

will be lucky if they receive verifications from 4MK and 4RO.

The following list of VK's may be heard any Sunday morning between the times given (N.Z.S.T.):—4JU, 8 a.m. to 1.30 p.m.; 4NW, 8 a.m. to 1.30 p.m.; 4PW, 9.30 a.m. to 7.30 p.m.; 4WI, 10.30 a.m. to 1.30 p.m.; 4RJ, 9.30 a.m. and 1.30 p.m.; 4EF, 9.30 a.m. to 7.30 p.m. Also VK4QL, any time from 9.30 p.m. to 1.30 a.m.—"Elgin" (Wanganui).

Eastern Reception Good.

EASTERN reception still appears to be very good in this locality, and quite a number of stations have been heard at very good volume near midnight. Last Tuesday evening (August 29), no less than 20 stations, including XGOA, JOHK, JOCK, KZRM, and 6WF, were heard with just the two wires (about 2 feet long), on the set in use. Loggings are: JOUK, JOCG, JONK, JOBG, and XGOD, a 1 k.w. station. American reception has been fairly good at times. WO(-WHO) was heard at good volume on Wednesday at 6.35 p.m., evidently testing. Latest logging is KDB, a 100-watt American.—157W. (Wellington).

Latest Verifications.

LOGGINGS have been few and far between lately, the only new stations being WBAP, WAPI, JFAK, and VKTBC. Verifications received during the last six weeks were from: WIOD, WBT, WIAM, KOIL, KTSA, 2BL (day-light), 5AD, and 6ML. I have also received a letter, which may be a verification, from XEB, written entirely in Spanish. KOMA was heard on Wednesday, August 30, broadcasting an item for New Zealand listeners, and asking for reports on their transmissions. A tip for anyone wanting to log WFAP, is that this station is always on the air early Wednesday evenings. I have discovered this through hearing WFAP on several Wednesday evenings while trying to log WBAP.—61A. (Tauranga).

WHEN it is decided to repaint the Eiffel Tower "mast," no less than 45 tons of paint are required to do the job.

FOR SALE or EXCHANGE

The rate for small advertisements under this heading is 1/6 cash for 20 words, and twopence for every other word thereafter.

WANTED to Sell, 4-Valve A.C. Set; get Australia, good tone. Reasonable offer accepted. A.C. Set, c/o "Radio Record."

WANTED to Sell, Local All-Electric Receiver, practically new, in excellent condition. What offers? "Local," c/o Box 1032, Wellington.

WANTED to Exchange, a 3-Valve Battery Set for a Jubilee De Luxe Speaker. "Speaker," c/o "Radio Record."

WANTED to Buy, a 2-Valve Short-wave Set, complete with plug-in coils to cover from 15-100 metres. "Short-wave," c/o "Radio Record."

WANTED to Exchange, a 3-Valve Battery Set for local electric receiver. Difference made up in cash. "Exchange," c/o Box 1032.

FOR Sale, Philips B Eliminator, heavy duty type. 3002. Perfect order. £3. Philips Battery Charger. Type 450. Rate 1.3 amps. Perfect order. £1/10/-, Limbrick Bros., Radio Dept. Waiapawa.

WEBSTER PICKUP—Tone arm and volume control. In excellent condition and very powerful. £1/2/6. Dent, Box 893, Auckland.

The Romance of "Courtenay"

A Triumph of Achievement

FROM a small room ten feet square to a modern three-floor factory covering a total area of 12,000 square feet—this represents the amazing development made in the past four years by the Radio Corporation of New Zealand, Ltd., manufacturers of "Courtenay" radios. The name was happily chosen by a firm pioneering a new industry, for it was taken from that of Viscount Courtenay, one of the directors of the New Zealand Company, under whose auspices Wellington was settled in 1839.

Early in 1929 one of the founders of "Courtenay" radio worked with an assistant night after night, planning and building small valve sets. They were pioneers of a new industry in New Zealand, and, appropriately enough, their small workshop was located in the oldest brick building in Wellington. It stands in Old Custom-house Street, and was erected immediately after the disastrous earthquake of 1855, which levelled every brick building in the settlement.

