AN
INAUGURAL DISSERTATION
ON
The Function of Voice and Speech

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Know all men, by these presents that among the severe trials incident to human life, that of a person who is obliged to write because he cannot be accused, when every name and muscle is ready to rise in mutiny at the thought, and the body, soul, and spirit rebel at the very idea of the undertaking. The product of the pen in such a case, is more likely to be the heavy after-piece of a jaded spirit than the very speaking of the soul. Just at the last extremity, a few remarks must be made, as to all hazard, and there is one that will be sure to interest the reader.
more than any other, and that is this—The number shall be small. In speaking of the function of the voice, it will be expected of the writer, as a matter of course, that he will mention the organs compassing the apparatus by which the function is executed. The vocal apparatus is with little difference, the same as that by which the act of respiration is performed. The chest, the lungs, the trachea, and the larynx, are the organs concerned.

The words Voice and Speech are frequently used as synonyms, but in a philosophical discussion when speaking of their origin,
it is natural to make a distinction for voice is the article out of which speech is manufactured. This object is accomplished by the combined operations of various organs, in addition to those specified as belonging to the vocal apparatus. The lungs, the tongue, the lips, the teeth, the palate, and the naso-pharynx that the apparatus of respiration while operating in the execution of its appropriate function, should, as an incidental matter, without embarrassment, and with so little assistance from other organs, execute an other function, so important as that of voice, is a striking instance of that economy which nature often
exercises in her operative labor, and the materials employed.
The respiring air, in passing out from the lungs, sets such an action in the larynx, as to produce that sound which we call the natural voice of animals, and which in man is so modulated by other organs as to produce speech in such a variety of modifications as to express our thoughts and feelings in such a manner as to make it the best external exponent of internal operations. The function of speech, in its wonderful operations, when guided by sentiment, and attended by sensibility and sympathy, has a compass equal to the
Whole circle of human feeling, with all the variation of circumstance and condition, it has the capacity of particular adaptation to our hopes and fears, joys, and sorrows, the passions and emotions of our nature, and that in all the various degrees recognized in the scale of human feelings. Over the whole inner man it is exerted no small degree of power in exciting or allaying joy or woe, for good or for evil. It is a consideration of no small interest that he were so evidently organized with the special view of being operated upon by the power of speech.
The fact is evident from the law of mind and feeling, and from the structure of all our susceptibilities. They all give a different response, and vary in their character and degree of action, according to the vocal influence which is brought to bear upon them. Every vibration, and note of sympathy and sensibility, is ever ready to give a response which demonstrates andamp;ndash;times the fact, that we were formed with the particular view of being highly susceptible to the action of vocal power. Who that has ever been afflicted who that has ever been visited by
Misfortune and distress cannot attest the power of speech to strengthen or debilitate, to enliven or depress, according to its character. While it thrilled like electricity through every nerve, all the higher qualities of our intellectual and moral nature, reason, understanding, benevolence, and nobleness of soul are greatly dependent on the vocal powers as a special medium by which to make this crew full and spontaneous response in all the intercourse of man with his species. They are the conductors of mental and moral electro-magnetism by which mind communicates.
with mind, heart with heart,
soul with soul, sensibility with
sensibility, sympathy with
sympathy— in short, the med-
ium through which, by a con-
centration, and embodiment
of intellectual and moral en-
ergy, a man transmits all the
feelings of his bosom into that
of another, with the speed,
and fire, and force, of elec-
tricity. And hence it follows,
especially, in the use of oral
language, that the reception
we give to the communication
of another, and its force,
and effects, are always mod-
ified by the character of the
speaker, and the opinion
We have formed of him, the same words, delivered in the same style, cannot possibly have the same effect when coming from men of different and opposite characters.

From the one, our feelings might receive with disgust, while we would listen eagerly to the other, as did the Lady of the Lake to catch the sound of his father's word:

"With head upward and look intent,
And eye and ear attentive bent,
With welcome smile and lips apart,
Like monument of Greekian art."

