

words per minute, so that when the four keyboards are being worked at their full capacity 160 words per minute are passing from Wellington to Auckland. At the Auckland end four senders are similarly engaged, so that a total of 320 words per minute are being transmitted over one telegraph line when the circuit is fully loaded. Each pair of operators—that is, a sender at Wellington and a corresponding receiver at Auckland—work independently of the others; they constitute in effect a duplex of their own.

"There are other high-speed telegraph systems, but few have the flexibility of this multiplex system I am briefly describing. By means of an instrument termed a 'repeater,' it is possible to pick up the signals formed by any particular operator at the Auckland end and repeat them into any telegraph line in this office served by the same machine-printing apparatus. For example, it is possible to repeat the Auckland signals to Christchurch, to Dunedin, to Napier, or to Wanganui; as a matter of fact, such re-transmissions are of everyday occurrence.

"Another striking illustration of the flexibility of the system is seen in an arrangement whereby one operator can send simultaneously to a number of stations. As I speak an operator here is perforating simultaneously to Auckland, Christchurch, and Dunedin, Press news messages for the morning newspapers, and, if occasion arose, Wanganui and Napier could also be served at the same time." [Listeners then heard the characteristic sounds of the keyboard perforator, the transmitter, and the printer.] "Listeners will be interested to learn that one of the most important instruments associated with this machine-printing system was the invention of Donald Murray, a New Zealander. Mr. Murray was originally a newspaper man, and the linotype machine used in newspaper offices for the setting up of type gave him the idea of attempting to 'set type by telegraph,' as he put it. He succeeded in his object, and gained a world-wide reputation in telegraph circles."

"The microphone is now being moved to another part of the room," continued the announcer. "A number of pneumatic tubes terminate at this point; the collecting and distributing centre. Messages from the counter branch and from other parts of the building are received here through the tubes. The messages are enclosed in small fibre carriers, being held in position inside by means of a steel spring. Nearby is another tube running under Grey Street, through which passes cable traffic between the Eastern Telegraph Company's office in Nathan's building in Grey Street some 70 or 80 yards away from this room. Cable messages

from and to various parts of the world are received and dispatched from this point. The cable, which is terminated in Nathan's Building, is connected direct to Sydney, the landing-place in Australia being at Bondi, the famous Sydney beach, of which no doubt you have all heard. At the New Zealand end, the landing point is at Titahi Bay, from where the cable is carried in a trench to Wellington.

"In this room (the nerve centre of the telegraph system of New Zealand) are many other interesting instruments, but my time is up, and we are now returning to the studio to continue the concert programme.

"Good evening."

Arbitration Proceedings

Award Not Yet Made

THE arbitration proceedings to determine the figure to be paid to the Radio Broadcasting Company for its assets are proving very protracted. His Honour Mr. Justice Blair was accepted as arbitrator, and after a preliminary visit to each of the four centres, he embarked upon the hearing of evidence in Wellington. This has been proceeding now for over two weeks, but finality is almost in sight. Thereafter it will be for the judge to sift the evidence and reach his determination. The award may possibly be made in the coming week.

Soviet Radio Plans Comprehensive System

SOVIET Russia is to have its own Radio City in Moscow by 1933. It will be known as Radio Centre, and, besides being a centre of scientific and experimental work, it will be the focal point for the Soviet Union's expanding broadcasting and shortwave systems.

The Supreme Council of National Economy is to build three or more 100 kilowatt stations during the next year at Kiev, Minsk and Sverdlovsk, and fourteen stations at various points of 10 kilowatts power each. These will supplement and in some instances replace existing services that are regarded as inadequate. Moscow already has its Komintern station, rated at 100 kilowatts, which with the similar-powered station in Rome and the 160 kilowatt giant in Warsaw, represents the highest powered broadcasting being done on a regular schedule in the world to-day.

Wireless Phone Tapped

Unusual Case of Eavesdropping

THE possibility that hundreds or even thousands of owners of wireless sets are in possession of secrets which have passed over the trans-oceanic telephone has been disclosed by a London listener.

