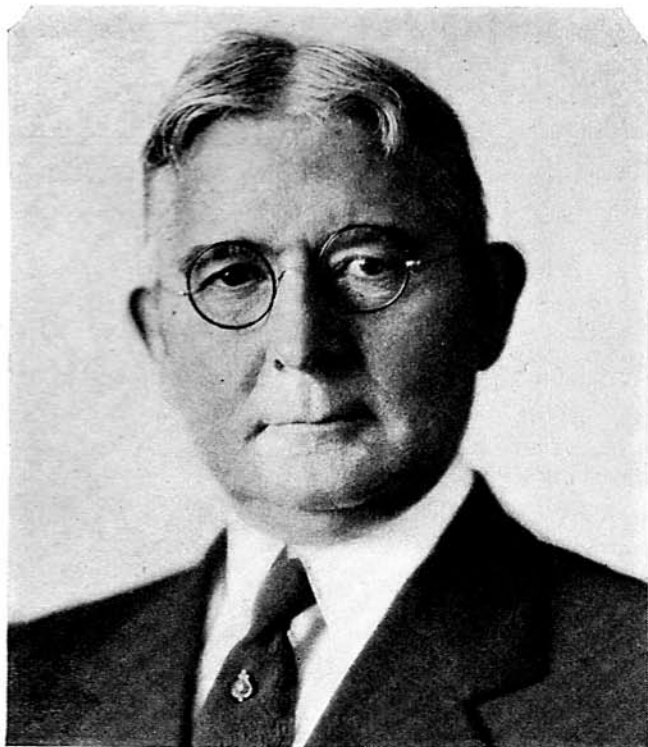


Is American

By Arthur H. Lynch

Canada's Radio Revolt



Gen. Charles Saltzman

BACK in 1920 when radio broadcasting was first introduced, the "problem" of who would ultimately pay for it was immediately recognized. Doctors, lawyers, communication magnates, editors, magazine and newspaper publishers, and many others, puzzled by the thought that, though this new medium was entirely worth while, it might be difficult to locate a sugar daddy who would keep it in a suitably luxurious fashion, drew up many proposals.

Some very bizarre prophecies were made and some very interesting conjectures were entertained by many of the political bigwigs because they recognized in radio a particularly strong weapon in carrying their story to their constituents.

In some circles there is a very rapidly growing tendency which indicates that there are some who consider our method of handling the broadcasting situation most unsatisfactory.

England has established a broadcasting policy which is completely different from ours and, although it may serve England quite well—and we have our doubts about that—it would not get to first base in America.

Canada has, up to the present time, been operating on a policy which in most respects is very similar to our own. But lately a group of influential Canadians has become interested in the project of establishing a Government-owned and operated system for broadcasting in Canada, similar to the English system and directly counter in principle to the system we employ. The entire analysis of the Canadian situation, prepared for us by Martin Codel, the representative of RADIO NEWS at Washington, D. C., gives us a picture of the proposed Canadian set-up.

Says—

"In England, broadcasting is controlled by one corporation. I have listened to British broadcasting. I think that the corporation gives the public what the corporation thinks the public ought to hear."

"Spontaneous, vigorous and bearing the endorsement of some of the best men and minds in Canada, is this movement for the reorganization and nationalization of the Canadian radio broadcasting structure launched by the newly formed Canadian Radio League. To American radio listeners, broadcasters and government officials it bears tremendous significance, for in some respects it represents a revolt against American broadcasting practices under what United States Senator Dill has aptly called 'Radio by the American Plan.'

"Ultimate success of the Canadian Radio League's campaign will mean the establishment on the North American continent of a somewhat modified counterpart of one of Europe's great broadcasting systems, the British Broadcasting Corporation. The plan contemplates government ownership and operation of the radio, pure and simple, though the Canadian government monopoly would be given the powers of a private enterprise and kept as free from political sway as is the British Broadcasting Corporation under its charter.

"Success of what the Ottawa Citizen calls 'Young Canada's Cause' will mean, moreover, that there will be established to the north of this country—but within tuning range of American receiving sets, since the basic Canadian stations must necessarily be of extremely high powers to serve the Dominion's widely scattered population—a system of broadcasting free of all advertising except the more refined forms that are undertaken, as are most of the programs on the American networks, by the leading national advertisers primarily for good-will purposes.

