

Francis Bate. 'Cello solos will be played by Mr. Bate.

MR. E. J. BELL will give his fortnightly "Book Review" on Monday evening. The band engaged for Monday evening is Derry's Military Band, under Mr. J. Scott. A bright entertaining programme will be presented. Mr. W. Roy Hill, one of Wellington's finest tenors, who is visiting Christchurch, will be singing. His items will be "Afton Water," "My Love She's But a Lassie Yet," and "The Bells of Little Weston." Other vocalists will be Mrs. M. E. Sharp, mezzo-soprano, who has won championship medals at Gore and Invercargill competitions, Miss Nancy Bowden (contralto), and Mr. Chas. Harroway (baritone). Humorous recitations will be given by Mr. Ronald Foster.

OPERATIO numbers, both vocal and instrumental, will feature Wednesday evening's programme. A Dunedin artist, Miss Florence Sumner (soprano), will be one of the vocalists. Also singing will be the popular Mrs. D. W. Stallard, who will sing solos from "Satanella" and "Mignon," as well as "Waiata Maori." There will be tenor solos by Mr. W. J. Trewern and baritone solos by Mr. F. C. Penfold. Elocutionary items will be provided by Miss Dorothy Jenkin.

A very fine instrumental programme will be given by Miss Gladys Vincent (violin), Mr. Francis Bate (cello), and Miss Mary Garden (piano). As a cello solo Mr. Bate will play Ponchini's "Chant de Patre."

A TALK to farmers on "The Proper Stage for Cutting Wheat," will be given on Thursday evening at 7.30 by Mr. W. J. Calder, M.Sc., B.Ag. This talk has been arranged by the 3YA Primary Productions Committee. The evening's programme will be mainly classical. The vocalists will be Miss Anita Graham, Miss Agnes Cunningham, Mr. Sydney Andrews, and Mr. Fred A. Bullock. There will be two soprano and contralto duets. Miss Lucy Fullwood (pianiste) and the Studio Octet will be responsible for the instrumental portion of the musical programme.

FRIDAY'S programme will be of a popular type, with a supplementary dance music session, which will be supplied by the Bailey Marston Dance Orchestra. The vocalists will sing some old favourites, which will prove very acceptable. The singers will be Miss Lucy Fullwood, Miss Mary Taylor, Mr. T. G. Rogers, and Mr. E. J. Johnson.

VARIETY will mark Saturday evening's programme. There will be

soprano songs by Mrs. B. Sluis, and tenor solos by Mr. W. J. Bischlager. Mr. Leslie Stewart will sing "The Desert Song," "Hats Off to the Stoker" and "That's How the World Was Made." The Melody Maids will sing at the piano with ukulele. There will be humour by Mr. H. Instone, and bright music by the Studio Instrumental Octet.

4YA Notes

THE Rev. L. McMaster, B.D., of Christchurch, will be the preacher at Knox Presbyterian Church on Sunday evening, when the service will be broadcast. A relay of a concert to be given by the St. Kilda Band, will follow.

QUARTETTES by the Orpheus Male Four, a combination of Dunedin Royal Male Choir soloists, will be a feature of Monday evening's programme. The numbers will include "Bells of Seville," "Cornfield Melodies," "Wint' Songs," "An Evening Lullaby," and "I Hear Kentucky Calling"—a variety of items which will please all tastes. Soprano and contralto solos will be sung by Miss Freda Elmes and Miss Netta Wilkie, respectively. Miss Ngata Buswell will recite. Mr. James Paterson will sing "The King's Minstrel," and Mr. H. McAllum "King of the Air." Violin solos will be played by Miss Bessie Paine.

THE Kalkorai Band, under Mr. T. J. Kirk-Burnand, will provide the programme on Tuesday evening. Assisting vocal artists will be Miss Rita Holmes (soprano), Miss Irene Hornblow (contralto), Mr. J. Montague (tenor), and Mr. R. Martindale (baritone). Recitations will be given by Miss Isobel McGregor, a fine concert performer, who is making her debut in radio.

ON Wednesday evening, at 7.40, there will be a talk to farmers, arranged by the Primary Productions Committee. The Novelty Trio will be introduced to listeners on Wednesday evening. A very bright programme will be presented by these instrumentalists. The fingers for the evening will be Miss Letti de Clifford, Miss Margaret Howden and Mr. Les Stubbs. Two duets will be "List to the Convent Bells," and "Life's Dream is O'er." Recitations will be given by Mr. Dale.

