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TELEVISION'S FUTURE

Sir Ernest Fisk Is Confident

MAN who will be closely connected with the rise of a new, and in a special sense spectacular, industry in England after the war, passed through New Zealand the other day - Sir Ernest Fisk, the former head of Amalgamated Wireless of Australasia Ltd., who is on his way to England to become managing director of E.M.I. (Electric and Musical Industries Ltd.), the biggest firm developing television in Britain.

Sir Ernest Fisk arrived in Australia from England 35 years ago as a Marconi demonstrator, when radio was for most people merely a new scientific wonder, and not a part of their everyday life. He is on his way to England now when television is in much the same state-though of course wealthy people in New York and London have actually used it in their homes-and one of his jobs will be to see that television grows up in far less time than it took radio to go from cats-whisker and earphones to all-wave sets and "magic eyes." Because the war years have caused the technical side of television to develop at a tremendous pace, and because the public state of mind has been prepared for television as a form of entertainment by radio and film, Sir Ernest Fisk will probably see in the next dozen years rapid developments in television that are the equivalent of the things he has seen taking about 40 years to happen in vision-less radio.

Television on Armistice Day?

In an interview he gave The Listener the day after he arrived in Wellington, Sir Ernest talked about some of the theoretical possibilities of the industry he is entering. But television is not all a matter of theoretical possibilities. Visual programmes were actually being broadcast in London before the war, but transmission ceased the day the war began, and Sir Ernest thinks they may even start again the day the war ends.

"On what basis they will resume I don't know, but I presume where they left off. That is to say on a frequency of about 48 megacycles and four-hundred-and-something lines to the frame. Then as soon as possible I should imagine there'd be a parallel service set up of higher definition, which would in time outmode and replace the present system."

"Will England have this Frequency Modulation' type of broadcasting that the Americans are hearing so much about?"

"I don't think countries outside America will bother very much with F.M. You have to go to all the expense of television, and put up with all its limitations, and you get more faithful reproduction of music—but that is all. I feel that if you're going to go as far as that you might as well go a little way further and add the visual part. Then of course colour will be possible some day, and three-dimensional portrayal. But those are both luxuries, and I expect they will be as slow to follow black-and-white as they have been in the films. Television was ready for general use before the war; the only problem that remains now is to discover what kind of programme can be transmitted."

"There is no problem about coverage. Theoretically there is no reason why one programme could not be simultaneously received in London, Moscow, Shanghai, New York, Buenos Aires, and Johannesburg. All the main continents could be linked up."

"Then the problem of distance has been overcome."

"Yes, in this way, that a chain of automatic repeaters all over the worldreceiving-sets and transmitters side by side, operating so as to pick up the signal and pass it on-could, theoretically, be set up all over the world. They merely have to be within visual range of one another. So you could go from London to Dover, across to France, and thence from one hilltop to another right across Europe; over the Urals to Russia, from Spain down into Africa; across the Behring Straits from Russia to Alaska and down into Canada and the States, and from there through Central America down to South America. The only large places that couldn't be reached very well would be Australia and New Zealand. That's theoretically possible, mind you. Obviously the real problem would be the political one. I'm not predicting that it will happen.

"Anyway, even if you can't see things happening in London at the very moment that they are happening, airmails will enable you to see them very shortly afterwards. Complete television programmes will probably be flown right out to New Zealand within a few days, and New Zealand itself is geographically well suited for television—with all these high points you could easily relay one programme to all the main centres. An automatic repeater can be left to run on its own for quite a long time-as far as I know there's no reason why you shouldn't have one on the top of Mt. Egmont-you can see Mt. Egmont from the Wellington hills on a clear day, can't you? You simply pick up the signal on a directional beam, and send it on on a directional beam, and when it reaches an audience—a centre of population-you radiate it in the ordinary way."

Telephone and Telegraph

"What about ordinary communications? What will the new discoveries do in that field?" we asked.

"Well, it's obvious that plans are under way to reorganise the whole communications system of the Empire. I think it's safe to say that the countries of the Empire will have a service at all hours as good as that within the United States. I know it can be done because I designed a scheme for it myself."

"What will that mean to the ordinary New Zealander?"

"To the ordinary New Zealander pro-bably not a great deal, unless he happens to want to put a trunk call through to Fiji, or London, or Capetown. But one thing that might become generally used is the transmission of pictures. If a man wants to send a photo of the new baby to his mother-in-law in Ontagio or somewhere in the Empire, he could have it sent very quickly by radio. On the other hand it will mean a good deal to the ordinary New Zealander when a full-

(continued on next page)