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# ELEMENTARY PHONETICS 

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## ELEMENTARY PHONETICS

 ENGLISH, FRENCH, GERMANTHEIR THEORY AND PRACTICAL APPLICATION IN THE CLASSROOM

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TWO PLATES AND OTHER DIAGRAMS, AND THREE REDUCED FACSIMILES OF COLOURED SOUND CHARTS


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## PREFACE.

This treatise forms part of a series of books dealing with the teaching of modern languages according to the so-called "New Method" or "Reform," two of which have already appeared, viz., First Steps in German, and A German Grammar.

The present volume is intended to serve as an introduction to the study of English, French, and German phonetics. It gives in the first place the necessary phonetic explanations and hints for the use of the English, French and German Sound Charts which we have drawn up, and which are intended for classroom purposes. Though not infrequently going beyond these explanations and hints, it remains elementary in treatment and substance, giving merely a good working knowledge of the subject; and the student who is desirous of increasing that knowledge, is strongly recommended to study one or more of the books mentioned on page 162 ff .
The chief features in the arrangement of the subjectmatter are the following :-
(1) The description of the speech organs and their functions contains only what is essential and simple.
(2) With regard to the speech sounds, ie., vowels and consonants, we have in the first place tried to give a clear idea of their production and nature. With this view we have first treated the English sounds connectedly, thus making English the basis and starting-
point for the acquisition of a general understanding of phonetics. Then French and German are taken up, each separately, but always with reference to the general principles acquired in the English part. We believe that this method, though it leads here and there to repetitions, is the proper one for the beginner, and that it will give him a clear insight into the formation of speech sounds generally, and enable him to study English by itself, ${ }^{1}$ or, with its help, either French or German separately.
(3) Since the science of phonetics is essentially experimental, we have frequently referred the reader to such experiments as he can easily make upon himself, and as will no doubt contribute to a clearer understanding of phonetic facts and principles.
(4) Considerable attention - necessitating occasionally the repetition of certain facts and observations-has been devoted to the practical application of phonetics in the classroom.
(5) Appendices are added containing (a) phonetically transcribed texts, chiefly intended to show the pronunciation of words in their natural context in the sentence ; (b) bibliographical notes. ^
(6) The English pronunciation we use as basis is the Northern English of Dr. Lloyd, Liverpool, i.e., the English " employed by educated people born and bred in Northern England, between the latitudes of Birmingham and Durham," which is, with few exceptions, also that of the educated Scotchman. The few outstanding divergencies between northern and southern English and Scotch will be referred to in special para-

[^0]graphs. We have given the preference to northern English, because the greater simplicity of its (long). vowels has the double advantage of facilitating the study of vowels generally, and of forming the proper basis for the corresponding sounds in French and German; while the southern "divided" long vowels offer no difficulty after the elements of their composition have once been explained from northern English. ${ }^{1}$ We set up no standard of English pronunciation, but merely describe the articulation of the ordinary English sounds, and state, in a general way, where they occur in the more careful speech of the educated in the North and the South of England and in Scotland. What is called the correct pronunciation of Standard English we must leave to the teachers of elocution.

For French we use as basis the pronunciation of the educated Parisian; for German that of the educated Hanoverian, shorn of those parts which are purely local, and to which reference will be made in the proper place. Of the several forms of German pronunciation the English-speaking learner will find the Hanoverian on the whole the easiest.

How much of the purely scientific parts of this book, i.e., the description of the speech organs and their functions, can or should be taught to school children must be left to the discretion of the teacher. We would however say that, according to our opinion, the details of phonetics should never appear in the schoolroom as a subject per se. The teacher should use his knowledge of the subject as a means for the benefit of the children, but that he should take them through the same

[^1]course as he himself has passed through is an exaggerated demand, of which only the most ardent "reformists" of twenty years ago could make themselves guilty.

The phonetic transcript we use in this book, as also in the Sound Charts, is that of the Association Phonétique - Internationale, and therefore also, to a large extent, that of the New English Dictionary. The International is not perfect, but for our purpose it is unquestionably the best. It would no doubt be possible to devise for each individual language a more perfect system of phonetic letters, but that would lead to a multiplicity of systerns, and the gain in one direction would be lost in another.

In the drawing up of the Sound Charts we have taken those of Professor Vietor as models, but differ from him in several minor respects, where personal experience has convinced us that improvement was possible. Reduced facsimiles of these charts are appended.

We also add a number of blank leaves for any notes 'and remarks the reader may wish to make. In particular, they should be used as a memorandum for what is noteworthy and exceptional in French and German pronunciation.

The necessity of a scientific study of English pronunciation on the part of the English teacher has now been fully realised by the Education Department of Scotland, ${ }^{1}$ and will no doubt soon receive the desired recognition on the part of the English educational authorities. There is, therefore, no need on our part to justify for theoretical or practical reasons the English part of this publication. French and German, however, are in a different position, and a few remarks on the

[^2]teaching of the pronunciation of these subjects will, we trust, not appear superfluous.

Though the study of French and German has in recent years received all round an increased amount of consideration and attention, the pronunciation of these languages in the schools is still far from what it should be. In the elementary schools it is too frequently of a kind which cannot be described otherwise than as absolutely bad: the Code treats it with indifference; H.M. Inspector is more inclined to be lenient than severe, and the man who pronounces French and German according to his own mysterious wayssometimes borrowed from antiquated grammars and dictionaries-is still allowed to be at large; yet one cannot help asking what use there is in giving children a smattering of French and German with a pronunciation which is unintelligible to everybody except themselves and their instructors. This absurdity, however, assumes the form of positive harm if the children, so taught, proceed to a higher school, where they prove a regular nuisance in the French and German classes.

