subject has at last succeeded in making a position for itself, and its existence is recognised in the chief universities of England and Scotland. Its further progress will certainly be assisted by this able account of the methods and accomplishments of the science.

SPEECH.

The Science of Speech, an Elementary Manual of English Phonetics for Teachers. By Benjamin Dumville. Pp. xii+207. (Cambridge: University Tutorial Press, Ltd., 1909.) Price 2s. 6d.

'HIS is a concise, accurate, and interesting little manual, written by one who is evidently a master of the subject of phonetics, and knows how to communicate information. Nowhere have we seen so good an account of the muscular movements and the positions of the articulating apparatus. The book is intended for teachers, who often, in these days, are required to teach the elements of phonetics. or, at all events, to train children in the art of correct pronunciation and good reading. It is not a book to be read hastily. It requires a careful experimental study of the movements described, with the aid of a mirror, but the descriptions are so clear and the methods so simple and convincing that the accurate knowledge acquired will well repay all the trouble. The nature of vowels, consonants, diphthongs, digraphs, the distinction between voice and whispering, the various kinds of whispers, and the nature of the aspirate are fully explained.

There is an interesting chapter on the sounds in connected speech, such as accent, emphasis, intonation, assimilation, and variations in pitch. The author, perhaps, scarcely attaches the importance to pitch, or rather to variations in pitch in the words or syllables of a spoken sentence, which we are inclined to do, and which is brought out in a striking way when the vibrations of the sounds of a sentence are recorded on a rapidly moving surface. We are much interested in the chapter on "The Organic Basis of English," which must appeal to physiologists, the point being that, by repetition, during the early period when speech is acquired, a kind of habit is imposed on the articulating organs, and, we would add, on the nerve centres involved; this will be determined by the sounds the child imitates, or is taught to pronounce. There will thus be a kind of organic habit for each language, a consideration that may explain how difficult it is for one trained from early days in the English language to acquire, in later life, the true intonation of good French. The author gives a striking illustration, p. 141, of the difference between the English t and its French equivalent, so that an Englishman uttering the sentence Ton thé t'a-t-il ôté ta toux? (Has your tea taken away your cough?) would probably not give the t the peculiar softness or quality that can only be obtained by pronouncing the t, as the French do, by starting with the tip of the tongue from the back of the front teeth, instead of a little behind, as is done in English speech (see Fig. 27).

The last two chapters deal with spelling reform and with the important pædagogic question of whether a phonetic training is helpful to children who are learn-

ing to read. We will not follow the author here, but be content with stating that he presents his arguments forcibly but with fairness. Children must at first be taught by the ear alone, and by frequent repetition; sounds that are distinctly bad, like the peculiar tone of many resident in London or in the south, or the nasal drawl of the west of Scotland, must be got rid of; and the ear of the child must hear, at all events during school hours, the tones of pure English. In not a few cases, probably, the work of the teacher may be undone by the sounds of the child's home. The author refers briefly to the use of the phonograph. The intonation of the gramophone is far superior, and we would advise that the Gramophone Company should be induced to take, say, a dozen records from highly trained and correct voices, illustrating the tones of pure and undefiled English. These would be of immense service to teachers. The Gramophone Company has a record of the voice of the late Canon Fleming, uttering some of the prayers in the Morning Service of the Church of England, which fully illustrates what we mean.

It is a pity that a better set of symbols for phonetic speech sounds has not been invented. Some are very grotesque, but, still worse, with a weak eyesight, some of the symbols are difficult to discriminate. The symbols of Graham Bell seem to us to be better than those mostly in vogue, and it is only right to mention that these are used by so high an authority as Mr. Sweet in his "Primer of Phonetics." Mr. Dumville is to be congratulated on having produced an excellent book on what is truly the *science* of speech.

JOHN G. MCKENDRICK.

A TEXT-BOOK OF OTOLOGY.

Lehrbuch der Ohrenheilkunde für Ärzte und Studierende. By Dr. Paul Ostmann. Pp. viii+533. (Leipzig: Verlag von F. C. W. Vogel, 1909.) Price 18 marks.

HE name of Dr. Paul Ostmann is well known to otologists, not only in Europe, but in the British Islands and the United States. A text-book upon diseases of the ear from his pen is, therefore, welcome, even though it be disappointing. Like all text-books which hail from the German Empire, however, it is marked by that peculiar German conceit which, whilst giving ample prominence to the work of compatriots, ignores, or, at the most, dismisses with curt comment, that of equally prominent scientific labourers of other countries. Dr. Paul Ostmann's text-book abounds with references to German aural surgeons, but in all its 533 pages only some seventeen British or American otologists receive mention, and the names of some of these are spelled incorrectly. Picking out, from motives of curiosity, the names quoted from among those surgeons who belong to our own country, we find that Handfield Jones, Toynbee, Hinton, Ogston, Macewen, Walker Downie, Dundas Grant, and Yearsley alone receive acknowledgment for their work, whilst Cheatle, Pritchard, Barr, and many other names of equal lustre in the domain of diseases of the ear are ignored completely. In a work issued at the present time, when so much that is of lasting