

CHART  
OF  
ELOCUTIONARY DRILL

T. B. BROWNING, M.A.

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*(From the Proceedings of the Canadian Institute.)*

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(Extract from the proceedings of the Canadian Institute.)

## AN ELOCUTIONARY DRILL CHART.

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**THE BREATH AND ITS GOVERNMENT.**—The breathing required in public speaking or reading is a voluntary act which calls into play two independent sets or double sets of muscles, and may therefore be considered of two kinds, thorassic and diaphragmatic. The first is more commonly used by women, the second by men. In the first, you alternately raise and lower the ribs, that is, expand them upwards, outwards, side-wise, and towards the back, separating one from the other; and, again, compress them. The muscles used in the operation act upon the backbone as a fixed line, and their action is said to be in part direct, in part indirect. Figure No. 1 shows the chest as expanded; in No. 2 it is collapsed. The extension-motions given in the chart to reach these respective positions are similar to the means employed to restore breathing in persons who have been rescued from drowning, and, in certain cases well-known to the medical faculty, to produce or increase respiration in young children. Figure No. 3 exemplifies the action of the diaphragm.

Ordinarily in public reading or speaking, we should inhale noiselessly and through the nostrils only. If you raise the tongue against the roof of the mouth at the same time that you dilate the nostrils and contract the respiratory muscles, you may fill the lungs in an instant without closing the mouth. Times occur when you must draw your breath through the mouth and with noise, as in gasping; for example, where disease is simulated or trying situations are depicted; but, except where a pronounced effect is to be produced, such labored inhalation should be avoided, as both prejudicial to health and destructive of vocal power.

The retaining of air in the lungs is an important point in the government of the breath. You hold the inspiratory muscles contracted, close the glottis as in swallowing and aid the operation by shutting as far as possible the air passages of the mouth and nose. If you ask for what time one may retain his breath without injury, the answer is: it varies with the person and his degree of skill. One may hold for a minute; for another forty-five seconds may be too long. The end to be gained is control over the muscles and, as in gymnastic exercises, that which is to be avoided most is straining.

Except for rest, the breath is to be set forth through the mouth. As in retaining, time has been divided into short, medial, long, very long. You may empty the lungs, as it were, at a blow or within a measurable time. In all cases expiration should be free, that is, without scraping, without obstruction. Whatever time you practice, a regular, even and full flow will give you more complete command than spasmodic or irregular jerks. The reader should imitate the athlete. In his private practice he will prolong his expiration to the utmost; in reading will not stretch beyond a quick recovery, but act within himself and at his best. To use up a breath as if it were one's last, necessitates, in almost every instance, an effort or gulping for the next, which is not more conducive to health, agreeable to an audience, characteristic of good delivery nor in itself more skilful, than "catching crabs" is evidence of superior oarsmanship.

Voluntary breathing is the foundation of public speaking. Under whatever defects one may labor, lisping, stammering or stuttering, if once he gain power over his respiratory muscles to use them at pleasure, he will be hindered neither by want of breath nor a surplus of it—the main stumbling-blocks of public speech—will not only avoid the throat-laceration which afflicts the clergy so deeply, but will have already overcome more than half the obstacles which lie in the way of distinct and effective delivery.

VOWELS—THEIR PRODUCTION.—How many vowels has the English language? Webster reckons 33, Ogilvie 14, Sweet 36, and other orthoepists say 40, 12, 9 or 6. There is no consensus of opinion as to the number of our vowels. How, then, may they be distinguished? Mr. Melville Bell gives a systematic answer. He subjects the mouth to minute experiment and classifies vowels mainly according to the positions which the tongue assumes in enunciation. Thus they are front,

back, mixed ; high, middle, low ; round, etc. For purposes of illustration he uses diagrams. I doubt whether any one knows better than Mr. Bell that the lips, cheeks, tongue, hard and soft palates concerned in vocalization, differ both in size and shape in different persons ; and that vowel positions which may suit one man may not, in minute particulars, be absolute for all. His directions are given generally, are easy of application and are subject to correction by the ear. "Visible speech" was a great step forwards not only in phonetics but in the understanding of our language.

But how do the sounds differ between themselves ? Helmholtz experimented fully on the question, and has been followed by Koenig: They take the common European vowels and find the number of single vibrations they contain. This is for U 448, O 896, A 1792, E 3584, I 7168 ; so that, counting on the chart from left to right, you have a series of ascending octaves. Dr. Koenig has prepared a tuning fork for each vowel and adjusted a resonator to each. If you take fork A bow and apply it to the resonating chamber, you receive the tone of the Italian A ; so with the others respectively. Here, then is a scientific basis for vowel classification, in which the personal equation is almost eliminated.

But though these sounds be used in French, Italian, German and other languages, have we them in English ? Mr. Palsgrave says they lingered in the South of England till about 1500. If it be asked, do our vowel-names correspond with these sounds, the answer, with one exception, must be, No. Our language is peculiar. It is like a stately ship built of wrecks. Scandanavian, Danish, Norman conquests are embedded in it. Our spelling is a complex form which crept upon us from the south, and was made to represent another complex form or mass of complex forms which prevailed in more northern portions of England. Mr. Oliphant throws much light on the subject and shows how our vowels waged among themselves an internecine war before 1500. Thus

i takes the place of ae, e, ea, oe, ge, iht, w, y ;  
 a " " " ae, e, ea, oe, ge, i, o, y ;  
 e " " " a, ae, ea, eo, eow, i, ia, o, w, y ;  
 o " " " a, aw, ae, ao, e, ea, eaw, eo, i, w, ow ;  
 u " " " a, ae, eo, eow, e, i, o, oi, w, we, y ;

("Old and Middle English").

There was no king in Israel in those days, no tyrant compositor, and every man spelt as seemed good in his own eyes. One vowel is written for another indifferently. "The New English," in its early stages is equally belligerent. Thus

a	takes	the	place	of	aw, awe, e, ea, eo, ge, i, y, o ;
e	"	"	"	"	ae, ea, ei, eo, ew, i, io, iw, o, oi, ow, u, ui, y;
i	"	"	"	"	a, ae, ai, e, ea, ee, eh, eye, o, ou, ow, u, y ;
o	"	"	"	"	a, ae, au, aw, e, eo, ew, i, ou, ow, u, y ;
u	"	"	"	"	a, e, eo, eu, ey, i, o, ew, ow, we, y, ye, v.

We have plain traces of the anarchy to-day. Dictionaries agree that a in fate is like e in they, a in fair like e in their, a in fall like o in form, a in 'fiar like e in brier, i in ruin, o in major, and the second u in sulphur. Again, e in heir is the same as i in sir, o in worm, u in fur, and y in myrrh ; the o in move cannot be distinguished from the oo in moon, or u in rule, while o in wolf is like oo in wool, and u in push. To cap the climax we are told that a has five distinct sounds, e six and o seven, as if distinct sounds do not constitute distinct vowels.