In the secondary schools matters are naturally in a more satisfactory state, but there are both room and necessity for improvement even there. Owing to the absence of serious tests and to the urgency of other demands, the teacher is inclined to treat pronunciation rather cavalièrement as a subject of his teaching, and not infrequently, perhaps, also as part of his professional equipment. \There are not many University students here-and we do not think they are worse than others -who can pronounce étudiant d'université without committing several inaccuracics: Ithe accent is too often
misplaced in both words; the nasal "a" has neither the proper nasal resonance nor the correct "a" sound ; the first word receives four instead of three syllables; and the articulation of all the vowels lacks that clearness and distinctness which are so characteristic of French pronunciation. Two simple German lines, as-

## In einem kühlen Grunde

Da geht ein Mühlenrad-
do not fare much better: the "a" sound in ein is generally articulated too far back in the mouth, especially by students coming from the northern parts of Scotland; the " ü" sound has not the proper rounding of the lips, and, consequently, not the necessary distinctness; the " $d$ " in "rad" is left as " $d$," and the " a" before it receives the wrong quantity (it should be long as it is in "des Rades"); the "glottal stop" before " in," "einem" is not observed; and lastly, the dissyllabic words are produced with an effort, as if a weight were attached to them, too much stress being laid upon the unaccented syllables, as in einem, kühlen, Grunde, Mühlen. All this may not seem very serious, but it is un-French and un-German-it may even be called slovenly - and should be avoided, since it can be avoided. It must be admitted that to a certain exfent these inaccuracies are explained-many teachers, and especially the headmasters behind them, will no doubt say justified-by want of time, which necessarily leads to want of care, but we are inclined to think that a considerable part of the responsibility rests with the deficiency of the method employed. First of all the initial stage of language instruction, i.e., the most important stage for pronunciation, is generally left to the
less experienced teachers; yet every inaccuracy passed over at that stage will take root and stubbornly resist subsequent correction. Another equally, if not more, serious deficiency arises from the fact that the teacher, whatever his nationality, whose pronunciation is correct, is generally inclined to assume that he knows it and can teach it. Every teacher of French or German, whether Briton or foreigner, is aware that in order to know the grammar of these languages, he has to learn it, that speaking the language-even if it is his own -and hearing it spoken will not suffice. Though not generally admitted the same necessity for systematic study exists for pronunciation, and such systematic study can be based only upon phonetics, a subject which, for one reason or another, has so far not found much favour with the majority of teachers in Great Britain, in spite of the fact that the language teacher has constantly to speak of vowels and consonants, and now and then of Media, Tenues, Aspirata, etc., with but a very imperfect notion of the character of the sounds in question. Moreover, it seems but a truism to say that the teacher who is able to properly analyse the spoken word into its elementary sounds, who knows the articulation of the language he teaches, as also the habitual functions of the speech organs of his pupils, will be able to go to the root of a mispronunciation-as the medical man follows pathological symptoms-and correct it physiologically, instead of trying, often in vain, to do so by invoking imitation alone. Teachers of this country, among them one of the undersigned, have noticed during their visit to German schools that sometimes the pupils, taught phonetically, had a better English pronunciation than their teacher, which is
easily explained by the fact that the latter knew and could explain the articulation of English sounds, but had not the same flexibility of tongue as his pupils to produce them.

Admitting, then, the utility or necessity of a knowledge of phonetics, the teacher is confronted by the question how to acquire it. We know from personal experience in the classroom-we have been lecturing on French and German elementary phonetics for several years-that it is a subject difficult to learn for a certain class of learners. <The principles of it are simple enough, but the knowledge of them remains useless, unless the student is willing to give his own thoughts to the subject, and make his own experiments, and persevere in both. It is eminently a subject which requires this latter quality, and one which resists every attempt at cramming. Theory alone does not suffice, and where the learner has nobody to demonstrate to him, he must be his own demonstrator, and that is not a difficult task, as we shall have occasion to show in the following pages.

Text-books are, as a rule, not as helpful as they might be. They are too elaborate, and aim too high, even the elementary ones; they confuse and discourage the beginner by too much detail, especially in the description of the different parts of the larynx and their functions, which are difficult to understand and by no means essential to know. One of the chief objects of this little book is to give the teacher an insight into the practical parts of elementary phonetics, and especially to show him how he can turn his knowledge to account in the classroom. It assumes a partial acquaintance with the elementary facts of French and German pro-
nunciation, but some important rules, which may probably not be generally known, are given here and there. The relation between spelling and pronunciation is dealt with briefly but systematically, and a complete index will enable the reader to use the book for purposes of reference so far as the information supplied goes, which, we trust, will cover the ordinary needs of the teacher. The relation between English spelling and pronunciation has, for obvious reasons, been treated very summarily.

Further information on French, German and English pronunciation and phonetics will be found in the works mentioned at the end of this book (p. 162 ff .). However, we repeat that without self-observation and persevering study, the simple as well as the elaborate text-book will do little good. It happens that a teacher "has a shot" at the subject, and finding the many things that take place in the small space between throat and lips rather bewildering at first, he easily persuades himself-if he is not already persuaded beforehandthat the game is not worth the candle, and schnell fertig mit dem Wort, he calls the whole thing a fadet tout est dit. The expectation of knowing the subject after merely reading through the text-book must necessarily lead to disappointment.

We feel confident that, when he has mastered the subject theoretically and applied it practically with earnestness and care, the teacher will come to the conviction that the pronunciation of French and German means a good deal more than an accomplishment which may be left to boarding establishments for young ladies, that it has in it physico-psychological elements of real education, viz., of adding flexibility to the child's
speech organs, training his ear, imparting the sense of strict accuracy, teaching aural observation, and neatness and carefulness of enunciation, diminishing his shyness and removing the fear of appearing ridiculous in uttering foreign sounds or sentences, and last, but not least, making a breach in the wall of what is usually called insular habits, at the same time helping to teach what the British find so difficult to learn-adaptation. ${ }^{1}$ All this of course in a small way, yet, in education as well as elsewhere, "many a little makes a mickle". Besides, if we merely look at the matter as a question of principle, where the mode of teaching a certain subject leads in the taught to habits of slovenliness,

[^3]there can be but one choice, whatever the subject, namely, either not to teach it at all, or to teach it with that respect for accuracy which the teacher owes to himself and to his pupils.

