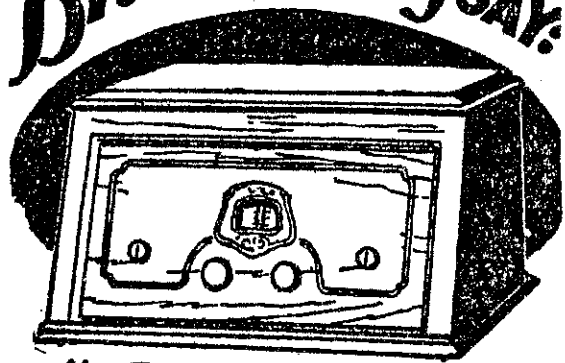


# 79 STATIONS on a 6-Valve BREMER-TULLY

28 - American  
21 - Australian  
10 - Japanese  
20 - New Zealand

Bremer-Tully say:



"The best set built  
— for the least  
it's wise to pay"

The foregoing wonderful record tells its own story in regard to the performance of this ultra-supreme Radio Set. Read what the owner of the Set says himself:—

"Dear Sirs,

"The following is a list of 79 Stations received on a Bremer-Tully 6-Valve Set model since November 15th, 1927, when my set was first installed. I have cards, letters, etc., confirming reception of all the stations listed below. I have also a big list of Short-wave Stations, and would be pleased to send along . . . . ."

(Signed) William Terrill,  
Waitara, 24/9/28.

2BL Sydney	KOMO Seattle, Washington	3GN Newton, Aust.	1ZQ Auckland
5CL Adelaide	KPO San Francisco	KMTR Los Angeles, Cal.	4YA Dunedin
3DB Melbourne	CNRV Vancouver, B.C.	KMOX St. Louis, Mo.	2AQ Taihape
3LD Deal Island, Light House, Victoria	JIBK Osaka, Japan (old station)	KWKH Shreveport, La.	1YA Auckland
AQE Sir James Clarke Ross Whaling Ship	JORK Osaka, Japan (old station)	KGER Long Beach, Cal.	JOAK Tokyo, Japan
7BY Bombay, India	3AR Melbourne	KFSD San Diego, Cal.	JOEK Kiroshima, Japan
4ZB Dunedin	4QG Brisbane	KFVD Venice, Cal.	3ER Melbourne
3ZC Christchurch	2UE Sydney	KFRC San Francisco	KTAB Oakland, Cal.
3YA Christchurch	3CI Clifty Island Lighthouse, Vic.	9XF Chicago, Illinois	KNX Hollywood, Cal.
2ZM Gisborne	3UZ Melbourne	KGU Honolulu, Hawaii	KGO San Francisco
JOBK Osaka, Japan	3VP Wilsons Lighthouse, Vic.	JOCK Nagoya, Japan (old station)	KFWI San Francisco
JOJK Kumanu, Japan	5KA Adelaide	2KY Sydney	KEX Portland, Ore.
4ZL Dunedin	ARDI C. A. Larsen, whaling ship	7ZL Hobart, Tas.	KFKB Kansas City, Kansas
2ZK Wanganui	5DN Adelaide	2UE Sydney	KNRC Santa Monica, Cal.
WENR Chicago, Illinois	2ZF Palmerston N.	KZRM Manila, Philippines	KHJ Los Angeles, Cal.
WBBM Chicago, Illinois	1ZB Auckland	7CA Calcutta, India	KFWM Oakland, Cal.
KFON Long Beach, California	2YA Wellington	4ZM Dunedin	KWVG Brownsville, Texas
KFI Los Angeles, California	3BY Melbourne	3LO Melbourne	JOAK Tokyo, Japan
KFWB Hollywood, California	JOHK Sendai, Japan		2FC Sydney
KSL Salt Lake City, Utah	JOIK Sepparo, Japan		
	2HD Newcastle, Australia		

#### AGENTS:

Barnett's Radio Supplies, Dunedin.	Macks Radio Co., Wellington.	L. J. Rattenbury, Waitara.
G. T. Gillies, Oamaru.	D. A. Morrison & Co., Wanganui.	Anchor's Radio House, Hamilton.
Brehaut Bros., Timaru.	Davy's Electrical Supplies, Hawera.	Turnbull & Jones, Auckland.
J. I. Smail, Christchurch.		Superadio, Ltd., Auckland.

#### N.Z. AGENTS:

## RADIO LIMITED

COMMERCE BUILDING, ANZAC AVENUE, AUCKLAND.