But if a has five distinct sounds why should it be named from one of them only? Not it alone but all our vowels have been so named, and, with one exception, named strangely. Shakespeare says, the whirligig of time brings in his revenges. In this case we have had ours. If invasion from the continent wrought sad havoc on English vowels, and nicknames arose from them, very likely in the manner which Mr. Earl points out, we have done our best to impose these nicknames on the languages of the continent. With respect to dead varieties, Greek and Latin, we succeeded in the attempt for several centuries, succeeded at least to our own satisfaction. These days a doubt has been ripening to a conviction that this course of action is not wise. Through the influence of philological study and under the leadership of Cambridge, English-speaking-people are beginning to raise themselves above the vulgarism, and are at once adopting a more rational mode of pronouncing the classic tongues, and are enquiring what vowel sounds their own language really has. If the question then be put thus, have we as vowels in English the five tones which are represented by the Koenig forks, call them what you will? the answer without an exception is, Yes. How could it be otherwise? They are octaves which embrace the compass of the

human voice. We shall see, I hope, that we not only have them but that they dominate our speech. It may be, as some philologists say, they are universal.

But how do you produce these vowels? He that is whole needs not a physician. He that has a model and can imitate it correctly, is well off already. Others may find the following practice of service. Take fork A. vibrate and apply it to the aperture of the resonator till you perceive the sound distinctly. Then bring the fork vibrating to your mouth. If you obtain there a resonance as full, clear and strong, as that which comes from the resonance chamber, your mouth is in the proper position for sounding vowel A; if not, not. Practice will bring A and the other vowels.

I am indebted to Professor Loudon, of Toronto University, for the opportunity of practicing upon a very fine set of the Koenig forks with resonators. The vowel which I could most quickly produce was A, next, O, E, U, I, as they stand. After considerable practice I drew the diagrams which are set opposite the vowels in the chart. They are made for the lower register and may be serviceable by way of hint. I also had the aperture of the mouth, front view, for each vowel photographed, but as the cost of transferring them to paper is considerable, I must ask the members of the Institute to be content with the following measurements in inches. I need not say that I would scarcely have subjected my own mouth to this ordeal, had I another on which to experiment.

For A,	the lips covering the teeth	extreme height	1,	width	$1 \frac{9}{16}$ ;
O,	"	"	"	"	$\frac{1}{2}$ , "
U,	"	"	"	"	$\frac{3}{16}$ , "
E,	"	"	"	"	$\frac{3}{4}$ , "
I,	"	"	"	"	$1 \frac{5}{16}$ .

Practice upon the forks brings into clear relief the function which the mouth plays in singing and speaking. It is a resonant chamber for the vocal cords.

The strings of a piano from which you have removed the dampers, may take the place of the forks. Sound any vowel to any note directing the voice upon the strings. If and when you form the vowel pure, you will receive a full, loud and distinct resonance. Again, take a metal tube one end of which tapers wedge-wise to a narrow slit by way of mouth-piece, insert the other end into a flexible

tube say of rubber, and its unattached end into the nozzle of a bellows which may be worked by hand or foot. Put the mouth-piece to your lips and ply the bellows gently. You will get a clear vowel sound when you place your mouth in a true vowel position. Those who cannot avail themselves of any of these methods may find it advantageous to practice on the short vowels of English words, as set out in table III., lengthening and modulating them as may be required.

In producing vowels, primary, intermediate, or compound, there should be no breathiness or wind-rush. An approved plan is to hold a lighted candle close to the mouth and shout. Sound vibrations are not likely to extinguish the flame nor to throw it outwards. Breathiness is a blemish in all speech; in vowels, it is a measure of bad production; it should not be used publicly except where blemish and bad production are required, for instance, in representation of disease.

MODULATION.—We say thou is a personal pronoun, if a conjunction, and up a preposition. But in, "if thou thou'st him some thrice, it shall not be amiss;" "if me no ifs, I know not if;" "he up with his staff and smote;" what parts of speech are they? I have no quarrel with our grammarians, but admire the ease with which in former days they swept obstructions from their path. Slang and license remain potent terms, and are explanatory in the manner of the scholastic dictum, nature abhors a vacuum. If she does, what then? Within certain bounds and these very wide, any word in English may be any part of speech, not by reason of its position, but of its employment. So a word or phrase in our language may take or require any modulation or any coupling of them. How many standard interpretations of Hamlet have we? One for each great actor who has studied and acted the part. Their different renderings consist not in textual variations, but almost wholly in different modulations. For this reason it has often seemed to me misleading to set down for practice in modulation phrases which are marked for one form only. The extracts wrested from their setting, bear very little meaning, and the pupil does not perceive why this and not that modulation is given. A better plan would be to carry one or a few phrases through all modulating forms, that the purpose or effect of the vocal change might appear. I would myself like to see a set of Shakespeare's



plays according to a standard interpretation, or a volume of Bright's speeches marked for delivery in the manner say of Mr. Bell's "Emphasized Liturgy." It would show what an intimate relation there is between the outward expression and the inward feeling, and rid elocution of the common imputation that it is a sham, a fictitious something imposed on words. In this event as well as under present circumstances, to gain the power of modulation, to produce it at will, to cultivate and control it, one must dive beneath the word and exercise the voice mechanically, as in singing, upon that which alone may be modulated, namely, the vowel.

Modulation is said to be of four kinds—force, pitch, inflection, stress; or, counting quality, five. Throughout them as an under current flows the element of time. I do not refer to the distinction between vowels as long and short. Important as that may be in words, vowel interchange, the history of language, it concerns us here very little. Any and every vowel may be appreciably uttered in the 132nd part of a second, or be lengthened for a minute. Each modulation should be produced in every time.

CLASSIFICATION.—Orthoepists at the outset of their work are met with this difficulty; they must adapt the letter to the sound, the sound to the letter or confuse both. Our spelling grew very rigid in the last century and change of the printed character, so frequent in our early history, became a thing tabooed. It would have been well had the letters adopted represented the sounds of our language with a considerable degree of fairness. One other condition would permit a particular spelling to remain for all time; if no new sounds arose, and if the vowels hit upon remained substantially as they were. We know neither of these conditions obtain. In such event we would not have seven sounds indicated by character o, five by a, six by e, and so many more by u and i. Again, the characters would not interlock each other. In the last century a distinction was not drawn between the stability of a language and its rigidity, and people thought that unless spelling were made and preserved uniform, the language itself would somehow perish. Philological science began with Grimm's discovery of the law of consonantal interchange and may be perfected with a sufficient theory of vowel interchange. The

preservation of obsolete letters, many of them inserted by way of mistake, is not so much an aid as a stumbling block to the student of language. His problem is this—what is the speech of a people, how has it developed, through what changes has it passed? The matters which he desires most to know are the changes which take place in language, that he may discover and apply the law of the change.