"The Canadian Radio League's plans do not contemplate eliminating advertising sponsorship, but minimizing it. Presumably, although the League's report does not say so, the new government broadcasting organization would be supported by such indirect advertising but also very largely by license fees on receiving sets, as in England.

The British Broadcasting Corporation, however, carries no advertising whatever. Canadians must now pay an annual receiver license fee of only \$1.

"Practices that have grown up under the American system are cited over and over again in the Canadian Radio League's pronouncement as 'horrible examples' to be avoided in re-ordering radio in the Dominion. And these Canadians resent the fact that 'American stations cover the whole of Canada' and that 'only three out of five Canadian families can hear Canadian programs.' Even the Canadian programs are unsatisfactory, for 'the programs of the best quality are few and the majority of them are mixtures of advertising announcements and phonograph records.' Referring as well to Canada's present 70 broadcasters as to the American influence, the report remarks:

"Canadian public opinion, so far as it may be influenced by the radio, is in the hands of irresponsible authorities, however public spirited, and is at the mercy of American chains.' This indictment is aimed primarily against Canada's own broadcasters and incidentally to those in the United States, but the Ottawa Citizen goes even further in expressing its fears of

Broadcasting Economically Sound?

Should we be taxed for radio, as they are in England and as they seem to wish to be in Canada, or should we continue to let revenue from advertising foot the bill?

the American radio invasion: 'Commercial interests in the United States are debasing this new gift of engineering science to the Hollywood level. . . . The Canadian radio field will be absorbed into the American orbit, just as surely as the motion picture field has been absorbed, unless there is national action through Parliament to hold the fort, during the experimental years ahead, under public ownership.'

"If any American believes that there is little of substance behind this radio revolt in Canada, let him glance at some of the names making up the council of the Canadian Radio League: Louis St. Laurent, president, Canadian Bar Association; Col. J. H. Woods and W. M. Birks, past presidents, Canadian Chamber of Commerce; Dr. W. Harvey Smith, president, British Medical Association; Tom Moore, president, Trades and Labor Congress of Canada; F. W. Wood, president, United Farmers of Canada and director of the Canadian Wheat Pool; Fred N. Southam, president, Southam Publishing Co.; Gen. Sir Arthur Currie, principal, McGill University; Dr. R. C. Wallace, president, University of Alberta and the Association of Canadian Clubs; the Rt. Rev. Archbishop Matheson, former Primate of all Canada, and nearly twice as many more persons equally prominent. As if their endorsements were not sufficient, the Canadian Radio League publishes a list showing that the leading national clubs and associations and several score leading Canadian newspapers are on record in support of a national system of broadcasting for the Dominion."

Is Canada Wrong?

We wonder just how familiar the gentlemen suggesting this radical departure are with actual conditions in the ether as they affect the average listener-in and how well they are qualified to act in a broad and impartial manner in this work. We fear that a large percentage of them may well be placed in that group of individuals who are amply supplied with this world's goods and who are imbued with a viewpoint which we believe to be extremely conservative. We wonder how many hours a day these gentlemen listen to broadcast programs, if they listen at all. Isn't it very likely that from their very stations in life we can assume that they are one with correspondingly wealthy

conservatives here who believe that there is no enjoyment to be had from a radio receiver because whatever good might come from it is overbalanced by the unwelcome and more or less blatant ballyhoo for someone's soap, lipstick, cigarette, flesh reducer, or what not?

There is much to be said for their position and we agree that a great many of the broadcast programs forced into the American homes would create a very much more friendly attitude toward their sponsors if the proportion of advertising-to-entertainment were not only materially reduced but the character of the advertising itself very completely altered.