He is able to pick up messages on a standard three-valve receiving set fitted with a shortwave adapter such as can be bought in any wireless shop for 30/-.

Recently the "Sunday Express" spoke to Mr. Kaye Don at Buenos Aires by telephone when he made an attempt on the speedboat record.

Within 32 minutes of the time of booking the call Mr. Kaye Don's full story, told by himself, was in the office of the "Sunday Express." Thirty minutes later an amateur wireless enthusiast telephoned to the "Sunday Express" and informed the editor that he had overheard the conversation.

He added that he heard Mr. Kaye Don speaking some minutes later to one of Lord Wakefield's representatives in England, informing him that he had given his personal account to the "Sunday Express," and requesting that this newspaper should be supplied with any other details they required.

Shortly afterward Lord Wakefield's representative telephoned to the "Sunday Express" offering further details. He expressed his astonishment on being informed that his conversation with Buenos Aires had been overheard.

The facts were communicated to an official of the London Telephone Service, who said: "If you tell us who the man is we will report the matter to the secretary of the G.P.O. This is a very serious matter, and we shall, in all probability, prosecute."

The listener, Mr. Alan Dilnot, of Dorset Road, Wimbledon, gave permission for his identity to be revealed.

"In the interests of all who use the wireless telephone service I am perfectly willing to be prosecuted in the hope that the 'test case' will ultimately result in an end being put to eavesdropping," said Mr. Dilnot to a representative of the "Sunday Express." Mr. Dilnot was interviewed by post office officials, who warned him that by conveying details of the conversation he overheard he rendered himself liable to heavy penalties under the Wireless Telegraph Act.

Full details of Mr. Dilnot's eavesdropping have now been placed before the legal advisers to the Post Office to decide whether he is to be prosecuted. If this course is taken it will be the first prosecution of its kind.

"I have listened to a number of con-

"Smith Family"

Scheme Under Way

A DECISION to establish the "Smith Family" charity scheme as a permanent organisation in Wellington was made at a representative meeting of citizens on Friday. The Mayor, Mr. T. C. A. Hislop, presided.

In outlining the assistance given last Christmas when the scheme was operated in connection with radio station 22W, Mr. Hislop said the "Smith Family" scheme would not encroach on the work of existing charitable organisations. It was proposed to establish a "Smith Family" with a permanent secretary and an executive committee elected by members who would pay a subscription of £1/1/- a year. It was hoped that there would also be associated with the "Family" a large number of "Good Fellows" who would pay no subscription but who would give assistance in various ways.

Another speaker said the administrative expenses would be small. Hamilton Nimmo and Sons, Ltd., had offered a floor free of charge, and the only paid official would be a clerk to deal with the correspondence. It was proposed to form a "Young Smiths'" organisation among school children.

Appreciation of the "Smith Family" scheme was voiced by Mr. J. I. Goldsmith, chairman of the Citizens' Unemployment Relief Committee.

A motion formally constituting the organisation was carried. The Mayor was elected vice-president. It is hoped that the Governor-General, Lord Bledisloe, will accept office as patron, and that the Prime Minister, Rt. Hon. G. W. Forbes, will act as president. The other officers will remain anonymous in accordance with the original spirit of the "Smith Family" idea.

versations over the wireless telephone," added Mr. Dilnot.

"On the same night that I intercepted Mr. Kaye Don's message to the "Sunday Express" I heard a member of a London firm talking to his mother.

"On another occasion I listened to a man who wanted to know about a secret marriage which had taken place in Paris."

A Post Office official said to a representative of the "Sunday Express": "We are taking a very serious view of the matter. We admit that conversations between London and Buenos Aires can be picked up by owners of wireless sets."

RADIO SERVICEMAN WANTED

LARGEST radio firm in main town in the Wellington Radio District desires the services of an expert Radio Serviceman, capable of doing all classes of repairs and testing of all electric receivers, with the aid of modern service instruments. (No amateurs need apply.) Apply with qualifications for further particulars to—

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