In this view of the subject, it is interesting to know that the organs of speech, like those of
Locomotion, are susceptible of a high degree of cultivation and improvement.
This is evident from the striking distinctions and contrasts, in this respect, which exist among mankind in whose organism there is no structural defect. The fact that a function, so highly vital and important as that of respiration, is most intimately concerned in all the strictly philosophical improvements of the function of speech, would seem to indicate the propriety of noticing, especially, some of the more practical considerations in favor of such
improvement.
The most important exercises, for the improvement of the voice, are highly favorable to the health of the lungs.
This is true with respect to various pathological conditions of the lungs, both as to the means of prevention, and of cure.
The lungs are frequently in an enfeebled condition, with an obstructed and languid circulation, with a loss of tone, and a bad state of the secretions, which affect their whole substance. But this unhealthy condition, more particularly, affects the air cells and air passages, when the vitiated
Sectures accumulate; and not being of the proper consistence, but frequently tough and tenacious, they adhere and clog up the cells and passages, prevent the free ingress and egress of air, and frequently produce a tendency to collapse, and greatly lessen the capacity of the lungs, for the execution of this important function. But such a pathological condition is evidently inconsistent with the practical results of vocal philosophy, for its natural tendency is to prevent such a condition, or to remove it where it exists.
Attends directly to remove and prevent engorgements; to make the lungs clear themselves of accumulations, by improving this circulation and secretion; this acting, this energy, and this time, with an increase of this capacity.

Again—the most important measures adopted for the improvement of the voice are highly important for the general health. Vocal philosophy is not only a subject of great practical utility as it respects the function of speech, but also as it respects all the vital functions and, in fact, every organ, and every function, in
the human economy. They are all dependent on respiration, which is indispensable to the function of speech. According as respiration is well or ill performed, we are more or less susceptible of impressing by the various morbid agents which tend to disturb a healthy action and establish disease; for our protection is the resistance offered by the vital forces, and this resistance diminishes, as the function of respiration is improved. This is the function by which the formation of the blood is completed, and by which it is renewed, after being drained of its nutritive
and vivifying properties, by making its circulation through the system, and "administering to the various operations of life." No one will doubt the importance of good blood to the health of the whole economy, and every part of it; but it is evident, from a demonstration, that the blood is better or worse, according as respiration is more or less perfect. And the perfection of this function, as of every other, depends on the organs concerned, and especially, on the condition of the lungs, and those organs in which resides the motive power, which is brought into requisition in the
respiratory operations of the chest. This power, by which the vocal and respiratory apparatus and all the organs of speech are controlled, is a muscular power, a power which resides in certain muscles which act in obedience to the will, and which by proper discipline are greatly improved. But although the apparatus of respiration, for certain purposes, is under the control of the will, and may be controlled by it, at pleasure, yet, the ordinary execution of the function of respiration, both when we are awake, and when we are asleep, is not to be attributed...
wed to the stimulus of volition, but to a spontaneous impulse to action resulting from the stimulus of simple irritation in which the will is not consulted. The muscular fibres are excited to action in the work of respiration by the stimulus of the air we breathe, acting upon the lungs; as the stomach is excited to the work of digestion by the stimulus of food; and as the heart and blood vessels are excited to action by the stimulus of blood, and as the nerves are excited to this peristaltic action by the properties of this contents.

As the will is a faculty of the
mind, and the mind is frequently restless, and neither
knows nor feels any stimuli but That of Life, it would
have been far be to the health
and happiness, and life of
man if the vital organs and
functions had been made to
wait upon in the Tardy Stimuli
lus of vitality. Man is freq
ually too stupid to value his
own happiness; but the au-
thor of our being, in the
exercise of infinite wisdom
and goodness, has decreed it
that every organ is provided
with its own appropriate
stimulus, which is adapted
to its peculiar organization,
The eye is excited by the stimuli of light; the ear by that of sound; and all the organs which constitute the sense of smell by the genial stimuli of odors. But the writer is reminded of his promise in the outset, that his remarks should be few and, although, he is aware that the various pathological conditions to which the organs of voice are frequently subjected would furnish a large amount of interesting matter for discussion, yet he will dismiss this subject without further notice, and would
merly suggest a few consid-
erations which it seems
to have been too freq-
ently overlooked. These are
certain positions which con-
titute the basis of theory and
practice in vocal philosophy
on which, though they
may appear self-evident, will be
found worthy of special no-
tice.

It is evident that the organs
must assume a great variety
of position in executing the
function of speech.

In executing this function,
the organs must have a
sufficient length of time
allowed them to assume the
different positions necessary.
3. The organs must be allowed to occupy the different positions assumed, a sufficient length of time.
4. The organs must have a sufficient force applied to them, in the different positions.
5. The available force depends primarily on the power of those muscles which are concerned in uniting the apparatus of respiration and of voice.
6. The must know when to apply the force exerted in executing the function of speech. He must know
in what part of the mechanism is more especially required.