After all that has been said so far, it is perhaps well to observe that the phonetic method is not a royal, but merely a more natural, a more interesting, and, we believe, a more instructive and a safer road to French and German pronunciation than the one usually adopted. It works no miracles, nor does it dispense with careful attention on the part of both teacher and taught, and it would be altogether unwise to raise our expectations too high as regards the general results of its application. It is well to bear in mind that in pronunciation, as well as in everything else where we have to reckon with the possibilities of school instruction, we can, at all events in the foreign languages, neither reach the ideal nor should we attempt it. If we reduce our expectations to the proper measure of modesty and common-sense, we must not hope to teach the average child the exact articulation and intonation of the properly taught French or German child, but what we can and what we must attain is an articulation and accentuation which the educated Frenchman and German will readily recognise as French and German. Neither the degree nor the value of such a result need humiliate or disappoint us; in fact, even if we attempted more and aimed higher, the result would in all probability be the same. However, what we must not expect from the pupil we need not entirely renounce in the teacher.

What we have thus pointed out as the practical aims of the teaching of pronunciation-the details of which
will form an essential part of this book-requires on the part of the teacher nothing but the necessary acquaintance with the theory and practice of the pronunciation of the new language, a knowledge of the proper method of teaching it, seriousness of purpose, patience and perseverance. It may be exceedingly difficult and well-nigh impossible to induce the Buchan "loonie"-whose Doric may be regarded as typicalto pronounce bought as bawt and not like boat, or the typical London child to pronounce pale as pale and not as pile, because what has been learned at school will be unlearned at home. But in the learning of a foreign language this is quite different. If the child has once been taught from the beginning that the French tableau is tableau (tăbl⿱夕) and not "táwblow" nor "táblow," that the French son is son and neither " saw " nor " so" nor "song," that " a," "é," "è," " u," are " $a$, " "é," "è," "u," and not sometimes this and sometimes that, that child, wherever he comes from, will pronounce each word as it has been taught him. The plea non possumus, on the part of the teacher, should neither be brought forward nor listened to. We are convinced that even the inevitable effects of inveterate habits of carelessness and inattention on the part of certain children can be greatly reduced, provided the teacher is willing to handle, with his beginners, sound-drill on phonetic principles with the same degree of thoroughness with which he handles grammatical drill, and to reprimand and repress, throughout the whole course of his instruction, errors in pronunciation and in grammar with like severity.
That with the unsatisfactory state of our present system of examination and inspection the teacher has
had and still will have to find his reward almost entirely in the consciousness of conscientiously fulfilling what he thinks his duty towards his subject and also towards his pupils, is an unpleasant fact, which has to be reckoned with. It seems extraordinary that our educational authorities by their regulations prevent or handicap methods and aims of teaching which, by this time, have been generally recognised by educationists as best, both from the practical and the educational point of view. Negligences, inaccuracies, without speaking of serious errors, are apparently silently tolerated which would be severely censured if they occurred in the same degree in other branches of school instruction. One of the practical results of the present state of matters is that many of the elements of French and German pronunciation have to be taught to a number of University and Training College students, as is the case here, and no doubt also elsewhere, and what is worse, that in most cases certain bad habits of mispronunciation have been allowed to take root, which prove afterwards as indestructible as certain weeds. You imagine, after a great deal of trouble, that you have at last got rid of them, in fact you made sure of that by examination, yet on having, after the holidays let us say, a further occasion to test the fruit of your labours, you find that the weeds have grown apace, and that nature, i.e., what habit has made so, has returned triumphant and galloping. The root of both the good and the evil lies in the elementary and junior classes, and so long as pronunciation does not receive in these classes its proper share of attention, the " muddling in" and the " muddling out" will have to continue their edifying course and struggle.

However, there are at present unmistakable signs in the educational firmament, of Scotland at any rate, indicating that we are within measurable distance of a much needed and generally desired reform. ${ }^{1}$

As a last hint we would propose to the student of French and German pronunciation the following course, which a certain amount of personal experience makes us believe is the best: Make yourself well acquainted, theoretically and practically, with the various parts of French and German articulation ; study carefully phonetically transcribed texts, and then proceed to France and Germany. And when there, talk and watch!

In conclusion we desire to express our indebtedness to Dr. R. J. Lloyd, Honorary Reader in Phonetics, University College, Liverpool, for his kind help and valuable suggestions. We should like further publicly to thank Mr. Alfred Macleod, Lecturer on Elocution, Aberdeen University, for several useful hints and corrections.

> W. SCHOLLE. G. SMITH.

Aberdeen, December, 1902.
${ }^{1}$ The Scotch Education Department subjects at present those of its King's Students and King's Scholars who intend to teach French and German to an oral examination in these languages, and it has, besides, taken steps which, it is expected, will ensure a certain amount of teaching of French and German pronunciation in those schools which present pupils for the Leaving Certificate Examinations in these branches, and there is every prospect that these steps will be rendered more effective in the near future. It is also interesting to note that in the last report on the present condition of Modern Language Study in Scotland, by Dr. Macdonald, Assistant Director of Higher Education, special attention is called to the value of Phonetics as an aid in teaching pronunciation.

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PHONETICS.


Diagram I.


