Future of Radio

(Continued from front page.)

Further Developments.

ON October 20, 1915, for the first time in history, a man in America telephoned to another in the Eiffel Tower in Paris. From then onwards, the radio telephone has been perfected with almost startling rapidity; 1927 saw the institution of a regular service between America and England, and this has been now extended and Sydney has spoken to London. In other pages of this issue we read of the conversation between a boy at death's door and his mother in London.

Radio is being applied to almost undreamed-of developments, and it is not an exaggeration to say that the commercial life of to-day would be impossible without radio in any of its allied forms.

Two problems have confronted radio throughout its whole history—static and fading. They are the same to-day as they were when the first message was transmitted 30 years ago. Static eliminators have been devised, but none have been entirely successful. Wonderful stories have been built around some of these instruments, but in common all have reduced the strength of the signals as well as the static. Underground antenna, loop antenna, patent antenna have all shown that they were more or less insufficient to cope with the problem. In saying that static will in all probability never be eliminated Edison has come somewhat near the truth—but it will be overcome.

When wireless first came into being tremendous power was necessary at the transmitting end. With the advent of the valve it was found possible to reduce the power of the input very considerably, yet output was strengthened. These transmitting valves are being improved very rapidly, they are becoming smaller in dimensions and more powerful. In support of this Mr. Smith handed around a transmitting valve of large dimensions, remarking that this was capable of delivering an output of about 500 watts. Against this the modern water-cooled valve of the same dimensions is capable of an output of 5000 watts, and even more, and this marks the progress of only ten years.

Static is not noticed on the local station because of the strength of its output. With the increasing strength of the stations it will some day be possible to receive these at the same strength as the local, and then, and not till then, will static be overcome.

Fading is a different problem. Its exact significance is not properly understood, though the Heaviside layer theory seems very feasible. Fading is receiving a great amount of attention at the present. Among other things, the Byrd expedition is investigating this phenomenon, and it is possible that this will also be overcome. Again, the increasing power of the stations will bear forcibly on this.

Radio of the Future.

WITH the rapid development of this science, the future indeed is very promising. As far as the receiver is concerned, it will no doubt remain all electric until something more powerful than this is discovered. Perhaps it will be rendered obsolete with, say, the harnessing of the disintegrating atom.

Each season has seen fresh developments in the receiver, though none revolutionary. The triode, the four-electrode, the pentode, the screen-grid, the A.C. triode, the A.C. four electrode, have each in turn found their way into our receivers without rendering them out of date. To-day the fashion is the A.C. valve; next season will see the introduction of the A.C. screen grid, a valve with a possible amplification factor of 300. And this valve can be easily fitted to any existing receiver.

The set of the future is not difficult to picture. One valve, combining tone quality and power, one control, and within the reach of every one. Yet this is future, only yet in the "imagination stage."

The possibilities of radio vision—seeing, talking to one's friends thousands of miles away will be commonplace. With the development of radio and aviation, space and time are being annihilated. Individual movement is being reduced to a minimum.

What of war? The horrors of the last war, when radio and aviation were in their infancy, were beyond description. Imagine a calamity with these sciences developed to present-day standards and, more important, the possibility of their development in the case of need. Wireless will render war impossible, impossible because of its terrorism.

The possibilities are without bounds, the future is still a closed book to us, and perhaps we should be thankful for this and say with Butler:

"You have shown us yesterday, with to-day we live, but, please God, keep down the veil that separates us from to-morrow."

"Delivering the Goods"

Fine Tribute to Company's Service

FEELING that it was his duty to express his appreciation of Mr. H. Cottrell's recent talk on the gannets of Cape Kidnappers, Mr. R. C. O'Connor, of the Te Aro Book Depot, Courtenay Place, Wellington, recently wrote to the Broadcasting Company. In so doing, he made reference to the broadcasting service in general. Specialising as he does in wireless literature, with customers throughout New Zealand, the Te Aro Book Depot is a rendezvous for most of the Wellington radio fans, so Mr. O'Connor's remarks are particularly interesting.

In the course of his letter to the general manager of the Broadcasting Company, he says:

"I wish to express to your company my heartfelt thanks for the way you arise to every special occasion. I bear in mind the All Blacks in South Africa, their recent tour in Australia, the Kingsford Smith event, and others too numerous to mention. It is just great, and you have my family's and my own sincere thanks for your initiative and great service. Radio has become as important in our household as the morning drop of milk. We would be lost without either

"Many an argument I have had with wireless customers in the past about the programmes put over. I counselled patience, even although their license fee was but a penny a day. I am pleased to say, however, that I seldom now ever hear a complaint about 2YA stuff—indeed, many valve users have assured me of late that 2YA is about as good as the best in their experience, and I pass it on for what you may consider it is worth.

"Possibly the Radio Broadcasting Company may still be getting a kick or two from inconsiderate licensees who do not know your colossal task, and this humble testimony from a listener-in of long standing will not be amiss.

"Your company has our grateful thanks for the great pleasure you give us in our home, and we wish you continued growth and success. Personally, I am doing missionary work on every possible occasion, and your company can count on me as being ready to argue the point about your delivering the goods."