"Make This a Radio Christmas"

Suggestion Approved by Trading Circles

"A Trader" writes:—"The radio traders of New Zealand would be sadly lacking in vision if they did not take the hint published in the last issue of 'The N.Z. Radio Record' regarding the approaching opportunity of making this a 'Radio Xmas.' For myself I thank you sincerely for your suggestion, and congratulate the Editor on his foresight in prompting the traders to take such action, as I am sure it will mean a harvest to a trade which up till this year has languished badly. In previous years it was only the relatively few with a scientific turn of mind who turned to radio as a respite at the end of their day's toil. The absence of an up-to-date and ample broadcast service in New Zealand caused many a radio trader to close down. The real public, that is to say the average man or boy, had not touched radio, and it was utterly impossible to work up public interest, let alone enthusiasm, in broadcasting to attempt to storm the people with the slogan 'Make This a Radio Xmas.' It was impracticable before the advent of the Radio Broadcasting Company of New Zealand to supply a ghost of the programmes we now enjoy, when there was no direct substantial revenue going to the existing broadcast stations. You sold a receiving set at 50 guineas to a man with the idea that he was going to obtain a service commensurate with the cost of his set and his license fee. When the novelty wore off the purchaser's interest flagged, for, owing to the difference in time, even then, between Australia and New Zealand, he could obtain only a fragment of the programmes from the Australian stations before he had to close down owing to the lateness of the hour. You know nobody who has a set with loudspeaker range would endure headphones so that the members of his family would not have their sleep disturbed. Then, also, business men cannot sit up night after night till a late hour in order that they may obtain their entertainment from Australia.

"As for the farming community late nights are anathema, for early rising is a necessity to the farmer. A word of praise, however, is due to the pioneer broadcasters of this country for their plucky endeavours against the lack of substantial financial support. The sinews of broadcasting were very attenuated, but with the meagre funds at their disposal, the pioneers achieved wonders, although, of course, the thing could not last. Traders realised they were up against it, and it was, as I have previously stated, impossible to work up public enthusiasm.

"Now, all is changed. With an undeniably splendid broadcast service New Zealand now takes its proper place in the radio world. We have a liberal schedule, and it is not difficult to convince the man in the street that there is unending entertainment and interest, also instruction, to be derived from the ownership of a broadcast receiving set. The impossible, though admittedly wonderful distant-getting three-coil regenerative set, with its puzzling and elusive method of tuning has now been relegated to a place among the things that were. For this the radio trader should be truly thankful. Interminable servicing in order to train purchasers to operate the tricky three-coil set rendered radio selling an utterly losing game. A new era has opened up. The sets now available to the public possess none of the intricacies in tuning peculiar to the old three-coil outfit, and it may be truly said a little child could be taught to tune in on the present-day valve set with a few minutes' tuition.

"The news sessions, lectures, etc., of the present broadcast service are a source of tremendous interest to my many patrons scattered throughout my district, and it is my experience never to hear of one listener who has discarded his set through disappointment with what he is now getting out of it. On the contrary the general enthusiasm of the listeners with whom I come in contact has proved infectious among the uninitiated, and many a set is now being sold purely as the direct result of observing the pleasure derived by those who already own a set.

"Cordially, I thank you again for the proposal that we traders should 'Make This a Radio Xmas.' That slogan will find a conspicuous place in my windows. I shall do everything possible to prove to the public that my radio goods possess the power to bring enjoyment through the air in a way that will open up a new life of wonder, interest and entertainment. There is no reason why two-thirds of the homes in New Zealand should not have a radio set. It is going to become more indispensable than the ubiquitous piano or gramophone. The news of the world, talks of interest, an unending variety of music, recitations, are what radio offers, and therefore what other household chattel can compete with it? Pardon the length of this letter, but my enthusiasm has taken charge of my pen. At all events if the trade lacks enthusiasm how can he expect to instil it into others? The good folk in my district will have every inducement to 'Make this a Radio Xmas'."

THE PATENT TANGLE

WHAT WILL THE END BE?

POOLING SUGGESTED.

An article with a special appeal to New Zealand listeners, in view of the prospective position arising here in relation to patents, appeared in a recent issue of "Radio Retailing":—

"So far," it said, "in the neighbourhood of 5600 patents have been taken out in America on radio apparatus. Obviously so great a number of patents inescapably involves the radio industry in a maze of embarrassing entanglements. For the mass of claims overlap, conflict, and infringe each other like a heap of jack straws, until no man can see the way out, save through an interminable litigation that, if not avoided, will inflict partial paralysis upon the progress of the radio industry for years to come.

"Therefore, the subject of cross-licensing of patents is drawing steadily to the front. The Nema Radio Division is studying it. The R.M.A. has a committee at work. It is the topic of discussion everywhere. And the discussion is impelled by a gathering storm of patent litigation that is already beginning to whip the trade relations of a rapidly increasing number of radio manufacturers and jobbers and dealers into a state of pandemonium.

