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Publication/Creation

London : Whittaker & Co., 1835.

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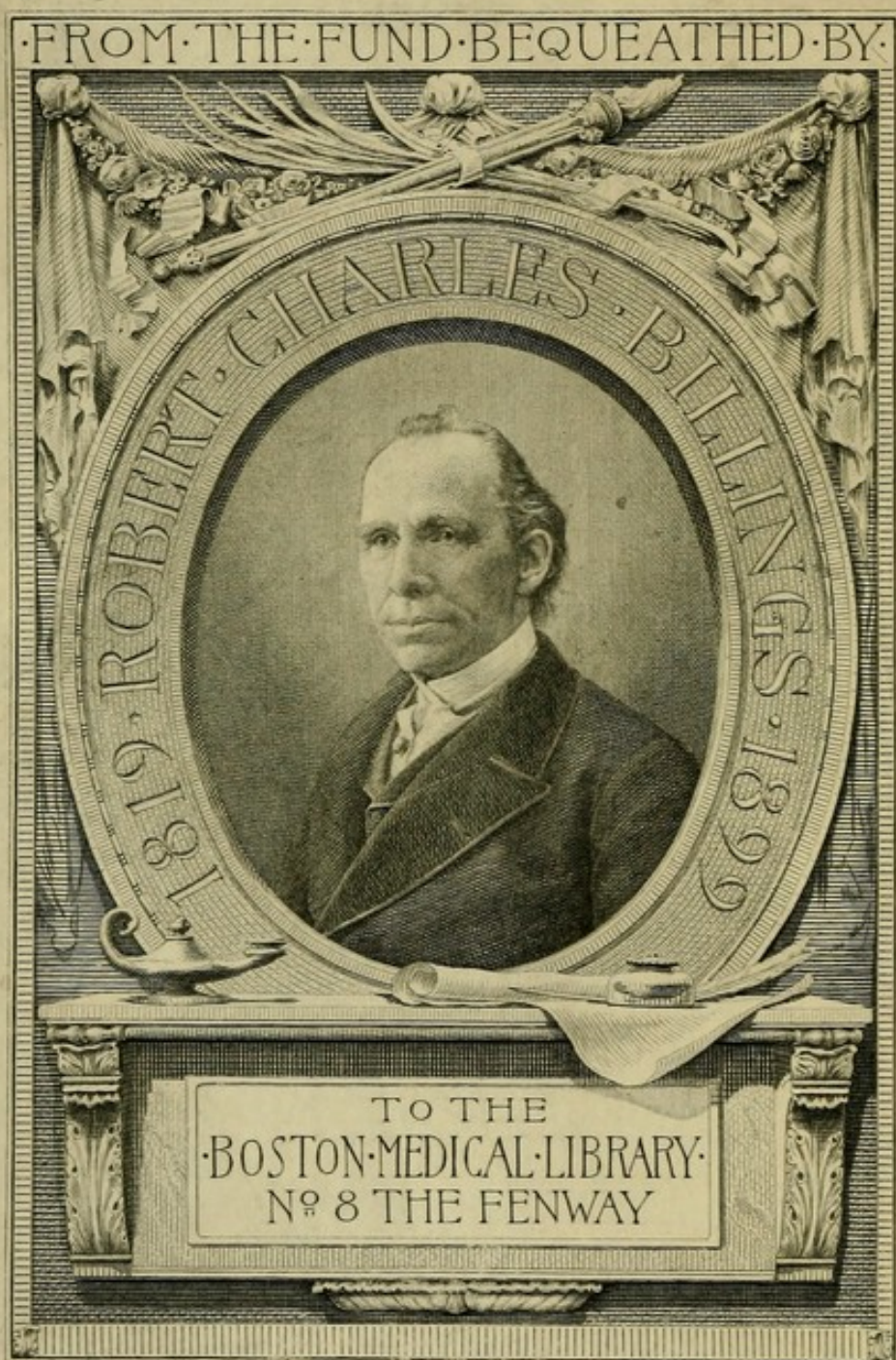
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WRIGHT'S TREATISE
ON THE
CAUSES AND CURE
OF
STUTTERING.

19. Q. 54.



TREATISE

THE CAUSES AND CURE

STUTTERING,

AND

THE REMEDY FOR THE SAME.

JAMES W. HUGHES, ESQ.

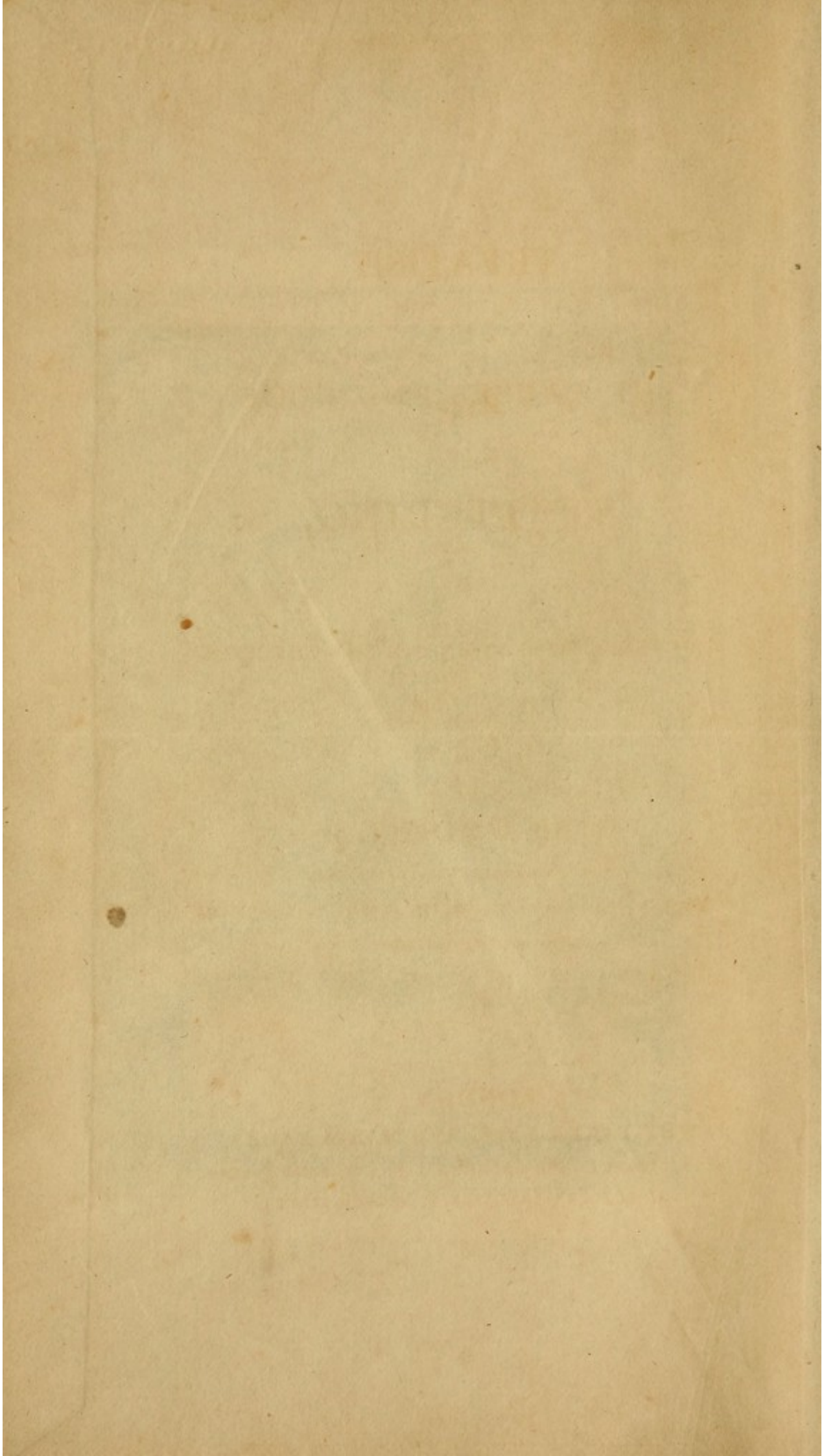
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LONDON

WETTERLICK & CO. 10, AVE. MARK LANE.

NEW YORK: J. W. HUGHES, 10, AVE. MARK LANE.
PHILADELPHIA: J. W. HUGHES, 10, AVE. MARK LANE.

1854



A
TREATISE
ON
THE CAUSES AND CURE
OF
STUTTERING,
WITH
REFERENCE TO CERTAIN MODERN THEORIES.

BY
JAMES WRIGHT, Esq.

LATE OF MAGDALEN HALL, OXFORD,
AUTHOR OF THE SCHOOL ORATOR, PHILOSOPHY OF ELOCUTION,
READINGS OF THE LITURGY, &c.

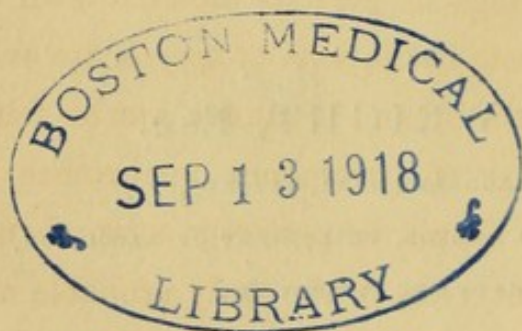
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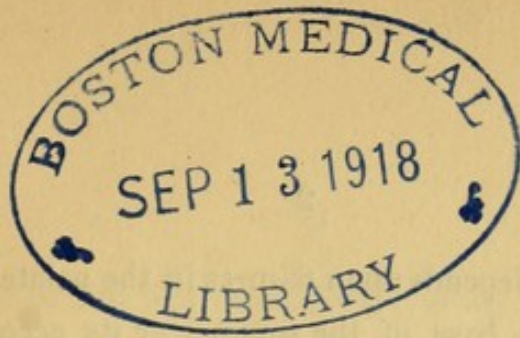
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THE Author is induced to submit the theory contained in the following pages to the judgment of the public, because he has found it of eminent practical utility in removing defects of utterance. He communicates his system for the cure of stuttering with much confidence, from having directed his entire attention to the subject for a considerable number of years, and from its being the result of extensive and long-continued experience. The sufferings of persons afflicted with complicated and inveterate hesitations of speech are evident to all who witness them : and it cannot but be felt and acknowledged to be of paramount importance to a cure, that the cause should be perfectly comprehended ; this, the Author conceives, is the only probable means of attaining a successful method of treating impediments of speech, and he trusts that he has accomplished the object.

*Arundel House,
Balham Hill.*



INTRODUCTION.

NUMEROUS are the theories and explanations which have been given, respecting the cause and cure of stuttering : but not one of them seems to approach the truth. The system of Dr. Arnott, and also that of Dr. M'Cormac, however plausible, are, nevertheless, proved to be ineffectual. The following letter, transmitted four years ago, to the Editor of the Times newspaper, which I now take the liberty of transcribing, clearly demonstrates, that stuttering is not occasioned from an attempt to speak, either without breath, or when the glottis is closed.

TO THE EDITOR OF THE TIMES.

Wednesday, Jan. 6th, 1830.

SIR,

Stuttering, or habitual psellismus, is so interesting a part of medical physics, that I cannot resist the temptation of offering one or two remarks on the extract from Dr. Arnott's work, which appeared in your paper of Saturday last. It is a subject which has engaged my attention for years ; but I am free to confess, that after continued and patient inquiry, I have not yet been able to arrive at any satisfactory conclusion, respecting what might be called the true physical cause of stuttering. Some medical men suppose, that it depends upon a relaxation of the *frænum linguæ* ; others are of

opinion, that it depends upon fissures in the palate or uvula, tumours on the base of the tongue, or its accompanying nerves. Dr. Arnott is of opinion, that stuttering is a spasmodic interruption, which occurs behind or beyond the mouth,—that it is occasioned from an endeavour to speak when the glottis is closed. The views of Dr. M'Cormac of Edinburgh, as set forth in his treatise, *On the Cause and Cure of Hesitations of Speech, &c.*, approach nearer to what may be conceived to be the truth. “I began my investigation,” says the writer, p. 33. “with the supposition that stammering was in general a vicious habit of speech, whose origin and real nature remained to be yet discovered. I commenced with calling to mind the mode of utterance, attempted by stammerers; and I repeated to myself, with all the correctness with which my imagination was capable, the procedure which stammerers employ when speaking, or about to speak. By the practice and consideration of those means, it suddenly occurred to me, that stuttering was an attempt to speak when the lungs are in a state of collapse or emptiness.” The author’s mode of cure is the expiring of words with very considerable force; and he affirms it to be so easy of execution, “*that were it not for the sake of saving trouble, it would be of little consequence whether children contracted it or not.*” How far will a favourite theory carry some persons! There appears, however, to be something rational in the opinion of this writer. It is certainly more satisfactory than that of the author of the *Elements of Physics*. But I am disposed to read every thing that is written upon the subject with exceeding caution, and am constrained to say, that the system neither of Dr.

