

Speech by Alexander Graham Bell, 1871

After the invention of Visible Speech by Professor A. Melville Bell had been referred to, and the history of its application to deaf-mutes traced up to the present time, Miss Fuller, the Principle of the Boston School, showed that the symbols could be taught to Congenital Mutes so young as to be almost infants.

CONCERNING THE EXPERIMENTS I HAVE BEEN MAKING.

The objects of the experiments I have been making during the past three months, has been to test the possibility of educating the mouths and voices of deaf-mutes.

I wish to draw your attention to two young ladies who have been under my instruction, —Miss Alice C. Jennings, daughter of the late Rev. Mr. Jennings of Auburndale, Mass., and Miss Theresa Dudley, daughter of the Hon. L. J. Dudley of Northampton, Mass. I wish special attention to be directed to the case of Miss Dudley, as she is a congenital mute. She was educated at home, and at the American Institution, Hartford, Conn. At thirteen years of age she commenced the study of articulation under Miss Rogers, the Principel of the Northampton Institution. She has had four years experience in the use of her vocal organs.

In September I permitted Mr. Philbrick, Superintendent of Public Schools in Boston; Mr. White, Secretary of the Board of Education, Dr. Ira Allen, Chairman of the Special Committee of the Boston School for Deaf-Mutes, Dr. Geo. F. Bigelow, member of that Committee, Dr. Blake, and two other gentlemen to examine the condition of Miss Dudley's articulation previous to my instruction. I did this that Miss Rogers might have full credit for the very wonderful work she had accomplished, and also that these gentlemen might be the better able to appreciate the improvement justly due to Visible Speech. The points observed were:

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1st. That a few of the elementary sounds were defective. These were the vowels in the words pool, poll, pole, Paul, and poll; and the consonants wh, w, r, l. The vowel ee was only occasionally correct.

2nd. All double consonants were defective. For instance ts, x, gs, ch, j, &c.

3rd. Rapidity of utterance had been gained at the expense of distinctness.

4th. It was difficult for strangers to understand her conversation, and impossible for them to follow her reading.

5th. Her voice was under no sort of control, and it was not 2 pleasing in quality.

Miss Dudley has been under my instruction for three months. The improvement manifest may be emphatically summed up in the one word, "Power." She has attained power over the instrument of speech-such power, that she can produce the elementary sounds of foreign languages as well as those of English-by merely studying their symbols-that she can vary her voice in QUALITY as well as pitch, sustain it on one level, or inflect it at will, and that she can appreciate certain musical intervals.

I have devoted principal attention to Miss Dudley's articulation. In Miss Bennings' case I have aimed at the cultivation of the voice, and the communication of elocutionary principles. Miss Dudley varies her voice entirely MECHANICALLY, but Miss Jennings can now associate a FEELING with every inflection. The latter also possesses the mysterious power of appreciating RELATIVE PITCH. Both of these young ladies are apparently TOTALLY DEAF.

I was anxious to ascertain how far the power of recognizing musical intervals could be educated, but, having more important work to do, I did not make the attempt with these pupils. Miss Fuller, however, permitted me to experiment upon the voice of one of her scholars; Miss Isabel Flagg, and I shall exhibit to you today, what I consider a scientific

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curiosity-perhaps of little practical value-namely the phenomenon of a deaf person MECHANICALLY SINGING. Miss Flagg will afterwards recite, with elocutionary effect, a little humorous sketch which we may call "Thrushes versus Starlings."

The audience is freely invited to dictate words in ANY LANGUAGE. Should Miss Dudley fail in uttering these correctly, the attempt at all events will illustrate the directive power of the symbols. Afterwards she will read the Lord's Prayer from the symbols of Visible Speech. You will observe that, though the utterance is exceedingly SLOW, the articulation is perfect. It will require long and patient practice of Oral Gymnastics before she is able to speak FLUENTLY with distinctness-but the end-PERFECT AND PLEASING ARTICULATION is certain.

CONCERNING THE PLAN OF INSTRUCTION.

