



# A PASTORAL SYMPHONY

## Queer Things Can Happen in the World of Radio

of a dance?" asked hobby the Horse, with old-fashioned courtesy.

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Clara the Cow giggled and parked her grass in her other cheek. "Thank you," she said blushingly, and away they waltzed under the stars and the radio aerials.

Like a scene in a Western movie where the happy pair sing and dance in wide open spaces, the orchestra providing the accompaniment was invisible. The music was in the dancers themselves—not their hearts or souls, but their mouths. It came from the grass they were chewing! Anything was on tap, from a gavotte to a rhumba.

All this happened not on Walpurgis Night in the Bavarian mountains, but on an ordinary week night at Mount Victoria, when 2YA was in its infancy.

There can be no guarantee, of course, of the strict accuracy of the scene we have described but, if we can believe all we are told by radio technicians, it might have taken place. For a certain area under high-powered radio aerials is a magician's paradise. It is a place where anybody with sufficient knowledge can produce the queerest and most entertaining phenomena.

#### Music from a Fence

When the former 2YA was being erected operators did not need receiving sets. The iron roof of the temporary quarters rattled when a programme began and then settled down to deliver music which could be heard quite plainly. Not a great deal was known in New Zealand then about what the technicians call "parasitic oscillations" or the "Rocky Point effect."

A barbed-wire fence round the later Titahi Bay installation had not been properly earthed. A half-crown, held close to the fence, drew an electric arc from it and the higher it was held the greater became the intensity of the arc, until the coin was too hot to hold. Later this fence was earthed every ten feet. But almost any piece of metal can take on peculiar properties in certain positions, such as producing music without a receiving set. A blade of grass can do the same thing, hence the unusual behaviour of Hobby and Clara.

#### A Receiver for a Penny

Most of these freaks were discovered as station installations were being made.

One of the staff laid a wager that he could build a receiver costing less than a penny. He won by holding a nail near the transmitter and drawing off music. Mount Victoria and Titahi Bay are not the only scenes, of course, of radio

curiosities. When 3YA was in its early stages, a tin shed for tools was built under one of the masts. Before the power was turned on electric globes lit up in the shed. The reason? The power lines were parallel with the aerials and induced current came into play. In the same shed some of the tools became magnetised, possibly through the mass of steel in the mast deflecting the earth's magnetic field.

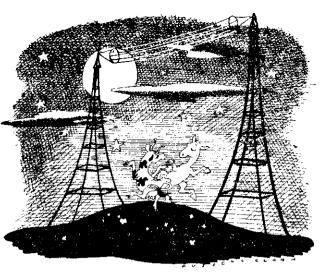
Parasitic oscillation is responsible for many weird effects, and so are other agencies with which the radio man is familiar. The spreaders which keep the aerials apart at 2YA once caught fire and collapsed. When experiments were being made with a multiple-tuned aerial, a down-wire came adrift, and forming an arc, set fire to the window-sill of the shed. A neon tube held under a radio mast will glow without any connecting



"... The case of two Czechoslovakian workmen"

wires; an ordinary house lamp will sometimes do the same. Technicians have a very healthy respect for their apparatus, but animals, it seems, don't care. What's more, they get away with it. Station 2YA's pet cat strolled under the 10,000 voit condenser bank and came out the other side without a singe. They called him a Lucky Little Sebastian after that

And when gorse and broom caught fire, field mice were driven out by the heat. They found their way into the mechanism, causing all sorts of upsets, but their greatest nuisance to the staff was their preference for trouser buttons as food. Plagues of daddy-long-legs were frequent and it was difficult to keep them out of the high voltage equipment. Static electricity dragged them in, causing temporary breakdowns in the transmission.



". . . It might have taken place"

An excited visitor rushed in to 2YA's temporary quarters one evening with the information that a brilliant comet or fire-ball was just overhead. An insulator on one of the guy wires had become white hot, giving the appearance of a low, bright star.

### Ants' Radio Call

Insects, it is reported, knew about radio long before Marconi worked with his first wires and coil. When foraging ants discover a store of food the leaders wave their antenna briskly and, by some strange electric impulse, send out a "Come to the Cookhouse" signal, which is received by every other ant within range.

Human beings are capable of receiving radio programmes without a receiving set or even a nail. A case was reported from America some time ago where a man who lived near a high-powered broadcasting station was unable to sleep. Every time he dozed off broadcast music drifted into his head and woke him up. Radio technicians investigated. The man, it turned out, worked in a machine shop grinding knives and the fine carborundum dust settled on the gold filling in his teeth. Each night when he switched off his electric reading lamp, which was clamped to the head of his bed, he removed a partial radio circuit and unwittingly permitted the metal frame of the bed to become an aerial system. His jaw, falling open as he dropped off to sleep, acted as a crystal detector, tuning in the radio programme from the nearby station. A toothbrush removed the trouble and brought him sleep.

Just as curious was the case of two Czechoslovakian workmen who were able to tune in to any broadcast programme at will and give their friends entertainment coming solely from their bodies. Again the experts went to work and were convinced that there was no trickery. Before becoming human receivers the men did deep breathing exercises for half an hour. Possibly their exertions generated electricity. Then they interlocked their right hands while their left hands held a contact of a loud speaker. The room, it is said, filled with soft music. Listeners were asked to name any station they would like to hear and this queer pair tuned in.

Possibly at some future date electric power and light may be transmitted into the home by radio.