# THE PHYSIOLOGICAL AND PATHOLOGICAL RELATIONS OF THE VOICE AND SPEECH

Published @ 2017 Trieste Publishing Pty Ltd

### ISBN 9780649483426

The Physiological and Pathological Relations of the Voice and Speech by John Syer Bristowe

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd. Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

# **JOHN SYER BRISTOWE**

# THE PHYSIOLOGICAL AND PATHOLOGICAL RELATIONS OF THE VOICE AND SPEECH



In Harley how my

### THE

# PHYSIOLOGICAL & PATHOLOGICAL RELATIONS

OF THE

# VOICE AND SPEECH

## JOHN SYER BRISTOWE, M.D.Lond., F.R.C.P.

SENIOR PHYSICIAN AND LECTURER ON MEDICINE AT ST. THOMAS'S HOSPITAL.

Being the Lumleian Lectures, delivered before the Royal College of Physicians, in March and April, 1879.



1000

LONDON:

DAVID BOGUE.

PUBLISHER TO THE ROYAL COLLEGE OF SURGEONS, 3 ST. MARTIN'S PLACE, TRAFALGAR SQUARE. 1880.

### JAMES RISDON BENNETT, M.D., F.R.S.

### PRESIDENT OF THE ROYAL COLLEGE OF PHYSICIANS,

Chis Volume is Inscribed,

IN

TOKEN OF THE ESTEEM AND AFFECTION

ENTERTAINED FOR HIM

BY

HIS OLD PUPIL

### PREFACE.

THE following lectures were not intended to be exhaustive of the subjects discussed in them. certain matters in relation to the voice and speech were selected for consideration, to which the Author had from time to time given special attention, and upon which he had contributed papers to the St. Thomas's Hospital Reports, and to the Transactions of the Clinical Society, and had delivered himself to some extent in his work on The Theory and Practice of Medicine. The articles referred to, however, have only been partly reproduced, and the opinions originally entertained have been carefully reconsidered, and in many instances considerably modified. The notes to the first lecture are quoted almost verbatim from a paper of the Author's On the Mechanism of Articulate Speech, published ten years ago.

Among the authorities whose works were largely consulted for the purposes of that paper, and to whom he is still chiefly indebted for information relating to articulate sounds, must be especially enumerated:—

Helmholtz, Die Lehre von den Ton-empfindungen als Physiologische Grundlage für die Theorie der Musik. French translation, 1868, corrected up to that date by its Author; J. Müller, M.D., Elements of Physiology, translated by Baly; Professor Max Müller, Science of Language, 1864; and Mr. A. J. Ellis, various publications on Phonetics.

11 OLD BURLINGTON STREET, February, 1880.

# CONTENTS.

LECTURE L	
	PAGE
Introduction—Action of Organs of Respiration—Action of Organs of Phonation—The Natural or Chest Voice—The Falsetto Voice—The Whispered Voice—Action of Organs of Articulation—Letters—Classification of Letters—Vowels—Scheme of Vowel-sounds—Consonants—Scheme of	
Consonantal Sounds	1
LECTURE II.	
Recapitulation—Complexity of Motor Processes in Respira- tion: in Phonation: in Articulation—Transmission of Sensory Impressions to Brain—Auscultation: Ægophony: Bronchophony and Pectoriloquy—Loss or Impairment of the Laryngeal Voice—Paralysis of the Recurrent Laryn- geal Nerve—Cases—Paralysis and Spasm of Organs concerned in Articulation—Bulbar Paralysis: General	
Paralysis, &c.—Chorea and Stammering	54
LECTURE III.	,
Cerebral Localisation of Speech—Broca's Views—Bastian's, Broadbent's, Ferrier's, and Kussmaul's Observations—	
Cases	98

. 10 e \*\*\* (**26**) (26) -

## ILLUSTRATIONS.

I.	VERTICAL TRANSVERSE SECTION OF LARYNX	PAGE 4
2,	VERTICAL ANTERO-POSTERIOR SECTION OF LARYNX	4
3.	UPPER ORIFICE OF LARYNK SEEN FROM ABOVE, DURING	
	UTTERANCE OE A HIGH NOTE	5
4.	DIAGRAMS OF GLOTTIS	12
5.	DIAGRAMMATIC ANTERO-POSTERIOR VERTICAL SECTION OF FACE, NECE, AND SKULL, SHOWING IN ITS UN- SHADED PARTS THE CAVITIES OR CANALS CONCERNED	
	IN PHONATION AND SPEECH	13
6,	DIAGRAMMATIC REPRESENTATIONS OF POSITIONS OF ORAL	
	PARIETES AND TONGUE IN PRONUNCIATION	37
7.	LATERAL VIEW OF LEFT HEMISPHERE OF BRAIN, SHOW- ING PRINCIPAL SULCI AND CONVOLUTIONS; TOGETHER WITH FERRIER'S CENTRES FOR VISION, FOR HEARING, AND FOR MOVEMENTS OF LIPS AND TONGUE, OR FOR THE MOTOR PROCESSES OF LANGUAGE (AS NEARLY AS POSSIBLE BROCA'S CONVOLUTION).	
8.	DIAGRAM OF CEREBRAL AREÆ CONCERNED IN SPEECH,	
	AND OF THEIR CONNECTIONS	108