

## Letter to the Editors.

*To the Editors of THE JOURNAL OF LARYNGOLOGY.*

SIRS,—It is with great interest and pleasure that I find Dr. Holbrook Curtis, of New York, has recorded his valuable observations. It is, however, not the first time that these appearances have been noted. Years ago my husband, the late Emil Behnke, observed tiny wart-like growths; thickening and bulging; frayed or serrated edges; and striated, and generally congested appearances of the vocal ligaments. I have also met with examples in my own work. The remedial exercises adopted by Mr. Behnke were similar to Dr. Curtis's, in so far that he insisted on the use of diaphragmatic and inferior costal breathing, but the vocal exercises were different. The employment of the vowels "ah" and "o," as instanced by Dr. Curtis, can have no influence in producing the results above enumerated; vowels being formed by the different positions of the mouth, soft palate, teeth, and lips, and not by the varying adjustments of the vocal ligaments. Those cases of nodules that came under Mr. Behnke's notice, and also those in my own work, have not been caused by the use of the *coup de glotte*, but by that closure which is called the "check" of the glottis. In the "check" of the glottis, "the vocal ligaments meet *before* the air has had time to reach them, the pyramids "come into close contact with their inner surfaces, and the vocal ligaments are "held firmly together. The gate is securely shut, the air accumulates below, "until the pressure becomes great enough to overcome the resistance above. "Then the gate is forced upon, and the action is accompanied by a distinct "click.'.....It is generally followed by a continued tight closure of the vocal "ligaments, so that the air has, from the beginning to the end, an unnecessary "amount of opposition to overcome. This also interferes with the tone, and "makes it hard and metallic." In the *coup de glotte* "the vocal ligaments meet "just at the very moment when the air strikes against them; they are, moreover, "not pressed together more tightly than is necessary. No obstacle has to be "overcome...but the attack is clear and decisive, and the tone gets a proper "start.....The closure of the vocal ligaments being maintained at the most "suitable degree, the tone production is carried on, so far as the glottis is "concerned, under the most favourable conditions, and the result is the best that "can be obtained." ("Voice, Song, and Speech," Browne and Behnke; p. 128.)

If the "check" of the glottis be continually and energetically used, injury to the delicate membrane is a certain result, and also to the muscles which govern the closure of the glottis, *i.e.*, the lateral crico-arytenoidei, and with them the arytenoideus. Hence the condition of the cords which Dr. Curtis observes. The striated appearance of the vocal ligaments, and congestion of the pharynx mentioned by him, I have, in my own work, found to be caused, not by vocal practice on the vowel "o," but by wrong use of the registers. "A register is a series of tones produced by the same mechanism." (Behnke: "Mechanism of the Human Voice.") When that mechanism is employed beyond its natural limits, great strain is plainly visible in the ligaments themselves and in the surrounding parts, which look red and angry, and its continuance leads to chronic congestion. After medical treatment has removed the results of such erroneous vocal methods, practice on the right use of the registers will speedily remove congestion, and vocal tone will be fuller and more resonant.

Dr. Curtis says, "Be careful that the initial attack is removed entirely from

the cords." The right focus of respiratory attack is against the vocal ligaments; it is as impossible to make any tone if the attack is taken from the cords as it is to get notes from a wind instrument by directing the breath anywhere but against its vibrating element. There are other debatable points in Dr. Curtis's theories of voice training, but I must not encroach further on your valuable space to refer to them. Nevertheless, if the results he obtains are so good, we must be thankful to him for calling our attention to them.

I am, Sirs, yours respectfully,

K. BEHNKE.

[We have no intention of opening these columns to a discussion of matters of interest merely to musical instructors, and the argumentative questions of singing registers, &c.—EDS. J. of L.]

---

## NOTES.

---

THE Editors desire to express their acknowledgment for the very able manner in which the proceedings of the British Medical Association Meeting, lately published in this Journal, were reported by Dr. WATSON WILLIAMS (Bristol) and Dr. MILLIGAN (Manchester).

---

ON Thursday, the 25th of October, the celebrated otologist, Dr. W. MEYER, of Copenhagen, attained the advanced age of seventy. Dr. MEYER, who is in full enjoyment of perfect health and undiminished vigour, received on the occasion a very handsomely bound address from the younger specialists in Denmark as a mark of the esteem and appreciation which is so justly due to him, not only as one of the most distinguished otologists of this century, but also as a friend and colleague.