I make use of the vowels of the Koenig forks for many reasons. As already said, they embrace the highest and lowest tones of the human voice, are equi-distant one from another and are common to all speech. An objection such as this I have heard: they are universal and therefore not necessarily English. A universe that does not include English-speaking countries, or universal vowels that are not necessarily found in the English tongue, would be rarities indeed; round squares simply, or round squares in the shape of isosceles, rhomboidal triangles. With other scholastic lumber they should be sent to Paris for exhibition next year at the centenary of the Great Revolution. Second, these sounds may be used as aids in and tests of vowel production. Mr. Ellis, who is, I suppose, our best authority on phonetics, says that few men, probably no man, pronounces his vowels precisely the same at all times. What elaborate supports singers have by way of accompaniments and forks! Yet they do not at all times strike every note truly. What would their execution be had they no accompaniments, no fork, and but a hazy notion that a particular note were required? This is precisely the situation of the vast majority of speakers. Again, as the sounds may be made externally and the same at all times, they not only give us a test of pure production, but enable us to allot their proper position to intermediate vowels and to detect compounds. This is their chief scientific function. A subordinate reason will have influence with many; that, as they are the principal sounds of European speech, practice upon them will render the acquirement of modern languages more easy. Those who are engaged in voice-training would add, from the experience of singers, that they are a better means than our vowel name-sounds of developing the riches and power of the human voice. To me their principal recommendation is that they set forth in clear relief the dominant characteristics of English, and may be adapted to our printed forms with very great ease.

Upon this basis our vowels would stand thus :

Single vibrations per second.		Primaries and Intermediates :
7168	I	as in pin, fin, peel ;
	é (ei)	“ her ;
3584	E	“ they ;
	á (ah)	“ man ;
1792	A	“ father, pun ;
	ó (awe)	“ form ;
896	O	“ pole, note ;
	ú (ou)	
448	U (oo)	“ pool, move, pull.

Some persons distinguish an intermediate ú between U and O ; “ not on thy *sole* but on thy *soul*, harsh Jew ;” but I do not find that it has established itself in our pronunciation. We have four compounds, that is, vowels formed by a quick transition from one vowel position to another.

*O* (ow) by combination of A and U, as in how, house ;

*i* (eye) “ “ A “ I, “ pine, Cairo (Kiro) ;

*oi* “ “ O “ i, “ oil, join ;

*u* (you) “ “ I “ U “ tune.

A glide from U to I (oo-ee) gives we, a sound which has been the subject of much controversy, is found in composition with g, at least in foreign names (g-oo-ee-ze), is often converted into *i*, and is generally represented by a consonant. It would seem that all compounds are more or less consonantal. I doubt not but the manometer would show this very clearly. The change from one position to the other would seem sufficient to produce a consonant. Compounds are, as it were, connecting links in word-systems, wherein the stepping stones, counting from the vowel side, are vowels proper, compounds, liquids, sibilants, mute consonants. The transition from a low to a high vowel gives a more or less distinct w, from a high to a low vowel a more or less distinct y sound.

Here, then, we have five primaries, three (or four) intermediates, four compounds, in all twelve (or thirteen to include ú) under which, I believe, all vowel sounds now received in English may properly be brought.

The primaries as they hold the extreme positions and the equidistant way-stations, the octaves, are fixed points that are easily verified, and will suffer neither increase nor diminution. Between each pair in the ascending scale there is room for many intermediates which no doubt will be formed. As language progresses finer distinctions are drawn. These find place particularly within the higher octaves. Why it should be we are not told, but the fact is that our speech has a tendency to mount higher and still higher, until, like vaulting ambition, it overleaps itself and falls into compounds. The process of multiplying intermediates and fusing compounds will no doubt continue as it has heretofore gone on, in the face of academies and all accepted orthographical modes. We may shut our eyes but must move with the stream. In these circumstances it is a part of wisdom to note a change when it is made and to accommodate one's self to that change. We need not make ourselves anxious lest future generations should not be aware how well their fathers of the nineteenth century spelt. They will desire to know chiefly how we sound our language. As for etymology, it is reasonably safe already, and is scarcely furthered by parading in words a mass of useless or misleading characters, be they never so beautiful. Nature is careful that organs which have outlived their usefulness should not be kept at full length as a clog on animals, but shall to all intents and purposes vanish. Philologers will find the rudimentary forms of words without further aid from obsolete letters which have their proper place in storehouses such as dictionaries.

A word upon the forms assigned to intermediates and compounds. The acute accent shows that the number of vibrations per second has been increased from that of the octave; in other words, we have sharpened the normal sound. Accents are frequent in printed French, and are therefore familiar to the majority of persons who read. The subscript may not meet with so ready acceptance, but is used in Greek for the same purpose, is not hard to make and would, I think, serve well to indicate the two-fold character of compounds.

We now come upon the question what is a vowel, and how is it distinguished from a consonant? Both are sounds and therefore consist of vibrations. In vowels they proceed without jar or interruption, are regular or periodic; in consonants they are not regular, not periodic, and proceed with more or less of jar. A manometer reflecting a gas jet which is agitated now by a vowel, and again by a consonant, will make the difference evident. The outline of the one appears uniformly curved, the other is ragged, jagged or distorted. The same instrument tells the internal difference between one consonant and another. Thus L and R have a kind of periodicity which is not so remotely separated from the contour of the vowels, at least of compounds, while G (hard) K. V. P. etc., are extravagant. The distinction is summed up thus: a vowel is a tone, a consonant is a noise. Tones are many, noises infinite.

But, it may be asked, if vowels are tones, and music consists of tones, more properly of compound tones or notes, how on this theory do you distinguish speaking from singing, speech from music set to words? Helmholtz provides the answer. He investigated the nature of music and resolved its development into three stages which for our purposes shall stand reversed. First, you have the harmonic music of our own day with its vast accompaniments, tempered tuning, subtle use of intervals once deemed dissonant and its reduction of all sounds to a key-note which governs throughout. Music of this kind has little in common with speaking. What a feeling of artifice, strainedness, unreality, one might almost say hypocrisy runs throughout our best operas! No sane man ever expressed himself so in real life, or could be conceived so to do. Galvanic grimaces are pawned on us for genuine laughter. The middle ages have another species which knows neither key-note, tempered tuning, nor accompaniment, rigidly discards dissonances, is built for many voices and called polyphonic. From this you may step back into the ancient world, say of Greece, where a monophonic or one voiced music reigns, without dissonance, key-note, tempered tuning, accompaniment or the need of any. It is a succession of unrelated or independent sounds in themselves regular which follow one another as the feeling, thought and rhythm of the verbal composition may demand. In this manner hymns and ballads were rendered at the Isthmian and other games. A partial survival of it may be detected in the intoning of religious

service ; while the improvised recitations of Italy are said to preserve it with very great fidelity. It is the noble art in a gelatine stage, yet between it and speaking there is a difference which is pointed out by Mr. Hullah when he says: "musical notes are discrete, speaking notes concrete." He refers to inflection, the chief charm of speech, and that which gives it so vast a range of expression. Now, withdraw inflections from speaking, as we have already abstracted key-notes and accompaniments with their dependencies from music, and you come upon a platform which both have in common, and from which they set out on their diverse developments, the monotone. The mayor's proclamation in Henry VI., the ghost's speech in Hamlet, the well known "oyez, oyez, oyez," of our courts are rightly said to be sung, or intoned, or spoken.

The cultivation of the speaking voice in respect of force, quality, time, stress and pitch, proceeds along the lines which singers adopt. The musical scale is used in common. Good singing demands a wider compass of compound tones than effective speaking which will be satisfied with three or four notes, at most an octave. To speak well, one should confine himself to those notes which he can best produce, and upon them practice every form of modulation, particularly the welding of notes or inflection.

In the chart exercises, A is selected, not because it only should be used, but for other reasons. A is the centre of the vowel system, is that tone which is most easily formed, which opens the mouth most widely and best develops the possibilities of the human voice. O, E, U, I, the intermediates and compounds are not to be neglected, but return should frequently be made to A.

