

Roe (J. O.)

Compliments of
DR. J. O. ROE,
17 N. Clinton Street,
Rochester, N. Y.

LARYNGEAL WHISTLING.*

By J. O. ROE, M.D.,
ROCHESTER, N. Y.



Miss Julia C., æt. twenty-one years, the daughter of a clergyman, was referred to me for treatment for a mild pharyngo-laryngeal catarrh, Nov. 26, 1880.

While examining her for the above difficulty she called my attention to a peculiar power that she possessed, viz., that of whistling with the lower part of her throat at will, without the aid of her lips or any portion of the buccal cavity.

On requesting her to give an exhibition she at once whistled a tune through for me as perfectly as one can with the lips. The only difference noticeable was that it was in quite a low key, and sounded as if she was at quite a little distance from me or in another room.

To ascertain positively where this sound came from I had her whistle "Yankee Doodle" while I watched the movements of the larynx in the laryngeal mirror.

On producing the whistle, the vocal cords were drawn tense and the chink of the glottis nearly closed. The ventricular bands were approximated and puckered up, leaving an elliptical opening in the centre through which the vocal cords could be seen with their thin edges vibrating. The contraction of the ventricular bands was assisted by the contraction of the thyro-ary-epiglotticus, as the epiglottis and arytenoid cartilages were more or less approximated; but on producing high tones the arytenoid cartilages were drawn up under the epiglottis instead of the epiglottis being drawn downward.

Thus it could be distinctly seen that the fundamental tones

* Read before the American Laryngological Association, session 1881.
Reprinted from the ARCHIVES OF LARYNGOLOGY, Vol. iii, No. 1, Jan., 1882.

of the laryngeal whistle were produced by the vibrations of the edges of the vocal cords, the tone being modulated by the minute adjustment of the ventricular bands which regulated the laryngeal opening above the cords.

In addition to the assistance of the ventricular bands in modulating the tone they also pressed firmly down on the vocal cords, closed the ventricles, and acted as a damper in preventing the cords from vibrating except for about one third of their length in the centre. This sphincter-like action of these muscles corresponds with the position which Gordon Holmes¹ believes the larynx to assume in the production of the falsetto notes.

This young lady says she has been able to whistle in this manner since childhood, and previous to two years ago, when her throat began to give her trouble, she also possessed some ventriloquial powers.

In order to ascertain if this phenomenon was due to the fact of her possessing this ventriloquial power, I have since taken the occasion of examining the larynx of a professional ventriloquist.

I discovered in him that he produced the primary ventriloquial tones in precisely the same manner, *i. e.*, the larynx assumed exactly the same shape that the young lady's did while whistling. He was unable to produce a laryngeal whistle, but he told me of two other ventriloquists who were able to whistle very loudly with the larynx alone, the mouth being closed, and who could give beautiful imitations of canaries and other whistling birds.

This shows the ventriloquial power to be due to the ability of modulating the tones in the larynx with little or no assistance of the organs above, except to deflect the sound or "throw the voice," as they term it, in the direction from which the performer wishes it to appear that it originated.

This phenomenon of laryngeal whistling is certainly a very interesting physiological and vocal curiosity, occurring as it does in a person who has never cultivated any fancy vocal gymnastics, as is the case with ventriloquists.

No cases of the kind that I have been able to find are recorded.

¹ "Vocal Physiology and Hygiene," London, 1879, p. 116.

On inquiring of other physicians I have found but two who have seen cases of this kind, viz., Dr. Elsberg, of New York, and Dr. Moore, of Rochester.

Dr. Elsberg has seen two cases, both young ladies between twenty and thirty years of age, who could whistle with the larynx alone moderately loud.

Dr. Elsberg also stated to me that my observations in regard to the manner in which the sounds were produced and the position assumed by the larynx, as detailed above, corresponded exactly with the observations which he had made in his cases.

Dr. Moore has seen one case, that of a girl five or six years old, who could whistle in a medium tone with the larynx at will, and could imitate a bird-call. When quite young she could whistle in this manner any tunes that were familiar to her, but as she grew older she lost this power, from want of cultivation, but retained the ability to produce different sounds and the bird-call.

No laryngoscopic examination in this case was made.

Since writing the above I have heard of another case of laryngeal whistling through a non-medical friend, that of a little boy being able to whistle very loudly with his mouth wide open.