Examples of good and poor types of advertising programs may be heard almost any night. Our contact with the listening public, particularly those who take their radio listening seriously, indicates that a perfectly delightful entertainment feature can be made to produce extremely bad will by the injection of advertising material which the audience itself believes to be in poor taste. This contact with the listener-in

also indicates very definitely that the old-fashioned bugaboo built around direct advertising need no longer be feared. Doubtless the average listener-in would very much rather hear a very brief but at the same time very well-placed piece of direct advertising than have forced on him the very thinly veiled, and generally most futile attempts at stage setting and transparent disguise designed to introduce air advertising by what radio script writers believe to be subtlety.

What They Do in England

In order that we may have a much more comprehensive idea of what broadcasting conditions are like abroad, so that we may not judge too harshly the efforts in this country, it is interesting to observe what is happening in England, where a system somewhat similar to that proposed for Canada has been in use for several years. The British Broadcasting Corporation is a broadcasting monopoly operated under a special Government charter. Every user of a radio receiver in England must pay an annual tax of two and a half dollars. The income derived from this is split between the Government, for relief of taxation, the (Continued on page 828)

Amos
'n'



Andy

What are the rights of broadcasters against theatres, dance halls, hotels, railroads who use their programs to attract the public for commercial reasons? Louis G. Caldwell, former general counsel for the Federal Radio Commission, cites the case of Amos 'n' Andy, whose popularity threatened the box offices of theatres and vaudeville houses until those resorts installed loud speakers and offered the noted black-face team as added attractions, advertising the fact. The advertiser who paid heavily for the program did not even have the satisfaction of receiving credit, Mr. Caldwell notes, for the theatres tuned out the advertising part of the program

Is American Broadcasting Economically Sound?

By Arthur H. Lynch

(Continued from page 779)

Post Office and the British Broadcasting Corporation; the largest proportion going to the last. The sum received by the British Broadcasting Corporation is used for the financing of the broadcasting stations, the executive organization necessary for their maintenance and the payment of regular broadcasting talent. The entire broadcasting situation in that country is controlled by a "board of governors"—a carefully chosen and comfortable collection of "public-spirited" people (incidentally quite well paid) who virtually leave nearly everything in the way of policy to the administrative chief, Sir John Reith, a man of dominating personality and intense views on certain subjects which some consider almost fanatical.

No advertising is permitted on a British Broadcasting Corporation program and as the particular gentleman in control is generally considered to be keenly interested in church movements of one kind or another, he is opposed to certain types of broadcasting on Sundays. As a matter of fact a typical Sunday broadcasting schedule is very illuminating to us in America, who, at almost any hour of that particular day would have our selection of practically any kind of broadcast entertainment, even up to a very late hour on Sunday night or, if we must be technical, Monday morning. Here we have a summary of what the English listener-in may expect from the English stations on this holy day.

No programs until 3 p.m. except on very special occasions.

3 to 4 p.m.—Bach Church Cantata (no alternative).

4 to 4.15—Service or "talk for the children."

4.15 to 5.30—Classical Music or Chamber Music Concert.

5.30 to 6—Bible Reading (no alternative).

6 to 8—Dead silence.

8 to 8.45—Church Service (no alternative).

8.45—Good Cause Appeal (no alternative).

8.50—News Bulletins (no alternative).

9 to 10.30—Light Classical Music (alternative).

10.30—Epilogue (short religious service).

10.50—Close-down.

Dance Music is Absolutely Prohibited on Sundays.

Just outside London there is a twin 50 kw. transmitter designed to give London two alternative programs of equal strength and contrasted in program matter. On Sundays, except for concerts in the afternoon and evening, the two programs will be identical or only alternative as regards the religious services.

As a consequence, during the silent period of 6 to 8 p.m. several European stations put on programs paid for by English firms, the programs being announced in English in addition to the local language.

The statement that no advertising is permitted "must be taken with a grain of salt, in very much the same way that it is generally supposed that the political party in power will not use local broadcasting stations to further its own political ends. To imagine for a minute that there is no advertising on English air programs is pure hallucination. Two examples will suffice to illustrate this point.

H. M. V. which is the English abbreviation for "His Master's Voice," an organization somewhat similar to the old Victor Phonograph Company in the United States, and the other leading record companies, supply the British Broadcasting Corporation with phonograph records which are incorporated as part of the broadcast programs; full announcements of the names, makers of the record and the actual catalogue number and label, often follow the reproduction itself. Of course this is not considered advertising because the various companies do not pay for it. But we know just how long that sort of thing went on in this country before the broadcasting stations began to demand a consideration from the record manufacturers.

