstration of the

Model C326 was given and enthusiastically received.

Mr. Ionson next gave a very interesting talk on the circuits of the new receivers, from a service technician's viewpoint, and created considerable interest during the question and answer period. These receivers were also displayed for the benefit of all present.

Dramatizing the Merchandise

(Continued from page 24)

soda fountains are also installed occasionally.

A large amount of newspaper space is regularly used even though appliances are scarce. This is to let prospects know the lines which the store features. Names of customers desiring appliances are taken, and the client is called as soon as the order arrives. One particular method of advertising favoured by Mr. Houston to push appliances, is cards used on the local buses. Measuring 11" by 23", a card can be put on every bus, for just \$12 a month in Chatham.

HAMMOND TRANSFORMERS

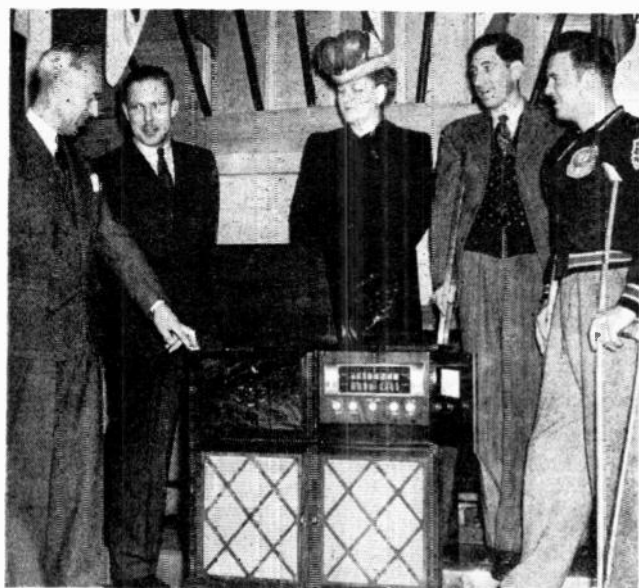
Canada's Only Complete Transformer Line!

EVERY RADIO SERVICEMAN
AND AMATEUR KNOWS -
HAMMOND
BEST OF ALL!



HAMMOND MANUFACTURING CO. LIMITED • GUELPH, ONTARIO, CANADA

General Motors Presents Radio-Phonograph to Patients of Shaughnessy Military Hospital



At a ceremony held recently in Vancouver, General Motors of Canada presented a new radio-phonograph to the patients of Shaughnessy Military Hospital in appreciation of their co-operation in the making of "Valiant Company," GM's technicolour movie produced for the 9th Victory Loan Campaign. The film has now been adapted to rehabilitation work.

When the picture was finished, GM promised the staff and patients that the first radio-phonograph produced in Canada by Canadian General Electric Co., Limited, would be sent to

them. The machine was delivered recently and placed in the Red Cross Lodge at the Hospital where it may be enjoyed by all walking and wheel chair cases.

Shown in the picture, left to right, are: Alex Eastwood, GM Zone Manager, Vancouver, who made the presentation; Brigadier W. G. Roaf, Regional Director, Department of Veterans Affairs; Mrs. Austin Taylor, Chairman of the Red Cross Lodge Committee, Vancouver, and David Maxwell and Brian Kerfoot, both of whom were bed patients at the time of filming.

Canadian Electronic Wholesalers Association (Eastern) Meetings

A meeting of the Montreal group of the Canadian Electronic Wholesalers Association (Eastern) was held at Moishe's Restaurant, Montreal, on December 3rd, representatives being present from Atlas Wholesale Radio Supply, Canadian Electrical Supply Company Limited, Commercial Radio Supplies, Excel Distributing Inc., Electronic Supply Ottawa Limited, Manis Radio & Electrical Supply, Payette & Company Limited and Radio Accessories Limited. S. Singer and R. Veillet acted as chairmen and secretary, respectively. P. Mahoney, of Electronic Supply Ottawa Limited, was welcomed as a new member. Reports were submitted by the chairmen of the various committees and all showed progress in their operations. Application for membership from Chas. Wackid, of Radio Television Laboratories, Ottawa, was approved. Arrangements were made for uniform closing over the Christmas and New Year's holiday season.