## The Speech Organs (see Diagram I.).

$\S 1$. The upper part of the windpipe $(a)$ is called the larynx or voice-box, the most important parts of which are the two membranes called yocal chords $\left(b-b^{\prime}\right)$. They stretch horizontally across the larynx from front to back and can be brought close together, or be separated so as to form an oval kind of aperture, as seen in the diagram. The interval between these vocal chords is called the glottis, and we speak therefore of an open and a closed glottis. If the glottis is closed, the expiration from the lungs, passing between the chords, causes them to vibrate, thus producing a sound, to which we shall refer hereafter as the voice. If they are open, the air passes between without producing vibration. There is consequently in this case no sound (voice). The interjection which is usually spelt "hum " (instead of "hm ") illustrates these two positions of the vocal chords. In the first part of this exclamation the vocal chords are separated, and the somewhat strong current of expiration passes through the nose-the epiglottis (c) is raised and the lips are closed. There is no sound but that ofmore or less hard-breathing through the nostrils. In the second part the vocal chords are brought together and made to vibrate, and though the expiration is less strong than before, the sound itself is considerably stronger in quantity and quite different in quality. This
sound " $m$ " may in a way be regarded as the " voice " produced by the vibrating chords. ${ }^{1}$

Experiment.-In pronouncing the above interjection prolong both sounds, the " $h$ " and the " $m$," and press at the same time the palms of your hands to your ears, when you will find that, on proceeding without interruption from the first to the second sound, there is a strong kind of murmuring resonance in the head, which is caused by the vibration of the vocal chords, and which did not exist as long as the " $h$ " sound lasted.

This experiment is a very elementary one, but it helps the beginner in different ways:-
(a) It gives him an approximate idea of the sound, pure and simple, produced by the vibration of the vocal chords.
(b) It teaches him to sustain single sounds and to open and close the glottis at will, two performances of great importance and of some difficulty.
(c) It shows him how he can easily ascertain when the vocal chords are vibrating and when not.

The rapid succession in which the glottis can be opened and closed is easily illustrated by quickly pronouncing hmhmhmhm or atatatatat (in " a " the glottis is closed, in " $t$ " open).
§ 2. The epiglottis $(c)$ covers the larynx in swallowing. In breathing and speaking it is raised. In other respects it is of no importance to us.
$\S 3$. Owing to the flexibility of the tongue in stretching upwards, forwards and backwards, in assuming a round,
${ }^{1}$ In humming the scale or a tune on this " $m$," the difference in the pitch of the notes is caused by the vocal chords being tightened (thinned) or relaxed (thickened), which means increased or decreased rate of vibration.
flat, concave and convex shape, the form of the mouth, the oral cavity (g), changes, in speaking, in many and various ways.

The gums of the upper teeth are marked $(f)$.
§ 4. The roof of the mouth consists of two parts: the soft palate $(d)$, the hard palate (e). The soft palate is movable: it can be loweréd, as seen on the diagram, so as to leave the passage to both the oral and nasal cavity (i) free. If it is raised and pressed against the back part of the oral cavity, the passage to the nose is closed ; if it is lowered and the tongue raised so that both meet, the passage to the mouth is closed. The soft palate is also called the velum (the veil). It is not a mere kind of cone, as the diagram might suggest, but a continúation of the hard palate, and as such it stretches along the whole part of the roof. The middle part of it, however, ends in a thin cone called the uxula.
$(k)$ indicates the gullet.
Experiments.-(a) Passing your thumb, the nail downwards, along the roof you will notice that the front part is hard and the back part soft, and that the latter can be pushed back.
(b) In order to examine your open mouth clearly, place yourself with your back to the light and hold a hand-glass before you, so that the rays are reflected from the mirror into your mouth. In saying "a" (the "a" in father) the soft palate with the uvula can be clearly distinguished. Alternating this "a " with the French nasal " a " in an, i.e., pronouncing the English " a " through the nose (see p. 38), the soft palate can be seen moving to and fro. Still keeping the above " $a$ " sound in father, and adding the consonant repre-
sented in English by -ng (as in hany), the soft palate and the back part of the tongue will be seen to meet, thus closing the passage to the front part of the mouth.

## The Speech Sounds. <br> The Phonetic Alphabet.

§ 5. For practical as well as for scientific purposes the ordinary spelling, i.e., the ordinary representation of speech sounds is too inconsistent to be of much use. In English the letter " i," for instance, represents three distinct sounds in marine, bite, fir ; on the other hand the " i " sound, as we have it in " marine," is represented in more than half a dozen different ways in marine, seal, feel, eve, field, neither, people; one single sound is represented by two letters, as in "sh," "th," and one letter represents two sounds, as " g " in gin. Similar inconsistencies exist in French and German. It has therefore been found necessary to use a new alphabet, called the phonetic alphabet, in which every sound is represented by one and the same letter, and one letter represents only one and the same sound. The " i " in marine is therefore also used for the same sound in seal, feel, etc., and cannot be used in bite and fir.

Length is indicated by placing : after the vowel, so that ask, ame, 5.ut are spelt a:sk, a:m, Hu:t. Half length is shown, where it is necessary to refer to it, by - placed after the vowel, so that notation would read : notation.

## The Yowels.

§ 6. Assuming the soft palate to press against the back of the mouth, thereby shutting off and neutralising the nasal cavity, and the vocal chords to vibrate,
it will be seen from the diagram that the "voice" has to travel a certain distance before it reaches the lips. It is a well-known fact that a sound in passing through a cavity changes to a certain extent its character according to the shape of that cavity. If you pass through a suite of empty rooms of different height, size and shape, you will find that your voice or your footsteps sound different as you pass from one room to another. A simpler experiment is this: pronounce a continuous long" "a" (the "a" in father), then form with both your hands a narrow tube and press them in that shape closely to your lips without altering (rounding) their formation, when it will be found that the "a" sound is changed to the sound of awe. Treated in the same way, the " i " in marine is changed to the French " u " (German " $u$ ") and the "e" in rein to the French "eu" (German "ö") sound. As soon as the tube is removed, the original a-i-e-sounds, which in this experiment have to be continued without interruption, will occur again. The sound produced by the vibration of the vocal chords is modified in a similar way before it escapes through the lips. If the cavity it has to pass through retained the same shape the sound would remain the same. But this is not the case, mainly owing to the flexibility of the tongue, which, by slightly stretching forward, upward and backward, by being a little more rounded or flattened, alters the shape of the oral cavity-the resonance chamber-thereby modifying the original sound of the vibrating chords, the voice. ${ }^{1}$ Of these modifications, which, theoretically speaking, are without limit, our ear easily distinguishes the eight fundamental

[^4]sounds which are represented in the accompanying Table A.