A certain newspaper in England has several feature writers on its staff who appear before the microphone periodically and discuss in a very familiar fashion the same things that are discussed in their sections of the newspaper. Their identity is not concealed and the fact that they are associated in such and such capacities with such and such a newspaper is made equally clear. In the English sense this is not advertising but to do the same thing in this country it costs some of our national magazines and some of our newspapers a very tidy fortune. Single acts from plays are also broadcast with full acknowledgment.

So much for the broadcasting itself and in this connection it seems to us that a system of this kind controlled by a comparatively small group of individuals who may or may not have a particularly accurate viewpoint of the manner on which this important subject of public relations should be based, could be brought to a point, if it has not already been, where extremely unfair business practices might

result because of the friendliness of the control board with certain broadcasters and its possible unfriendliness to others. In other words, we see in this system the possibility for flagrant partisan abuses which we feel are materially minimized by the American system even though there may be some objection to some details in the latter.

The situation is ably summed up by General Charles Saltzman, chairman of the American Federal Radio Commission, as follows: "In England broadcasting is controlled by one corporation. I have listened to British broadcasting. I think that the corporation gives the public what the corporation thinks the public ought to hear."

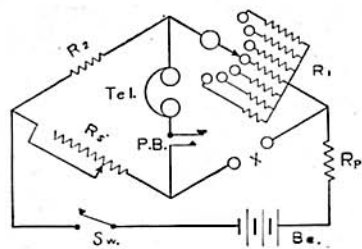
An interesting sidelight on the English situation may be drawn from the fact that certain progressive business houses in England have realized that some of the programs coming from France and other parts of the world are securing an increasing English audience. In certain instances some of these programs are considered to be better than the programs sent out from the English stations. This is particularly true during hours when people would normally like to have some radio entertainment provided by their local stations but find it is not forthcoming. Realizing the importance of this situation some English merchants have contracted for advertising time on the air with foreign stations whose programs reach England in a satisfactory fashion. As a matter of fact, a great many English listeners satisfy themselves with programs from the United States which they are able to receive on short waves. We do not believe it impossible or improbable that some adroit English advertiser, like Sir Thomas Lipton, would find it impractical to purchase time on the air with one of the American short-wave stations for the advertising value such a program would have in England. In direct contrast to this situation, it is doubtful that our own system for financing our broadcasting is so completely bad as some misinformed extremists are wont to have us believe.

Needless to say, an experiment of this nature in the United States would not enjoy the lingering death for which our noble experiment in temperance is now making us appear ridiculous in the eyes of most of the world.

In certain circles, particularly circles outside of the advertising profession itself, various attempts have been made to bring about advertising censorship in very much the same fashion that censorship of almost every other type has been suggested at one time or another. As a general thing, the individuals or groups be-

(Continued on page 840)

Build Your Own Wheatstone Bridge



As a result of many requests, we have developed a kit of specially-designed Super Akra-Ohm Resistors, which makes it possible to construct an inexpensive Wheatstone Bridge for measuring resistances from 1 ohm to 10 megohms.

We manufacture wire-wound resistors of any value from 0.01 to 10,000,000 ohms, having negligible inductance and distributed capacity and calibrated to an accuracy of 1%. Their use is highly recommended for Laboratory Standards, High Voltage Regulators, Telephone Equipment, Television Amplifiers, Grid and Plate Resistors, Electrical Apparatus, and Test Equipment.

Send today for our Bulletin No. 74-D, which describes this special kit and the construction of an inexpensive Wheatstone Bridge.



Super Akra-Ohm

Shallcross Mfg. Company

ELECTRICAL SPECIALTIES

700 PARKER AVENUE

Collingdale, Pa.



Accurate High-Resistance Wire-Wound Resistors

SHORT WAVE WITH YOUR PRESENT RADIO



"THE SUBMARINER"

Short wave reception from all parts of the world is enjoyed by many users of "Submariners."