Arnott nor of Dr. M'Cormac, will, in my humble opinion, be of much utility, in the removal of confirmed and inveterate instances of stuttering. Still, it would be idle not to acknowledge, but that there may be, occasionally, instances of psellismus, which seem to arise from some spasmodic affection of the glottis, or from an attempt to speak without breath; on the other hand, to suppose that *all* stuttering is occasioned by either of the above causes, would be equally idle. Let us imagine the following sentence to be spoken as I mark it. "Many men are very incredulous." *m-m-m-e-e-n-n-y m-e-e-e-en ar-ar-ar b-p-p-t-b-v-ver-y ink-k-* (here from the painful contortion of countenance, and from the wry motions of various parts of the body, the speaker appears almost convulsed) *ink-k-redlus*. Such an instance of stuttering is of very common occurrence. Now the question proposed is,—what can possibly be the cause of the hesitation during the utterance of the first three words? Is it because the glottis is closed, or because the lungs of the speaker are not sufficiently supplied with breath? The supposition would be frivolous, for all three are composed of liquid and vowel sounds; and, therefore, however continued might be the psellismus, the glottis, during all the time of the hesitation, must be open, and the lungs must, all the time, be supplied with breath. The question returns,—what is the cause of the interruption at the word *very*? It is unreasonable to suspect, that it proceeds from either of the above causes, or from any one of nervous irritation. At the back part of the palate, immediately before the nasal passage, is suspended a small fleshy membrane, called the uvula¹; the

¹ Herries's Elements of Speech.

chief use of which seems to be that of preventing the escape of breath or voice through the nostrils, during the utterance of certain letters, called mutes. The speaker, above instanced, in attempting to utter the word, "*very*," closed the nasal passage, also the lips of the mouth, which ought not to have been done; the consequence was, the repetition of a wrong letter, and that a mute, with an effort to give continued vocality, or prolongation to it. The nasal passage ought to be entirely closed during the utterance of the two last words. The seat or cause of the hesitation in the utterance of *c* (*k*), might be at, or between, the back part of the tongue and the palate. During speech, that the glottis need not be closed, it is true; Dr. Arnott is supported in his assertion by common experience; and it may be added,—that the glottis need never be closed, (by the epiglottis,) except during the moment of swallowing the saliva, or swallowing food. I frankly confess, that respecting the efficacy of the method of Dr. Arnott, I entertain considerable doubt, and two of the reasons of my suspicion and doubt have been given.

I am, Sir,

Yours, &c.

Ψ.

But further :—If stuttering be occasioned by a closed glottis, or by collapsed lungs, then the utterance of all the letters of the alphabet would be equally impeded; but, from the practice and acknowledgment of stutterers, and from the experience of all persons who have watched and observed stutterers during their efforts to speak, it may be safely affirmed that such is not the case; for some letters are arti-

culated with considerable ease and facility, while others are not pronounced without painful interruptions of breath and voice, and without uncertain, confused and contrary articulations, accompanied by distressed bodily contortion. In most cases ¹, such words as "*Iōnian Isles*," would be uttered with tolerable ease; but ask the stutterer to alter them to *Itōlian Kiles*, he would be instantly embarrassed; next, to shorten the vowel *o* to *Itōlian*, he would be still more puzzled; and, finally, to alter each *n* to *t*, *Itōtiat Kiles*, he would then be encompassed with difficulties which would seem to be almost insurmountable. During every effort to utter *t* or *k*, the breath and voice would be stopped. It might be said that the glottis would immediately afterwards be closed. But the question returns, (assuming the glottis to be affected,) what would induce the glottis to close? The answer is ready,—The organs requisite to articulate the letters. The cause must not be blended with, nor taken for the effect. The breath and voice being constantly interrupted, shut up and prevented from issuing through the mouth and nostrils, by the proper organs for the utterance of the mutes, the epi-glottis is, probably, taught (if it may be so expressed) to cover the orifice of the glottis vera. In confirmed stuttering, it is possible for the epiglottis to act, as it were by anticipation; that is to say, having been induced to follow the action of the organs of speech during their effort to utter certain letters called mutes, which necessarily stop the breath and voice,—the epiglottis may afterwards occasion-

¹ Excepting those cases of stuttering which are confirmed and inveterate.

ally close the orifice of the larynx, without waiting for the notice or warning, as it were, of the organs of speech. This appears to be the true state of the case, and the proper solution of the question.

As far as my own individual experience has conducted me, I am inclined to affirm, that the simple closing of the glottis (whether a spasmodic affection of the *glottis vera* closing itself, or a simple action of the *epiglottis*), not occasioned by a deranged action of the organs of speech, will never produce stuttering. Independently of other considerations, I am led to this conclusion, upon reflecting on a case which was presented to my observation, twenty years ago, in a Clergyman¹, who resided at Blackheath. From a spasmodic closing of the glottis, (the epiglottis possibly), the above individual was unable, frequently, when speaking in public, to utter the first letter of the leading word of a sentence, such, for instance, as the diphthong-vowel sound in "*our*," or the first letter in "*Almighty*," at the commencement of the "*Second Service*," in the Liturgy. He frequently said, that it was impossible to describe the excessive nervousness and extreme anxiety which the pause or impediment occasioned, lest he should be unable to proceed in the service; but never in any instance, public or private, of which I ever heard, did he have the slightest tendency to stutter, nor was he in the habit of repeating a letter, or of stammering for a word to express his meaning. His flow of words was exceedingly copious; and he was one of the readiest, most gentlemanly,

¹ The author alludes to the late Rev. Dr. Jenkins, of Corpus Christi, Oxford, an elegant scholar and affectionate friend,—the author's early patron and adviser.

and deliberate speakers, I ever heard. In this case, the glottis was opened and the impediment removed, by dividing sentences into oratorical portions, and by constantly taking breath, between each of them.

Notwithstanding the many palpable objections to the system which I am now controverting, it finds an advocate, in one respect, in Mr. Richard Cull. "In impediments of the voice," affirms Mr. Cull, "it is evident the defect must be in the larynx, and when it is discovered to be a loss of power over its continuance, it will be found to arise from a spasmodic closing of the glottis."—To this paragraph it might be answered,—suppose a hesitation or impediment of the voice to occur at the words, "*since, such,*" or at any word beginning with *s*. The stutterer would say *s s s* (not *ess ess ess*,) he would continue hissing *s s s*, but would not be able to utter the annexed, succeeding vowel. Now, in such an instance of hesitation, the glottis must be opened, otherwise the hissing *s*, could not be produced and repeated. The same remark, in opposition to the paragraph in question, is equally applicable to the simple aspiration *h*, and also to every one of the breath or whispered prolonged consonants; *the glottis must be open*. Now the defect or cause of not being able to utter the words, *since, such, &c.*, might not be in the larynx; if, however, it be otherwise proved, it is evident, that the defect must be at some part of the larynx below the glottis: perhaps, in such a supposed instance, it might arise from a temporary derangement of the *chordæ vocales*, connected with the recurrent nerve. It seems possible, I repeat, that the defect might not be in the larynx at all:—(*probable*, I ought to have said)—which will be presently explained.—

“Such persons,” (stutterers whose impediment is in the voice) adds the same writer,—“such persons will generally be able to sing, and some to read poetry without any impediment.” The reason of Mr. Cull is this. “In singing, the stream of voice never stops; and in reading poetry, it should seldom be interrupted?” To this may be said, and that without the slightest hazard of contradiction, the stream of voice is constantly interrupted in *singing, reading, and speaking*, by the mutes *p, k, t, b, g, d*, and also by the aspirated or whispered consonants. Assuming that impediments of the voice are caused by a closed glottis, he says, “Dr. Arnott was the first to point out the exact nature of the morbid affection” (of the glottis), “and thereby enable us to apply a remedy on a principle which before was empirical.” “The remedy is to produce a voice, by droning on any simple sound, as the *e* in *berry*, or, more properly, the *ir* in *bird*, by which means the glottis is opened, and the stream of voice is flowing through it, and therefore, ready to be modified by the enunciative organs, to form any word that may be desired; the only peculiarity will be in joining all the words by the drone sound, which, as long as it is continued, will prevent the closing of the glottis, and consequently of the recurrence of the impediment.”

But the natural method of opening the glottis, and continuing it open, is that of breathing; and it has been shown, that though the glottis be open, the stutterer may not be able to speak.

Mr. Cull explains, in writing, the system which he advocates, in the following manner:—

“e-Hail—e-holy—e-light—e-offspring—e-of—e-heaven—e-first-born, &c.”

The above example, as well as any other, will serve to explain the theory of Dr. Arnott; and it will answer the purpose of the writer of this treatise to show his further objection to the system.

If a closed glottis be the cause of stuttering, the natural method, as it has been before explained, of opening the glottis, is that of breathing. Let the stutterer aspirate the first letter in the word, and according to the system, he will easily utter "*hail*:" then, it might be asked, of what use would be the drone sound? (There may be, however, a use for a vowel-prefix, but it cannot be for that of opening the glottis, which will hereafter be seen.) More may be said with regard to the next word; the glottis must necessarily remain open, during the utterance of the word *hail*; and as *l* is a liquid, and, therefore, of a nature capable of being droned out as long as breath continue in the lungs, the speaker, according to the system, has nothing to do but to take breath again and utter the word "*holy*." For the utterance of the following word, in the example, the liquid *l*, which is as proper for opening the glottis as *e*, has actually a simple vowel prefix in *y*. The words *offspring* and *of* begin with a simple vowel-sound, and, therefore, are as appropriate for opening the glottis as the drone sound: the word *heaven*, beginning with an aspirate, is as easily and more naturally uttered without an introductory vowel sound: the sibilant or whispered letter *f* does not require a vowel prefix in order that the glottis may be opened; but *t* and *b* being uncombinable mutes, an intervening vowel might be of use, though certainly not to open the glottis. From these notices it can easily be seen, that, as far as the glottis is con-

cerned in the first letter of every word of the above elucidation, the vowel *e* is of no use, and that from the nature of the letters *t* and *b* the stream of voice is interrupted by the organs of speech; so that in the illustration of Mr. Cull, the intervening simple vowel-sound is introduced where, in respect to the glottis, it is of no use, and the only place where the voice is interrupted, and where, according to the system, the simple sound might have been serviceable, it is omitted.

A

TREATISE

ON THE

CAUSES AND CURE OF STUTTERING.

THEORISTS and practical men agree, that impediments of speech arise either from defective organs, or from an insufficient, or an improper use of organs which are perfect. The lungs are the organs of breath; the trachea larynx with the glottis are the organs of voice; and the *tongue, jaw, teeth, lips, palate, uvula, nostrils*, and *cavities* of them, are the *organs of speech*. The exercising of the whole of these organs, particularly the organs of speech, properly, constitutes what is termed audibility of voice, articulation, distinctness of voice, and liquid utterance. Defective organs of speech, such as hare-lip, deficiency of hard and soft palate, uvula, &c. affect the articulation only, especially the mutes; in such cases, the air, breath, and voice meet with little or no interruption from the organs of enunciation; while an insufficient or improper use of organs which are perfect, affect not only the articulation of the speaker, but also his continuity of speech. So that confused, indistinct, or complicated articulations and hesitations of speech, or stuttering, appear to arise from a similar cause. This will be comprehended, if it be taken into consideration, that the voice, in articulate language, is both continuous and interrupted; which can easily be known and thoroughly appre-

ciated, by adverting to the letters of the alphabet ; the vowels, liquids, sibilants, and *V* and *Z*, do not obstruct the breath or voice, but the mutes *B*, *D*, *G*, *P*, *T*, and *K*, act as dampers upon the breath and voice, and stop them.

Nothing can more successfully aid the progress of any art or science, or the object of any inquiry, than a clear and distinct knowledge of its constituent parts, and the employment of concise and proper definitions. This is applicable to the object of the following theory ; it applies with much propriety to the elementary principles of oral utterance, to the organs of breath, voice, and speech, together with their mechanical operations, as connected with the causes and cure of stuttering.