## English Yowels. ${ }^{1}$

§ 7. The vowels of the accompanying table, which we use as the starting-point of the following remarks, are, as has already been mentioned in the preface, those of Northern English, i.e., the English of the educated people between the latitudes of Birmingham and Durham, which are, with few exceptions, also those of the educated Scotsman. Any differences between Northern and Southern English will be pointed out in a special paragraph. The expressions North and South will refer to England, not to Great Britain.
§ 8. If the front part of the tongue is raised towards the front part of the hard palate (Diagram 1, Table A), the oral cavity has a shape which gives to the voice, passing through that cavity, a resonance which strikes our ear as the " i " sound in marine (field, feel, etc.).
$\S 9$. If the tongue is slightly lowered and more uniformly rounded, the shape of the resonance chamber is altered and with it the resonance of the voice which strikes our ear here as the English "e" sound in rein, aim, ache, etc.
§ 10. Diagram 3 shows the tongue-position for the vowel-sound in there, fair, care, phonetically represented by $\epsilon$.

[^5]
## ORDINARY ARTICULATIONS



6


E A.

## NORTH-ENGLISH VOWELS.


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§ 11. Diagrams 4 and 5 show the tongue-positions of two different "a" sounds. The first, phonetically represented as -a-, has a more forward movement of the tongue and a somewhat brighter sound (resonance) than the other. We call it the front-a. In the second, phonetically represented as $-\alpha$-, the tongue is drawn farther back, and its resonance inclines towards the "a" sound in "all". We call it the back- $\alpha$. The first of these two sounds is the vowel of pat, map, can, etc. It occurs only in northern English and in Scotch. In northern English it is found only short, in Scotch both short and long. The ordinary (northern and southern) long English a is our second $\alpha$, the a in father, calm, etc.
§ 12. The diagrams render a description of the other vowels superfluous. However, we would recommend the learner (1) to study carefully in the eight diagrams the different positions of the tongue and the respective shapes of the oral cavity; (2) to practise the different tongue-articulations with the help of a hand-glass, speaking and also whispering the sounds very distinctly. In these experiments the teeth should be kept about an inch apart; it is only thus that the respective movements and positions of the tongue can be both seen and felt with sufficient distinctness ; (3) to clearly familiarise himself with the fact that in all these different vowels the fundamental sound, i.e., the voice, produced by the vibrating vocal chords, remains under normal conditions absolutely the same, and that it is only after passing through the various shapes of the oral cavity (the resonance chamber), where it receives its peculiar and distinctive resonance, that this sound strikes our ear as the vowel i, e, $\epsilon$, etc.

## II. English Vowels.



widэst a $\alpha$ widest

III.

\$ 13. Table A, as has already been mentioned, rea presents the tongue articulation of the most important English vowels. Diagram II. completes the list (see § 16), and Diagram III. is intended to explain the triangular form, in which the vowels are usually represented. The place of each letter in this latter diagram indicates approximately the position which the tongue occupies in the pronunciation of the respective vowels (cp. Table A).
§ 14. The terms narrowest, narrow, wide, ete., explain themselves from Diagram III. In "i" and "u" the distance between tongue and front-palate and back-palate respectively is narrowest, and widest for " $a$ " and " $\alpha$ ". The terms narrow and wide will be found useful for oral instruction, in order to distinguish between " $e$ " and " $\epsilon$," " $o$ " and " $\rho$ ". The two vowels " $a$ " and " $\alpha$ " are always wide, and need only be qualified "a" as front-a, and " $\alpha$ " as back-a. For I, $\mathfrak{x}, \mathrm{u}$, see § 16. Instead of narrow and wide the terms close and open are often used. Sweet uses the terms high and low.
§ 15. The terms front-vowels, usually given to the series i-a, and back-yowels, given to the series $\alpha-u$, explain themselves also with the help of Diagram III.
§ 16. It will be noticed that Diagram II. contains five vowels, viz., $\mathrm{I}, æ, \mathrm{U}, \Lambda$, ə, which are not represented in the diagrams of Table A. The vowel "I" occurs as a rule only short, and has a tongue-position which is a little lower than for " i ," inclining towards the e-sound. In comparing eel and ill it will be noticed that the two vowel sounds in these words are not only distinguished as regards quantity, i.e., length, but also as regards quality, i.e., the sound as such which depends upon the position of the tongue.
§ 17 . The " $æ$ " is the southern vowel in pat, map, can, bad, bag, cab. It is usually short, but is not infrequently lengthened before such (voiced, see § $132(c)$ ) consonants as d, g, b. Where it occurs in northern English and in Scotch, it is a southern importation.
§ 18. The " u" sound as in pull stands in the same relation to "u" in pool as the " I " does to " i ": the tongue-position for the " u " in "pull" is slightly lower than that for the " $u$ " in pool, and inclines towards the o-sound. As a rule the u-sound occurs only short, and the "u" only long; cf. pool and pull, route and foot. N.B.-In Scotland no difference is made, as a rule, between pool and pull, route and foot, as regards the quality of the vowels ; in fact, the " U " sound may be regarded as non-existent in Scotch proper.
§ 19. In order to distinguish between "i" (eel) and " I " (ill), " u " (pool) and " U " (pull) in oral instruction, it may suffice to call the first in each group the long " i ," long "u," and the second the short "i" and short "u"; or to speak of narrow " $i$," narrow " $u$," and wide " $i$ " and wide " $u$ ".
N.B.-In order to convince himself that the vowels in eel and ill have quite distinct sounds the reader should make them of the same length, when he will find that, in spite of such equality, eel does not sound like ill. The same should be done for pool and pull.

