

## Hawke's Bay Notes

## A Super Station

Power of 100,000 watts

**N**OW that the Heeney-Tunney boxing contest is relegated to past history radio reception in this part of the world has gone back to normal, but it is due for another flutter shortly when the trans-Tasman flight is on the air, and local fans are looking forward to this broadcast with almost as much interest as the boxing contests.

As far as boxing is concerned, by the way, there has been plenty to keep interest up in this direction, and nothing but pleasure is expressed at recent boxing broadcasts from Dunedin, Christchurch, Wellington and Auckland. There is no doubt that such broadcasts make a pleasant break in ordinary programmes. The last descriptions from Auckland and Christchurch were particularly enjoyable and the boxing associations are to be congratulated on allowing contests to be broadcast.

**T**HE R.B.C. is to be complimented on the stand taken in regard to racing broadcasts, and the Racing Conference can rest assured that as far as many listeners are concerned, their action did not tend to increase their popularity.

**R**ECEPTION locally continues good—better than for a long time—but this winter has not been a good one for radio reception in these parts. The "Yanks" have not been so prominent of late, but JO-LK, the Jap, has been heard at good strength on several occasions.

**I**N the last issue of the "Record," a Napier correspondent has been taken to task by a northern listener, for daring to suggest that 2YA is not a wonder station. Maybe it is for the northern listener, but for listeners in these parts it is far from being so, probably on account of the intervening ranges, and 3YA and 1YA will give it a "go" any night and beat it for clarity and tone and in many cases for volume as well.

**T**HE H.B. Radio Society is feeling just a little bit proud at present, for its president, the Rev. F. A. Bennett, has been appointed Bishop of Aotea-Roa, New Zealand's first Maori Bishop. The Rev. Mr. Bennett is a keen radio enthusiast and his genial personality is a feature of local radio meetings. A brilliant orator and a thorough gentleman, we congratulate him on his appointment, our only regret being that it may necessitate his leaving this district and thus severing his connection with the H.B. Radio Society.

Just a word of praise to all the Uncles and Aunts who are responsible for the children's sessions at the various stations. Some of these sessions are great, and are enjoyed quite as much by the adults as the youngsters.

**T**HE best advice which can be given is not to spill accumulator acid on the carpet, but if you do chance to be unlucky, you can minimise the damage by neutralising the acid with a weak alkaline solution such as ammonia or washing soda.

Listeners familiar with the short-wave transmission of the American station WGY, which is operated by the General Electric Co., of America, at Schenectady, New York, will be interested to learn that at WGY there has recently been installed the most powerful broadcast transmitter ever constructed. This transmitter uses a power of 100,000 watts, which is 20 times the power used by 2YA, Wellington. It is designed for operation on ordinary broadcast wave lengths, and it is understood that its normal wave length will be somewhere about 365 metres. About a year ago, experiments were begun at WGY with 50,000 watts transmitter. Although it is similar in principle to less powerful transmitters, many details of the new station are interesting. The apparatus has been made extraordinarily compact, and it occupies less floor space than the 50,000 watts transmitter it replaced.

### Remarkable Valves.

**T**HE valves used are among the most unusual components. Each is composed almost wholly of metal. The plate, which is also portion of the outer wall of the valve, is about three feet long, and three inches in diameter. Its walls are hollow, and, while in operation, the valve is kept cool by a stream of water, which, by means of pumps, is circulated rapidly through the hollow plates. The filaments used are several feet long, and as thick as fairly heavy fencing wire. Each carries 210 amperes at a pressure of about 30 volts. This is approximately 5000 times the amount of power required to operate a receiving valve of the 201a type. Many safety devices have been incorporated to protect the apparatus and its operators.

### A Special Alarm.

**A** SPECIAL alarm is attached to the cooling system on the valves, so that, if any interruption of the flow of water occurs, or if the valves tend to overheat, the operator on duty is immediately warned. Several of the large valves are used at once in the transmitter, and as each consumes about 107 kilowatts in plate and filament circuits, the surviving valves would be heavily overloaded if one broke down. Hence, each valve is fitted with a switch, which automatically cuts off power to the transmitter if it fails. The apparatus which carries current at a very high pressure is carefully protected with screens. Access beyond these screens is gained by doors so constructed that, while they are open, and until they are locked from the outside by the operator, all current is turned off. Hence, engineers working inside the screens are adequately protected from the danger of a shock from the apparatus.

**I**F leads are to be brought in, try the window. Flat, flexible copper strips can be made to fit underneath the closed window and connect both aerial and earth to the set without damaging the house. Suitable strips are on the market, but they can be improvised quite readily.

**O**WNERS of crystal sets who desire to add a stage of audio amplification cannot do better than employ a double grid valve. These fit standard bases, the auxiliary grid being connected by means of a terminal at the side of the valve to the positive terminal of the high tension battery. These valves give an amplification factor up to a hundred with consumption as low as .06 amperes at four volts, thus permitting an accumulator to be dispensed with.

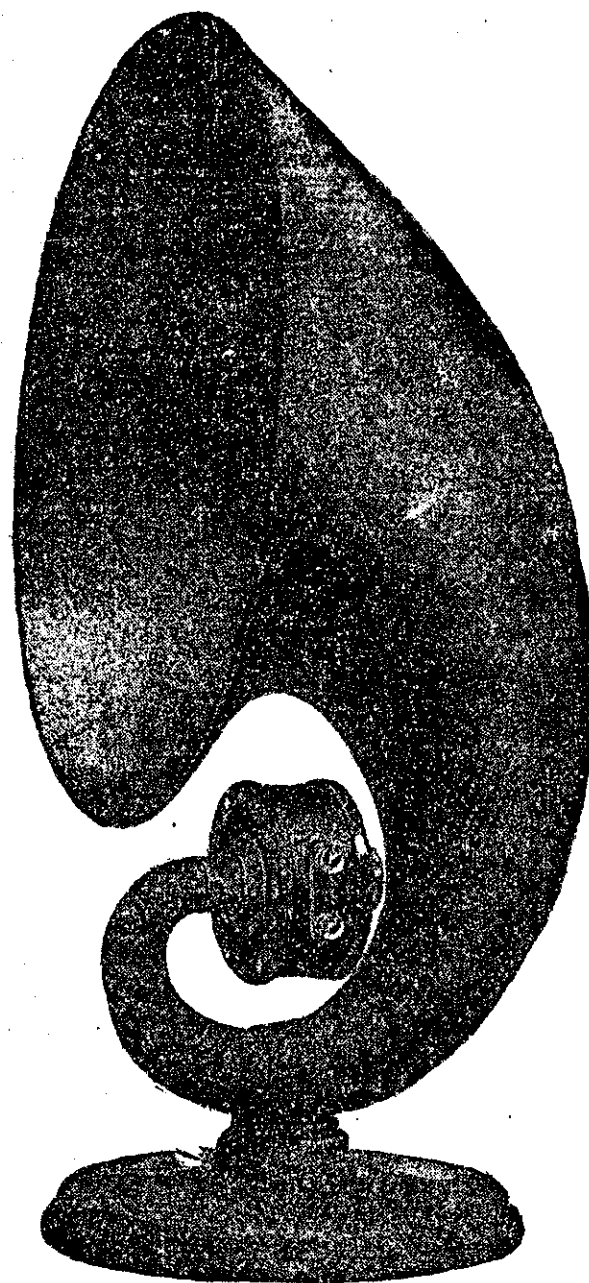
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