## How the B.B.C. is Conquering Interference

THE enclosed article from "The Times," "The B.B.C. and Its Clients," is of much interest, writes Mr. J. H. Owen, of Wellington, to the "Radio Record." Due to the proximity of Great Britain to the Continent, a good deal of interference is occasioned by the number of foreign stations and their numerous wave-lengths. It is especially at night time that this trouble happens. Now eleven B.B.C. stations which formerly had their own separate wave-lengths will become relay stations with one common wave-length, which will be an exclusive one. If pandemonium has to some extent prevailed in Great Britain, how much more must it exist in Canada and the States, where there is little or no control? I see by recent news that those countries are trying to take steps whereby some 160 small stations, which at present litter the air, shall be eliminated. This will be a difficult and an unpleasant task for the Postmaster-Generals. I see by the "Radio Record" that an application is likely to be made for a license to erect a chain of stations in New Zealand shortly. It is to be hoped that the Postmaster-General will refuse all applications of this sort. Once granted, they would (after the novelty wore off) be a constant source of annoyance to the New Zealand Broadcasting Company and to every listener in the Dominion, whilst the whole existing system would be imperilled.

The Annual Radio Exhibition takes place at Olympia this month, 22nd to 29th, and I am looking forward to a treat.—J. H. Owen.

THE new plan, announced by the B.B.C., and commented upon by our wireless correspondent recently by which it is intended that listeners to the B.B.C.'s relay stations shall be relieved of the growing annoyance of interference, is a drastic measure, but one clearly needed inasmuch as it will bring relief to some four or five millions of listeners, mostly owners of crystal sets, in a number of thickly populated areas where enjoyment of the programmes has of late been much impaired. Indeed, this large body of listeners may be supposed to have expected that the B.B.C. would take up their case; and they are now going to have a remedy given them, which, though admittedly temporary pending the introduction of the regional system, should remove all hardship and cause of dissatisfaction. Whether other nations will follow the B.B.C.'s lead in this matter remains to be seen; but it is an example of the B.B.C.'s pioneering foresight, and, as it happens, it is a kind of sequel to the famous Geneva plan, towards the settlement of which the B.B.C. took the initiative. By that plan each nation in Europe was allotted so many shared and so many exclusive wave-lengths, Great Britain at present having eleven shared, and ten exclusive. Now, by the application of one of the exclusive wave lengths to the relay stations, the B.B.C. has found a way of restoring to listeners at those stations a means of hearing such as they have not been able freely to enjoy for some time. How badly they have suffered from various forms of interference due to the broadcasting of foreign programmes on shared wave lengths can be judged by the fact that in some instances the local programme has been to all intents and purposes efficient only at so short a range as half a mile, while at three miles distance interference is received. This is, of course, at night, when that otherwise beneficent layer of electricity, the Heaviside layer, exerts its potency about sixty miles up in the atmosphere. By means of that layer, which Sir Oliver Lodge called "an unexpected bonus on the part of Providence," long-distance transmission, as in trans-Atlantic telephony, and in the beam system, is achieved; but it happens to

be too good a reflector of waves by night to be compatible with comfortable reception from stations using shared wave lengths.

THE waves in fact, of Continental stations have travelled farther than is desirable. Transmission over long distances is not wanted in broadcasting, or interference with the pleasure of others ensues. The nuisance, moreover, has been growing worse, as the Continental stations have been trying too shout their neighbours down, and with their ally in the Heaviside layer, they have largely succeeded, especially as they have been increasing their powers while our relay stations have been kept at the same strength. Hence the need for an escape from pandemonium. The stations affected are not the main stations, which all have exclusive wave-lengths; in their case working has proved on the whole satisfactory throughout the country, though there have been occasions when some Continental station has wandered a little in wavelength and caused interference to a programme set out on one of our exclusive wavelengths. The sufferers are the relay stations—Dundee, Edinburgh, Leeds, Bradford, Sheffield, Hull, Liverpool, Stoke, Nottingham, Plymouth, and Swansea—all populous places where the listeners are mainly crystal users and fairly close to the station. It is to these stations that the B.B.C. has resolved to devote one of the exclusive wavelengths pending the full introduction of the regional scheme. All relay stations will therefore use the same wavelength, and interference among the relay stations themselves will be mitigated by arranging for the relay stations to have the same programme. Technically this is quite sound, and very little interference should be experienced to ranges of five miles at night, while the day range should be even greater.

THERE is one conceivable drawback to the plan, and that is the discouragement which it gives to local programmes. Even here, however, for one reason and another, the disadvantage is not so great as may seem at first. The effects of the Heaviside layer come into force only after sun-