No need to buy a special short wave receiver, as the "Submariner," attached to your receiver in a few seconds, will bring in reception for only a fraction of the cost.

"Submariners" are available designed for operation with each type of receiver. They are priced from \$17.50 to \$27.50, with fixed wave band of 19-50 meters, or interchangeable coils of 13-145 meters. The "J" feature, an exclusive "Submariner" achievement, enables you to get superior results with all of the newest receivers. The models JATV, 19-50 meters, at \$22.50, or the JIA7V, 13-145 meters, at \$27.50, have a tremendous wallow when attached to the

NEW SCREEN GRID SUPER-HETERODYNE receivers.

ORDER TO-DAY

Send postpaid upon receipt of price, or C. O. D. if \$1.00 accompaniments order. Foreign—Cash with order.

J-M-P MANUFACTURING CO., INC.

3417 Fond du Lac Ave. Milwaukee, Wis., U.S.A.

ALUMINUM BOX SHIELDS

Genuine "ALCOA" stock, silverplated finish, 50x65 \$1.89—Current size \$4.05, 10x67 Monitor size \$4.25, 5x55 Coil Shield (like picture on the left) \$1.00.

ANY SIZE TO ORDER

Coil Shields, Coil Hole Covers, Shielded Wire, Intermediate frequency coils 50c pair, .0005 Bakelite condenser 12-70-MFDD Hammarlund equalizer condenser 15c.

We specialize in parts exclusively. We can furnish everything described in this magazine. Give us a trial.

BLAN, the Radio Man, Inc.

89 Cortlandt Street, Box 3, New York City

Send for your
FREE
Copy of "RADIO TROUBLE FINDER"
See Inside Back Cover

Is American Broadcasting Economically Sound?

(Continued from page 828)

hind movements of this character have been of the same honest but misguided zealots blessed with a superficial knowledge of a particular subject combined with a complex for imposing their likes and dislikes upon the rest of us.

Most of them seem to forget the fact that we have radio censorship at present. In fact, radio programs are more completely censored than any other type of entertainment. In the final analysis, the success of any particular program feature sponsored by advertising depends upon the manner in which it is accepted by the listener. If it is pleasing, the audience will increase; if it is displeasing, the audience dwindles rapidly. As a general rule the success of advertising programs in this country is judged by the "box-office receipts." There are a great many instances where the phenomenal growth of certain business organizations can be traced directly to radio broadcasting. On the other hand, the selection of mediocre broadcast material by an advertising agency lacking in experience and in a realization of the critical viewpoint of the listener-in, have resulted in the expenditure of huge sums for the production of most unsatisfactory returns. We need no other form of censorship than the very formidable weapon found in the simple single tuning dial on the average radio receiver. The listener is absolute master.

The success of advertising by air depends in no small degree upon the announcer who introduces and acts as master of ceremonies for the program. There are some perfectly marvelous announcers, but there are many who irritate most of us almost beyond words. We find a very apt summation of these gentlemen in a recent copy of *The New Yorker*, which we quote for your edification and to which we subscribe most heartily:

"Somewhere in the past we have met radio announcers before—somewhere radio announcers came into our life, long before the radio. The sound of their voices touches a familiar chord in memory. We know what chord it is, too; radio announcers are the little boys of twenty years ago who used to delight their grammar-school teacher by reading 'with expression.' That's it. How well we remember them, the little sissies. Half the time they didn't know the words, but they read them with expression anyway. They are still doing it, still raising their voices on the last word of the sentence in the ecstasy of putting their personalities over with teacher. We could have knocked their little blocks off in those days. We still can, damn it. Give us that rock!"

A typical example of the manner in which a program costing thousands of dollars for a single hour can fall completely shy of its mark—and one instance should suffice, although infinitely more are available—is found in the reaction to the recent broadcast of a particularly popular dance orchestra used in connection with advertising. During the time that the band was playing, the music was so fine that an entire ballroom swayed to

its seductive rhythm. At the conclusion of one particularly good dance selection, the announcer broke it with an advertising harangue. The effect was instantaneous and unanimous. The entire ballroom, filled with people who move in reasonably fashionable social circles, became babel. Ladies and gentlemen in evening attire who never could be counted upon for such action were in the midst of a complete uproar until the advertising blurb was finished. With the first few strains of the next number the dancing was resumed. It is doubtful that more than a half dozen of the sixty or seventy people in the ballroom were able to hear anything the announcer said. Possibly advertising of this nature is effective, but we believe that such a claim would be a subject for considerable debate.