Miss Madge Clague, a contralto from England, who has lately been a regular singer at 1YA, will be appear at 4YA on Friday evening. Her items will be "Buy My Strawberries," "The Nightingale of London's Inn," and "Sea Wrack." Other soloists for the evening will be Miss D. Sligo (soprano) and Mr. W. Hilliken (baritone). Mr. Angus Gorrie will continue his series of recitals on "Young Poets Lost to England During the Great War." The programme will contain items by the Studio Trio, a cello solo by Mr. P. Palmer, and some selected records, instrumental as well as vocal.

ON Saturday evening 4YA will relay 3YA.

WANTED AND FOR SALE.

For column of casual advertisements see page 32.

How U.S.A. Broadcasts Wireless "Weather"

Activities of the N.B.C. Peculiar Phenomenon

MERLIN H. AYLESWORTH, president of the National Broadcasting Company in America, is on a visit to Europe, where he has had something to say about the American system of broadcasting.

Aylesworth believes that service to the public is the one foundation on which the company should base its hopes for permanent support and ultimate prosperity. As a result the measures the things N.B.C. should do or not by the test of whether they will benefit the public.

Aylesworth is not a technician; he will tell you he doesn't know the difference between a kilocycle and a motor-cycle, or a short-wave and a permanent wave.

He has a technical staff to deal with those things. But he does try to envision the vast possibilities of radio as an educational and cultural force, as a purveyor of entertainment, information and instruction. His enthusiasm and sense of the dramatic and his refusal to accept as final "it can't be done" often enables him to accomplish the seemingly impossible.

With some sixty-three broadcasting stations to feed, the N.B.C. mainly relies for its upkeep on the income accruing from microphone publicity given to a large group of industrial and commercial concerns who sponsor the programmes.

No direct advertising is permitted, as it is considered that bald "puffs" would raise the antagonism of listeners and would defeat its own ends.

Of the sixty-three transmitters dotted all over the North American Continent, from New York on the east coast, to San Francisco in the west, and from Chicago to Miami in Florida, only three broadcasting stations are actually owned by the company.

Daily transmissions are almost continuous from 7 a.m. until midnight and simultaneously, where necessary, three different entertainments can be relayed to three separate groups of stations included in this system.

A rule has been made that no educational or instructional talks shall last more than 15 minutes, and statistics show that of the total transmissions only 33 per cent. of the time is devoted to speech.

In his opinion, Mr. Aylesworth states that the tastes of listeners had undergone considerable change in the space of two years.

WIRELESS has a "climate" and "weather" of its own, stated Mr. R. A. Watson Watt in a lecture he delivered before the Royal Meteorological Society recently.

Wireless as a means of communication is essential in modern meteorology, because it alone is capable of giving sufficiently rapid interchanges of data over wide areas. The results of observations made all over Great Britain are in the hands of the central forecaster within an hour, the majority of the data for Europe are received within an hour and a half, and that for the whole Northern Hemisphere within six hours.

THE weakening of signals over different kinds of country, according to time of day and season, and the dependence of atmospheric disturbance on latitude, place and time, are climatological in scope. The quick-period changes, the erratic phenomena of fading, are part of the "weather" of wireless—atmospherics are its "rain-fall."

The lecturer declared that the average atmospheric is a hundred thousand times as strong as a readable signal. They have been known to disturb broadcast reception up to four thousand miles from their place of origin.

Atmospherics originate in thunderstorms, and the predominant source of the world's supply of atmospherics at any moment usually lies in a land where it is summer afternoon. The average atmospheric received in England is of such strength as would be sent out by a thunderstorm 2000 miles away.

Speaking of the alleged effects of wireless on weather, Mr. Watson Watt stated that the average rainfall of England requires for its production the expenditure of energy at the rate of a third of a million horse-power per square mile night and day throughout the year.

The total rate of emission energy from the broadcasting stations of Great Britain and Northern Ireland, in the limited periods during which they work, is less than 53 horse-power.

Any effect of broadcasting on weather would therefore be due to "sub-homo opa hic doses" of less than one in a thousand million.

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AND
SPEAKERS

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