THE CONSONANTS.—I had once thought of pursuing the subject from the compound vowels to the liquids, and thence to the more pronounced irregularities of the mute consonants. For the present I pass from that point of view, interesting as it may be or may some day become, begin at the other end, adopt as the basis of classification the formation-point of consonants in the mouth, beginning at the tip of the lips and proceeding step by step backward to the base of the tongue and soft palate. Within this space there are two regions of aspiration, the teeth and the back of the mouth, and two of light production, the tip of the lips and mid-arch of the hard palate. Accordingly, we have the mouth divided into three main and easily

recognisable sections, and obtain from it the well established grouping into labials, dentals, gutturals ; or the B. D. and G. groups. These are subdivided into classes, thin, medial and aspirate, and by a cross division into (1) mutes, stop or explosive consonants, (2) sibilants, (3) liquids, oral and nasal. The diagrams given in the chart indicate the central formation-point for each group.

It has been suggested and may be that the order of historical development of language was the reverse of that which I have indicated, namely, from the base of the mouth forwards. In support of this theory is instanced the gradual disappearance in our own and other cultivated languages of the heavy gutturals, the formation of *ch* (*t-sh*) and *j* (*d-sh*) within group D., and the interchange of aspirates of the G into those of the D and B group. Upon the other hand examples of an opposite process may be adduced. Again, it is said that as language progresses, aspirated sounds soften or differentiate themselves into medials or thin consonants of the same class, whether mutes, sibilants, or liquids. Thus T passes into P, D into Z, S, L, and many other cases may be cited. Both French and English have gone rapidly to sibilation. But the cause of this change is doubtful ; it is doubtful, also, whether the process still proceeds in France. In our own tongue a strong tide has set in the opposite direction for more than thirty years under the influence of Germany. The tendency I speak of will appear clear to any who will compare a page of Carlyle with one from DeQuincey or Newman. Indeed, the function which is played by sibilants and liquids in the interchange of consonants within groups, or from group to group, whether in our own language at different periods, or as between ancient and modern tongues, is a matter which is by no means ascertained. Grimm's law applies to mutes and has been scarcely added to since his day. There are enormous gaps in it which await filling, and, for that purpose, use may be found both for liquids and sibilants. A sufficient theory of vowel interchange is also among the needs of the day. Meantime and that one may proceed on certainty, the table of consonants which is given in the chart corresponds to, accords with and may, I think, be profitably used to illustrate the discovery of the great German scholar, the basis of all philological science.

Certain consonants give rise to no small difficulty, as *q*, *rh*, *w*, *wh*, *x*. *Q* is to-day resolved into its elements *k-w* (or *ku*) and is therefore

usually discarded from the class of independent consonants. Rh may be trilled at the teeth as well as the back of the mouth, and for that reason is often classed as a dental—others argue that it is a semi-vowel. While the formation point of liquids is not so defined or pointed as that for mutes, I believe, the balance of authority regards Rh as guttural consonant. The consideration which has seemed to me conclusive is its function in our older English, where its guttural character is very pronounced. So far back as James I's reign Hume, the grammarian, held w and wh as labials, and had for testimony the evidence of his lips. The interchange of v and w in many of our dialects and as between German and English gives countenance to his view, while the argument from analogy under Grimm's law is at least not against him, for instances are found on both sides plentifully. But other men have organs of speech and find that they pronounce w and wh clearly, while their lips are held forceably apart. In this plight the historical argument is of weight. W ordinarily represents the hard g of our older tongue. As for wh it is a curious transposition. We do not pronounce it in that form but rather as it was spelled, hw ; not what, but hwat ; a palpable guttural. X has two forms, ks and gs ; expect, exact ; it is differentiated into its elements like q, and should therefore I suppose be dropped. I do not give it place in the table so much because of its necessity as to call attention to the nature of the sibilants. They belong to every group and coalesce with every class. In standard English we do not retain ps, waps, the older sibilant of the B group which is now heard only among children, but convert it into sp, wasp. Of western speech probably Greek is the only one in which it is thoroughly embedded.

Many divide consonants into whispered and voiced. K, t, p, it is said, are whispered ; h (hard) th, v, are voiced. But the second set may be whispered as well as the first, and the first, though evidently thinner, may be voiced as well as the second. Again, all medials, mutes, sibilants, liquids, admit both of whispering and voicing. I wish to go further, for I deem the matter important, and say that all sounds in speech, vowels and consonants, not only should be but for clear enunciation must be both voiced and whispered. In whisper you observe the mode of sound-production more accurately, detect an error more quickly, and may remedy it with greater ease. Those who labor under defects of speech as lispings, stammering, stuttering,



find, if I may speak from my own experience and that of other persons from whom I have heard, that, next to regular breathing, the whispering of vowels and consonants is their most speedy and sure road to cure. The declaiming of whole passages in whisper will be found a most beneficial practice; all exercises in the chart are given for rendition in both forms.

THE TABLES.—The first does not call for special remark. Modulation upon one, two, three and four vowels will follow in their natural order. In the lower line of the second table the order of the letters is reversed within each group, so that in forming a syllable with any vowel you may begin with a thin and end with an aspirated consonant, pav, pof; or reversely, fib, vup. Difficulty in syllabic formation and enunciation has, generally I think, the following degrees: (1) repetition of the same consonant, pap, bab, faf; (2) a thin alternating with a medial, or a medial alternating with a thin consonant within its group, pav, bop; tod, dot; (3) composition of the aspirates with either of the other classes within the group, pev, vup; buv, vub; tuth, thut; duth, thud. The formation of syllables as between group and group, is comparatively easy, the greater interval, I presume, allowing freer play to the parts.

The third is an attempt at orthoepy. I have made use of the classification of vowels into long and short not because it is accurate, but because it is convenient. If a word such as pin be emphasized—as once in the House of Commons ‘call you that a pin?’—it will necessarily be long. I sometimes doubt that our prosody proceeds upon the order of the foot-rule. The intermediate which I call é (ei) is written indifferently, o, u, a, e, i, appears frequently in composition with r as or, ur, er, ir, but, so far as I can ascertain, scarcely admits of classification as long or short. According to its use it be either or of indefinite length. O is that vowel-name which we have in common with European peoples. Its position in English is well defined, as in note, and we might have expected it to show marked varieties of length. But not so. Its short form has shot into intermediate ó, (awe) while the short sounds of other vowels have remained comparatively stable. One must go north of the Tweed, at least north of Mr. Oliphant’s Great Sundering Line, before he reaches nöht, pöht, höht. The Scotch have preserved the old English vowel with very great exactness. I give no examples, long or short, of the intermediate ú

(ou) for the reason already given. Its place is often supplied or usurped by the compound *o* (ow) as rout, rowt; gouge, gowge. In these instances our pronunciation is not stable, while fine distinctions are not easily drawn in the case of low vowels. When U, disinterred from the rubbish that for nearly three centuries has lain upon it, shall have claimed and received fit recognition from our authorities, the position of the intermediate will become more clearly defined and be confounded neither on the one side with U (oo) nor on the other with *o* (ow). In regard to the compounds *u*, *i*, *oi*, *o*, I find no short form of them and imagine that to be pronounced at all, which necessitates the passing from one vowel position to another, they must be sounded long.

