## LETTER TO THE EDITOR

## AIKIN'S RESONATOR SCALE

TO THE EDITOR.

The Journal of Laryngology and Otology.

SIR,—In his interesting contribution to a discussion on "Speech Re-education Methods" reproduced from the "Proceedings of the Section of Otology, Royal Society of Medicine" in your issue of last month (page 216), Dr. F. B. Gilhespy has sought to reconcile the results of Harvey Fletcher's researches on the frequencies of vowel sounds with the so-called resonator scale of Aikin.

No doubt Aikin's scale is of practical service to the speech therapist as it is extensively used in the teaching of vowel sounds. Nevertheless it can hardly be accepted as accurate in the light of our present knowledge.

Harvey Fletcher in America and Sir Richard Paget in this country have independently shown that *every* vowel sound has a high and a low frequency.

Dr. Gilhespy has placed some of Fletcher's figures below the notes of Aikin's scale, but for the first five vowels he has selected only the low frequencies of Fletcher's table, and has set them in line with the high frequencies for the remaining seven vowels, presumably in order that the figures may correspond to the steady and regular ascent of the scale. Fletcher's low frequencies for the upper seven vowels appear in a second line. The facts being thus distorted, the result is an erroneous impression which can hardly be allowed to pass unchallenged.

Dr. George Seth of Edinburgh has prepared a "scale" of the vowel sounds, based on all the frequencies given by Fletcher and Paget, and the result is not quite so simple as Aikin would have us believe. Aikin's Resonator Scale, published in 1910 as an aid to teachers, was probably never intended to be a scientifically accurate acoustic analysis of the vowel sounds, and the facts established more recently by the above-mentioned observers cannot confirm such a regular sequence of musical notes.

I am, Sir,
Yours very truly,
Douglas Guthrie.