A second meeting of the Toronto group was held under the chairmanship of Andy Haise at the Prince George Hotel,

Toronto, on December 12th. Representatives were present from Alpha-Aracon Radio Company Limited, Canadian Electrical Supply Company Limited, Phono-Vision Distributing Company, Radio Trade Supply Company Limited, Wholesale Radio Company Limited and Anthony Foster & Sons Limited. The chairman welcomed Geo. Chow, of Phono-Vision Distributing Company, as a new member of the association. Further steps were taken towards the organization of the jobbers in this area and it was recommended that a permanent secretary be appointed. Discussion took place regarding the advantages and desirability of introducing trade identification cards to ensure discounts being allowed only to bona fide dealers, service technicians, hams, etc. It was finally agreed that an identification numeral system be adopted, the details to be worked out under the direction of the chairman.

Pass It Along

This issue of Radio and Appliance Sales contains material of interest to every member of your staff. Pass it along.

SAW THE SERVICE-MAN SAYS



I'VE GOT 250,000 CUSTOMERS

THERE are over 250,000 EASY Washers now in use in Canada. That's big business . . . and a real opportunity for sound, profitable service. Protect your reputation and your profits by stocking only genuine EASY parts. Highest quality . . . fair price . . . prompt service.

Order through your EASY distributor or direct from the factory.

I USE ONLY GENUINE EASY WASHING MACHINE PARTS

Order from your EASY Distributor
or direct from:
THE EASY WASHING MACHINE CO. LIMITED • TORONTO (10) ONTARIO



"VOMAX", the famous McMurdo Silver Meter—combining in one the functions of a multimeter, a volt-ohm-db-milliammeter, and an r.f. vacuum-tube voltmeter of laboratory instrument calibre—is now manufactured and distributed in Canada by:—

McMurdo Silver

DIVISION OF

General Radionics

LIMITED

465 Church Street - Toronto

ENQUIRIES FROM THE RADIO INDUSTRY INVITED

**QUICK
SERVICE**

PARTS · SUPPLIES · TOOLS for Refrigeration · Air Conditioning

JOBBER INQUIRIES WILL RE-
CEIVE IMMEDIATE ATTENTION



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MONTREAL, QUE.

Exclusive Representatives for:

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- Ansul Chemical Company
- Perfection Refrigeration Parts Co.
- Rotary Seal Company
- Electrimatic Water Valves
- Imperial Brass Mfg. Company
- Maurey Mfg. Corporation
- Mills Industries Inc.
- Cutler-Hammer Inc.



Appointed Merchandise Sales Representative

James V. (Jim) Molloy has been appointed merchandise sales representative in the Western area of the city of Montreal, according to an announcement by W. J. Collins, manager, Merchandise Sales, Canadian Marconi Company.



JAMES V. MOLLOY

Jim has been with Marconi for the past six years. Most of his service has been in their factory, where, in a supervisory capacity, he became well versed in all phases of manufacturing and factory operations. With this background of experience in the plant, and his genial personality, Mr. Molloy is well equipped to take over the important Montreal West End territory as a sales representative.

Coleman Appoints Regional Sales Managers

TORONTO — The Coleman Lamp and Stove Company, Limited, announces the establishment of three sales divisions in Canada—Western, Central and Eastern—and the appointment of three regional sales managers who assumed the responsibilities of their new positions on January 1, 1947.

Russell Fox, who has represented Coleman in the Prairie Provinces since 1939, becomes regional sales manager for all Western Canada with headquarters in Winnipeg.

Fred Holmes, for many years sales representative in Central and Northern Ontario, will be regional sales manager for the

entire province with headquarters in Toronto.

Gus Paillard, formerly Coleman representative in Quebec, becomes regional sales manager for Quebec and the Maritimes with headquarters in Montreal.