The first "Courtenay" receiver consisted of a crystal set combined with a two-valve amplifier operating directly from the electric light socket. Crude though it may have been according to modern standards, yet it was the first low-priced a.c. set in the field, and as such it met with instant popularity.

Business progressed so rapidly that early in 1930 it was found necessary to increase staff, while by September of that year "Courtenay" sets were in such demand that difficulty was experienced in fulfilling orders. In addition, many talkie plants for theatres throughout New Zealand were manufactured that year, while another outstanding achievement was the installation at New Plymouth hospital of what is still one of the finest radio plants of its kind in New Zealand.

At this juncture the manager decided to embark on a tour of England and America in order to acquaint himself more fully with the best markets for raw materials. He also made a thorough investigation of the latest methods of receiver manufacture, and brought back with him the most up-to-date machinery that money could buy.

The arrival shortly after this of Mr. Z. R. Stanley, an American radio engineer of wide experience, to take up an appointment as chief designing and producing engineer, was a most important event in the history of "Courtenay." Mr. Stanley was followed by expert die and tool makers, and from then on production increased by leaps and bounds. Five months later the "Courtenay" superheterodyne appeared, and was in such demand that the factory had to be kept working at peak output to cope with orders.

In the spring of 1932 the staff had increased to over 30, and the output of large sets was over 200 per month. By Christmas of that year the output had increased to 500 monthly, and in the May following the staff numbered over 50. Accommodation had become greatly overtaxed, and so it was decided to move into the Stewart Hardware Building, Courtenay Place, where

ample space was available for both a large factory and a showroom.

A brief survey of the factory will no doubt be of interest to technically-minded readers. Every component part which can possibly be produced commercially in New Zealand either is, or shortly will be, produced on the premises. This necessitates a large number of departments, one for each type of work.

The machine and tool-making shop is fully equipped with lathes, presses, and other machinery necessary for the making of dies for the many different types of stampings and pressings, and of equipment such as coil-winding machines. One huge machine, which is to be used shortly in the manufacture of loudspeakers and for other general heavy work, is capable of exerting a distributed pressure of over 120 tons. Smaller presses are used to punch out transformer laminations, valve sockets, and shields, etc.

On the next floor is the sheet metal working department, where the chassis are punched, bent, and subsequently electric spot-welded, thus eliminating the need for screws and rivets. In another room on the same floor we find the spray-painting and cadmium-plating departments. In the latter department the chassis and all metal stampings are given a metallic coating both for the sake of appearance and as a protection against corrosion.

The coil-winding department, where both power and radio frequency transformers are wound, is located on the third floor. The intricate equipment required is all made in the machine shop. It is certainly fascinating to watch the uncanny way in which layer upon layer of wire and paper insulation is wound upon the rotating formers with an astonishing rapidity.

Much research has been devoted in this department to the development of special precision testing equipment, which enables radio frequency coils to be matched to an exceptionally high degree of accuracy.

The products of the various departments all meet in the assembly room, where one sees chassis in all stages of development, gradually evolving into the finished receiver. From here the chassis pass to the testing department, which is one of the most interesting in the factory. The room itself is completely shielded from outside interference, so that receivers to be tested are subjected only to the required signal frequency and intensity from the standard signal generators. By means of these instruments it is known exactly what input in microvolts is necessary to produce a certain standard output at any desired frequency. In other words, after the general mechanical and electrical tests and final alignment, the actual sensitivity of the set is measured and recorded at five different frequencies. This naturally is an over-all test of every component part of the set, including the valves, and it is with this same set of valves that the set is finally sent out to the dealers.

Provision for displaying and demonstrating the finished factory product has not been forgotten, for a spacious, tastefully-furnished showroom, designed on the latest lines, is now open to the public.

THE Italian station at Bari proposes to devote one hour weekly to broadcasts in the Albanian language.