## The $x$ and $\partial$ sounds.

$\S 20$. The sound which is designated by " $\Delta$ " is the vowel in but, much, mud, etc., and long in purse, burn, i.e., before " r ".
$\S 21$. " $\partial$ " is the symbol for the. vowel in sir, her, and in the unaccented syllables of balloon, real, direct,
the (before consonants), a (the trees in a forest), ivory, father, houses, added. ${ }^{1}$
$\S 22$. In the articulation ${ }^{2}$ of these two vowels both the front and the back part of the tongue are slightly raised, with a lowering in the middle. As thus their articulation lacks a uniform character, these vowels are called mixed. Another name given them is obscure, because the position which the tongue occupies here cannot very well be brought into definite relation to the tongue-position of any of the eight primary vowels of Table A. All that can be said is that in " $\Lambda$ " the articulation tends towards the "a" sound, and in " $\partial$ " towards the " $e$ " sound. Owing to this somewhat vague difference both vowels are often and easily confounded, especially when they are unstressed, which is the rule for " $\partial$," and is often the case with " $\Delta$ ".

## Diphthongs.

$\$ 23$. The three English diphthongs in by, bough, boy are phonetically represented by bai, bau, boi, or more correctly, since the last element is short, by bai, bau, bor.
$\S 24$. The long " $u$ " sound in tune, new, etc., is wrongly called a diphthong; its first element is not a vowel but a consonant, i.e., the " $y$ " sound in yes, you, phonetically

[^6]represented as " j ". The above words would therefore phonetically spell tju:n, nju: (and not tiu:n, niu:).

## General Remarks.

§ 25. Lip Articulation.-Hitherto we have in the production of the vowel-sounds considered only the different positions of the tongue and their relation to the different shapes of the oral cavity, but it is obvious that the formation of this resonance chamber, as it has been called, and with it the voice that passes through it, is to a certain extent modified by the shape which the lips may assume, just as the tone of a wind instrument is modified by the shape of its end part. In examining himself, the student will find that it is possible to pronounce the vowels of Diagram II. without changing the position of his (slightly opened) lips, but that the sound of the respective vowels becomes clearer if he tightly stretches his lips horizontally in pronouncing "i" and gradually relaxes and opens them as he proceeds from " $i$ " to "e," " $\epsilon$," " $\alpha$," and then gradually pouts and rounds them with " $\rho$," " о," "u". These respective actions of the lips, especially the stretching for "i" and "e," the rounding for "o" and " $u$," are much more pronounced, more energetic in French than in English, and constitute one of the chief characteristics of French articulation. German articulation occupies in this respect an intermediate position between French and English.
§ 26. Activity of the lower jaw.-Since the tongue is attached to the lower jaw it is but natural to expect that the raising and lowering of the former is accompanied and facilitated by a corresponding movement of the latter. Though it is possible to pronounce, in a
fashion, all the vowels with the teeth closely set, it will be found, here too, that the respective sounds become clearer if they are accompanied by the corresponding lowering and raising of the jaw, i.e., an opening and narrowing of the mouth.
$\S 27$. Relation between quantity and quality of a yowel.-There is a certain relation between the quantity and quality of a vowel, which it is well to bear in mind. It may be stated, as a general rule, that the short vowels incline to a relatively wider articulation than the long vowels. This becomes easily noticeable in comparing the long and short i, u, e, o sounds in eel-ill, pool-pull, rein-red, notenot, which words, phonetically transcribed, read (length being indicated by :) : i:l-ıl, pu:l-pul, re:n-red, no:t-not. ${ }^{1}$

[^7]
## IV.

beat i:
bit I
bait e: route
bet $\epsilon$,
U butcher $\epsilon$

To be strictly accurate we should have to distinguish, as regards quality, between the " $\epsilon$ " in bet and bear, and between the " 0 " in bottle and bought, but the difference is so inconsider-able-it only seems accentuated by the difference of quantity-
§ 28. Shortening of long yowels.-Before certain (voiceless, see § 133) consonants, as t, p, k, long vowels are, as a rule, slightly shortened. In comparing the vowels in eel and eat, made and mate, rose and rope, bruise and brook, it will be found that the vowel in the first word of each group is longer than that of the second word. To be strictly accurate, the pronunciation of eel, eat, made, mate, etc., would be represented as i:l, i•t, me:id, me.t, etc.

## $\S 29$. Influence of a non-interyocalic " $\mathbf{r}$ " on preceding yowels :-

(a) If the preceding vowels are wide, i.e., $\epsilon, \alpha, \Lambda, ~ \supset$, as in bear, bar, bird, lord, their articulation is slightly changed in this way :-whilst the general position of the tongue remains the same as for the ordinary $\epsilon, \alpha, \Lambda, \rho$, the tip of the tongue is directed towards the gum of the upper teeth, as for the articulation of the r-sound (see § 149), which, however, is not clearly articulated here. This position of the tongue does not change the general character of the $\epsilon, \alpha, \Lambda$, $\rho$ sounds, but merely adds a new kind of resonance, of timbre, which we may designate as the vocalic r-timbre. (Compare law and lord, father and farther.) These vowels are usually called coronal yowels (corona here $=$ tip of the tongue), and are phonetically represented as $\stackrel{r}{\epsilon}, \stackrel{r}{\alpha}, \stackrel{r}{\Lambda}, \jmath^{x}$. Where the " $r$ " is intervocalic, i.e., followed by a sounded vowel, the r-timbre of the preceding vowel disappears and the "r" itself is sounded ; bear and bearing would
that it can be neglected in an elementary treatise like the present. (This applies more particularly still to the difference between the two o-sounds in boat and window.) We shall therefore leave these differences to the advanced and critical student and confine ourselves to the broader vowel-distinctions of Diagram II.
therefore phonetically read as bé:, be:ring. In order to avoid too much detail, these coronal vowels are not represented on our English Sound Chart.
(b) If the preceding vowels are narrow, i.e., i, u, o (narrow "e" does not occur before " r "), they are followed by the obscure vowel " $\Delta$ " (or "ə"). This addition of a non-syllabic vowel is called an off-glide. The off-glide here is always coronal. Compare here, poor, more, which would be phonetically represented as hi: $\bar{\Lambda}, \mathrm{pu}: \hat{\Lambda}$, mo: ${ }_{\mathrm{A}}^{\mathrm{N}}$. The same off-glide occurs in the diphthongs of fire, power, moire, phonetically like fari, pauí, mori. Where the " $r$ " is followed by a sounded vowel, the off-glide does not occur and the "r" itself is sounded: compare more with more and more ; phonetically : mo: $\bar{A}$, mo:r and mo: $\bar{A}$.