Form Bakelite Company (Canada) Limited

The "Bakelite Company (Canada) Limited" of 163 Dufferin Street, Toronto 1, Ontario, Canada, has just been formed. The new company, as of January 1st, 1947, takes over the activities of the "Bakelite Plastics Division of Carbide and Carbon Chemicals Limited" of the same address. Management and personnel of the company remain unchanged.

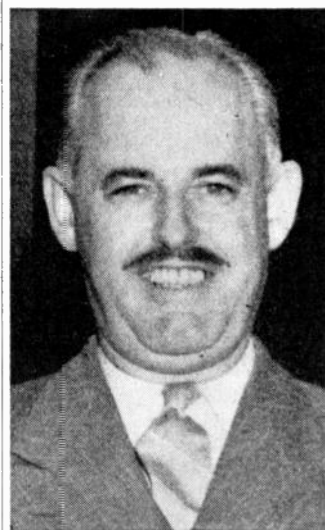
Out-of-Towners To Attend CEDA Meeting

A large number of out-of-town manufacturers have signified their intention to have representatives present in Toronto at the time of CEDA's annual meeting in March.

This is in conformity with the association's suggestion to enable out-of-town members to make contacts more easily.

It is hoped more manufacturers will signify their intention to co-operate.

Beatty Appointment



J. R. DICK

Beatty Bros. Ltd. announce the appointment of J. R. Dick as sales manager in charge of Eastern Ontario Appliance Division. Mr. Dick previously supervised the Northern Ontario Appliance Division.

FOR DEPENDABLE SERVICE IN THE WEST

Service is the acid test of superiority. No better service is available to the radio and electronic trade in Western Canada than that provided by our organization.

Distributors for the New Post-War ASTRA Radio in Northern Alberta

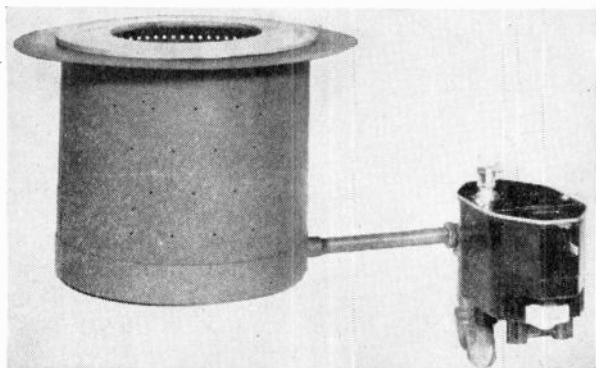
RADIO PARTS JOBBERS

Electronic Industries Limited

Manufacturers and Distributors of Special Electronic Equipment



Our New Home in the Electronics Building
8534 - 109th St. - Edmonton, Canada



NOPAR OIL BURNER KIT

For Installation in
COAL OR WOOD STOVES

Low Price—Easy Installation—Clean—Economical
Steady Heat—No Soot, Ashes, Dirt or Smoke.

No wicks or rings to burn out or replace.

DEALERS' INQUIRIES INVITED

NOPAR PRODUCTS

P.O. Box 694
LONDON - ONTARIO

Available Soon: NoPar Oil Burning Ranges and Space Heaters—Write For Details.

Commercial Equipment To Represent Rogers Majestic in Maritimes

"Starting with the first of the year, Rogers Majestic radio, home appliances and other items will be distributed throughout New Brunswick, Nova Scotia, and Prince

Edward Island by Commercial Equipment Limited, with head office in Saint John and branches in Halifax, Sydney and Moncton." This announcement has just been made by W. T. Burnham, general sales manager of Rogers Majestic Limited.

Commercial Equipment Limited is a well-established

wholesale house handling automotive equipment, garage supplies and household appliances; distributing through retail outlets in all three Maritime Provinces. The company is headed by D. H. Allan with sales under the control of R. E. Dowd, general sales manager. The newly created Radio and Appliance Division will be headed by R. L. Lennox.

"We are confident that our new distributors will do a real job for us," said Mr. Burnham, in commenting upon the appointment. "They are progressive and realize the great opportunities for expansion in their territory. Plans are already completed, by them, for a new building to be put up in Moncton on Foundry St., between Eaton's and the Windsor Hotel, with construction scheduled for early spring. This new building will have ample showroom space and this expansion is indicative of the spirit of Commercial Equipment Limited."