One will see in scanning the table that the main difficulty in English orthoepy arises from the long and not from the short forms of vowels. Pin, bin, fin represent I (ee) faithfully, but to produce the same vowel long, we change the character, peel, heat, feel, except, in foreign words. Again for E we have an accurate short sound in pet, bet, fell, but for the long we write pay, bay, fey, or fay. The á (ah) is the most pronounced intermediate in English both long and short and was a particular favourite with Sheridan. It makes distressful havoc of the continental A, though we manage to obscure by out-heroding the outrage with our name-sound for the same character. The center of the vowel system A (aa) found its advocate in Walker. As early as the days of Chaucer it is represented by the letters au, but its native garb is by no means obliterated from our tongue. It appears in many words, in father, for instance. Its short sound constitutes the most unsatisfactory part of our orthography. Many dictionaries set it down as an obscure or obtuse form of the compound *u* (you). I doubt whether any statement could be more obscure or more obtuse. If you lengthen the vowel in pun, you get the vowel in palm; shorten the first vowel sound of father and you have that of fun. The intermediate ó (awe) is well developed in both powers, and presents a striking contrast to O and U. Such has been the influence of our compound *u*, that the ancient English sound for the letter came to be written oo for the short as well as the long form, fōot, pool. It is nevertheless found in its proper dress on compositor. with p, b, f, l,

w and sh, pull, push. When one looks upon the printed English of to-day, he would not at first blush entertain the thought that the characters I, E, A, O, U, represented in old English the sounds which they represent in the chart, or that our fathers used them in the island of Britain for more than four hundred years, and attached to them the same powers which they now have in the best educated circles of Europe. Yet such is the incontestable fact.

In drawing up table III. I endeavoured to confine myself to monosyllables and words which are in frequent use and in its compilation have received much assistance from Mr. Hullah's work on the "Speaking Voice." I give but one example of each consonant except where there seemed strong reason to use a greater number, in the case of intermediate é and U. Had I allowed myself greater latitude I might have lengthened the table indefinitely. As it stands it falls much short of my wish. The difficulty of picking out monosyllables beginning with each consonant containing each vowel in cases where pronunciation is not open to serious question, must be my apology for its incompleteness. My endeavour has been and I hope the table on examination will be found to exemplify with a reasonable degree of fullness, the vowel and consonant sounds of English on a basis of pronunciation which is accepted by all standard authorities and is in use on both sides of the Atlantic.

I should add that the chart is copyrighted in the United States by Mr. L. W. Seely, in Canada by myself, and is submitted to the members of the Institute for their consideration, and in the hope of receiving such suggestions for its improvement as may occur to them, while the right of publication and translation is reserved.

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(Entered, according to the Act of the Parliament of Canada, in the year one thousand eight hundred and eighty-eight, by THOMAS BLAIR BROWNING, in the office of the Minister of Agriculture, at Ottawa).

## CHART OF ELOCUTIONARY DRILL.

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*Designed for use in Private Study and in Schools and Colleges.*

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T. B. BROWNING, M.A.

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### VOLUNTARY BREATHING.

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#### I. MODES.

THORASSIC. —From the shoulders as a fixed line alternately to elevate and depress the ribs to their full extent.

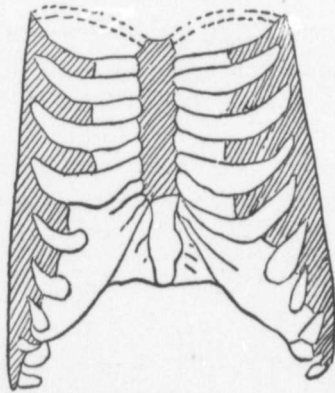


Fig. 1

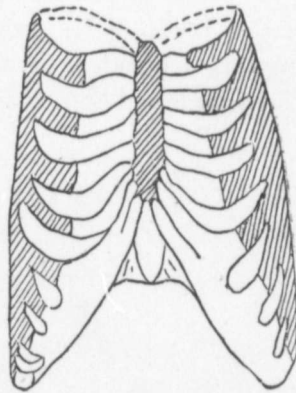


Fig. 2.

Production—the body erect, shoulders square to the front, the arms hanging by the side, nostrils dilated.

- (1) *Full Inspiration*.—(a) Bend the fore-arm against the upper, placing the fingers on the shoulders; (b) raise the elbows obliquely outwards to the height of the shoulders; then (c) over the shoulders obliquely backwards, till the wrists cross at the nape of the neck.
- (2) *Full Expiration*.—(a) From the last position bring the elbows obliquely outwards and downwards to the sides; (b) cross the wrists on the hollow of the chest, and (c) compress the ribs both in front and at the sides.

Exer. 1. Inhale in thorassic breathing, repeat.

2. DIAPHRAGMATIC.—From the ribs as fixed points to contract and relax, that is, depress and elevate the diaphragm alternately.

Production—the body erect, nostrils dilated.

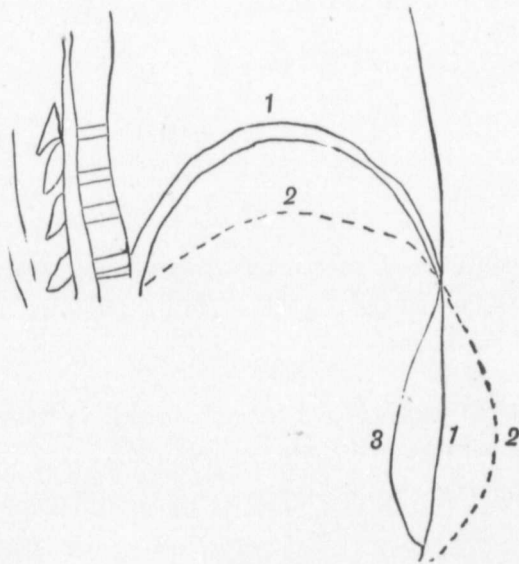


Fig. 3.

- (1) *Full Inspiration*.—(a) Relax the front abdominal muscles; (b) depress the diaphragm. The dotted lines (2) indicate the position to be assumed.

- (2) *Full Expiration*.—Contract the front abdominal muscles, pressing inwards (3) and upwards—diaphragm is driven to its normal position which is indicated in Fig. 3 by the continuous dark line (1).

Exer. 2.—Inhale in diaphragmatic breathing, repeat.

## II. GOVERNMENT.

1. *INHALING—Ordinary*.—Receive the air through the nostrils and without noise. Place the tongue against the roof of the mouth, expand the nostrils and bring the organs to the position of full inspiration.

*Impassioned*.—Receive the air through the mouth and with sound, as in gasping.

Exer. 3.—Inhale in each kind alternately and in each mode.

2. *RETAINING*.—Maintain the position of full inspiration, close the glottis as in the act of swallowing, and keep it closed, shutting the air passage of the mouth and of the nose as far as possible.

*Times*.—(1) from  $\frac{1}{10}$ " to 1";  
 (2) " 1 " 5, short ;  
 (3) " 5 " 15, medial ;  
 (4) " 15 " 45, long ;  
 (5) " 45 " 60, very long.