“ Audible voice is produced by a set of muscles, acting on the cartilaginous cavity at the top of the *trachea*, or wind-pipe, called the larynx, while the air is passing through the *glottis*. ‘ When the recurrent nerve on one side of the larynx is cut, the voice becomes remarkably weak ; when both are cut, it is entirely and irrecoverably lost ¹.’ Articulation is occasioned by certain interruptions of the voice or breath, effected by actions of the *tongue*, *palate*, *uvula*, *nostrils*, and *cavities* of them, and the *teeth*, *lips*, and *jaw*. When the common current of breath is urged more forcibly through these various apertures of articulation, without much affecting the *larynx*, we have an instance of the indefinite sound, known by the name of the whisper ². In audible voice, the air, while passing from the lungs to the mouth, must, little or much, affect the larynx, in proportion to the quantity, quality, or character of the voice which is produced.

¹ Whytt.

² What is termed hoarseness of voice, proceeds from various causes, foreign to the present purpose. It may not, however, be unnecessary for the student to know, that when the larynx is injured, the air, though the cartilages be acted upon by the muscles, passes through the windpipe, without yielding the ordinary sound.

“We have an opportunity of further deducing, by experiment, that from the peculiar nature of the constituent parts of the larynx and its orifice, the whole diversity of sound may be distinctly heard, though the mouth be shut; and from this may be easily conceived that, as the tunes¹ and tones² of the voice depend upon the diameter of the *glottis vera* or orifice of the *true glottis*, with the tension of its ligaments, and not upon the different formations of the mouth, the whole diversity of syllables, may be accomplished in any one note of a diatonic or chromatic scale of music. This appears to agree with that melodious arrangement of voice called singing; for the leaps or intervals of voice may be heard, understood, and compared with any note of the same measurable gamut or scale after the articulation shall have ceased.” (PHILOSOPHY OF ELOCUTION, Page 45.)

¹ Tune, either as to high or low notes.

² Tone, as to quality, whether natural or feigned. The difference of tone, which may be defined to be the *quality* of sound, seems to be occasioned by the steadiness or unsteadiness of the cartilages constituting the larynx, and duly exercising the various apertures of the mouth. By singing the word *mi*, first in the chaste and afterwards in a falsetto voice, in precisely the same note, (say *C* in the tenor clef) the student may observe, that, by placing the finger on the *larynx*, in one instance, it vibrates, in the other, it does not vibrate. Let the student sing the word *fa* in the same note as before, viz. *C* in the tenor clef, and he will perceive, that the tones of both chaste and falsetto voices are greatly improved. It appears, therefore, that, in producing chaste voices, the *larynx* and *glottis* are acted upon to the fullest extent; that, in producing falsetto voices, the *glottis* is principally acted upon; and that, as all the sounds of a musical scale may be distinctly heard, though the mouth be shut, the tones of the voice are further modified by the various apertures of articulation. The student will feel the propriety of drawing these inferences, and be convinced, that the mechanical cause of what is called either a mincing or mouthing pronunciation, arises from not duly exercising the organs of speech, or in other words, not opening the mouth conformably to the mode allotted for each vowel.

The terms, *voice* and *articulation*, therefore, are not synonymous, neither is articulation the same as the inflexions of the voice; for articulate speech may be accompanied with certain intonations of voice as symbols of emotion; yet those intonations are not, in the least, analogous to articulate speech. Articulate language, be it repeated, is audible or whispering voice, modified by the various organs of enunciation. Articulation is distinctness of pronunciation; it is a method of speaking, or whispering, clearly and distinctly, so as not to confound or blend one voice or sound with another. We shall, however, better comprehend the nature of articulation, in contradistinction to a simple vowel sound, by closely attending to the meaning of the term.

The term articulation is used in anatomy and surgery; it is used, also, in reference to speech, in opposition to the instinctive expression of voice in animals and the inferior creatures. "Man is endowed with articulate speech." How and when the term was originally applied to language, it is of little or no use to our present purpose to inquire. There is, however, a sort of figurative analogy between the articulation of bones and the articulation of voices in speech; the consideration of which will enable any one fully to appreciate and clearly to define the term, as used in reference to alphabetic language. Let us try the experiment of singing, and of blending or running the following vowel sounds into each other: viz. *oo* as in *doom*, *oo* as in *book*, *o* as in *tone*, *o* as in *odd*, and *o* as heard in *orb*: that is to say, in singing the sounds, let us open the mouth and lips in rather a pouting manner for the sound of *oo*, in *doom*, and increase, by degrees, the size of the opening, till the ear detect the sound of *o*, as heard in *orb*; it will be discovered that long *o*, as in *tone*, will be heard at the mean distance, or nearly so, between the apertures of the two; i.e. between *oo*, as heard in *doom*, and *o*, as heard in *orb*; and *oo*, as in *book*, which will be discovered somewhere between *oo*, as in *doom*, and *o*, as in *tone*; and *o*, as in *odd*, will be discovered somewhere between

o, as in *tone*, and *o*, as in *orb*. $\bar{O}o-\ddot{o}o-o-\ddot{o}-\bar{o}$. It is exceedingly clear, that the above voices or vowel sounds are so blended and melted together as hardly to be detected at their exact points or intervals, by the most accurate ear. It is also clear, that the only reason to be given, why the above vowels cannot be detected, is because they are not articulated; that is, the voice is not interrupted by marks of division; it is *ONE stream*. The voice is not composed of a number of little streams, united, as it were, by *joints* or *knots*; they are pure, clear and audible sounds issuing from the organ of voice, blending or mixing together. Let us propose a question respecting \bar{o} as in *orb*, at the close of the example $-oo-\ddot{o}o-\bar{o}-\ddot{o}-\bar{o}$. Is it an articulate exemplification of *o*, as in *orb*? No! It may be called a resemblance, an exemplification of, or an approximation to, the clear and simple sounds of the *diapason*, *vox humana*, or some one of the stops in a musical instrument, called the organ. Now let the student open his mouth for *o* as in *orb*, but let him suffer his voice at the commencement, to have what may very properly be called a prefix; viz. let the voice be modified by the action of the back part, or root of the tongue, against the palate, near the uvula. *O* (rb.) This is a pure and simple articulated voice; it is a vowel. After strict investigation, it is perceived that every pure and simple vowel is rendered distinct, by an appropriate action of some part of the tongue against the correspondent part of the palate, which, for the sake of perspicuity, may be called a *prefix*. Further: in respect to diphthongs, &c.—When one, two, or three vowels are blended together, the whole is called either a diphthong or triphthong. Let any one analyse the diphthong *oi* as in *void*, he will find it to be composed of *o*, as heard in *orb*, and *i* or *e*, as it is heard in either *it* or *me*;—and, here again, as an accurate articulation is a distinct pronunciation, in which one sound is not confounded with another, it is very evident, that two or more vowels may be sounded, and yet that each may not be distinct or articulated. “The Ionian

Mount." In this phrase, *e* in *The* seems to be combined with *i* in *Ionian*, forming a sort of diphthong, but such is not the case ; both *e* in *the*, and *i* in *Ionian*, are distinct syllables, and have prefixes produced by the action of the tip of the tongue between the teeth (*th*), for *the*, and the sides of the tongue against the teeth, gums, or hard palate for *i*. *The Ionian*. When one vowel sound is separated from another, by what is here termed a prefix, it is said to be articulated. But vowel sounds are more effectually separated from each other by letters called consonants, as in the above instance of *th* in *the*. Consonants are prefixes to vowels produced by the tongue, lips, teeth, and various organs of speech ; a consonant is a letter by which one vowel is not suffered to blend with another,—by which, a vowel is rendered more distinct and perceptible than by its own prefix. The use and propriety of this definition of a consonant, will be seen and acknowledged, in some instances which occur in our own language. Thus,—merely in respect to the addition of *n* after the indefinite article *a*, when the noun substantive begins with a vowel, as *an apple*, *an egg*, &c. and also, in respect to the vulgar, I had almost said the *natural*,—but, however, the vulgar obtrusion of *r* between words which begin and end with a vowel ;—as “ the *idea (r) of any thing*. &c. In the Greek language, the nature and use of consonants are very strikingly apparent.

Consonants vary in power according to the nature and capability of the organs by which they are articulated. Some have the power of prolongation ; others have no such power. If the power of prolongation were the only characteristic of a liquid, then the English alphabet would be supplied with two more liquids than those of the Greek¹ alphabet ; viz. *v* and *z*, the latter of these, being different from the Greek *zeta*. But if the power of prolongation and the capability of

¹ Though the sound of *v* is expressed by **Ϝ**, (the Æolic digamma,) yet this letter was never universally adopted by the Greeks.

flowing into some one other consonant, are the true characteristics of a liquid, then the English alphabet has only four liquids, corresponding with λ , μ , ν , and ρ . L flows into d or t ; m into b or p ; n into d or t ; and r into d or t . V and z are deficient in this principal characteristic of a liquid; v and z are, nevertheless, consonants of a certain and definite power, *i. e.* prolongation. Excepting q , s and x , the rest of the consonants, which have not the power of prolongation, are called mutes. A mute has precisely the same power over the voice, in utterance, as the damper has over a vibratory string or monochord, in music: a mute stops the sound of a preceding vowel. Nothing can be clearer,—nothing can be more decisive than the characteristic power of a mute.

I am strongly inclined to believe, that if due consideration be given to the true, philosophical nature of mutes, and to the effect of those actions of the tongue which immediately precede and accompany the utterance of all vowels and every vowel, which, with much propriety, may be called vowel prefixes,—and also if some little attention be paid to the genuine quality of accents and the inflexions of the voice,—then a clear explanation of the causes of stuttering, and an easy and permanent method of instruction and discipline for the cure of stuttering, would be firmly established. Let any one who can speak *without* hesitation repeat the word *mat*; he will discover that m and a can be dwelt upon, continued, or prolonged. If an attempt be made to prolong the letter t , it will be observed, that during such an attempt, the breath will be stopped. Still keeping the tip of the tongue and sides of it firmly locked against the gums and the palate, let the same person suffer the breath and voice to issue through the nostrils; it will be heard, that the liquid or prolonged consonant n is produced. Hence it is concluded, that the same organs of articulation, are used to produce n and t : the only difference between them is, that, in the one instance, the voice is shut in, as it were, and in the other, that it issues through the nose. Simple as this process

may appear to any person who has fluency of utterance, to the inveterate stutterer it seems to be involved in considerable mystery. Now let the stutterer himself endeavour to articulate the same word, *mat*, he will substitute *b* or *p* for *m*, and attempt to prolong it. Let him now place the hand over the mouth, the lips being closed, and suffer the breath and voice to pass out, as in the above instance of *n*, through the nostrils; that being effected, let him suddenly take away the hand and open the lips,—after a few trials, in ordinary cases, this method would help the stutterer to articulate *m*: in difficult cases it would not; the stutterer would return to *b-b-b*. In attempting to articulate *egg*, the stutterer would strive to substitute hard *g* for the vowel, and struggle in the most painful manner to prolong the letter, which cannot possibly be effected, because it (*i. e.* *g*) is a mute;—or he might begin even with *d*, another mute;—*d-d-d-d-g*, *k*,—and exhibit to the eye of the beholder all the appearance, in his countenance, of spasm and convulsion. From such an insufficient use of the organs of speech as this, the stutterer, during most painful efforts to articulate, is incapable of respiration. Being exhausted, he stops to take breath. He tries again and again, but to no purpose. He constantly meets with the same obstruction and the same difficulty; the organs are locked fast: and so long as he thus struggles to articulate, so long precisely is he bereft of the power of breathing.

Stuttering, therefore, is an effort to accomplish what is decidedly impossible. It seems to be an improper use of those consonants called mutes, with an effort to prolong their sounds like liquids and vowels. The letters *n*, *g* (*as in ing*) and *m*, being nasal liquids, the nasal passage should be open. In confirmed stuttering, from an improper use either of the uvula, or the soft palate, *i. e.* the organ which closes the nasal passage, the above liquids are consequently changed to the mutes *D* or *T*, hard *G* or *K*, and *B* or *P*. Such a simple, but deranged action as this, with frequent and fruitless

efforts to give prolongation to the substituted letters, causes interruptions of voice and painful stoppages of breath. Persons who substitute letters, but *whose enunciation is continuous*,—whose utterance, nevertheless, is defective, thick, confused, and complicated,—such persons do not, I apprehend, ever stutter, so long as they continue to have power and command over the organ which closes the nasal passage : and I suspect that patients whose organs are imperfect in respect to the organ which closes the nasal passage, and to the palate and lip, *never* stutter : while in patients whose voice and breath are interrupted by a simple closing of the nasal passage at improper places, all the organs of speech, breath, voice, and enunciation appear to sympathize and become affected ;—the tongue cleaves literally to the roof of the mouth ; every vowel is prefixed with a consonantal mute : the lungs do not regularly perform their office ; the breathing is consequently broken, panting, and frequently stopped ; the larynx seems to be disordered and the quality and force of the voice appear to be weakened, and, sometimes, for a second or two, bewildered and lost.