"Cross-licensing of patents at first thought appears a ponderous problem. As a matter of fact it is utterly simple, as witness the experience of the automotive industry, in which there is a wealth of guidance, if the radio man will but consult it. Patent litigation followed the same devastating course there, also, until the manufacturers of automobiles had wound each other up into a sweating, struggling mass bound round with the red-tape judicial decrees and inhibitions. Reason and leadership finally conquered, and these strangling patent restrictions were all thrown into a pot, free for use by anyone who joined the pool and paid the royalties to the owner of the patent that he used.

"As a result it is conceded that there are to-day probably twice as many cars at work on double the mileage of hard roads as could have been possible with everybody's patent obstructing everybody else's. And the automotive industry is ten years ahead.

"Cross-licensing is simply a business arrangement between a group of manufacturers to do away with litigation over patents, and permit its members to manufacture goods for the market, rather than try law suits against each other. It will entail a frank decision as to whether the executives of the radio industry are to devote their best hours and energies and intellects to the development and marketing of radio equipment, or to conduct the incessant offensive and defensive warfare among themselves. For in the present overburdened condition of our Courts the original trial in a patent suit is not called inside of two years, and from four to seven years of planning and prosecution elapse before the possibilities of legal action are exhausted.

"What price law suits?

"Naturally, in the early stages of the discussion of cross-licensing in any industry, there is always an apparent split between the interests of large and small manufacturers. But experience has shown that the cost of patent sharing is less than the cost of patent litigation. And the large company that contributes a large proportion of patents is more than compensated by its larger participation in the increased progress and prosperity of the industry, and by its larger relief from the sapping burden of litigation expense.

"And so it will be in the radio industry, when the large and the small sit down together to accept joint responsibility for protecting the public against this growing artificial and uneconomic tax. For the high cost of patent suits will be super-imposed on the price of radio equipment unless something is soon done about it."

The first radio valve, which was invented in 1904 by Professor Fleming, an Englishman, possessed only a filament and a plate. This was improved upon by Dr. Lee De Forest, an American, in 1907, who added the grid to the valve. This improved valve has remained to this day in practically its original form.

In testing a wet battery it is decidedly more reliable to employ a hydrometer instead of a voltmeter. A cell may show a high voltage when it is more than half discharged.

Mr. Edward F. Spanner says that mammoth airships designed for world communications, have no commercial future. In fact, the little future they have seems, at the moment, to be all in the air.

THE BUGBEAR—STATIC

VARIOUS THEORIES.

Many theories have been advanced to explain the cause of static, and it is probable that a variety of different factors contribute to this annoying interference with wireless communication. Thunderstorms undoubtedly play their part, and electrical discharges in the atmosphere are certainly one of the chief causes of the trouble in summer. An interesting suggestion which has been made to account for some of the trouble is that it is sometimes caused by meteorites entering the earth's atmosphere. Meteorites are masses of material, usually metal, of varying sizes, which wander at high speeds through space. Occasionally—that is, in proportion to the number of these bodies which are free in space—one will strike the earth's atmosphere, and the intense heat generated by the friction as it rushes through the upper layers of the atmosphere heats the outer surface of the body to white heat, causing the "shooting stars" seen in the night sky. It is estimated that tens of thousands of these visitors strike the earth's atmosphere daily, and the larger ones are believed on occasions to produce some of the static which is heard. Electrical disturbances in the sun are also said to cause trouble sometimes. Indeed, mysterious noises which wireless operators once believed to be signals from other planets were later considered to be caused by disturbances in the sun.

To Minimise Effect.

Although the interference caused by static cannot be entirely eliminated from a receiver, its effects can be considerably reduced. The fortunate possessor of a superheterodyne receiver or similar supersensitive set is in the best possible position to combat the nuisance, because he can use a loop aerial for reception. When the loop is pointed directly at the desired station it reduces interference to a minimum, because only the signals coming in one direction will affect it strongly. Next to using a directive loop for reception, the best way to reduce the nuisance caused by static is to reduce signal strength to the set. It is found that for a given intensity ratio between a signal and static the interference which the static causes is least when the set is so adjusted that signals are as weak as it is possible to make them without causing discomfort to listeners. Signals can be reduced in a variety of ways. The easiest is to use a plug and jack arrangement, by which one or two valves in the receiver can be taken out of use. If this equipment is not included in the set the filaments of the valves can be turned down until the signals begin to weaken. Another method which is often used is to employ a very small aerial for reception when static is bad. This arrangement, in addition to giving the desired general strength reduction, appears often to possess the further advantage of being less responsive to static, in proportion to the signal, than is a large aerial.