

**ON ARTICULATE SOUNDS,
AND ON THE
CAUSES AND CURE OF
IMPEDIMENTS OF SPEECH**

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On Articulate Sounds, and on the Causes and Cure of Impediments of Speech by John Bishop

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JOHN BISHOP

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A MESIAL SECTION OF THE VOCAL ORGANS.

A Septum Narium
B Eustachian Tube
C Uvula
D Dorsal of Right Side
E Section of Tongue
F Epiglottis

G Section of Arytenoid Muscle
H Base of Arytenoid Cartilage
I Right Ventricle of Larynx
K Right Chorda Vocalis
L Internal Surface of Trachea
M Section of Os Hyoides

ON
ARTICULATE SOUNDS;
AND ON
THE CAUSES AND CURE
OF
IMPEDIMENTS OF SPEECH.

Samuel S. Taylor M.D.

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BY

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MDCCCLL

EW.

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1851

P R E F A C E.

DURING the past and the present century great advances have been made in the science of Acoustics, which has been applied with considerable success to the functions of the vocal organs in man. The Author has therefore thought it desirable at this time to give a brief exposition of the Physiology and Pathology of the articulating organs.

Those who have studied the treatises of Euler, Poisson, Chladni, Biot, Sir John Herschel, and the Rev. Mr. Willis, must not only have derived a tolerably correct opinion of the present state of acoustic science, but must also perceive the difficulties with which the subject of vibrating membranes is still encompassed.

The first part of this work is intended to supply the data necessary for the study of the pathological condition of the organs of articulation. It is shown that the Physiology of the subject terminates at

that point where the Orthoëpy begins, and that the boundaries which separate these branches of knowledge are clearly defined.

Of the articulating organs, as of all others, the pathology is necessarily derived from the physiology. In the treatment of their disorders, however, we possess advantages much greater than in the disorders of many other parts of the body, of which the normal functions are less understood, and the pathological conditions less obvious to the senses. Hence, our success in the treatment of the defective use of the vocal organs is considerably greater, and it is hoped that, in the following pages, some of the points connected with this difficult subject are satisfactorily cleared up. A rational plan of treatment appears to be the more necessary because, when cases of this kind formerly presented themselves, surgeons were not in possession of any correct theory on the subject; the want of which has encouraged unqualified empirics to occupy the vacant ground, with manifest discredit to the profession, and detriment to the public.

It was after the author had occupied his leisure hours during several years in studying the physiology of the human voice, as a subject of abstract

research, that his attention was forcibly drawn to its pathology, by the surgical treatment of impediments of speech proposed by Dieffenbach, and others. The author has ever been at a loss to comprehend how a mechanism, so elaborate and perfect in its normal state as that of the vocal organs, could be expected to perform its office after mutilation. This question he leaves to the disciples of Dieffenbach to answer; but is satisfied in his own mind that the course they have pursued has resulted from their imperfect knowledge of the physiology of these organs, leading them in many cases to mistake functional derangement for organic defect.

38, *Bernard-street, Russell-squares,*

March 30, 1851.

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