

Pictures by Radio Apparatus for Christchurch

THREE Fultograph machines are due to arrive in Christchurch shortly. They are primarily for the

reception of pictures sent by wireless transmission. It is hoped to be able to adapt one machine for transmission purposes, and to use the others for reception.

In appearance, each machine is somewhat like an Edison gramophone, with a rotating cylinder, and a

threaded rod for carrying a stylus along the cylinder, which is covered with iodised paper. The incoming electrical impulses pass through the stylus and cause a brownish deposit, whose shade varies with the varying strength of the impulses. The impulses themselves owe their strength to the original black and white or

intermediate tones on the photograph being transmitted.

The varying currents at the transmitting end are amplified and made to modulate the carrier wave, an extra strong impulse being sent at each revolution as well. This trip signal operates the receiving end, which consists of a suitable receiver coupled to the Fultograph. A catch operates at each revolution of the Fultograph cylinder and holds it until the trip signal allows it to start each revolution again. The clockwork which drives the cylinder is coupled through a magnetic clutch, a direct drive being out of the question.

A delicate relay acts when the trip impulse arrives at each revolution and releases the catch on the Fultograph. It would be a difficult matter to synchronise each receiver with the transmitter cylinder, and so they are set to run just a shade faster than the transmitting one, giving time to be caught ready for the release impulse. A milliammeter is incorporated to adjust the correct input, otherwise with too much strength the relay would be functioning with any strong impulse. A smudged picture would also result.

ARRIVED!!!

AND DESTINED FOR LEADERSHIP!

... A NEW AND FINER RADIO VALVE

FOR the first time, shipments of the National Union Radio Valves were forwarded to jobbers on February 15th, 1930.

Produced with painstaking precision and packaged with distinction, this new and finer radio valve has gone forth to assume the leadership for which it was destined.

This is no ordinary radio valve to take a quiet place in the ranks of radio. It is the perfected product of a great combine of men and resources, who have determined to produce an outstanding figure in the radio valve world. The weeks and months to come will find the new National Union Radio Valve increasingly important in the eyes of dealers and jobbers, and the years will find it deeply entrenched in the favor of millions of set owners.

Such is the new National Union Radio Valve. If you can appreciate the value of being a National Union Dealer or a National Union Jobber, you will communicate with us—soon.

MILES NELSON,

Representative,

61-62 Brunswick Bldgs., Queen St., Auckland,
N.Z.

The
NEW
**NATIONAL
UNION
RADIO VALVE**

Would Go Out of Date

H. G. Wells on Broad- casting

THE well-known writer, H. G. Wells, is now on a tour in America for the purpose of giving lectures. In "World Radio" we read that Mr. Wells reported to the American Press some interesting considerations on broadcasting.

Four years ago he was convinced that broadcasting would die out and that the best microphones and loudspeakers had the same possibilities as crossword puzzles and Oxford trousers.

Since that time H. G. Wells has changed his mind, however, owing to his having become acquainted with English broadcasting rather than with American broadcasting.

He made a comparison between the broadcasting systems in England and America. He spoke of his experience in an American studio. The studio was not built soundproof, the microphone was presented to him like the barrel of a revolver, he was asked to stand, when speaking, under a lamp of the same intensity as is used for film records and with the same heat-radiation. His anxiety when speaking was intensified by the arrival of journalists. Mr. Wells said all this ruins the special properties of broadcasting and irritates the most fluent speaker.

In London, however, radio listeners are addressed in the same way as one would speak to an intimate friend in private conversation. In the studios at Savoy Hill everything possible has been done to adhere to the time allowed and to deliver one's speech under the most favourable conditions. The listeners receive the same impression as if a friend was speaking to them.

KNOW the time all over the world
with a

DX Clock.

Posted in Cardboard Tube, Price 9d.
Box 1032, Wellington.