Possibilities of the Portable technical interest.

THE following account of the use of portable sets has been written by R. W. Beare, to an English daily. It is interesting and highly instructive, and in view of the increasing popularity of this type of receiver is worth republishing.

One of the features of this motoring Easter has been—and still is—the immense number of roadside picnic parties that have been enlivened, or otherrvise, by the strains of wireless music n some cases "strain" is just the right word for it. My own personal opinion is that the portable set carried on the car ought to be used with discretion, and quite a lot of it. It is all right to listen to your own radio set; but if the party in the next glade is pumping o t 5GB while you are receiving 2LO -well, you see where the strain comes

However, there is quite a knack in using a portable to best advantage, and out of the considerable number of motorists who have purchased sets of this type during the winter there must be many who are now using them in proper conditions-that is, as real portables, carried on the car-and who are not yet up to all their little tricks.

In the first place, while the majority of portables have quite good rangegetting qualities, there are only two or three stations which can be received in a manner suitable for outdoor listening. They are the nearest main local station and the two Daventrys. Unless the music is fairly powerful it is liable to be dissipated to the four winds immediately it leaves the loudspeaker. and the result is worse than the tinniness of a bad gramophone.

Distant stations, especially in the daylight conditions in which the portable is almost invariably used-until. at least, a heat wave makes midnight motoring popular again—can seldom be received with that roundness of tone that alone makes wireless worth listening to.

How to Improve Results.

THE moral is obvious—don't try any tricks with the wireless set out of doors. Be content with the good reception of the nearest main station. because, although you personally may

of Wellington.

The next General Meeting of the above Society will be held on-

JUNE 11th

in the CAMBRIDGE TERRACE CONGREGATIONAL CHURCH HALL, at 8 p.m.

MR. H. A. FIRTH, of Messrs. Kirkcaldie & Stains, Ltd., will demonstrate and lecture upon the new "Majestic" Receiver.

Radio and the Motor be tickled to death to get Radio Tou-Research in Australia see exactly what the effects of fading louse in daylicht, other people within hearing have not your theoretical and

> Very often, also, results can be improved enormously by attaching a length of rubber-covered flex to the aerial or earth terminal, if these are fitted, and slinging the free end of the wire over the highest branch of a tree that can be reached. With the majority of portables this has the effect of completely destroying whatever pre-tensions to selectivity they may have had, so that it is impossible to tune the local station. Since, in the public interest, you ought not to want to receive anything but the local, this does not matter, and your reception will have that fullness of which I have spoken as being so vital to satisfactory outdoor reception.

> Using an external aerial or earth, or both, in this way also neutralises the natural directional tendencies of the within frame aerial contained cabinet. This becomes now merely a large tuning coil, and it is necessary to turn the whole set this way and that in order to find the best position for any given station. If the outside aerial is not used, however, it should be remembered that this directional t ndency is very strongly marked, and that quite a small movement either way may make a disproportionately large difference in both quality and strength of reception.

Car Interference.

THERE are two other points that might be mentioned. Firstly, it will often be found that much better results can be obtained if the set is placed on a light picnic table, or even if it can be securely slung by a cord from the low branches of a tree, than if it is placed directly on the ground And, secondly, do not be too disappointed if it proves impossible to have a wireless accompaniment to the movement of the car. It is very seldom. indeed, that such reception is entirely free from interference from the dynamo and other electric gear of the engine, and usually the noise is simply ghastly.

Even if there were no such interference, I am not at all sure that it is a good thing to risk taking the driver's attention off his job.

"The Unseen Hand"

Amateur Radio Society Just because a faint motor "honk" interrupts the 2YA, Wellington, items interrupts the 2xA, Weilington, items occasionally, some listeners have voiced criticism. A shot fired in the KGO, Oakland, California, studio the other night just as one of the station's sopranos reached high C caused thousands of listeners to spring out of their easy chairs to watch their loudspeaker in amazement. Screams, moans, muffled voices and the sound of a police gong followed in quick succession, after which someone shouted, "It's all right," adding to the confusion of listeners. Concern for the concusion of listeners. Concern for the soprano was turned to laughter when the KGO audience was informed that a transmitter technical error caused the broadcasting of the rehearsal of a blood-curdling epi-sode of radio drama, "The Unseen Hand."

> "N.Z. Radio Listener's Guide? Dealers and Booksellers 2/6; Post Free 2/9—P.O. Box 1032, Wellington. Now Available.

Radio University Scholarship

IN the hope of improving radio transmission and reception, a radio research scholarship was established at the Sydney University for the period of three years, carrying a grant from the broadcasting companies of £500 per A vast amount of technical work has been the outcome of this action and it ultimately became the nucleus of a very important extension of radio research in Australia. fessor Madsen, of the P. N. Russell School of Engineering at the University of Sydney, recently conveyed to the directors of the New South Wales Broadcasting Company, Limited, a report on the work of Mr. Baker, the expert who has been carrying on research for several years past. showed that very consider ble progress It is, however, with has been made. the future of the Radio Research Board that Professor Madsen's communication mainly dealt.

He reports: "Mr. Baker is at present completing an investigation into the design and operation of suitable apparatus for the determination of field intensities of the order which would be met with at distances, greater than, say, 50 miles from a generating station This apparatus is of normal power. now almost complete, and as soon as it is assembled with suitable transport, Mr. Baker will undertake an investigation into the field strengths in districts lying between 50 and 150 miles from Sydney. When this work is complete, Mr. Baker will commence upon an investigation of fading, paying particular attention, in the first in-

in the neighbourhood of Newcastle. The work will consist of two parts. First, a very general investigation to or zincite and bornite).

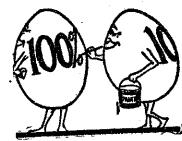
are in such districts upon the reception obtained here. The second portion will consist in a repetition and extension of the experimental work which has been initiated and carried out in England by Professor Appleton. have most of the apparatus available for the investigations and there are certain matters in connection with the work which is of considerable interest from the scientific point of view as well as from the more practical. It is not anticipated that we will be able to complete the work of fading within the year, but we will certainly have been able to break a considerable amount of ground."

Continuing, Professor Madsen writes: I am also very pleased to say that in addition to the co-operation which the Council for Scientific and Industrial Research extended through the Radio Research Board in this work, the council has now taken a very serious Acting upon the advice of the Radio Research Board, it has decided, in co-operation with the Postmaster-General's Department, to carry out a systematic scheme of investigation into radio problems, primarily in Victoria and New South Wales, extending in the first instance, over a period of three years. It has agreed to expend a sum amounting to £2700 per annum in each State, and this will mean employing the services of two additional investigators in addition to Mr. Baker. action of your Broadcasting Company in inaugurating the Radio Research Exhibition in New Couth Wales has been a very important factor in leading to this last development."

APART from the galena type of crystal with which a fine wire or cat's-whisker is used, the oldest known crystals in use for detectors are those stance, to the conditions which arise of the perikon type, in which two crystals are in contact with each other (generally zincite and copper pyrites,

REMOVAL

Electric Gossip



"RELAYED"

The shop lately known as Paramount Millinery, 120 Willis Street, will now be known as "Macquarrie's."

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