Moderation In Our Advertising

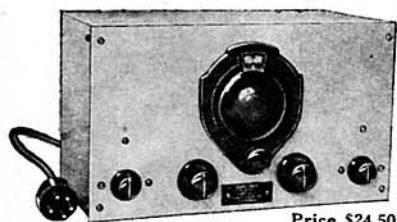
We agree that there is room for vast improvement in the manner of presenting advertising programs coupled with entertainment features. It seems to us the height of bad taste to break in on a series of operatic arias by some golden-voiced star of world-wide reputation with a ballyhoo for beds by an announcer whose voice is semi-effeminate and whose general demeanor before the microphone is completely devoid of personality and obviously affected. Instances of this character go a long way toward bringing about the criticism which is brought down so strongly upon the broadcasting stations themselves, the announcers and the advertisers who use them. It would seem that even a superficial study of mass psychology would penetrate the apparent mental void of the more self-satisfied and self-opinionated advertising folk who may be successful in other fields of advertising, but who are actually placed at a handicap in dealing with an ether advertising program.

In some instances there appears to be a fairly good reason for the continuance of advertising policies of this impolite nature in the return which can be shown when such programs first come on the air. But for a long period of time, when normally sound advertising effort should be pyramiding its result, we find that the following of such a policy results in dwindling audiences, especially when more acute advertising brains direct a competing program of much the same character but with the advertising in better taste on another chain during the same hour.

Many of the larger advertising agencies are now specializing on radio broadcasting and have established regular departments for the handling of air programs. As a rule, these departments are operated in much the same fashion followed in connection with stage presentations. There is no loss of advertising value and there is often a building of *entente cordiale* between the advertiser and the listener-in. In spite of the fact that many people believe that all advertising is obnoxious,

(Continued on page 844)

THE NEW "EXPLORER" SHORT WAVE



Price \$24.50

PLUGLESS POWER CONVERTER

A sensational advance in short wave reception

AUTOMATIC BAND SELECTION POWER RECEPTION

Plug-in coils entirely eliminated! Wave-length range 15 to 160 meters; automatic band selector changes wave-length bands by the turn of a knob in less than a second.

The EXPLORER itself uses two tubes, greatly amplifying distant signals. Used with your broadcast receiver it makes possible reception of stations all over the world with real loud-speaker volume.

With the EXPLORER you can obtain the best possible short-wave reception at lowest cost. Built on new principles of converter design, it is full sized, thoroughly shielded, and enclosed in a beautiful satin-finish aluminum cabinet. A special vernier tuning condenser with an effective ratio of 200 to 1 gives ease of tuning like a broadcast receiver's even with the most distant stations. Results obtained are unsurpassed by regular short-wave receivers, and the elimination of plug-in coils makes the EXPLORER the most convenient of all short-wave receiving apparatus.

Price \$24.50. Fully guaranteed. Models for every receiver, including all superheterodynes. Order now! Sent C. O. D. on receipt of \$2, or prepaid on receipt of price in full. State make and model of broadcast receiver, and whether A. C. or D. C. Foreign, price \$25.50, remit in full with order.

Send for Free Literature

RIM RADIO MFG. CO.

695 GRAND STREET BROOKLYN, N.Y., U.S.A.

Is American Broadcasting Economically Sound?

(Continued from page 840)

clever printed advertising is making many friends for itself, even among the intelligentsia.

Big Business

The National Broadcasting Company sells advertising time on approximately seventy-six of the country's six hundred odd stations. The time purchased by this corporation from the outside stations, which go to make up its chain for programs sponsored by advertisers, averages three hours per day. The remaining hours are sold by the stations themselves; sometimes at a higher rate than the NBC charges for the same station when it is used as part of its network.

The revenue derived by the NBC from advertisers for 1930 is approximately \$18,000,000. This figure includes the revenue from the NBC artists bureau.