Having endeavoured to trace out the hidden springs or causes of stuttering in respect to the organs of breath, voice, and enunciation, I shall venture to pursue the question a little further, both with regard to the exciting cause, and to the mental energies of the stutterer.

The stutterer is perfectly sensible, that he can read and repeat from memory better when he is entirely alone than when he is before a stranger, or even any one of his own family ; that he can speak generally with greater freedom of utterance to those who are his inferiors than to those who are above him ; to those who are younger than to those who are older than himself. Hence some persons have contended, that stuttering arises, more or less, from nervous irritation. But no one, however endowed, and however fluent in his speech, is, at all times, and upon all occasions, able to exert

his powers and faculties, and to choose familiar and proper words or expressions, and give utterance to them, with equal ease and equal advantage, even in the most healthful state of his body and mind. The stutterer is as much liable to this mental *hiatus*, this breach of continuity of thought, as other persons. All speakers may be said to be, more or less, *mental stammerers*; but different persons, (those who stutter and those who do not,) use different methods of covering or hiding these interruptions of mind. Some accomplish their objects, by verging off to other topics, and others by continuing to repeat hackneyed expressions, such as “let me see”—“what was I saying”—“my memory is so treacherous,” &c.—until the subject return to the mind.

“If it live in your memory, begin at this line; let me see, let me see;—

The rugged Pyrrhus, like the Hyrcanian beast,

—’tis not so; it begins with Pyrrhus—?

The rugged Pyrrhus,—he whose sable arms,” &c.—HAMLET.

The grosser and more palpable stammerings of mind are discovered among rapid speakers, by frequent and continued iterations and substitutions of letters, by repetitions of words, phrases, and sentences; and, among slow, deliberate speakers, they are known by filling up the interstice or vacuity of thought, by a short pause and by a liquid or unarticulated vowel sound, in something like the following manner.

“I-have hitherto-*u* (*r*) (*u*-th-ough not always, yet not unfrequently) found *u*-that *u*-what pleased me for a while, was soon after disgraced by some further or new experiment. And-indeed,-*u* (*r*) I have the less envied-*u*-many (for I say not *all*)—of those writers-*u*-(*r*) who-have taken upon them to deliver the causes of things¹, and-*u* (*r*)-explicate-*u*-

¹ This mental stammering (to which all persons, stutterers or not,

the-*u*-mysteries of nature, *u*-since-I have had opportunity-to observe how many of their doctrines, *u* (r) after having been for a while applauded—and even admired—have afterwards been confuted-*u*-by some-new phenomenon in nature, which was either unknown *u*-to such writers, or *u*-not sufficiently considered by them.”

This manner of speaking is exceedingly common ; and it may be safely inferred, that there are few, very few persons, who utter their thoughts in conversation, *without occasional mental stammering*. With respect to the confirmed stutterer, his mind, whenever he attempts to speak, is instantly alive, as it were, and upon the stretch ; the confirmed stutterer is all anxiety, *he is intensely liable to frequent mental stammering*, and *he endeavours to hide it by incontinuous speaking, or stuttering*. But the causes of mental stammering, whatever they may be, should not be confounded with nervous irritability. Neither is nervousness, any more than a closed glottis, to be received as the cause of stuttering. Stuttering, doubtless, causes and afterwards increases nervousness ; on the other hand, nervousness, so caused, increases stuttering ; and in proportion to the quality and quantity of hesitation, so, at all times, seems to be the nervousness of the stutterer. But place the stutterer in a situation not altogether favourable to the feelings of one who is likely to be overcome by nervous irritation ; after moderate tuition, place him before an audience of three or four hundred persons, he will recite fifty or a hundred lines of poetry with considerable pathos and oratorical energy. Again :—request the stutterer to read a sentence, in an audible voice, he would become instantly embarrassed ; and would be unable to proceed without considerable obstruction and difficulty : while, on the other hand, he could read the same sentence in

are liable) is frequently occasioned from not being able readily, or at the moment, to choose or recollect a word correspondently expressive of an idea.

a whisper, or he could sing or chant it, without the slightest hesitation or inconvenience. The reason, probably, why the stutterer can sing or chant a sentence but cannot speak it, is because the tune or melody of song is, in some sort, dependent upon the sounds of the vowels, and the time or measure in which they are delivered; because the syllables are delivered comparatively slow, and in monotonous: and because (if it be allowable to use the expression) the mind of the stutterer, during the exercise of singing, is actuated by a principle of order. In speaking or reading, the stutterer appears to be so hurried as to have no conception of order at all; his will and his organs of enunciation seem to act contrary to each other, and the syllables appear to be striving one with another for mastery. Further:—that any should stutter in his native tongue, and yet speak a foreign language with perfect freedom of utterance, may appear strange. Such, however, was the case in the instance of Sir George Braithwaite Boughton; he stuttered when he spoke in English, but spoke most fluently when he conversed in French. The cause of this remarkable circumstance, together with the stutterer's being able to whisper a sentence, although he cannot speak it aloud, might perhaps be accounted for by some defective action connected with the *chordæ vocales*, or it might be explained upon the principles of modulation, inflexion, accent, and quantity, rather than upon that of nervous irritability.

It is known, that some of the most inveterate impediments in respect to hesitations of speech, are caught by children from their mocking and jeering those persons who have the misfortune to stutter; other inveterate hesitations are caught from *involuntary* imitations,—the stammerer spontaneously catching the impediment from a stuttering companion or friend. All these relations and particulars tend to prove, that stuttering, with regard to the "exciting cause and to the mental energies of the speaker," is not generally occasioned by any circumstance *immediately* con-

nected with nervous irritability, but that, sometimes, it may be contracted either by involuntary imitation or by contemptuous mirth and burlesque mimicry; at other times, it may be engendered by impatience, irritability of temper, and pride; and finally, it may be acquired by accidental trick, or vicious habit, stubborn in a very high degree, and sometimes apparently inflexible.

Concluding my remarks on the cause or causes of stuttering, I proceed next to the cure.

Slight stuttering may sometimes be removed, and inveterate consequences be averted, by attention to certain exciting causes, and to surrounding external circumstances; for many a timid child, whose mental stammering occurs frequently, may be made to hesitate merely from the impatience and petulant behaviour of those persons who are about him: and many an idle schoolboy, having a slight tendency to stutter, and discovering that, if he sham the stutterer, he can possibly evade his lesson, contracts a habit of stuttering, which, in riper years, it will cost him some trouble to overcome. Whenever, therefore, it is noticed that a young person begins to stutter, the parent, or person under whose management he is placed, should examine well, in the first instance, his own temper, his particular and general conduct in speaking, being spoken to, in giving and receiving answers. The friend of the young person should assume the constant appearance of good humour: he should speak to the young stutterer, on every occasion, with calmness, gentleness, and deliberation, and encourage him to utter every word which he has to say, slowly and distinctly. In such an instance of slight, unconfirmed stuttering, the consequence would be, that, without any other instruction, the pupil would very soon involuntarily imitate his preceptor. With respect to the little urchin at school, who stutters on purpose to elude the vigilance of his tutor, it should be ascertained whether or not he has prepared his lesson; and

this could easily be known by requiring it, occasionally, to be *written* rather than repeated. And while an attempt is made to teach the young dissembler obedience and punctuality, care should be taken neither to frighten him nor to irritate his feelings; if possible, he should be mentally shamed. But nothing can be more erroneous than to suppose that children are capable of getting rid of stuttering merely by growing older. If a young person outgrow, as it is called, an impediment of speech (and, doubtless, many children have corrected themselves and discontinued to stutter), it must arise from the peculiarity of the case, in respect to *ear, taste, temper, and disposition*; it must arise from his being placed in a favourable situation, and under favourable circumstances. To affirm otherwise than this, would be to say, that a child born and brought up in the country would be induced to correct any provincial peculiarity, (such, for instance, as the Northumberland *r*,) by remaining in a place where the defect is constantly exemplified. Now, though we do not hear of counties of stutterers, still we do hear of whole families having similar impediments of speech, of whole families who stammer, more or less, in their mind,—of whole families who show their mental stammering by constantly repeating words,—who speak, more or less, with an irregular and confused rapidity of utterance: and, I repeat, whenever accidental circumstances favourable to the cure of stuttering do not blend, an unassisted child, rather than improve by growing older, would get worse; till his case, complicated at once with every consequence of carelessness and neglect, would become obstinate and inveterate, and exceedingly difficult to cure.

At this point, premising the system with two definitions and one or two remarks, the author's theory for the cure of stuttering begins.

Definition 1.—By mental stammering, the author means interruptions of thought, occasioned, possibly, by timidity, temporary abstraction or forgetfulness, on the one hand,

and, on the other, slowness of intellect, blended with inattention, with pride and self-conceit.

As all children, as well as all grown persons, are, more or less, mental stammerers, it will easily be conceded, that any child whose temper is rendered fretful, irritable, and impatient, by the unprincipled and petulant behaviour of a nurse or a servant,—a child, possibly, whose intellectual faculties are sluggish and obtuse, but whose disposition, timid, perhaps, yet nevertheless, teachable, is spoiled by an inconsistent and hasty tutor, hectoring and storming him into *hic, hæc, hoc*,—a boy whose development of the mental faculties, and those of speech, are constantly impeded by the indiscretion of such companions,—I say, it will easily be conceded, that such a boy, stammering out his answers,—“*u-u-u(r)-thanky*,” and his rules of Latin Syntax,—“*U-u-u-u-verbum personale*,” &c. will be very likely to repeat letters, and to hesitate in his utterance of syllables. On the other hand, it is to be recollected, that some children, from the apparent inertness of their organs of speech, are late in beginning “to talk;” as, therefore, the organs of such children are naturally sluggish, tardy, and sometimes even *sluggishly contrary*, when they are exerted to action,—while their *intellectual faculties* are *bright, sharp*, and *penetrating*, and their *tempers sensitive, irritable*, and *impetuous*, it will not be difficult to conceive, that if children like *these* be so unfortunate as to be placed under the direction and superintendence of ill-natured, cross-grained persons, persons who will not try to endure the interruptions which mental stammering and a confused and wearisome utterance occasion, they will, sooner or later, hesitate, in one way or other, upon vowels and consonants, whenever they attempt to speak. It may, therefore, be affirmed, that a child so circumstanced, and placed with such persons as those who are here described, will, unless means are used to prevent it, most probably stutter, and that, perhaps, in the most

painful, obstinate, and inveterate degree. To prevent stuttering is much more easy than to cure it.

The qualifications of nurses, servants, and tutors, as far as fluency in the utterance of children is concerned, are patience, kindness, and gentleness, combined with steadiness, firmness, and perseverance: and as the infant, or rather the little child, is taught to speak, not by rule, but by imitation, the qualifications of nurses and servants are distinctness of articulation, and slowness and deliberateness of speech.

Definition 2.—The author defines stuttering to be an effort to speak without altering the position of the mouth,—a struggle to utter a vowel, when the nasal passage and the mouth are closed,—an effort in speaking to accomplish what is decidedly impossible, viz. to give prolongation to the consonants called mutes:—the author explains stuttering to be occasioned, *primarily*, by an *improper use* of the *organ which closes the nasal passage*, and, *ultimately*, by an *improper use of the Organs of Breath, Voice, and Enunciation*.

The youth who is so unfortunate as to stutter and to possess an irritable temper, who is impatient, yet nevertheless, idle and lukewarm, who is conceited and self-sufficient, self-willed and obstinate,—such a stutterer has much to conquer before he can derive benefit from either written or oral instruction. Irritability of temper and forgetfulness are not stuttering; idleness or self-conceit is not stuttering: neither are they the causes of stuttering. But from this it is not to be understood, that the whole of stutterers are proud and obstinate, any more than that all stutterers are timid and bashful, habitually silent, and constantly desirous of avoiding society; still it cannot be otherwise than acknowledged, I think, that, with some very few exceptions, all stutterers seem to be, more or less, irritable, impatient, and sensitive. In order, therefore, that the stutterer may derive full benefit from any system of discipline and practice, which may be

recommended for his use, he should be strongly impressed with the necessity of attending to his bodily health, and of controlling his feelings, and endeavouring to acquire, and preserve upon all occasions, a quiet, calm, unruffled temper, an industrious and a persevering state of mind.

