

## LETTERS TO THE EDITOR

### THE COST OF AN AUDIOMETER.

THE EDITOR,

*The Journal of Laryngology and Otology.*

DEAR SIR,—I should like to reply to Dr Ross Souper's criticism of my comment at the Royal Society of Medicine where I claimed that the cost of the audiometer was not excessive. The price of the smaller model (8 notes ranging from 64 to 8192) is £135. I quite agree, however, that this is expensive. It must, however, be borne in mind that the instrument consists essentially of a series of heterodyned circuits; the inductances of capacities of each of these must be accurately and individually calibrated to produce the resultant "beat" note corresponding to the particular audible frequency required.

I do not believe this to be the ideal method, nor do I believe that the units employed to measure the varying intensities will find universal acceptance. But it is undoubtedly successful in so far as one can get an accurate quantitative measurement of hearing capacity as compared with the normal.

I quite agree with Dr Souper when he states that tuning-forks still have their uses. I employ them continually, but only for qualitative measurements.

During the past eighteen months I have experimented with three otometers (or audiometers) each employing an entirely different principle. From the large number of inquiries it is evident that the interest in accurate electrical measurement of auditory nerve function is keen. I should like therefore to add for the benefit of any other aurist who may be interested that I hope, during this year, to demonstrate an entirely new otometer, which will produce pure notes from 16 to about 10,000 double vibrations per second. The intensity of these notes can be varied from almost inaudibility (the threshold of hearing) to "painful" audibility. These differences of intensities will be expressed in terms of ordinary electrical units. I might point out that the performance and range of this instrument will compare with the large audiometer (costing about £600). It will be no larger than a hand sewing machine and its cost under £50.—I am, Sir, Yours faithfully,

O. POPPER.

12 WIMPOLE STREET, W. 1

15th April 1929.