Western Sales Conference

The annual sales and merchandising conference of Taylor & Pearson Ltd., Edmonton, Lloydminster and Dawson Creek; Taylor Pearson and Carson, Ltd., Medicine Hat and Calgary; H. R.

Cavers and Hunter Elected Utilities Commissioners, City of St. Catharines

Radio and Appliance Sales extends congratulations to Fred R. Cavers, national president, Canadian Radio and Appliance Dealers Association, and Doug. Hunter, president of the Niagara District, who have been elected members of the Public Utilities Commission, St. Catharines, Ont. Their election will give them further opportunity to make a substantial contribution to the public welfare and to the industry of which they are a part. We join with our readers in offering them our best wishes.



W. T. Burnham, general sales manager, Rogers Majestic Ltd., looks up from agreement just concluded whereby Commercial Equipment Ltd., Saint John, N. B., became exclusive Rogers Majestic distributors for the three Maritime Provinces as of January 1. Left to right: R. D. Sutherland, Eastern Canada Manager, Rogers Majestic; R. E. Dowd, sales manager of Commercial Equipment; W. T. Burnham; D. H. Allan, president, Commercial Equipment.

Dealers and Servicemen!

SPECIALIZED WHOLESALE DISTRIBUTION SERVICE

- Philco Radio Tubes
- Philco Radio Batteries
- Philco Genuine Replacement Parts
- Philco Auto and Home Aerials
- Vertrod Home Aerials

- Philco Universal Replacement Parts
- Speakers, Volume Controls, Switches, etc.
- Shure Bros. Microphones and Pickups
- Standard Transformers
- Triplett Test Equipment

When in Winnipeg drop in and visit our newly designed modern radio parts section. Hundreds of hard-to-get items NOW AVAILABLE.

GREAT WEST ELECTRIC & RADIO COMPANY LIMITED

89 Princess Street

Phone 27371

Winnipeg, Man.



MAY YOU REACH NEW SALES RECORDS IN 1947

We at *Standard* are making plans which will help you achieve this goal. Shortly, we shall tell you about our new plant, now under construction, which will give you the *Standard* quality line in larger quantities than heretofore. In the meantime. . .

Standardize with

Standard

- ✓ Power Transformers
- ✓ Audio Transformers
- ✓ Filter Chokes
- ✓ Speaker Field Coils
- ✓ I.F. Transformers
- ✓ Solenoid Coils
- ✓ Special Purpose Coils
- ✓ Electric Fence Transformers
- ✓ Signal Transformers
- ✓ Chassis—Cadmium Plated



Current Literature

(Continued from page 45)

ments, has just been published by Burndy Engineering Co., Inc., New York 54, N.Y. The catalogue contains specifications of Burndy lugs, links and taps of both the clamp and indent types, covering the conductor range from No. 22 to 2000 Mcm; as well as ground connectors, flexible connectors, and connectors for all bus and power applications. Also included are specifications on Burndy "Hytools" and "Hypresses" used for installing "Hydent" connectors. Copies of this catalogue can be obtained by writing Canadian Line Materials, Toronto 13, Canada.

New Burndy Electrical Connector Catalogue

A new 64-page illustrated catalogue, containing complete specifications on all types of "Hydent" (one-piece indent type) electrical connectors for conductor sizes from No. 22 to 2000 Mcm, has just been issued by the Burndy Engineering Co., New York 54, N.Y. The catalogue includes complete engineering and application data on all types of terminals, links and "quick disconnect" connectors. Also included are the following specialized Hydent connectors . . . the "Hyseal" group which provides for quick sealing of the conductor against moisture penetration . . . coaxial and shielded cable connectors . . . pre-insulated connectors which eliminate need for extra insulation . . . and aluminum connectors which assure low-resistance connection on aluminum cables.

The complete line of Burndy installation tools also is described. Copies of the catalogue may be obtained by writing direct to Canadian Line Materials, Toronto 13, Canada.