It has been shown, that the elements of utterance vary according to the nature and action of the organs which are requisite to produce them; that all the vowels are audible voices, and, of themselves, are capable of being made syllables; and that all the consonants are either whispering or audible, pre or post fixes to vowels, and of themselves, are said to be incapable of being formed into syllables.

Though a vowel, in consequence of its not meeting with interruption from any of the organs requisite for the utterance of a consonant, is an easy letter to pronounce, and of itself capable of being made a syllable, yet the confirmed stutterer is apparently unwilling, though comparatively easy, either to lengthen it, or to alter the position of the mouth: and though all consonants and combinations of consonants, however, are said to be incapable of themselves, of being formed into syllables, still some of them, such as *l, m, n, r, v, z, th* as in *thee*, and *s* as in *pleasure*, appear to be more of the nature of syllables than others. These the stutterer can more easily utter than the rest. Some of the consonants, double as well as single, differ only in respect to the breath and voice,—such as *B* and *P*, *D* and *T*, *G* (as in *good*), and *K*; *Z* and *S*; *V* and *F*; *Dzh* (*j*, or *g* in *gem*), and *tsh* (*ch* as in *cherry*); *Zh* (*s* as in *pleasure*), and *sh* (as in *shame*); *th* (as in *thee*), and *th* (as in *thought*.) Now, in correctly uttering each of the above pairs of mute consonants, *viz.* *B* and *P*, *D* and *T*, *G* and *K*, the organs of enunciation are the same; the only difference between these letters is that the vocal organ is or is not affected by the breath. These the stutterer finds great difficulty in uttering, because, they are of such a power as to damp or stop the breath and voice;

they have not, in the slightest degree, any power of prolongation, and, therefore, cannot melt or coalesce with any letter, whether vowel, liquid or consonant. Open, however, the nasal passage, without altering the positions of the organs which are requisite to articulate the mute consonants, and then the liquid sounds *M*, *N*, and *ng*, will be produced. The difference between those letters is most important for the stutterer fully to comprehend. To begin with *B*, *P*, and *M*. *M* can be prolonged or continued just as long as a vowel, and its sound may be compared with any note of a musical scale within the compass of the speaker's voice. *M*, viewed as a sound, may¹ in one sense be called a vowel, issuing through the nostrils instead of the mouth: and, in the instance of *M* and *B* or *P*, the mouth is shut, but while the nasal passage (the mouth being closed,) is open for *M*, it is closed for *B* or *P*; and as the mouth and nasal passage are closed for *B* and *P*, the breath and voice must of necessity be stopped; it is upon the explosion of the voice that *B* or *P* is found to be a vocal or a whispering consonant. There is precisely the same resemblance, and also difference, with respect to *D* or *T* and *N*. The vocal chords are ready for action at *D*; but they are steady or not ready for action at *T*. In the above cases, and in all instances of *D*, *T*, and *N*, the front part of the tongue is applied to the gums, so as to prevent the issuing of the voice, or breath through the mouth. In the instance of *D* and *T*, the nasal passage is closed, but it is open for *N*. The only difference, therefore, between *D* and *N*, is the closing of the nasal passage for *D*, and the opening of it for *N*; and the only difference between *T* and *N*, with respect to the organs of enunciation, is the closing of the nasal passage for *T*, and the opening of it for *N*. In *preparing* the organs for the articulation of *D* or *T*, we discover that the nasal passage is closed, and the front part of the tongue is applied to the gums, round the front part of the palate, so as to prevent, as in the instance of *B* and *P*, an escape of breath or voice through the mouth or nostrils. The organs so prepared for *D* or *T*, let us suddenly open the

nasal passage; or, in other words,—the organs being prepared for *D* or *T*, let us, instead of articulating those letters, permit first the breath, and afterwards the voice, to issue through the nostrils and suddenly utter the word *No*. The experiment will show *D* to be a vocal mute, and *T* a whispering mute; for in the one case, the word *No* will be uttered in a loud voice, but in the other case, it will be said in a soft whisper. *Dno*, *Tho*. The guttural mutes *G* (as in *good*), and *K* with their corresponding nasal liquid *ng*, if submitted to experiment, will discover themselves to be related to each other in the same particulars of *voice*, *breath*, and the *nasal passage*, as the rest. For the utterance of hard *G* and *K*, the root or back part of the tongue is applied to the hard palate, and for the utterance of the nasal liquid *ng*, the organs of articulation for hard *G* and *K*, are to be united, and the nasal passage opened. There is, however, a difference in the use of *ng* and *m* or *n*. *M* and *N* are both pre and post-fixes to vowels: *ng* is only a postfix to a vowel: but very frequently the utterance of the stuttrer is considerably impeded, when a consonant, liquid, or mute, (but especially a mute,) precedes or stands as a prefix to a vowel;—upon such occasions the speech of the stuttrer is constantly interrupted. Instead of *Man*,—he might possibly say *B-b-b-a-a-n*; but the nasal liquid *ng*, never coming before, but always after a vowel, is not so likely to affect the utterance of the stuttrer as *m* or *n*. Let us, however, pursue these questions respecting the mutes one step further. From a habit of improperly closing the nasal passage, and thereby converting *M* and *N* to *B* and *D*, and subsequently to *P* and *T*, the stuttrer involuntarily repeats the letters *B*, *P*, *D*, and *T*, themselves, when they stand as prefixes to accentuated vowels, *B-b-b-b P-p-p-p, &c.* till, at length, he falls into the same error in respect to hard *g* and *K*; and it may be safely affirmed, that when a child is so far impeded in his speech as to find difficulty in uttering the mute *G* or *K*, as a prefix to a vowel, his speaking will very soon suffer in other re-

spects ; his utterance will be speedily interrupted by a defective action, also, in either the larynx or the lungs, or perhaps, ultimately in *both* of them. This will inevitably follow, as a natural consequence, unless speedy means be used to induce an easy, regular and proper action of the organs of enunciation. Confirmed in his impediment, and unable to pronounce the guttural mutes *G* and *K* in the proper manner, and constantly repeating, or struggling to give *prolongation* to them,—or in other words, striving to *convert them into vowels*,—the stutterer is distressed with excessive difficulty of breathing, his bodily and mental feeling become convulsed and agonised, and exhibit to the eye of the beholder painful contortions of countenance, and, to all outward appearances, spasmodic affections. In such an inveterate instance, the nasal passage, be it taken into consideration, is closed, the back part or root of the tongue cleaves to the corresponding part of the hard palate, and finally to what is called the curtain or soft palate ; till by degrees, the prefixes of the vowels (which, in this treatise, have been defined to be the articulations of the vowels), and even the vowels themselves, have not the least opening for the issuing of the breath and voice.

It is maintained, therefore, that in confirmed stuttering, upon attempting to utter a vowel, the mute *G* and *B* constantly, as it were, obtruding themselves, the organs are entirely closed, and that, notwithstanding every endeavour to the contrary, they continue obstinately locked fast ; and thus do the organs of enunciation oppose every laborious effort of the speaker, to acquire vocal utterance. In one case,—supposing the first letter of a word to be a vowel, and, in struggling to pronounce it, the organs of the stutterer to be united for the proper articulation of the mute *K*, the recurrent nerve and chordæ vocales would, probably, become considerably and unavoidably confused and deranged in their actions : on the other hand, supposing the organs to be closed for the proper articulation of the mute *G*, his lungs

would, most likely, be deprived of their regular action and re-action, and his speech would be confused and incon- tinuous articulations and voices,—pantings, sudden inter- ruptions, and, in one respect, similar to the grief-like sob- bings of a school-boy, under the corporeal chastisements of a merciless preceptor. It is hardly requisite to add, that the longer and oftener such defective actions as these are per- mitted to affect the larynx and lungs, the more inveterate will be the case of stuttering ; because every contrary or op- posing action of the organ which closes the nasal passage is calculated, first, to restrain or to influence improperly all the organs of enunciation ; and, afterwards, from constant interruptions of the breath or voice, to occasion inordinate and mischievous use either of the lungs or the larynx. The consequence must be, that the stutterer, unless prevented, will proceed step by step, until he be confirmed in compli- cated, defective and contrary actions of all the organs of speech, breath, voice, and enunciation.

Stutterers may be divided into three classes:—

1st.—Into that class of stutterers whose impediment arises from a defective action of the enunciative organs, particu- larly that which closes the nasal passage. 2d.—Into that class of stutterers whose impediment is increased in propor- tion to the frequent and inappropriate use of, and the con- stant endeavour to give prolongation to, the mute consonants, till the lungs, or the voice, (the chordæ vocales and glottis,) be improperly or unnaturally excited. 3rd.—Into that class of stutterers whose impediment is confirmed in a defective action, and improper use of *all the organs of enunciation, res- piration, and voice.*

In the first stage of stuttering, many young persons have derived considerable advantage from the practice of intro- ducing, at the utterance of every accentual vowel, while reading or repeating from memory, and occasionally, during conversation, a small piece of silver, ivory, or, indeed, one of the fingers, between the lips or teeth. At the close of

each exercise of reading or repeating from memory, it has been found useful to repeat the examples which may have been chosen for the purpose, before a looking glass *without* the introduction of the finger or instrument; by which means pouting lips, uncomely mouths, and distortions of the features are avoided. Here the reader is called upon to remember, that any bad habit is a serious deviation from practical good sense; and that in proportion as an individual, from stammering of the mind, irritability of temper, rapidity of utterance, &c. may have been predisposed to stutter, and subsequently may have acquired the habit of stuttering, so ought to be, and must be, his industry, patience, and perseverance, in applying and pursuing a rational course of theory and practice for his improvement and final cure.

Every mechanical operation presupposes some resistance to be overcome: Hence the law in mechanics respecting action and re-action. When the power and the resistance to be overcome are exactly in equilibrium, a machine is ready for motion and use. In this case, the action and re-action are said to be equal. That the machine, however, may perform work, there must be an accession of power, and, in proportion to such accession, so will be the speed with which the work will be done. This principle applies to every mechanical operation; from the gigantic machinery of a Steam Engine, to the microscopic movement of the most beautiful and highly finished escapement of a pocket chronometer: it is applicable, also, to animal motion, and to animal and mental excitement; and it applies, with much propriety, to every mechanical operation as connected with articulate speech. Probably, we shall derive benefits from pursuing the analogy a little further. Supposing the movement of a watch to be complete, much remains for the maker to do, before, in the first place, it will go; and, in the second place, before it will keep accurate time. The parts must be "freed," and nicely finished and adjusted, not only in respect to the "taking in and letting out" of the

teeth, but, also to the escapement of each tooth, at the extremity of the machine, commonly known by the ticking of the watch. The next thing to be done is the adjusting of the power, (commonly called the main-spring,) to the resistance made at the escapement, *i. e.* to the weight of the balance-wheel and the strength of the hair-spring. If the balance be too heavy, or the hair-spring too weak for the strength of the main-spring, the time will either be impeded, or the watch will stop. By parity of reasoning, in respect to all the organs of speech, if the muscular power upon which the action of the cartilages which constitute the organ of voice, be too weak,—if it be deranged in its function, speech must be impeded; if the lungs be not regularly and systematically inflated and discharged,—if this action and re-action be not uniformly carried on, the voice will falter, quiver, tremble or hesitate; and, though the glottis itself be open, the speech will be impeded; but further, and, perhaps, more to the point,—if the resistance made at the organs of enunciation to articulate, (which must, of necessity, even in accurate speaking, transiently impede the breath and voice,) be greater than the power which is given to separate the organs of enunciation, and produce a passage for the utterance of a vowel,—the *breath* and *voice* will be *impeded altogether* and *stopped*, a word or syllable cannot be spoken. This is particularly applicable to the organ which closes the nasal passage, and to those organs which are proper for the articulation of the mute consonants.