In order that perfect and pleasing utterance may be attained from deaf-mutes, it is necessary to direct attention to four 3 points.

1st. Articulation, 2nd. The quality or "timbre" of the voice, 3rd. The Rhyth e m of Speech, and 4th. The Modulation of the Voice.

Visible Speech has conquered the difficulties of Articulation an Timbre, but it is not competent to show the Rhyth e m of Speech, nor to represent, otherwise than approximately, the modulations of the voice.

What my father has accomplished for the mouth, I have attempted to do for the throat. I have developed from the voice symbol of Visible Speech a philosophical notation for the MOVEMENTS of the voice, in regard to Pitch, Duration and Force. This system constitutes an ELOCUTIONARY, and in its fullest application, a MUSICAL notation.

Thus two systems, different yet related, will be necessary in order to obtain pleasing articulation from deaf-mutes.

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I have recommended that at first, articulation, rhythm, and modulation should be taught as SEPARATE BRANCHES OF EDUCATION.

In a further stage of progress Articulation and Rhythm may be united as one branch, and Modulation and Rhythm as another.

Finally Articulation should be given with Rhythm and Modulation.

CONCERNING ARTICULATION.

In teaching articulation, a radical difference must be made at the outset between the semi-mute and the mute proper. The former has already learned to talk-the latter has everything to learn.

Our object should be to KEEP UP THE KNOWLEDGE of spoken language possessed by the semi-mute, and to teach him the pronunciation of new words. This can be accomplished by the symbols of Visible Speech; and his voice may be prevented from becoming monotonous by the use of the allied Elocutionary Notation.

But the congenital mute, (who may be taken as the type of the other class), has had no practice in the use of his vocal organs; his mouth is at first incapable of using the language of hearing persons. The instrument of speech must be mastered like any other instrument, BY SLOW DEGREES. Hearing children being guided only by imitation, require four or five years' practice in order to talk correctly, and even then it is astonishing how many grow up with defective articulation.

To expect the congenital mute to talk the moment he has mastered the elements of speech, would be as unreasonable as to expect a child to play one of Beethoven's Sonata's when he only knew the notes of his piano. He must have long and patient practice of scales and exercises in order to obtain command over his instrument; he must have Oral Gymnastics as a preparation for speech.

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Should any one try the experiment of teaching a novice in music to play a Sonata correctly, we may predict the result. Rapid passages would be slurred over, and many false notes be given. The difficulties of execution would cause the performance to appear at best labored, and mechanical, and the pupil would probably be disheartened.

Should there be any approach towards correct playing, it could only be made through indomitable perseverance on the part of both teacher and pupil.

Analogy reveals the cause of the only partial success that has hitherto attended the efforts to teach articulation to the congenital mute. The attempt to make him utter words and sentences from the VERY OUTSET OF HIS EDUCATION CAN ONLY BE PRODUCTIVE OF IMPERFECT ARTICULATION; and it will be found difficult, and in many cases impossible to correct afterwards the defects engendered by too great anxiety for progress on the part of his teachers.

The mouth must be educated to produce sounds BEFORE the difficulties of spoken languages can be successfully grappled with. By means of the symbols of Visible Speech, the elementary sounds may be combined in all sorts of ways to form SENSELESS compounds analogous to syllables, words and sentences. These should be uttered at first very slowly; then by degrees faster and faster, until the power of correct and rapid utterance has been attained.

Then, and not till then would it be safe to introduce articulation with sense attached.

CONCERNING RHYTHM.

Suppose that a rhythmical exercise has been written on the board for a class of beginners. The children are required 5 to clap their hands, or tap their slates, or make some other visible motion, IN CONCERT, while marching round the room.

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The rhythmical repetition of a simple syllable-such as “Pa-”can then be substituted for the clapping of the hands. The children marching as before.

Finally, the marching is relinquished, and the teacher beats time with his hand instead.

In this way an appreciation of Rhythm may be developed before applying it to words. Classes can be exercised with regular rhythm, as it occurs in Poetry, and individuals with the irregular rhythm of Prose.