Exer. 4.—Retain for each time inhaling as above, repeat.

3. *EXHALING*.—Assume the position of full expiration, emptying the lungs without noise ;

(a) At a blow,

(b) Gradually, pouring forth the breath in an even stream for the times given under head of retaining.

Exer. 5.—Exhale for each time, repeat.

## VOWEL SOUNDS.

## I. PRIMARY.

<sup>448.</sup> U (oo)      <sup>896.</sup> O      <sup>1792.</sup> A (aa)      <sup>3584.</sup> E (ey)      <sup>7168.</sup> I (ee).

*Note.*—The Primary vowels are a series of ascending octaves; the figures are the numbers of single vibrations which produce them; the diagrams are drawn for the lower register. Project all sounds to an object.

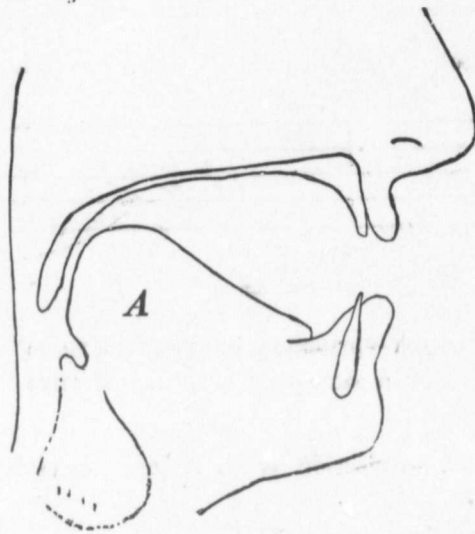


Fig. 4.

1. FORMATION.—Arch the back of the tongue against the uvula, its point resting on the floor of the mouth between the lower jaws, open the mouth fully and cover the teeth lightly with the lips.

Exer. 6.—Sound A exhaling in each time, repeat.

(2) CHARACTER.—(a) Atonic—non-vocal or whisper.

(b) Tonic—vocal or voice.

Exer. 7.—Sound A in each character for each time, repeat.

(3) REGISTER.—(a) Lower or orotund—depress the larynx and base of tongue raising the palate.

(b) Higher or conversational—larynx, tongue and palate in ordinary positions.

Exer. 8.—Sound A with each register and in each character for each time, repeat.

(4) DESCRIPTION. — (a) *Full*—convert all breathing force into sound, as in yawning.

(b) *Mixed*—convert part breathing force into sound as in panting.

Exer. 9.—Sound A in each description with each register in each character for each time, repeat.

## 2. MODULATION :

(1) PITCH.—Scale for pitch and inflection.

Low voices.      Common to all voices.      High voices.

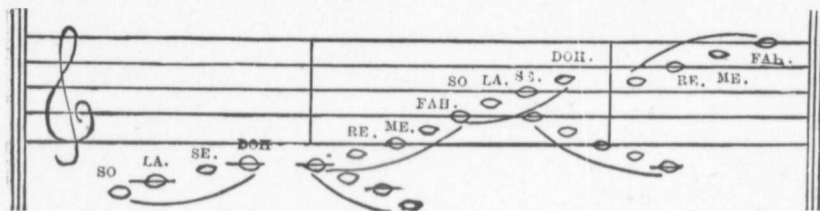


Fig. 5.

Each note is a pitch—principal pitches, doh, so, me (key c.).

Exer. 10.—Sound A in each pitch or principal pitch in each description, etc.

(2) INFLECTION.—Inflection is an union, coalescing or welding of notes.

(a) *Monotone*.—Notes repeated ; doh, doh.

(b) *Rising*.—Sound continued from lower to higher pitch without break or distinction of notes ; me-so.

(c) *Falling*.—Sound continued from higher to lower pitch without break or distinction of notes ; so-me.

(d) *Circumflex*.—The combining of rising and falling inflections without break or distinction of notes ; marks



Fig. 6.

Exer. 11.—Sound A in each inflection at each principal pitch in each description, etc.

(3) FORCE.—(a) Very soft.      (c) Moderate.      (e) Very Loud.  
(b) Soft.      (d) Loud.



Exer. 12.—Sound A in each force with each inflection at each pitch in each description, etc.

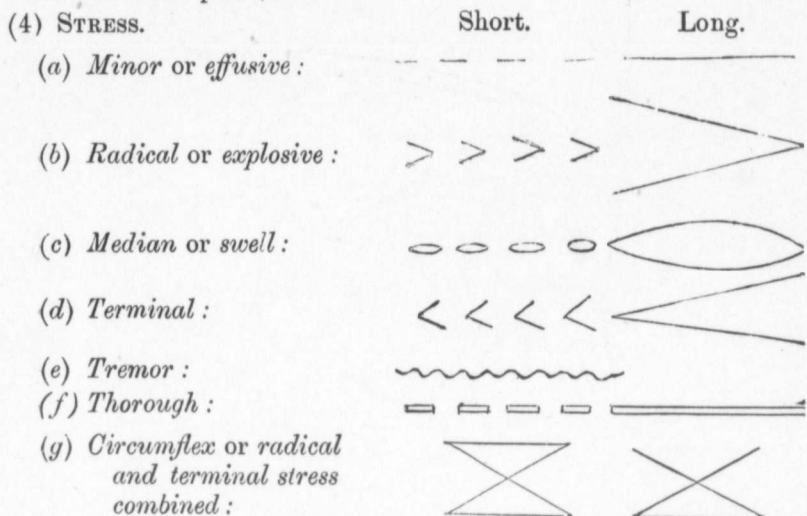


Fig. 7.

Exer. 13.—Sound A in each stress in each force at each pitch in each description, etc.



Fig. 8.

FORMATION.—Tongue and teeth in the A position, cheeks hollowed, lips drawn in, oral aperture almost circular, its diameters half those for A.

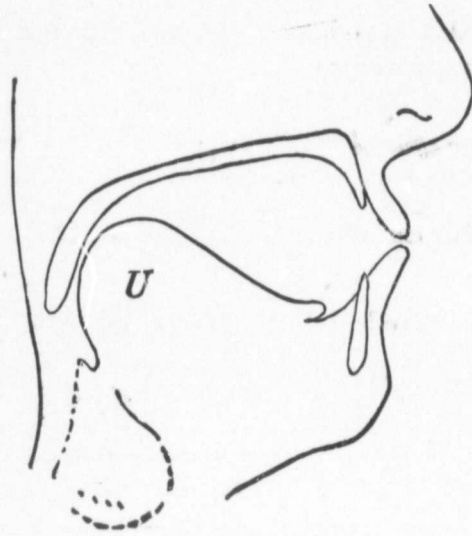


Fig. 9.

Tongue, teeth and cheeks in the O form, lips protruded, oral aperture reduced to half the size for O.

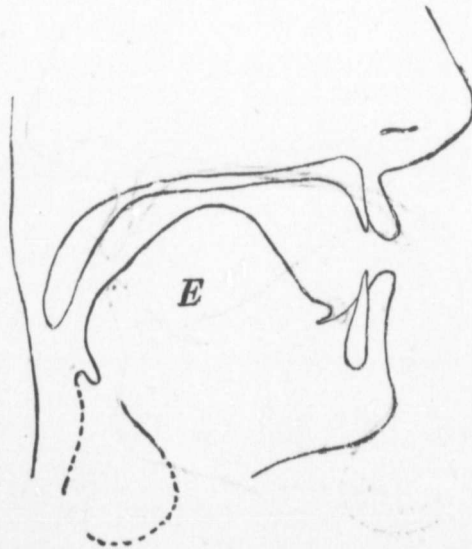


Fig. 10.