In cultivated speech, every motion performed by the tongue, the soft palate, the organ which closes the nasal passage, the lips and the lower jaw, is voluntary. The stutterer may easily comprehend and feel what is meant by this, *i. e.* by voluntary motion, by power and resistance in respect to utterance, if he will reflect upon any simple circumstance of apparent muscular motion. In willing, for instance, to raise, or rather to lift up my arm, the weight of the arm is the resistance to be overcome; but, my hand and arm being

raised, suppose a weight double that of my hand and arm, to be suspended from a pulley, and held by my hand, then the resistance to be overcome is the weight over and above that which is equal to that of my hand and arm; and if the power or the strength of my hand and arm be less or only equal to the resistance, my will and the motion of my hand and arm are either impeded, or they act contrary to each other. These are impediments which the will,—the *unassisted* will, I mean,—cannot possibly control; but with respect to an impediment of speech, occasioned by the resistance of certain actions of the lips, the tongue, and the organ which closes the nasal passage, such impediment can, by an efficient method, be successfully opposed; because every motion in this first, or indeed, any other stage of stuttering, is controllable by the will, inasmuch as the power of breathing and of exercising the voice is actually greater than the resistance; and if it were otherwise than this, suffocation would take place and life would soon be extinct. That the power of breathing and of exercising the voice, is greater than the resistance which is offered to it by the organs requisite for the utterance of the mute consonants, is fully proved from a stutterer of this first class being able to sing or chant a sentence, though he cannot utter it with accental inflexions of the voice. From this it might be supposed that the seat or cause of such an impediment is confined to the larynx; but upon judicious experiment and subsequent reflection, it is found to be connected with the organs of utterance themselves. Let any one of this class repeat a verse of a song,—“God save the King,” for instance, correspondently to the *TIME*, or *length* of the syllables, of the *tune*, he will find, that in proportion as he endeavours to adhere to the rule of speaking them slow, his impediment will be removed.

The cause then of stuttering, in this class, is the speaking too rapidly, and not minding, as it is called in reading, “the stops,” and the best and readiest way, in the Author’s

opinion, to remove it, is that of opening the mouth well, that is *properly*, for the vowels, and to speak with deliberation. This slow utterance will, moreover, aid the stutterer in another way; it will tend to diminish a defect which all persons, more or less, labour under,—the *stammering of the mind*. If the speaker open his mouth at the utterance of each accentual vowel, beyond what may be called “the modesty of nature,” it will not only tend to induce him to use the organs of enunciation with care and circumspection, but it would, also, render it impossible to speak so fast as unbridled inclination might prompt him. Should, however, the impediment have been neglected too long, and the lips occasionally begin to be locked fast, or the tongue cleave to the palate, they should be separated by mechanical means. For particular instances, small levers and springs acting against the tongue and lips have been found to answer the purpose.

A friend communicated to the Author the other day the case of a young gentleman, who laboured under what might be presumed to be the first stage of stuttering, and who, at last, succeeded in removing the impediment by simply opening the mouth and speaking slow; but discontinuing the habit of speaking according to rule, and ceasing to utter his words in a guarded and measured manner, and becoming careless and rapid in his utterance, he has relapsed, I understand, and now speaks as badly as ever. This ought to serve as a useful hint to stutterers of every description. No bad habit can be cured, until the cultivated or good habit be so confirmed as to become second nature; and this second nature is to be acquired, identified, and established only by continued industry, patience, and perseverance.

In the late Mr. Julion of Lambeth, the reader has an instance of an impediment of speech arising from the usual causes, and confirmed into a habit by improperly exercising the larynx. By vigilance of observation, by patience, industry, and perseverance, Mr. Julion cured himself, and

thence proceeded to cure others. His system, to use, I am told, his own expression, was "To make a voice;" which seems to be nothing more nor less, than to imitate the speaking of one particular class of mental stammers, (vide p. 20), viz. the sounding of, and dwelling upon, the vowel *u* as in *urn*, as a prefix to words, in something like the following manner: U - - - there-is-u-a-vigi-lance u-of-u-observ-ation, and-u-acc-ū-racy of-u-dist-inction (and so on), which books and precepts cannot confer; and from this, almost all original and native excellence proceeds." It may be here remarked, that this practically resembles the application of the system of Dr. Arnott; while, in respect to the *glottis*, the intention is different. In some cases the plan of Mr. Julion succeeded. The exercising of the voice, and speaking slow, are very important points; but certainly, as a system for the removal of other cases of stuttering than those which are occasioned by a defective action of the *chordæ vocales*, "the making of a voice," must, though a very useful auxiliary, prove insufficient. It did prove to be so; for in many instances, which came under the superintendence of Mr. Julion, it failed. Any individual, however, who labours under an impediment of speech, should read this account respecting the late Mr. Julion, with peculiar interest; it should be viewed as a useful and important lesson for the stutterer to con by rote. The above individual was vigilant and observing; he was patient, industrious, and persevering. He certainly cured himself, and subsequently succeeded in curing other stutterers, whose case corresponded with his own.

We have two other remarkable cases of impediments in father and son. The former, like Mr. Julion, cured himself; but the latter, deficient in the most essential qualifications, vigilance, industry, and perseverance, failed. The father was accurate in his conceptions; his judgment was good. His case, probably, did not reach the second stage of stuttering. He discovered, that slowness and delibera-

tion in speaking, are material points. He found relief, and, resolving to persevere, finally succeeded. "Old A——b is beginning one of his stories: I'll be off," were hackneyed expressions, I am told, whenever he began to narrate a circumstance. Having frequently heard the late Mr. A——b speak, the Author of these remarks is enabled to say, that there was nothing peculiar in his utterance, nothing remarkable,—more than that it was very, very slow; he spoke very deliberately upon all occasions, but without the slightest discordance or unpleasantness of drawl. The son grew up a stutterer, and continued so till his death. This case was remarkable. The son found no difficulty in reading, in repeating, or, indeed, speaking, except on certain occasions, and then he spoke by reversing the order of nature, *while the air was passing through the mouth into the lungs*. Like his father he was not defective in energy, thought, or physical capability; but in observation, judgment, patience, and perseverance, he appeared to be altogether deficient. So that, probably, while he seemed disposed to listen to advice, and to see the propriety of eulogizing a plan which succeeded in one whose judgment he revered and honoured, still he himself could not be prevailed upon to follow it. This gentleman actually kept at one time pebbles¹ in his mouth, till being compelled to swallow the greater part of them, he "s-p-pat the r-e-e-est" out of his mouth. Now the circumstance which occasioned the above individual to swallow the stones, though not the original, was, nevertheless, probably, the ultimate cause of his confirmed stuttering, because he could read, he could repeat from memory, and speak as well as most persons, excepting on particular occasions,—upon occasions, when, if

¹ It is said that the Grecian orator stuttered, and that he cured himself by speaking with pebbles in his mouth. The learned, however, are not, by any means, agreed, whether or not the impediment of Demosthenes was a stutter.

he had had pebbles in his mouth, he would in all probability, have swallowed them. Speaking himself out of breath, as it were, his lungs became collapsed, or partly so; and uttering a few words for a second or so, while the air was passing through the mouth into the lungs, he thus reversed the order of natural utterance.

The system of cure for such cases as this, is unquestionably that of Dr. M'Cormac: viz. "the expiring of words with very considerable force;"—that is, I conceive, the uttering of words, not by reversing the order of nature, by attempting to speak when the air is passing into the lungs, neither by the use of panting expirations, but by continued and lengthened breathings, constantly keeping up, on the one hand, the action of the lungs in receiving the air, and, on the other hand, the re-action of the lungs in breathing out vocal utterance, in a calm, quiet, slow, and deliberate manner.

It has been shewn that the organs of enunciation requisite for the utterance of the mute consonants, stop the breath and voice:—that the vocal chords are ready for action at *B*, *D*, and *G*, but that they are steady, or *not* ready for action at *P*, *T*, and *K*. If, therefore, a child has not a good enunciation of the mutes *B*, *D*, and *G*, and we may add *S*, when it should be pronounced *Z*, as (*az*) in the words (*wordz*) *mountain's* and *shepherds* in the following lines:—

"Beneath a mountain's brow, the most remote
And inaccessible, by shepherds trod," &c.

if a person should happen to be defective in these particulars, and to have passed the first stage of stuttering, it is very likely that his power over the larynx would be uncertain, the impediment begin to be confirmed, and the case, consequently, would be difficult to cure. Impediments of this class being of a two-fold character, the atten-

tion of the stutterer must be correspondently directed to the exercise of the organs of enunciation and of the organ of voice. When a sentence is uttered in a whisper, the vocal chords are not acted upon, or if acted upon, it must be in a very trifling degree. The practice of reading before persons in a whisper, therefore, is preferable, I am persuaded, to that of reading in a loud voice ; and if any one of this class will try the experiment, he will very soon be disposed to take advantage of the following hints. As all stuttering is occasioned, primarily, by an insufficient application of the organs of articulation, the stutterer should endeavour to become acquainted with the use and proper action of each of them. Supposing the organs themselves to be perfect, one organ cannot conveniently be substituted for another, nor can one articulation be converted into another articulation of opposite character : and as most efforts of the stutterer are occasionally accompanied, more or less, with distortions of countenance, and peculiar starts or motions of the body, no labour should be spared to prevent all irregularity of gesture ; because upon this will depend, in a great measure, the removal of the impediment of speech. Let some chosen sentence be pronounced before a looking-glass, first in a loud voice, and afterwards in a *slow, soft, and deliberate whisper*. The experiment, judiciously made, will prove to the stutterer, at once, the advantage of continuing to practise the organs of articulation *in the hearing of other persons*, in a whisper, and before a looking-glass. Passages of written composition, in verse whose rhyme is regular, should be selected, and every day, at stated intervals, read with slowness and precision,—the student ever bearing in mind, that breath must be constantly and regularly taken during the utterance of each sentence. Poetry of a more complicated character might next be chosen, and afterwards prose composition might be selected, and repeated from memory, *before one or two persons*. *All this, in the first instance, should be done in a*

subdued whisper before a looking-glass ; afterwards the whisper should be increased in loudness, till, at length, the organ of voice, the chordæ vocales, &c. be softly and imperceptibly, as it were, brought into action. It is hardly needful to add, that every effort of the stutterer in conversation should correspond, as much as possible, to the method he uses, and the improvement he makes in reading and in repeating from memory.

In obstinate, inveterate, and confirmed stuttering, all the organs of speech are deranged in their actions,—the organs of breath, voice, and enunciation. This can be explained to the perfect satisfaction of the reader, by means of the following sentence, and by analyzing the utterance of the stutterer during his effort to pronounce it.

“Nothing can atone for the want of modesty, without which beauty is ungraceful, and wit has ever been called detestable.”

At the commencement of the sentence, the front part of the tongue is placed against the gums, and prepared for pronouncing the liquid *n* ; but the nasal passage being closed, and the vocal chords quiescent, the mute *t* is substituted. The breath is, consequently, stopped. In further striving to articulate *n*, the vocal chords become active, but the nasal passage still continuing to be closed, the mute *d* is articulated : at length, the voice issuing through the nostrils, the liquid letter *n* is produced. The next effort is to join *n* (the sound of which is as continuous as a vowel,) to *o*, or rather, in respect to the organs of utterance, *u*, (nuthing) ; but in this there is considerable difficulty, although *u* in *uth* is the simplest and easiest vowel to utter : *n* is frequently repeated before a change of action can be effected in the organs of enunciation. A greater difficulty occurs in respect to *u* and *th*, not only on account of the sluggishness of the organs requisite to produce *th*, but also from the quiescent state of the *vocal chords* while pronouncing *th* as in *nothing*. The vocal chords having been quiescent for *th*,

they are called into action again for *i* and *ng*, i. e. nasal *g*. So uttered, the word *nothing*, would stand on paper thus :—T-t-t-d-d-d-n—n-u-u-th-th-ing. This, however, is but a moderate exhibition of the utterance of the stutterer, in the word *nothing*; it would perhaps, be T-t-t-d-d-n-n-m-n-n u-u-k-t-th, &c. The next word, *can*, would involve the speaker in much embarrassment; the nasal passage would necessarily be closed; the back part of the tongue would be so locked to the corresponding part of the hard or soft palate, as nearly to approach suffocation. The breath and voice, at length, finding an escape through the mouth, the stutterer would either struggle to speak with collapsed lungs or he would suddenly take breath, but by no means sufficient in quantity for his purpose. The same action of the tongue against the hard or soft palate, and the consequent panting and snorting, and stoppage of breath, would occur over and over again, until, quite exhausted, the sufferer would either hastily repeat the word, or he would be obliged to discontinue, for the present, the attempt altogether. Thus necessitated, he would replenish the lungs with fresh air. The accentual syllable of the word *atone*, beginning with a mute, is a cause of fresh difficulty. Even *w* and *a* in *want*, and *w* and *i* in *wich*¹ (which) and *wit*, to the confirmed stutterer are perplexing and difficult: w i. e. oo-oo-oo-a (that is, ǒ (r)) ǒ ǒnt, oo-o-o-ich, oo-oo-oo-it. The words *for* and *has* beginning with an aspirate or sibilant, the stutterer boggles at h-h-h or f-f-f: though in each of these letters *f* and *h*, the glottis is open, and the lungs are supplied with air, he finds difficulty in producing voice for the annexed letter. The whole sentence may be expressed on paper in the following manner. Ttd-d - - - dn - - - nu-

¹ The pronoun *which* properly begins with an aspirate,—*hooich*: the stutterer, however, does not usually prefix an aspirate in his pronunciation of this word, nor is it advisable, possibly, that he should ever attempt it.

