

**POPULAR MANUAL OF
VOCAL PHYSIOLOGY
AND VISIBLE SPEECH**

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Popular Manual of Vocal Physiology and Visible Speech by Alexander Melville Bell

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AND
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BY

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INTRODUCTORY.

THIS work gives a complete view of the actions of the vocal organs, and the resulting elements of speech. The symbols of Visible Speech are used to depict the various motions and positions of the organs. The object of the work is to popularize a knowledge of Vocal Physiology and Visible Speech, and to furnish a text-book by means of which these subjects may be taught in schools and colleges.

The mastery of spoken languages, the exact acquirement of native or foreign pronunciations, and the correction or removal of defects and impediments of utterance, will be accomplished by means of the Science of Speech, as here expounded. The teaching of articulation to the deaf will be especially facilitated.

The following extract from an address recently delivered* shows the reader something of the mode by which the principles herein developed were originally worked out by the author:

"I had hereditary leanings to the profession of teacher of Vocal Physiology; and when, in 1841, I began to prepare myself for independent work, I

*Printed in "Science," February 8, 1889.

sought to supplement what I may call the family knowledge which I possessed by the study of all available books on the subject. I found, however, that but little assistance was to be obtained from this source; for the art of treating defects of speech had been shrouded in secrecy by nearly all its practitioners. My father* was, in fact, the first to repudiate occult methods in the cure of stammering, and to practise his system openly. At the time I speak of there did not exist in print, so far as I could discover, any precise directory for the processes of articulation. I aimed at teaching these processes, but could not find a single work that gave specific guidance as to what to do, or how to do it, in any given case. Under these circumstances I had to investigate from my own organs and the organs of my pupils. I had many pupils, exhibiting wide varieties of defects and peculiarities, and the observations on these by day became the study of the night.

"Years of this pleasurable devotion to one subject ultimately developed what I had sought in vain to find as a legacy from professional predecessors. In 1849 the first results of my labours were published under the title of 'A New Elucidation of the Principles of Speech and Elocution,'† forming the kind of directory which I had desiderated before I began to teach. But this work was far from exhausting my phonetic material, which was still, moreover, in-

* Alexander Bell, born in St. Andrew's, 1790; died in London, 1865.

† Afterwards divided into two volumes, "Principles of Speech, Dictionary of Sounds, and Cure of Stammering"; and "Elocutionary Manual—Principles of Elocution."

creasing. I had become experimentally acquainted with a category of sounds far exceeding those in any language. The peculiar elements in Gaelic, Welsh, Scotch and Irish dialects, provincial and metropolitan English, American English, French, German, etc.—as well as those accidental sounds produced by stammerers, lispers, persons with cleft palate, deaf-mutes, etc.—were familiar to my ear and my vocal organs; and I sought long to incorporate them into one phonetic scheme, where each sound should find its place in due relation to every other sound. The process was the converse of that which had been tried for the collation of a universal alphabet. Eminent linguists had endeavored to collect from every language its peculiar sounds, and from these to frame an alphabet by which all tongues might be uniformly written. But no success had attended the efforts, because the identities and differences among the elements could not be satisfactorily determined. At a conference held in 1854, the object thus aimed at was formally abandoned, and declared to be impossible.

“A different basis, however, seemed to me to promise a different result. My aim was to find a physiological instead of a linguistic basis for the desired universal alphabet. I therefore sketched out mouth regions, divided as it were by lines of latitude and longitude, and endeavoured to locate in my chart every sound which I could form, or which I could distinguish, whether linguistic or not, so as to bring under review all the varieties that could be produced by the organs of speech. From such a category, I reasoned, the phonetic elements of any and every language might undoubtedly be

selected and identified. The undertaking was an arduous one, filling up the night-work hours of many years; but it was at last accomplished in the system of 'Visible Speech,' published in 1867."

The plan of exposition adopted in the Inaugural Work was to illustrate mainly by diagrams and tables. The plan in the present book is to explain in detail the formation and the sound of every element. The first publication was adapted only for students of Philology; this publication aims to enlist its students from the general public and from advanced classes in schools and colleges.

Vocal physiology should be included in the curriculum of normal schools, as an important part of the education of teachers; and every student preparing for missionary work ought to be an expert in Visible Speech. Many missionaries have already testified to the great facility they have experienced in acquiring languages through their knowledge of the system. The Science and Art of Speech—embraced under the title "Vocal Physiology"—should claim the interest, not only of teachers and linguists, but of every educated person.

In providing a manual of the details of comparative Phonetics this little work fills a place hitherto vacant. The subject could not have been made clear without the organic symbols here used in its illustration. This expository application of Visible