Place the tongue against the roof of the mouth, sink its fore-part near the mid-arch of the hard palate, so that its tip rests

upon the floor; drop the lower jaw about  $\frac{2}{3}$  the distance for A and cover the teeth lightly with the lips.

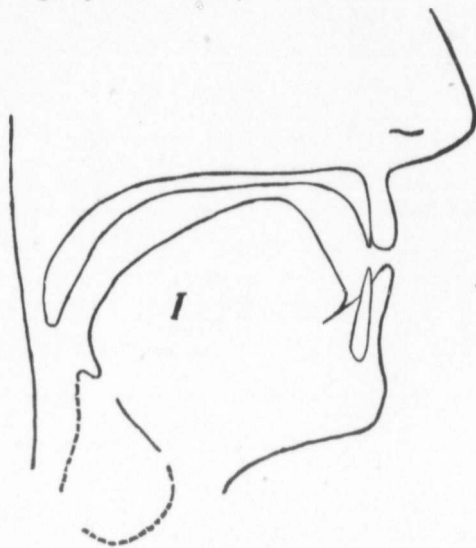


Fig. 11.

From the position for E move the tongue close to the front wall of the mouth, bring the teeth to about  $\frac{1}{2}$  the distance for E and draw the lips sharply over them.

Exer. 14.—Repeat exercises 6 to 13 for each primary.

INTERMEDIATES.—(1) é (ei) is intermediate between I and E, as in her.

(2) á (ah) is intermediate between E and A, as in man.

(3) ó (awe) is intermediate between A and O, as in form.

(4) ú (ou) is intermediate between O and U.

Exer. 15.—Repeat exercises 6 to 13 for each intermediate.

COMPOUNDS.—(1) o (ow) is formed by coalescing A and U, as in how, house.

(2) i (eye) is formed by coalescing A and I, as in pine.

(3) oi is formed by coalescing O and I, as in oil.

(4) u (you) is formed by coalescing I and U as in tune.

Exer. 16.—Repeat exercises 6 to 13 for each compound.

TABLE I.—ARTICULATION OF VOWELS.

	<i>U</i> <small>(ou)</small>	<i>O</i> <small>(awe)</small>	<i>A</i> <small>(ah)</small>	<i>E</i> <small>(ei)</small>	<i>I</i>	<i>o</i>	<i>i</i>	<i>oi</i>	<i>u</i>				
<i>I</i> —	⊖												
<i>e'</i> .....									<i>ó</i>				
<i>E</i> —		⊕							<i>O</i>				
<i>a'</i> .....									<i>u'</i>				
<i>A</i> —									<i>U</i>				
<i>ó</i> .....									<i>á</i>				
<i>O</i> —									<i>E</i>				
<i>ú</i> .....									<i>e'</i>				
<i>U</i> —									<i>I</i>				
<i>u</i> —									<i>i</i>				
<i>i</i> —									<i>í</i>				
<i>oi</i> —									<i>oo</i>				
<i>i</i> —									<i>u</i>				
<i>o</i> —									<i>oi</i>				
	<i>O</i>	<i>ó</i>	<i>A</i>	<i>a'</i>	<i>U</i>	<i>ú</i>	<i>I</i>	<i>e'</i>	<i>E</i>	<i>u</i>	<i>i</i>	<i>o</i>	<i>oi</i>

*Note.*—The primary vowels are placed on the leaded, the compounds on the hair, and the intermediates on the dotted lines. Hyphen is used between syllables.

(1) Groups of two vowels :

(a) Proceed on the lines from left to right and reversely, vowel on the left leading : I-U, I-O.

(b) Proceed from top to bottom and reversely, upper vowel leading : U-I, U-E.

Exer. 17.—Repeat exercises 6 to 13 for each group of two.

(2) Groups of three: Take the right angles : I-O-U, U-O-A, A-U-O, O-U-I.

Exer. 18.—Repeat exercises 6 to 13 for each group of three.

(3) Groups of four. Proceed on the perpendiculars each in turn leading: E-O-O-A, O-O-A-E, O-A-E-O, A-E-O-O.

Exer. 19.—Repeat exercises 6 to 13 for each group of four.

### CONSONANT SOUNDS.

1. FORMATION.—Beginning at tip of lips for P., the consonant formation point moves backward to the base of the tongue and soft palate for the gutturals H and Y (old English). The vertical lines indicate that the lower letters have approximately the same formation points as the upper. The word sibilant shows the distinctive character of the letters so named. Of the liquids, m, n, ng, are nasal, the rest oral. L is formed by holding the point of the tongue on the D position, and driving the vocal current round it, that is between the upper and the lower jaws: drop the point of the tongue to form R. The regions of aspiration are the teeth and back of the mouth, in both of which places the R can be trilled. The figures show the medial positions for each group.

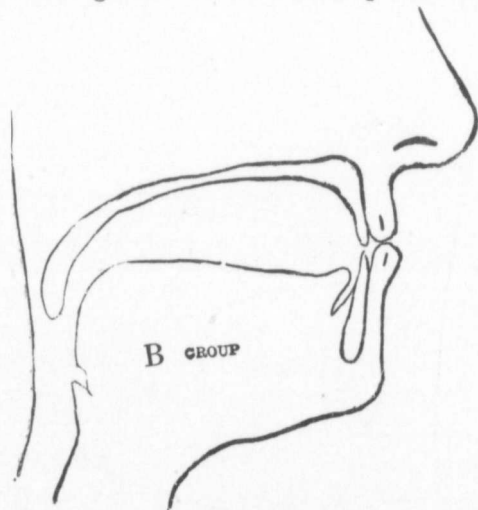


Fig. 12.

Labials or B Group.			
	Thin.	Medial.	Aspirate
Mutes.	P.	B.	F. V.
Sibilants.	ψ (ps)		
Liquids.	oral		
	Nasal.	m.	

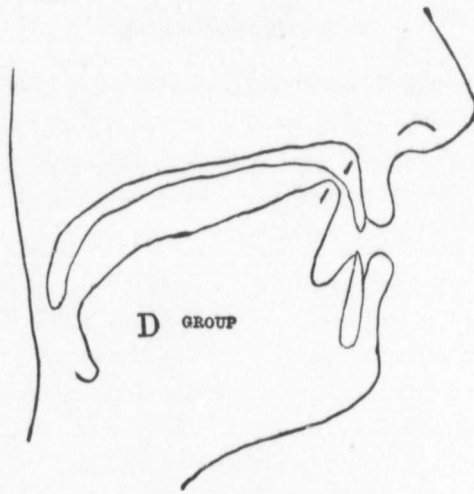


Fig. 13.  
Dental or D Group.

Aspirate.		Medial.	Thin.
Th.	Th.	D.	T.
Zh.	Sh.	Z	S
J-(Dsh)ch-(Tsh)		L	(final)
		n.	R.