-u-u-th-th-ing k- - - - - a-a-an at - - - t-t-one-f-f-for the-
e oo-oo-oo-ō o nt uv m-m-mod-ě-est-ty; oo-oo-oo-ith-th-
out oo-oo-ich b-b-beaut-t-ty ĭ-iz ŭ-ung-g-gr-ās-f-f-ul a-and
oo-oo-ooīt h-h-h-az-ever b-b-e-en c-c-o(r) o-ld d-d-de-t-t-
estable.

Thus, in the sentence, every word is liable to similar interruptions in breath, voice, and enunciation.

The attention of stutterers of this class should be directed 1st. To the general and proper manner of breathing. 2ndly. To the simple audible sounds, *ā*, *o*, and *ū*, as heard in the words *art*, *orb*, and *urn*. 3rdly. To the action and re-action of the lungs while practising the above vowel sounds. 4thly. To the proper action of the organs of enunciation, during the time of uttering all the letters, vowels and consonants, of the alphabet. 5thly. To respiration as connected with the classification of syllables, and with the utterance of sentences. 6thly. To the larynx, in respect to the accentual inflexions of the voice. 7thly. To the correcting of bodily contortion; and first and last, to bodily health, the feelings, and the stammering of the mind.

If the tongue of the stutterer cleave to the roof of the mouth immediately upon the lungs becoming inflated, it must be separated from the palate by an instrument of silver or ivory, similar in shape to that of a paper cutter. The nostrils should be closed or stopped by means of a spring pressing over the tip of the nose. When the tongue is properly separated from the palate, the simple vowel sounds *a* and *o*, as heard in *art* and *orb*, should be practised; accommodating the action of the lips, merely for the vowels, whether *a* or *o*. Still gently pinching the nostrils so as to exclude the air or breath, but removing the flat instrument from the mouth, and then simply opening the mouth and breathing through it, as on ordinary occasions when not speaking, let the stutterer observe the exact position of the tongue; and afterwards placing the flat instrument

upon the tongue, without pressing it down toward the bottom of the mouth, or altering the position of the mouth, or any of the organs of enunciation, let him practise the sound of *u* as in *urn*. Now let the stutterer commence a regular and systematic course of practice in respect to breathing, and to the above and other simple voices,—the action and re-action of the lungs,—that is, the air, and the audible effect of the returning air or breath passing through the trachea and larynx. The lungs being fully inflated, let the following vowel sounds be expired in one lengthened stream of voice, *ōō* as in *doom*, *ōō* as in *book*, *ō* as in *tone*, *ō* as in *odd*, and *ō* as heard in *orb*: let the following sounds, also be produced in one expiration of voice, *ē* as in *me*, *ī* as in *pin*, *ā* as in *age*, *ě* as in *mět*, *ē* as in *ērr*, *ǎ* as in *pat*, and *ā* as heard in *art*. (Vide page 15, of this Treatise.) In both instances, *A* as in *art*, and *O* as in *orb*, the tongue should be pressed to the bottom of the mouth, but the position of the lips should be different. During the sounding of all the first stream of vowel sounds, viz. *ōō*, *ōō*, *ō*, *ō*, *ō* (rb), the tongue continues at the bottom of the mouth; and during the sounding of the second stream of vowel sounds, viz. *ē*, *ī*, *ā*, *ě*, *ē*, (rr), *ǎ*, *ā*, (rt), the front part of the tongue approximates to the corresponding part of the hard palate, and as the vowels, as it were, advance, the distance between the tongue and the palate increases; but, as it has been said, the distance between the tongue and palate for *O* in *orb* and *A* in *art*, is the same. *I* in *time*, and *U* in *tube*, are diphthong-vowels; *I* is composed of *ā* as in *art*, and *ē* in *me*, and *U* is composed of *e* as in *me*, (the organs of articulation being pressed a little more closely together), and *oo* as in *doom*. When the stutterer has directed his attention to this mode of practice, and properly exercised the organs of breath and voice, and also the muscles of the tongue, he may proceed. Too much stress, however, cannot be laid on the necessity of attending to these preliminary steps. The action and re-action

of the lungs, the simple exercise of the voice, and the proper action of the tongue during the utterance of the vowels, are points intimately connected with the cure of stuttering.

The exercising of the whole of the organs of enunciation should now occupy the attention of the student.

The organ which closes the nasal passage can be exercised by practising *M* or *N*, and afterwards, by prefixing a labial or dental mute. *Bman. Dno. Ndno. Mbman. Op'n, (open), tak'n, (taken)*, and the vulgar pronunciation of *certain*, viz. *cert'n*. The exercising of the organs of speech properly, constitutes what is termed distinctness of pronunciation; the mouth must be fitly and suitably opened for the utterance of each vowel. Every appropriate organ must promptly perform its office for the articulation of a consonant, especially of a final consonant; and the lungs and larynx must supply each consonant with either a whispering or an audible sound. To attain an easy articulation of the consonants, may be recommended, and that strongly, the plan adopted by Sheridan, the practising of them with a vowel preceding each, as *ab, ac, ad, &c.*; by which means, it will not be difficult for the student to judge of the respective power of each consonant.

Without any danger of being confuted, it may be said, that the vocality of language is altogether dependent upon a clear and distinct utterance of the vowels. Each, or every modification of a vowel, demands an appropriate aperture or opening of the mouth, and a free use of the jaw. One aperture cannot be substituted for another. Signor G. Lanza, an ingenious and celebrated Italian singing master, introduced, a few years ago, a very useful method for the guidance of his pupils, in vocal music, in respect to the sounding of the vowels. He attached to the words of the Solfeggio, *do, re, mi, fa, sol, la*, pictures or plates showing proper apertures of the mouth. Having witnessed the beneficial effects of the system in several instances, the Author is

enabled to say, that the scheme of Mr. Lanza, as far as it goes, is applicable to the purpose of the stutterer, in this department of his practice.

Before the pupil can derive benefit from the following remarks, respecting respiration, he must be content to divide words into syllables, and submit to the practice of taking breath, between each of them. Afterwards, and in order, that he may know, and learn how, and at what time to breathe, when he is reading a sentence, and, subsequently, when he is endeavouring to express his own thoughts to others, he should first diligently watch the pronunciation and delivery of such persons and gentlemen in private life, as are admired for their simplicity of diction, and slowness and deliberateness of utterance. It would be discovered that all eloquent speakers have *one uniform* method of *pausing* and of *taking breath*, that, when engaged in discourse, they seldom or never breathe through the nostrils, but almost always through the mouth. If a speaker, answering the above description, were to be asked, "where he should consider it proper to take breath, in reading and speaking, the answer would be, "where I have time,"—*viz.* "at the beginning and the end of a period, and at any place in a sentence where there is sufficient pause." In the following sentence, a good reader or speaker would pause and take breath immediately after the word "operations;" he would also pause after the words "power," "reason," and "unemployed;" so that, if requisite, he might take breath at any of the above places.

"As the excellence of every power appears only in its operations, | not to have reason, | and to have it useless and unemployed, | is nearly the same."

The stutterer, however, may and ought to take breath more frequently than this: still it would not be advisable to stop in the middle of a word; and as there are combinations of monosyllabic parts of speech in sentences, which are pronounced and accentuated precisely the same as individual

polysyllabic words, so likewise, in the middle of such combinations it would be equally improper to take breath; yet, *between* such combinations, and also words which have no enclitics, breath may be taken. The following sentence is pronounced as *if* there were only three words or parts of speech. "*Truth | is the basis | of excellence.*" Before, between, and after each, breath may be taken, if requisite or convenient to the stutterer. The article is joined to its noun, and the preposition to the part of speech to which it belongs; and, the sentence so pronounced, a foreigner and stranger to the language, would suppose that only three entire words had been uttered; he would recognise "*truth*" as a word of one syllable, with the accent upon it; "*is the basis*" as a word of four syllables with the accent on the penultimate; and "*of excellence*" as a word of four syllables, with the accent on the ante-penultimate; the whole bearing a close resemblance to the three following parts of speech: "*Paul reprehendeth intemperance.*" In this sentence, if convenient or required, breath may be taken before, between, and after each word; but, in correct and easy speaking, it would be highly improper to take breath in the middle of "*reprehendeth,*" or "*intemperance.*"

It will be now proper to touch upon one or two material circumstances connected with the larynx, and the accentual inflexions of the voice. This will complete the Author's theory for the cure and removal of stuttering.

Every word of more than one syllable, *individually pronounced*, is accompanied with percussion, called accentuation. If the accent be placed on the first syllable, each single word exemplifies one inflexion of the voice: *viz. tèmperance, chàstity, pòpular, prèference.* If the accent be placed after the first syllable, each single word exemplifies both the rising and falling inflexion of the voice, altering at the accentuation. *These inflexions of the voice cannot be performed, unless there be a correspondent aptitude of action in the larynx,—unless the tension of the chordæ vocales, and the diameter of the glottis vera are capable of minute changes, and of pro-*

ducing speaking voices in quick succession, i. e. slides of sounds upwards and downwards, commencing frequently by leaping from one compass of the voice to another, with far greater quickness than the most rapid movement in music. “*Accentuation.*” Though the stutterer need not be troubled with elocutionary nicety, still as every successive accent (secondary as well as primary,) exhibits to the ear a fresh inflexion of the voice, and as the larynx must of necessity be instantly affected before an accentuated syllable, (secondary as well as primary) can be uttered, it will be useful for the student to dwell a little longer on the subject. Adverting to the above word, (*Accentuation,*) and listening to the pronunciation of it, we find, that the voice naturally adopts the rising and falling inflexion of voice, thus, *Ac-centu-ation*. But if the same word *Ac-centu-ation* occur in a sentence as the nominative to a verb, the accentuated syllable would as naturally adopt the contrary inflexion. An individual musical note is not susceptible of the slightest elevation or depression of sound; thus each note, however comprehensive as to time, is of the same quality of tune from the beginning to the end; hence in singing one lengthened musical note, neither the tension of the vocal chords, nor the diameter of the glottis, is altered; but speaking voices are evanescent inflexions. Speaking voices or inflexions are emitted through the glottis at the pronunciation of primary or secondary accents; they slide either from a low note upwards, or *vice versá*,—constantly leaping or jumping from one note to another—the voice being articulated by the effluent breath, as it is differently affected by the organs of the mouth. If these varieties are to be produced only by correspondent actions of the larynx, and if such correspondent actions of the larynx in speech are more complicated than those which are required in vocal music, we are furnished with a true, philosophical reason why the stutterer can more easily sing than he can speak.

When the voice begins to set, or as it is sometimes

termed "*break*," all young persons, those who speak with fluency of utterance, as well as those who do not, lose, in a certain degree, their command over the larynx: for a time they cannot sing with any tolerable certainty, either as to quality of tone or accuracy of note. In some instances, not only during, but also after, the setting of the voice, the larynx continues unable to obey the ear; and in a few other instances, after the setting of the voice, the vocal chords are so deranged as never afterwards to be capable of producing regular musical actions. Some years ago, the author knew a celebrated pianist, whose ear was, and continued to be, exquisitely delicate, but whose *voice* was discordant and anomalous in a very high degree. Before the breaking of his voice, he could sing very well; but after it, he was not able to sing two notes of the simplest air that could be chosen, in tune. Now, what must of necessity affect the larynx of all young persons, must equally affect that of the stutterer; and as speaking sounds are more complicated than musical sounds, it will easily be conceded, that when the voice of the stutterer begins to alter or *set*, his impediment is in great danger of being firmly rooted in what might be termed *organic defect*. This may be one reason, among many others, why it is sometimes more difficult to remove the confirmed stuttering of adult persons, than that of children.