Fred Neil Now President Edmonton A. R. T.

Fred Neil was elected president of the Edmonton Branch, Associated Radio Technicians of Alberta, at a meeting held in Edmonton on November 19. Twenty-eight members were present at the meeting.

Roy Cutlan was elected vice-president; Ike (J. M.) Ecklund, secretary; and George Tait, treasurer. Executive members are George Wade, Noel Ilac and Bill Cawston.

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The Lines You Can Sell . . . With Confidence



HOME PHONOGRAPH NEEDLES

Aeropoint Needles have proven their superiority. Unique in design, they have instant customer appeal. Expertly styled point-of-sale displays make them practically self-selling. Illustrated are three popular styles available for immediate delivery.



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No. 88—Exclusive plastic silencer. Electronium tip. Curved spring design. Up to 5,000 plays.

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No. 111—A high quality needle economically priced. Electronium tip; curved spring design. Up to 5,000 plays.

NET PRICE 81c.



No. 250

No. 250—The ultimate in permanent needles. Sapphire tip; curved spring design; stainless steel spring and shank. Up to 10,000 plays.

NET PRICE \$2.10

THE WATERMAN "POCKETSCOPE"

Small in Size . . . Light in Weight . . . Complete in Performance

A Pocket-size Oscilloscope, the Model S-10-A is a small, compact, light-weight instrument for the observation of repetitive electrical circuit phenomena. It is a complete cathode ray oscilloscope incorporating the cathode ray tube, vertical and horizontal amplifiers, linear time base oscillator, synchronization means and self-contained power supply.

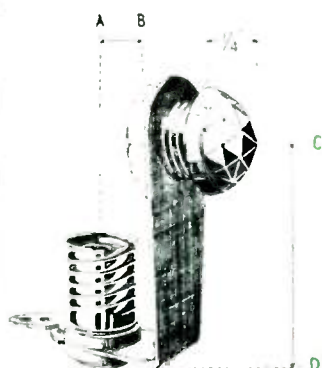
NET PRICE \$84.75



The "Pocketscope"

DRAKE PILOT LIGHT ASSEMBLIES

Made by the world's largest exclusive manufacturer of jewel light assemblies. Horizontal mounting types. Diamond cut (faceted) jewels or plain. Colours: amber, blue, crystal, green, ruby, white (milk white) and yellow. Finish: chrome, black, nickel and statuary bronze. Packed in individual boxes or in bulk with jewel, collar and nuts in bag. Special Jewels: SP—smooth, plain; SFA—smooth, frosted all over; SFB—smooth, frosted back. Various types for various mountings.



Drake Pilot Light
Assemblies

WELLER SOLDERING GUN

The new soldering principle of the Weller Speed Iron combined with the new transformer principle makes it an ideal tool for working where soldered joints are made in radio, electrical, electronic, telephone and telegraph work. It helps to speed and simplify test, repair, maintenance and service work in the shop, on the job or in the laboratory. Provides soldering heat in 5 seconds. Operates on 100 watts, 115 volts, 60 cycles.

NET PRICE \$16.95



**Saves Time . . .
Saves Money . . .
Easy to Use . . .**

We are Exclusive Canadian Factory Distributors for these and many other lines, which are backed by more than a Quarter-Century of Service to the Canadian trade. Stocked by Atlas jobbers—we will gladly refer you to the jobber in your territory.

ATLAS RADIO CORP., LTD.
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Listen on Bingsday

Hear Bing Crosby on Philco Radio Time,
his one and only radio program.
Coast to Coast on the Dominion Network,
Wednesday 10 P.M., EST; and 9 P.M., CST.
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Bing Crosby, star of Philco Radio Time,

enjoying the sensational Philco 706

The amazing new way to play records, invented by Philco. You just slide a record in and it plays automatically . . . no lid to lift, no tone arm to set, no bother with controls or needles.

An overnight sensation . . . the largest selling radio Phonograph in the world.

Now being profitably displayed by Philco Dealers throughout Canada.

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