

Laboratory Jottings

FROM Messrs. Crawford and Finlayson we received a Lyratone Midget a.c. receiver for test. This is the latest product of Gilfillan Brothers, the well-known American radio manufacturers.

The set has a very neat appearance and is well finished; it has three controls, tuning, volume and tone. Weighing under 22lb. it is readily transportable, and as it will receive the local station without an aerial, it is an ideal portable set for those who wish to move it from one room to another as occasion may demand.

The circuit consists of three r.f. screen-grid stages, screen-grid detector, feeding through resistance capacity coupling into a single output stage. The detector employs the power linear system. Self-healing, dry, and electrolytic condensers are employed, and this does away with any possibility of filter condenser trouble. We had an interesting example of this in that when examining the internal portions of the machine we accidentally disconnected the speaker with the power on. Normally the set would probably have broken down one of the condensers, but in this case a crackling across the electrolytic condenser was the only result. When the speaker was connected again the condenser healed. The filament voltages are kept well down, and this is a safeguard against power line surge. The mains are equipped with fuses.

The tone of the set is very good and quite natural. Obviously, using only one stage of 245, the output is limited though it is ample for the average room. The tone control gives a gradual transition from bass to treble. At its minimum setting there is little apparent clipping at either end of the musical scale. In other words, there is neither a boomy bass nor overpronounced treble.

The performance on distance quite surprised us. It brought in the main Australian stations at good strength, and even the smaller ones came in quite well. In the few days we had the set we were able to compile a log of about 30 stations.

By adjustment of the balancing condensers the set may be made to oscillate, and thus will go into a state more sensitive than the balanced receiver.

Selectivity is another strong feature, for we were agreeably surprised to find that we could receive 2FC with no trace

World Radio News

AT the beginning of the year the U.S.A. had 615 transmitting stations, Canada 70, Cuba 60 and Mexico 35. Central America had 800, South America 98, Argentina 43 Uruguay 26, Brazil 23, and Chile 6.

THE United States army is conducting experiments with a view to abolishing the military band. Instead of the band preceding a regiment, a loudspeaker car is being used as a substitute.

THE installation of a shortwave transmitting station is contemplated at Madagascar. The new post will give news bulletins, concerts, etc., and will also serve to facilitate the administration of the affairs of the island from Africa and enable instructions to be issued to the military force garrisoned there.

THE Radio Supplement of the Hungarian Journal, "The Voice of the People," is agitating for a decrease in the cost of radio licenses. Relative to the wages of the workers, the cost of a license is dearer than in any other part of the world. The townspeople are also complaining that the programmes

of 2YA. This is one of the most difficult tests any receiver is called upon to pass.

The volume control is capable of cutting Wellington down without introducing an obvious amount of distortion. It operates upon both aerial coupling and the screen-grid bias.

From a fairly searching examination we could detect no weaknesses or evidences of shoddy construction. Of course some time is necessary before the durability of any set can be ascertained, but, from what we could see of it, the "Lyratone" appears to be well constructed and would stand long service.

are solely drawn up to interest the country people. Although it is realised that these constitute the major part of the population of the country, the inhabitants of such towns as Budapest desire something a little more cultured.

EXPERIMENTS are being conducted in Hamburg in connection with the transmission of piano music without using a microphone. The string vibrations are immediately converted to electrical vibrations and fed to the transmitter. Tests are also being made to ascertain whether the principle can be applied to other musical instruments.

THIRTY-SEVEN State and local police radio stations are now in operation in almost as many American cities, and eighteen others are under construction. The majority of these are used for low power broadcasting on short-wave to patrol cars, although Pennsylvania's State police employ five long-wave stations.

A LONDON radio shop has a device whereby the passer by can light up the window at night by responding to the invitation to switch on the illumination himself merely by placing his hand over a shadowy miniature porthole. A hidden photoelectric bell causes a relay to work which in turn operates the light switch. The illumination ceases as soon as the hand is removed from the porthole.

AN international regulation reserving a block of high frequencies (short waves) for S.O.S. calls is urged by Captain S. C. Hooper, director of U.S. Naval Communications, who points out that the present distress frequency of 500 kilocycles (600 metres) is often inadequate when used over vast expanses of water like the Pacific, Indian, and South Atlantic Oceans. The daylight range of the average ship's transmitter, working on a 500 k.c. frequency, is about 500 miles, with a night range of perhaps 2000 miles. According to Captain Hooper, a ship in distress could easily be farther than this from other ships or land stations, and hence its S.O.S. signals would probably be unheard.

PRESS WIRELESS, INC., co-operative radio subsidiary of a group of important American newspapers, has been authorised by the Federal Radio Commission to proceed with the erection of a network of radio-telegraph stations with which to handle Press messages as a public service for the American Press as a whole. Stations in 19 cities were planned in the original project of Press Wireless. Under a previous grant of 13 trans-oceanic channels, some of which may also be used domestically, Press Wireless has already erected two stations in New York, two in Chicago, and one each in Boston, Los Angeles, and San Francisco. These are now operating with one another, and to some extent in international service. Other stations are under construction in Washington, Boston, and Los Angeles, and another has been projected in Honolulu.

THE American station WEAf frequently broadcasts the singing of canaries, to orchestral accompaniments, and, since the trilling of these little songsters cannot be imitated, cages of good birds are eagerly sought after and well paid for. Apropos of this story, one is told concerning other unusual performers before the microphone. When Byrd was in the regions of the South Pole the American station KDKA endeavoured to broadcast the voices of a number of American dogs for the edification of those with Byrd. Unfortunately one of the prospective artists proved refractory and upset the others, with the result that soon the entire personnel of the studio was pursuing errant dogs around the streets. Only one remained in the studio, but it was too frightened to be prevailed upon to bark, so the announcer had no alternative but to imitate the bark of a dog himself. This was duly broadcast to the world.

EXAMPLES

From my Bargain List

Igramic Short-Wave Chokes 2/6
14-inch Former 10d. per ft.
4-Volt Condor Valves, UX Base, 6/6 each

If you have not a copy of the Cheapest Radio and Radio Parts List write me at once.

BOB HORROBIN

Flashlight Corner, 2 Courtenay Place, Wellington.

Quick Repairs. 'Phone 22-357.

SILVER-MARSHALL SRADIO M EXTRAORDINARY

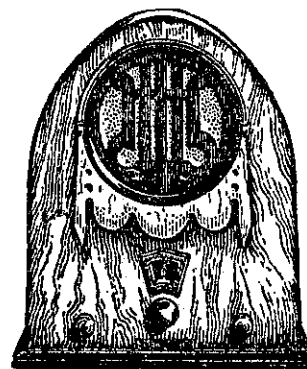
These complete console receivers are now available. The receivers employ the most modern features in radio design, incorporating:—

FOUR SCREEN GRID BAND PASS
SELECTOR, DYNAMIC SPEAKER,
BUILT-IN AERIAL, FREE FROM
"HUM."

Official S.M. franchised dealers for Wellington City

ELECTRICAL SUPPLIES, LTD.,

37 LOWER CUBA STREET.



DEALERS! The next shipment of Gilfillan's LYRA-TONE MIDGET

Arrives April 31. Nearly 100 of this month's shipment already booked. Get in early.

CRAWFORD & FINLAYSON LTD.

Box 675, Wellington.