In assisting the stutterer to regulate his voice in respect to accentual inflexions, it would not be proper, as we have before hinted, to tease him with scientific subtilties and elocutionary refinements. The proper object to be achieved on this head, is the utterance of syllables under the accent: and as the two particulars,—inflexion and articulation in respect to consonants,—are circumstances which render the object difficult to be attained, it has been found useful to exercise the voice, by practising the accentual syllables of sentences, when they are divested of their consonantal prefixes; thus:—

“ *Truth is the basis of excellence.*” “ Ūth (ōōth) is ě ās-
īs ōv ex-ell-ence.”

If the impediment be so far confirmed, as to render the sufferer unable to utter or articulate a vowel, he should exercise the organs of breath, voice and enunciation, agreeably to the advice formerly given, by practising the vowels *A*, *O*, and *U*, as heard in the words *art*, *orb*, and *urn*, and, also, ōō, ōō, ō, ō, ō(rb); e, ě, ā, ě, ē(rr), ā, ā(rt). Vide p. 15. See, likewise, pp. 16, 17, respecting articulation.

Supposing the student, after sufficient practice, to be capable of breathing effectually, exercising the voice, and giving the accent on the proper syllable, of repeating every word in the above example, when it is divested of the initial consonant, still in his attempt at pronouncing any word in its original form, the confirmed stutterer would be unable to proceed. The word *Truth*, for instance, commencing with the mute *T*, the voice and breath are stopped by the organs of enunciation, requisite for the articulation of the letter, viz. the organ which closes the nasal passage, and the front part of the tongue against the gums or front part of the hard palate. To overcome the difficulty, a vowel must be prefixed to *T*, thus: *Ut*. Here let the speaker stop, as if a word were finished.

In consequence of the stutterer's confirmed habit of endeavouring to speak without properly altering the enunciative organs, and the position of the mouth, the next letter, though a liquid, will not coalesce with the annexed, following vowel. And here it is to be remembered, that *all* the consonants, more or less, interrupt or impede every stream of voice; in consequence of which, the stutterer finds great difficulty in pronouncing a syllable when a vowel immediately follows a consonant, whether a liquid or mute, but more especially when it follows the mute consonant *P*, *T*, or *K*. And for this reason; because the means proper to be used for producing *p*, *t*, or *k*, not only stop the breath, but they

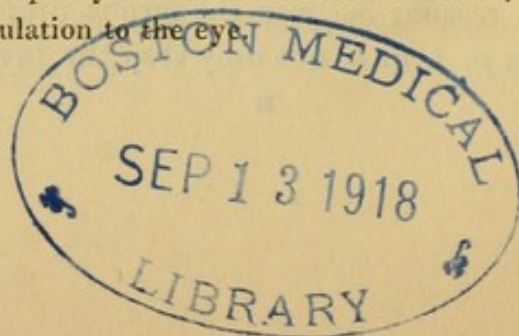
affect also the vocal chords, and render them quiescent. A vowel, therefore, must be prefixed to *r*, and the vowel and *r* should be uttered as another single word. The remaining letters, *uth*, (pronounced *ooth*), can be accomplished without impediment. So uttered, the word *truth* will stand on paper thus *ut - - - u-r - - - ooth*. This being a model for every other word in the sentence, the whole may be described to the eye in the following manner:—¹ Ut-ur-ooth iz ² uth-ub-āss-iss ov ex-ell-ence.

In his progress, the student will discover that he can more easily pronounce syllables, when under the penultimate, than under the ante-penultimate accent; that he can more readily give utterance to a long vowel than to a short one. In obstinate and inveterate instances, it is, therefore recommended to pronounce each word in a sentence syllabically, and to lengthen the ante-penultimate accent.

Trusting that the reader comprehends and fully appreciates every thing that has been insisted upon in this section, together with what has been advanced respecting *health*, the *mind*, and the *stammering of the mind*, *irritability of temper*, &c.; the *feelings*, *certain bodily appearances*, and *contortions of countenance*, the Author takes his leave of the stutterer for the present, and recommends the extracts and examples which have been given, as models for regular and systematic practice,—merely remarking, that when all the organs, especially that which closes the nasal passage, are duly and effectually exercised, and the stut-

¹ It is recommended to lengthen *u* in *ut*, *uth*, and *ub*, as if modified by *r*, but without the roughness, vibration, or articulation of *r*: thus *u (r) t*; and indeed, in this stage of practice, it is advisable to lengthen every vowel prefix.

² *S* in the above instance, is pronounced *Z*; it is useful to explain every discrepancy of this sort to the stutterer, by exhibiting the proper articulation to the eye.



terer can promptly and successfully deliver sentences according to the above syllabic form, both in reading and during conversation; then, and not till then, the student may avail himself of the method which has been already described, and which is really adopted, little or much, by almost every deliberate, accurate, and collected speaker.

U - - - there is u-a¹-vigilance of u-observation and u-accuracy of u-distinction, which u-books and u-precepts u-cannot confer; and from u-this almost all u-original and u-native excellence proceeds. Vide. p. 20.

¹ The unaccentuated sound of the article *a* in "a vigilance," is the same as *u*, in *ut*.

THE END.

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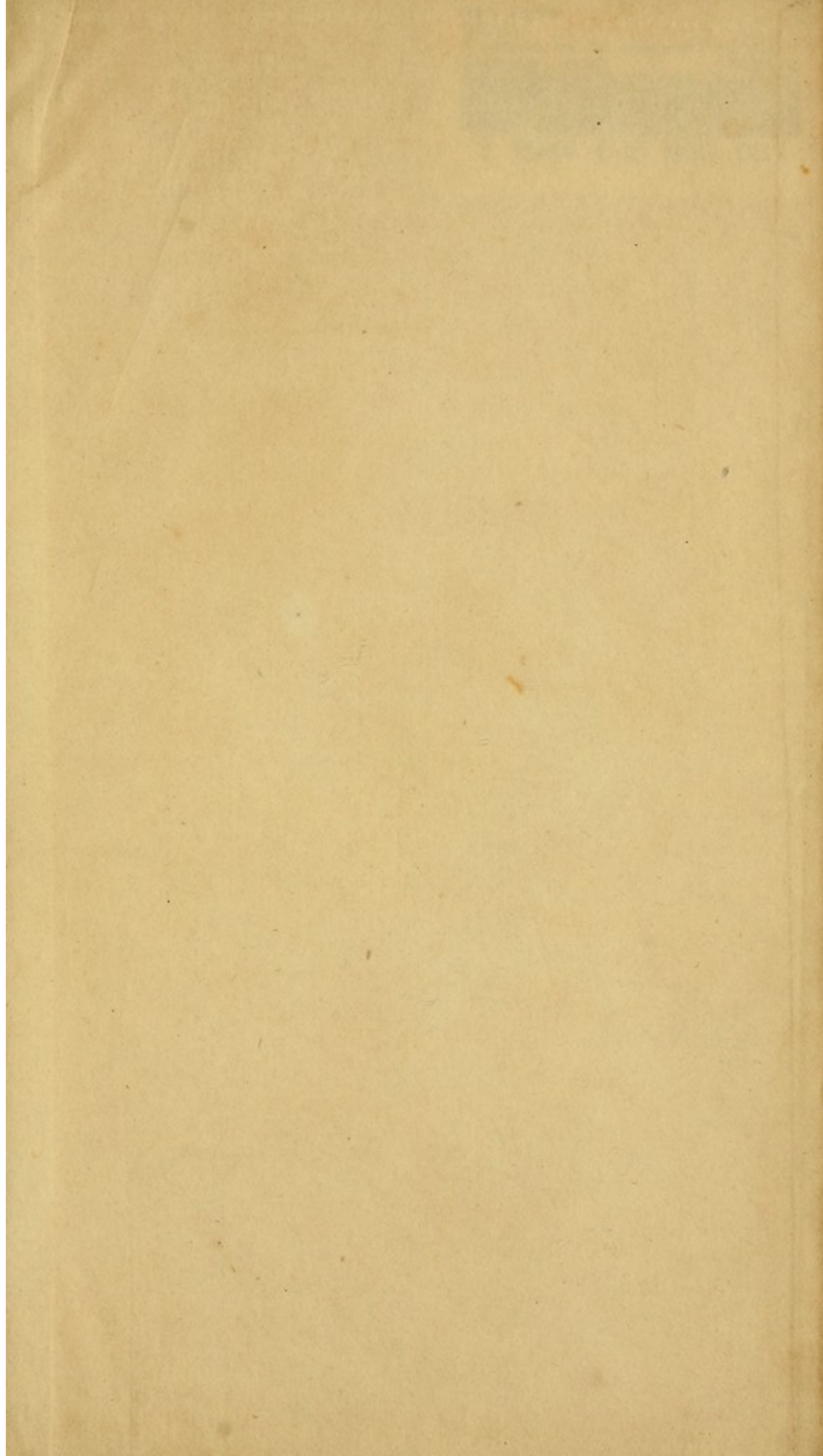
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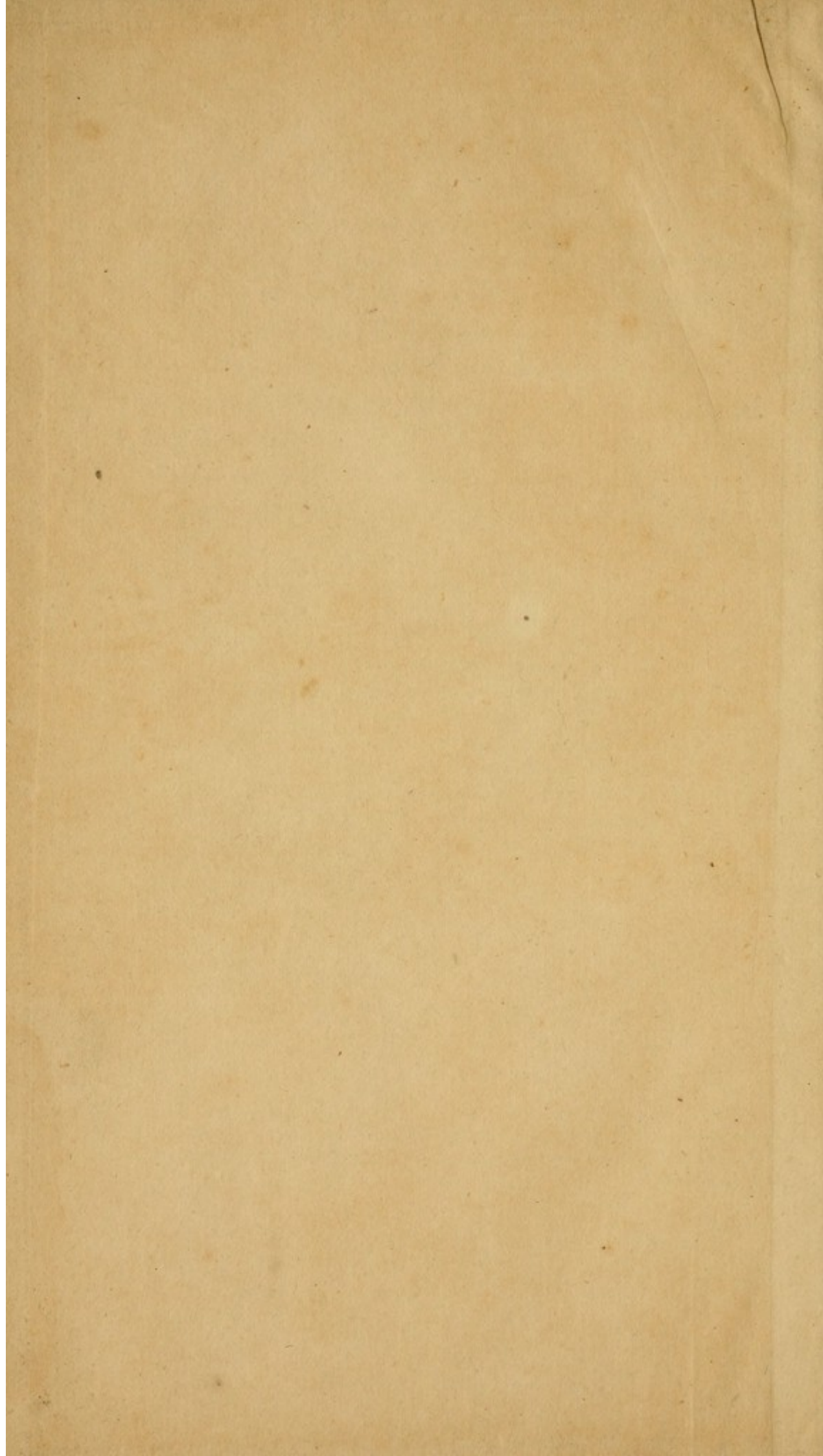
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