

## Letters to the Editor

regards the definition of a decibel it will be best to give the information furnished in the report which the National Physical Laboratory sends back with every set of Tuning Forks which they calibrate.

“ If  $I$  and  $I_0$  are two different values of the sound energy, the difference  $L$  in intensity level expressed in decibels is given by  $L = 10 \log_{10} (I/I_0)$ . A decibel is approximately the smallest change of intensity that the ear can ordinarily detect.

The ‘ half intensity period ’ of a fork is the time taken for the energy of the fork to decay to one-half of its original value, i.e. to decay by 3.0 decibels.”

I would add to this that the National Physical Laboratory regards the decibel as the only unit which should be used for precision work, but that they do not consider that auditory testing is precision work.

The half intensity unit is by far the more intelligible to Otologists and to use decibels for recording of hearing tests is to pretend an accuracy which the tests do not possess. The half intensity unit is plainly the more suitable for Otologists, in fact it may be said that the decibel should not be employed for the expression of the results of tests of hearing.

I am, Sir,

Yours faithfully,

A. LOWNDES YATES.

TO THE EDITOR,

*The Journal of Laryngology and Otology.*

DEAR SIR,—I have read with great interest the articles in the January and February numbers of the *Journal of Laryngology* which contain the Report of the Committee on Hearing Tests. They are of interest to the physicist because of the application of the tuning fork, monochord and Galton whistle, and because of the rejection of the newer electrical means of producing and maintaining audible vibrations.

As some of your readers may possibly be misled by two slips which have entered into the reading matter, it may be well to have these pointed out, if this has not been done already.

In the January number, on page 27, the first overtone of a tuning fork is referred to as being “ usually about six octaves above the fundamental note of the fork ”. The frequency of this overtone is on the contrary, usually about six times the frequency of the fundamental, or, say, about two octaves and a fifth above the fundamental note of the fork. This overtone is prominent in many forks just after they have been struck, but generally dies out rapidly. When it is unpleasantly prominent, it may be much reduced by the simple expedient of placing a small, thin rubber band on each prong

## Reviews of Books

about one-third of the length of the prong from the free end. The change of pitch thus caused is quite negligible.

In a discussion on the monochord on page 79 of the February number, the formula for transverse vibrations includes the quantity  $m$ , where  $m$  stands for, not the mass, but the mass of unit length of the wire.

I am,

Yours faithfully,

GEORGE E. ALLAN.

The University,

Glasgow.

## REVIEWS OF BOOKS

*The Extra Pharmacopœia.* MARTINDALE AND WESTCOTT. Vol. I. Twentieth Edition. Revised by W. H. Martindale. London, H. K. Lewis & Co., Ltd., 1932. 27s. 6d. net.

The twentieth edition of "Martindale" coming just after the publication of the 1932 *British Pharmacopœia* has renewed importance in addition to renewed and, if possible, increased interest. In reference to the tendencies of established old-timers a number of the *B.P.* fourteen preparations are retained, as many of them, though omitted from the present *B.P.* cannot, as yet, go altogether out of favour.

An immense amount of pharmacological, therapeutical and legal information is provided throughout, the last being made as intelligible as possible to the medical mentality.

Among unfamiliar information we are warned that Lysol is only active on gram-negative organisms, excluding thus the strepto- and many other cocci. Apparently two brands containing 50 per cent cresol are more generally efficacious than the original Lysol. As the streptococcus is the main enemy of the parturient woman and of the otitic sufferer, we must reconsider our trust in its efficacy in our own work. Acriflavine with glycerine, as also brilliant green, is recommended (p. 301). The section on Salicylic Acid is most interesting and affords encouragement to reperuse our organic chemistry. Amyl-Salicylate is recommended as a substitute for Methyl-Salicylate, having less odour. A combination of Salicylate of Methyl with Menthol (p. 67) is said to relieve pruritus, a symptom the otologist not infrequently has under his notice. The relaxation of the Methylated Spirit Regulations (p. 117) will be welcome, allowing plain Industrial Methylated Spirits without the "approved denaturants" to be used in place of "Surgical Spirit". The use of arsenobenzol combined with Mercurial (or Bismuth) treatment