

THAT the neutrodyne set, which is a "silent worker" when properly neutralised, can also be a veritable nightmare to neighbouring listeners owing to its howls, is still unknown to beginners and even to others more experienced. The writer has been requested to publish the most approved method of neutralising a neutrodyne. "Switch" would first emphasise a fact frequently overlooked by experienced listeners, viz., that the changing or renewal of a radio frequency valve in a neutrodyne is apt to throw the circuit out of balance and change it into a "howler" of the most malignant character. If a valve is changed or replaced, the set should be re-neutralised.

TO neutralise a neutrodyne tune in a fairly shortwave broadcast station, say 3YA, Christchurch. Insulate with a piece of paper wrapped round the filament prong of the first radio-frequency valve, adjust the neutralising condenser until the station can just be heard. Then remove the piece of paper from the first radio frequency valve prong and treat the second radio-frequency valve the same way. When the paper is removed from the second valve the volume should be stepped up considerably, and the set is correctly neutralised.

THE Browning-Drake circuit can be a nasty howler if incorrectly neutralised, and judging by the shrieks which pierce the welkin on Wednesday evenings around Wellington there are several Browning-Drakes which require adjustment. To neutralise a Browning-Drake circuit, remove any condenser, fixed or variable, which may be directly in series with the aerial. Tune in 3YA, Christchurch, using as much reaction as possible without distortion, bringing the station in at full volume. Place a piece of paper right round a filament prong (the thick one) of the radio frequency valve and replace it. The volume will now be diminished, but by adjusting the neutralising condenser the station will return to full volume. Next tune in a station about the centre of the dials (say 3LO, Melbourne), and make a final adjustment of the neutralising condenser. Another efficient method was described in the special issue last week.

WITH the departure of H.M.S. Dunedin last week from Wellington also departed the annoyance experienced by many city listeners caused by morse transmission from the warship. The radio waves from the cruiser came in at various places on one's tuning dials. At times a receiving set would be tuned in to one of the New Zealand stations when a mysterious crackling would burst in on the music. A slight turn of the tuning dial and the ear-splitting "note" of the warship's morse would almost shatter the diaphragm of the loudspeaker. However, all's quiet on the Wellington waterfront now.

THE perennial question has again been put to "Switch," whether a crystal set should have a long or short aerial. It is only when there are two broadcast stations in the vicinity that a short aerial is desirable in order to avoid interference from the unwanted station. A short aerial means greater selectivity but a decrease in volume. Here is what a leading authority says on the subject: "A crystal receiver needs all the energy that can be fed to it. Energy is collected by the aerial, which should have

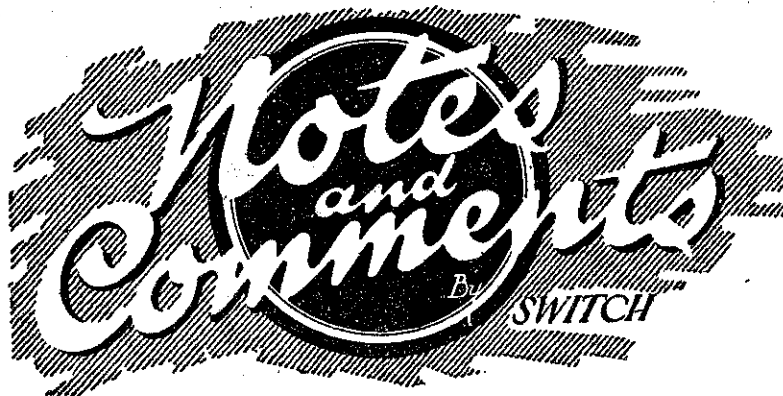
as large a collecting surface as practicable if maximum volume is to be attained. For crystal reception a short aerial should be used only when other means of securing selectivity have proved ineffective."