## Southern and Northern English.

§ 30. It has already been mentioned that the "æ" sound exists in northern speech only as an importation from the south, and that the northern "a" (in pat, can) is unknown in the south. But what distinguishes especially the pronunciation of the north from that of the south is the fact that the southern long narrow vowels $\mathrm{i}:, \mathrm{e}$, o:, u:, as in eel, aim, old, ooze, have not the uniform sound of the north, but assume as we may say, a diphthongal character, are divided, or, as we should say, end in a non-syllabic off-glide. The off-glide here is produced by a slight raising of the tongue, which means that the " $e$ " is followed by a non-syllabic " i ," or better " r " (= i ), ! the "o" by a non-syllabic " $u$," or better " U " $(=\mathrm{u})$, ${ }_{\iota}$ the " i " by a higher articulated " i ," which is like the English y-sound in you, yes, phonetically represented by " j " (see § 138), and that the " u " is followed by " w "
(see § 134). The phonetic transcription of eel, aim, old, ooze would therefore be i:jl, e:im (more correctly, e:Im), o:uld (more correctly; o:uld), u:wz.

The first element of these divided vowels is shortened before such (voiceless, see § 133) consonants as $\mathrm{t}, \mathrm{p}, \mathrm{k}$, as in eat, ape, oak, root (strictly phonetically $=\mathrm{i} \cdot \mathrm{jt}$, e.ip, o.uk, ru•wt). However, the divided character of the sounds remains. Compare these words with eel, aim, old, ruse. ${ }^{1}$
N.B.-Several English phoneticians are of opinion that the first element of these divided vowels is never properly long. In so far as this is a question of individual pronunciation, every reader must decide it for himself.

With regard to the pronunciation of these vowels before "r" see § 29 (b).
§ 31. The off-glide is found in northern English only in connection with long "e," as in madë, say = me:id, se:i. Before such consonants as $\mathrm{t}, \mathrm{k}, \mathrm{p}$ it disappears : mate $=$ me:t or me.t, ape $=\mathrm{e}: \mathrm{p}$ or $\mathrm{e} \cdot \mathrm{p}$.
§ 32. The South hardly knows narrov " o : " before "r"; more is mo: or mo:ə ; in the North it is mo:i.
The short " e " sound is, as a rule, slightly less wide than in the North; let, sell, etc., are in the North = let, sel, in the South often more $=$ let, sel (see transcribed text).

[^8]$\S 33$. The coronal vowels (see § 29) are not unknown in the South, but are not so common there as in the North; their occurrence is a question of individual pronunciation, and the reader should examine himself whether he pronounces hard, lord, burn, fared, here as ha:d or hã̛:d; lo:sd, lo:əd, lo:d or lộ:d; bı:n or $b_{\Lambda}^{\mathrm{r}}: n ; \mathrm{f}_{\mathrm{E}}: \Lambda \mathrm{d}, \mathrm{f} \in: ə \partial, \mathrm{f} \in: \mathrm{d}$ or $\mathrm{f}_{\mathrm{f}}: \mathrm{d}$; hi:ə or hi: $\Lambda .^{1}$

## Peculiarities of Scotch Pronunciation.

$\S 34$. It has already been mentioned (§ 17) that the "æ" sound, where a Scotchman uses it in pat, man, and, etc., is a southern importation, and that the " $u$ " sound in pool and pull are generally of the same quality in Scotch (see § 18), and we now add the following characteristic points of Scotch pronunciation :-
(a) We have seen (§ 30) that of the two " a " sounds (i.e., "a" and " $\alpha$ ") the south of England only knows the long " $\alpha$ " (as in father, calm, bar, etc.), the north the short " a " (in pat, and, etc.) and the long " $\alpha$ " (in father, calm, bar, etc.). Scotch pronunciation possesses both these vowels, and each long as well as short. Short " a " occurs, as in northern English, in pat, and, a cab, shall, etc.; long "a " in ask, amen, calm, etc.; short " $\alpha$ " in man, long " $\alpha$ " in father. There is a tendency in the pure Scotch, of the northern parts in particular, towards a back articulation of the " $a$ " sounds, so that words like match, cap are not pronounced match cap, but match, cap, and amongst the lower classes like motch, cop.