The total receipts for the Columbia Broadcasting System from advertising, covering the same period, is approximately \$6,700,000. Approximately \$720,000 were spent for talent. This figure applies to the CBS network of 76 stations.

These programs have given employment to many thousands of script writers, employed by the advertising agencies which handle the programs for the advertisers, many artists (among whom there are some whose ability to perform in most satisfactory fashion before the microphone would not be reflected in anything like similar remuneration because of certain characteristics which would make their performance on the stage or the screen improbable and in some cases impossible), groups of studio managers, broadcasting station operators and electricians, to say nothing of the many thousands employed in the sale of time on the air to advertisers and advertising agencies.

The importance of this enterprise to the advertising fraternity becomes apparent, when we consider that 1-5 per cent. of all of the money spent for advertising programs goes into the coffers of the advertising agencies which arrange for placing the programs on the air. In passing, we must observe that the advertising agency which has a clear understanding of radio as an advertising medium and can intelligently apply all of the technique which present-day broadcasting facilities provide, is in a position to offer an advertising service which we know can be inestimably valuable to the advertiser.

Recorded Programs

Another particularly important, new, but rapidly growing phase of broadcast advertising, is found in the very marked development of electrical transcription which the last year has brought in the recording of entire programs on specially prepared records or on film. These programs can be put on at will and make the entire advertising service much more flexible. As a typical example of how important this type of broadcasting is be-

coming, a single large automobile company placed with one of the record-producing studios a single contract for its broadcasting requirements for ten weeks which totaled \$800,000. Other important advertising programs, involving even larger expenditures, are now being negotiated.

After consider the tremendous strides that have been made in the radio industry in this country during the short time it has been in existence, it seems to us that we are a little impatient in demanding perfection so soon. We feel, on the other hand, that in spite of some of its more flagrant incongruities, radio broadcasting, as it exists here today, is on a sound economic basis. Its ills are minor ones and the attempt to convince us that a major operation is necessary is ill-advised. It seems to us, also, that if the Canadian point of view in connection with present agitation for centralized control in Canada is likely to have any reflex on American thought, advertising agencies, advertisers and broadcasters would do well to utilize their own facilities in providing the American listener-in with a more complete picture of the advantages to be gained by a system such as ours and the disadvantages which might follow the introduction of any type of broadcasting monopoly, government guided or otherwise, which would interfere with its normal functioning and improvement. Our present system, shorn of its shortcomings, is much better.

"The Mighty Mite"

(Continued from page 819)

either of these adjustments not result in a definite peaking of the signal, it will be necessary to remove or add turns to the coils L4 or L5 until the peaking is obtained within the range of the small mica variable condensers. It might be mentioned at this time that the adjustments should be made with the tickler coil L6 out of the circuit, as otherwise change in tuning will be noted on the adjustment of R9. This is directly due to the change brought about in the tuned impedance circuit of V3. After the intermediates have been adjusted the tickler is again placed in the circuit. To produce regeneration it may be necessary to reverse the leads to the tickler coil. The number of turns given for L6, while of the proper value for the receiver made by the writer, may be found to vary with different receivers. In any event, the tickler coil should be of such size as to cause the detector V4 to nearly break into sustained oscillation when the resistance of R9 is all in the circuit.

Suggestions

Inasmuch as it is believed that this re-
(Continued on page 846)

A CURE for SICK RADIO that PAYS You a PROFIT

AMPERITE automatically corrects line voltage variations up and down between 100 and 140 volts, to exact requirements. Saves tubes, prevents overloading, improves tone, reduces free service.

A type for every radio, including midget models. Can be installed in five minutes without chassis changes.

Ask your dealer or write to Dept. RN-3, naming your set and model.

AMPERITE Corporation
561 BROADWAY, NEW YORK

AMPERITE
Self-Adjusting
LINE VOLTAGE CONTROL

ACME WIRE PRODUCTS

Parvolt Filter and By-Pass Condensers, Magnet Wire—All Insulations, Varnished Insulations, Coils.

THE ACME WIRE CO.
NEW HAVEN, CONN.