THE editor of the Australian Broadcasting Company's publicity department writes:—"A kiwi in the last century was a queer Australian bird which inhabited obscure deserts and didn't know the first thing about flying. Now it is more correctly defined as a novice of the aero club, found almost everywhere, and although they do not know anything about flying, they are doing their best to learn." "Switch" never heard of the kiwi inhabiting obscure Australian deserts. He always thought the kiwi was peculiar to New Zealand, and instead of wandering in deserts preferred the dense forests. "Switch" lived for several years in Australia during the last century and is sorry that he never met even among the oldest inhabitants anyone who had heard of a live or dead kiwi being found in Australia.

A DIFFICULTY encountered in connection with A.C. receiving sets in some localities is the excess or, not infrequently, deficiency, of voltage in the electric main supply. A set the writer examined recently, was being operated on low voltage from the mains, and distortion was resulting. The owner was advised to communicate with the electricity department of the City Corporation if no improvement was noticed within reasonable time.

A LITTLE while ago "Switch" was asked to account for the frequent burning out of his "heater" type A.C. detector valve. An A.C. voltmeter was plugged into the socket of the detector valve and a 20 per cent. over-voltage was disclosed. A further test of the other valve sockets showed a corresponding excess. A specially wound resistance was placed in circuit between the set and the mains, and no further trouble was experienced.

AN A.C. voltmeter, reading up to 4 or 5 volts, is now an essential adjunct to the equipment of all radio service men in New Zealand now that A.C. sets are being sold in quantity. The voltmeter should be of the best quality, even though they are more costly than the D.C. voltmeters. Some of the troubles, and they are exceedingly rare, in A.C. sets are due to improper voltage from the mains.



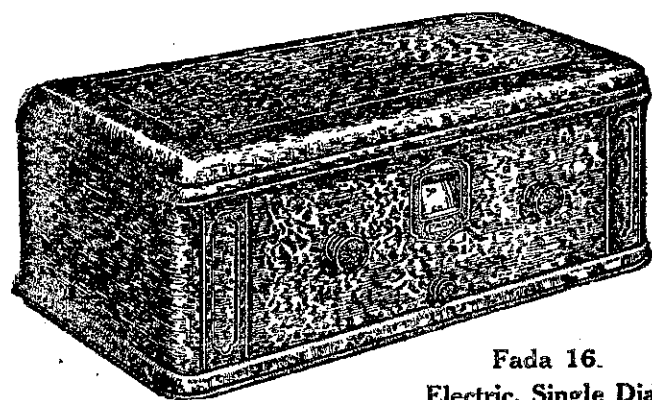
study of the various animals there is more easily accomplished.

AMONG the talented foreigners now being heard from the Australian broadcast stations are Senia Chostia-koff, tenor, a member of the Russian aristocracy; Sigmund Menchinsky, Polish viola player, a former member of the Symphony Orchestra attached to the Tsar's bodyguard, and Mischa Dobrinski, Russian violinist, leader of the same orchestra.

HOME constructors who are novices sometimes find themselves hopelessly fogged when building up a set from a circuit diagram, a circumstance which could be avoided if they observed only reasonable precautions. A set was brought to "Switch" last week embodying the Browning-Drake circuit. The best parts were used, and the soldering and wiring would have passed for professional work, but the set declined to operate. A tedious examination revealed that two wires were wrongly connected. If the builder had marked off on the circuit diagram in blue lead pencil each wire after it had been connected up, and if he had carefully checked the wiring, the trouble would not have occurred.

A CORRESPONDENT has suggested that a relay should be put on the air from 2YA, Wellington, of a visit to the Wellington Zoo, as is about to be done in connection with the Taronga Park Zoo at Sydney. There are not the facilities at our zoo for obtaining a circuit by telephone wire to 2YA, Wellington. To carry the microphone from cage to cage around our spacious zoo would require lengthy and most costly flexible leads to the nearest telephone circuit. Taronga Park Zoo is more compactly laid out, and the proposed relay of a nature

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