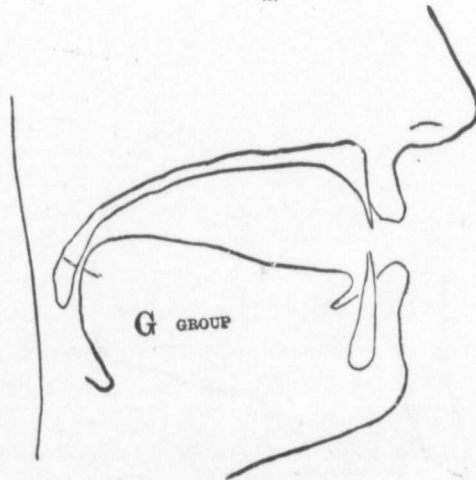


Fig. 14.  
Guttural or G Group.

Thin.	Medial.	Aspirate.	
K.	G.	Y. H.	12
X.	X.		8
W.	N G.	Wh. Rh.	4
			3
			<hr/> 27

TABLE II.—VOWELS AND CONSONANTS.

*Note.*—The liquids are in italics, the sibilants in small capitals, the mutes capitals; in the upper line the mutes are on the leaded, the sibilants on the hair, and the liquids on the dotted lines.

	P	B	<i>m</i>	F	V	Th	ZH	Th	SH	J	CH	D	Z	l	n	T	s	r	K	x	w	G	x	ng	Y	wh	rh	H
<i>U</i>																												
<i>u</i>																												
<i>O</i>																												
<i>ó</i>																												
<i>A</i>																												
<i>á</i>																												
<i>E</i>																												
<i>è</i>																												
<i>I</i>																												
<i>o</i>																												
<i>i</i>																												
<i>oi</i>																												
<i>u</i>																												
	V	F	<i>m</i>	B	P		s	T	n	l	z	D	CH	J	SH	TH	ZH	Th	H	rh	wh	Y	ng	x	G	w	x	K

(1) FORMATION.—(1) Groups of two.—Proceed with each vowel on the lines (a) from left to right and (b) reversely, the letters on the left leading: (a) U P.

Exer. 20.—Repeat exercises 6 to 13 for each group of two.

(2) Groups of three.—(a) Proceed from right to left, consonant leading and repeated, P U P.

(b) Proceed from right to left taking consonants in the following order, top and bottom, then reversely, bottom and top.

Exer. 21.—Repeat exercises 6 to 13 for each group of three.

2. Two Syllables:

(1) FORMATION.—(a) Duplicate exercise 20, first the vowel leading, next the consonant: UP,-PU.

(b) Repeat groups of three in exercise 21 (a);

(c) Combine each two groups in exercise 21 (b).

Exer. 21.—Repeat exercises 6 to 13 for each group of two syllables.

TABLE III.

	I		é		E		á		A		ó		O		ú		U		u		i		oi		o		
	short.	long.			short.	long.	short.	long.	short.	long.	short.	long.	long.		short.	long.											
P.	pin.	pique.	perch. perfume		pet.	pay.	pan.	past.	pun.	palm.	pot.	pall.	pole.		push. put. book.	pool.	pure. pew.	pine.	poise.	pout.							
B.	bill.	beat.	birth. burn.		bet.	bay.	ban.	bask.	blood.	balm.	boss.	ball.	bowl.		bull. bush.	boom.	butl.	by.	boy.	bout.							
N.	nymph.	need.	nerve.		net.	nay.	gnat.	nasty.	nut.	aunt.	on knob.	knowledge.	no.		nook.	noon.	new.	nigh.	noise.	now.							
F.	fin.	fear.	fir fur.		fell.	fey.	fan.	fast.	fun. flood.	father	fog.	gnaw. fault.	foal.		full. foot.	fool.	fume. few. view.	fine.	foil.	fowl.							
V.	vintage.	veer.	verb. verdict.		vex.	vein.	van.	vast.			volley.	vaunt.	vote.					they.	voice. void.	vow.							
Th.	this.	thee.			them.	they.	than.	rather.	thus.		bother.		though				enthuse. azure.			thou.							
Zh.	thin.	theme.	thirsty.		theft.	thane.	thank.	bath.	thunder			cloth. thaw.								thousand.							
Sh.	ship.	she.			shell.	shape.	shall.	shaft.	shut.		shod.	shawl.	show.		should. sugar.	through shoe.	thew.	thigh. shy.		shower.							
Ch.	chip.	cheer.	cheek.		chess.	chair.	chat.	enchant	chub.	chaldron.	chop.		choke.			choose.		chide.		pouch.							
J.	gill.	jeer.	germ. jerk.		jess.	jail.	jam.		jut.	jaunt.	jot.	jaw.	joke.			jews.	huge.		join.	jowl.							
D.	dim.	deal.	dirk.		dell.	dale.	dab.	draft.	does.	daunt.	dot.	dawn.	dome.			do.	dupe. dew.	die.	doit.	down.							
Z.	zink.	zeal.			zest.	zany.	as.			huzza.			zone.			ooze.		toys.	house								
M.	mid.	meed.	myrtle. merchant.		met.	may.	mat.	mask.	moth.	calm.	moth.	moss.	moan.			moon.	mute.	might. my.	oil.	mouthe.							
T.	tiff.	teal.	terms. terse.		tell.	tale.	tack.	trance. task.	touch.	taunt.	top.	aught. taw.	tone.		took.	too.	tune.	tie.	toil. toy.	out. town. sow.							
S.	sink.	seal.	serpent.		set.	same.	sad.	sand.	son.	salve.	sod.	saw.	soak.		sough. soot.	soot. soothe.		sight. size. aisle. lie.	soil.								
L.	lick.	lead.	learn.		led.	laid.	lap.	lamb.	love.	laugh.	lot.	law.	low.		look. lunatic.	loo.	lute.	oil. loyal.	loud.								
Final.																											
R.	ir-	ear.	earnest.		berry.	air.	par.	are.		far.	for.	war.	oar.			poor.		ire.		our.							
W.	will women.	we.	worm.		wet.	way.	wag.		won.		was.	wall.	woke.		wool. wolf. woman. would. woof.			wire.		wow.							



K.	Kill.	key.	kern.	ken.	kate.	cat.	cash.	come.		cot.	cost.	core.		could cook.	cooper.	curate.	kite.	coil.	cow.
X.	links. figs.	weeks. leagues.	xerxes.	vex. legs.	plagues.	backs. bags.	example			hogs.	hawks.		brogues			rebukes fugues.	likes.		
G. <i>Final.</i> Ng.	gig sing.	gear.	guess.	get.	gate.	gammon	glass.	gun.	guards.	got.	gauze.	goat.		goorka. good.	groups.	gewgaw	guile.		gout.
Wh.	whit.	wheel.		whet.	whey.					what.		whoa.			whoop.		whine.		
Rh.	rick.	reek.	reck.	red.	rare.	raft.	rang.	run.		rock.		row.		rook.	rood. rude.		rhyme.	royal.	
Y and H		yield. he.	her.	yet. hen.	yea. hay.	yarn. hat.	hasp.		yard. half.	yon. hot.	yawn. haw.	yeoman whole.			who. hue.	yule. hue.	high.	hoist.	house. how.