world wide, and it is quite natural to expect stations to broadcast and announce in their native languages. To identify every station heard, a listener impossible to attend in person. Would must first become quite familiar with shortwave tuning.

"The first requirement is an accurate list of shortwave stations, free from false and discontinued stations. Following this is a calibrated receiver, or at least an idea as to where certain wave-lengths fall on the dials. Then by simple comparison of the wavelength and the scheduled stations in the list and the time of reception, a great many stations may be properly and easily fixed.

"However, the handicap of different languages still presents a problem. By becoming familiar with certain phrases and radio terms used in radio one may, perhaps, learn what language is being used. Five languages are in most common use, namely, English, German, French, Spanish, and Dutch. We will dismiss English, as it is easily understood by our readers.

"The opening German announcement is generally "Actung, Actung," ing "Attention." Other easily learned words are "Kurswellendsender" (shortwave station) and "Rundfunksender" (broadcaster). The French almost always announce 'Hilo, Hilo, ici-which means, 'Hello, Hello, Other words are 'Radiotelephonique' (radio telephone station), and 'Emission' (broadcast). Spanish stations are accustomed to opening an announcement as 'La Estacion' station) and common words, easily understood, are 'Transmisores' (transmitter). 'Telefonia' (telephone), Senor and Senorita (Mr. and Miss). Dutch stations are often herd saying 'Dames and Herrn (ladies and gentlemen).

"Telephone stations are oftimes identified by the cities or stations which they call. For example, Holland stations will call 'Hello, Bandoeng,' when working one of the Javanese stations. FTN in France, calls LSG Buenos Aires, Hilo, Hilo, Buenos Aires ici Paree.' Other identifications are, HRB -Cuckoo call three times before announcing. F31CD—Striking of gong and calls, 'Hello, here is Siagon.' PCJ -Ticking of clock between selections. Also uses English. Rabat-60 beats on a metronome per minute. LSG-Calls, "Hilo, Paree, ici Monte Grande." English phones—Uses chopper modulation cutting up voice. KA1XR-Announces 'KZRM broadcasting from atop of Manila Hotel. Javanese phones-Calls "Hello, Kootwijk hier is Ban-doeng." Zeesen—announces "Here is der Kurzewellensender at Koenigswursterhausen,' KIO announces 'Coco-Head calling.' I2RO—Lady announcer says 'Raddio Romana Tripoli.' Pradio-Announces 'Estacion El Prado, Eucador.' HS1PJ-Six Riobamba, notes on a piano or musical instrument. American shortwave stations may be identified by the stations which they relav."

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and to the fact that many different A Musical Pilgrimage Education on the Air A Popular 3YA Artist languages may be heard. Reception is

(Continued from front page.)

you, if you wanted very much to attend a particular "talkie," stay at home and listen-in? I think not.

Another new idea which is saving much time and money is the broadcasting of new operas to determine their possible future success. In the old days enormous expense was entailed in the rehearsal and production of an opera which subsequently might prove a failure. Even Puccini's gem of operas, "Madame Butterfly," was at first indifferently received.

Now, however, the complete score is broadcast several times, and people learn to appreciate the music before attending the initial performance. In this way every chance for success is afforded the opening production.

Every effort, too, is made to help young and unknown composers whose works, excellent though they might be,



SIGNOR LUCIEN CESARONI.

languish for want of a little publicity. languish for want of a little publicity.

And what an excellent medium radio

May 30: "An Aspect of Social Instituis for satisfying their needs. . . .

CURIOUSLY enough, Milan shares one broadcasting station Turin, a town about 80 miles distant and just across the French border. Each town is connected by a land line to the station, and the programme time is divided between the two. While in Milan I visited the broadcasting station there, and spent some time in chatting to the conductor of the studio orchestra. One idea in which I was very interested was the regular exchange every few weeks of his orchestra with the one in Milan. The conductors of each, however, remain behind.

Thus each combination has the benefit of playing under two conductors, each with his own pet ideas of the interpretation of music. Also the players themselves much appreciate the holiday thus afforded them.

My wanderings were now nearing an end, Leaving Turin, I was whirled by rail across France to Paris, thus completing the round trip. By air to London, where I spent a few weeks, and then after a tour which will always be among my most pleasant memories, I boarded a liner homeward , bound for New Zealand.

Series of Broadcast Lectures

THE following schedule of lecturettes and discussions has been prepared by the W.E.A. for broadcasting from Station 1YA, Auckland, and 2YA, Wellington :-

TVA.

March 24, 1931: "Introductory.

April 7: "Democracy—Do We Want It and Can We have It?"

April 21: "The Problem of Unemployment."

May 5: "Civilisation in America."

May 19: "Art in Everyday Life." June 2: "The Rationalisation of In-

dustry." June 16: "Crime and Criminal."

June 30: "The Problem of Money and Prices."

July 28: "Modern Views on Evolution."

August 11: "The Free Trade Question."

August 25:. "Post-war Germany."

March 21: "Education of the Air," by Dr. I. L. G. Sutherland, Director, Workers' Educational Association. April 4: "Matter and the Universe" (Professor P. W. Robertson, Professor of Chemistry, Victoria Uni-

versity College).

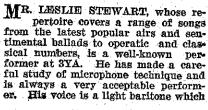
April 18: "Leaving Children Alone"
(Professor W. H. Gould, Professor of Education, Victoria University

sity College). May 2: "Two Australians Discuss the State of Their Country" (Mr. J. R. Elliott, B.A., and Dr. I. A. Hen-

ning, Lecturers, Victoria University College).

May 16: "A Martyr of International Peace" (Mr. H. G. Miller, M.A., Librarian, Victoria University College)

tions" (Professor T. A. Hunter, Professor of Philosophy, Victoria University College).





LESLIE FLEMING -Steffano Webb, photo.

broadcasts well. Mr. Stewart comes from Dunedin and received his first vocal training under Mr. John Leech. the well-known tutor.

Besides his radio engagements, Mr. Stewart is well known on the concert platform and frequently sings for the picture theatres. He has also toured New Zealand on the Fuller circuit, his splendid voice and his versatility as an entertainer making him a very popular artist in a vaudeville entertainment.

Kite Transmitters

For Direction-finding Tests

KITES carrying short-wave trans mitters and weighing little more than 1bb. are used in direction-finding tests now being conducted by the Department of Scientific and Industrial Research at the Slough experimental station in the South of England.

The transmitters each carry a number of dry cells and a valve, together with an aerial of about 100ft. Ranges up to half a mile are obtained, the kites being flown at heights up to 500ft. Radio bearings are taken on the kites from a ground station, extraordinarily accurate results being obtained.

ONE of the best methods of reducing very bad local interference from electric machinery, etc, is to use a frame aerial, but unfortunately owing to the loss of pick-up an extra R.F. stage will have to be used in order approximately equivalent to get strength.



DR. GEO. DE CLIVE-LOWE. A well-known writer, who has written a play, "The Price," which will be produced at 1YA on March 13.