[^9](b) Scotch hardly knows the long " $\epsilon$ : " as it occurs in the English pronunciation of there, Mary, fair, which is replaced by "e: ". These words phonetically represented read in English : thê: (the:ə, etc.), $\mathrm{M}_{\epsilon}:$ ri, fé: (fe:ө, etc.) ; in Scotch: the:r, Me:ri, fe:r.
(c) In certain parts of Scotland there is a pronounced preference for "o" instead of " $\rho$," so that top, got, bought, comma are pronounced to:p (instead of top), go:t, bo:t, ko:ma (instead of koma).
(d) The obscure vowel " $\partial$ " is likewise frequently replaced by "e," as in the girl, her, heard, which are pronounced : the gerl, her, herd.
(e) Since the non-intervocalic " $r$ " is not lost in Scotch as it is in English (see § 29), there are no coronal vowels nor an off-glide before the following "r" in Scotch pronunciation. The words here, barn, more, poor, burn are in Scotch: hi:r (not hi: ${ }_{\Lambda}^{r}$ ), ba:rn
 $\mathrm{b} \AA: \mathrm{n}$ ).
$(f)$ Scotch distinguishes between urn (a:rn) and earn (ə:rn) ; fur (f $\Lambda$ r) and fir (fər). No such difference is made in English, the vowel here is everywhere " $\Lambda$ ".
(g) The off-glide of the long southern vowels i, e, o, u is likewise unknown in Scotland: made is me:d (not me:id), eel is = i:l (not $\mathrm{i}: \mathrm{jl}$ ), old is $=\mathrm{o}$ :ld (not o:uld), ooze is $=\mathrm{u}: \mathrm{z}$ (not $\mathrm{u}: \mathrm{wz}$ ).

Certain of these peculiarities, such as those mentioned under (e) and (g), as also the frequency of the "a" sound, will assist the Scotch learner in his acquisition of foreign languages, others interfere with it, as his preference for the " e " sound $((b)$ and $(d))$ and for the " $\alpha$ " sound $(a)$. To these we shall call further attention in the French and German parts.

## Definition of a Yowel.

§ 35. There is in a vowel no other sound than that produced by the vibration of the vocal chords, called voice. This voice is modified, i.e., receives a certain resonance as it passes unimpeded through the resonance chamber, i.e., the oral cavity prolonged by the lips. According to the different positions of the tongue and the lips the shape of the resonance chamber and with it the resonance of the voice is changed, so that the latter then strikes our ear as one of those vowels which we have examined.

If the ordinary resonance of the four vowels $\epsilon, \Lambda, \alpha, \rho$ is accompanied by an additional resonance, which we have called the r-timbre ( $\$ 29$ ), we get the coronal vowels $\epsilon, \Lambda, \alpha, 5$ of northern (and partly of southern) English.

## Spelling and Pronunciation.

The following paragraphs are chiefly intended to further familiarise the learner with the application of the phonetic transcript. They give at the same time a cursory view of the relation between the English vowels and their ordinary spelling; but it does not fall within the scope of this book to enter into the details of the great variety of ways in which these sounds are actually represented.
§ 36. The "i" sound (southern, i:j) occurs, as a rule, only long. It is represented by :-
(a) i, in marine (mari:n; southern, mæri:jn), fatigue (fati:g; southern, fæti:jg); pique (pi•k; southern, pi•jk).
(b) e , in eve, he.
(c) ee, in cel (i:l; southern, i:jl) ; meet (mi•t; southern, mi.jt).
(d) ie, in field, grief.
(e) ei, in neither, seize.
(f) ea, in sea (si:; southern, si:j) ; beast, veal.
$\S 37$. The "I" sound occurs, as a rule, only short. It is represented by:-
(a) $\mathbf{i}$, in fill, bit, big.
(b) e, in pretty, England; unstressed in deceive, remain, event. (Especially in the southern pronunciation of -es, -ed, as in houses, added. Here the North has " $\quad$ ".)
(c) ay, in Monday, etc.
(d) $\mathbf{a}$, in the southern pronunciation of village, etc. The pronunciation of the North has here "e": village = viled3.
N.B.-Since the narrow "i" occurs, as a rule, only long, and the wide " I" only short (see § 16), the same letter "i" may be used in the classroom for both sounds, as " i :" and " i " respectively."
$\$ 38$. The "e" sound (southern, e:i) occurs only long. It is represented by:-
(a) ei, ey, in reign (re:in, northern and southern English) ; eight (e•t; southern, e•it).
(b) a, in name (ne:im, North and South) ; lake (le•k; southern, le.ik).
(c) ai, ay, in aid, aim, day.
(d) ea, in great, break.
$\S 39$. The " $\epsilon$ " sound occurs long and short. Long " $\epsilon$ " is only found before " $r$ " and is represented by:-
(a) $\mathbf{a}$, in care, parent ( $\mathrm{p} \in$ :rənt).
(b) ai, ay, in fair, prayer (pre:K).
(c) ea, in bear, pear.

[^10](d) $\mathbf{e}$, in there, where.
(e) ei, ey, in heir, their, eyre.

Short " $\epsilon$ " is represented by :-
(a) $\mathbf{e}$, in let, merry, special.
(b) ea, in ready, weather, deaf (def).
(c) ei, in leisure, heifer (hefər).
(d) ai, ay, said, again.

Sometimes the " $\epsilon$ " in Mary is made wider than in merry. The difference, however, is very slight, and seems more pronounced than it really is owing to the difference in quantity (length).
$\S 40$. The "æ" sound is purely southern, and occurs, as a rule, only short. It is represented by :- *
a, in pat (pæt), bad (bæd), manor (mæns). It occurs long in a certain pronunciation of such words as ask (æ:sk), dance (dæ:ns).
§41. The "a" sound occurs only short in northern English, and is always spelt "a " in pat (pat), man (man). In Scotch it also occurs long in ask, dance, etc.
$\S 4.2$. The " $\alpha$ " sound occurs only long in northern and southern English. It is spelt:-
(a) a, in father, bath, ask, pass, dance, drama, etc.
(b) $\mathbf{a u}$, in aunt, laugh (la:f), laundry (la:ndri ; also pronounced lo:ndri), haunt.
(c) ea, in heart (ha:t).
(d) $\mathbf{e}$, in sergeant, clerk.
(e) ua, in guard.

In ("broad ") Scotch it also occurs short in man, bad, etc.
§ 43. The " 0 " sound occurs long and short. Long 0 : is spelt:-
(a) $\mathbf{0}$, in order, lord,
(b) $\mathbf{o u}$, in thought, bought.
(c) $\mathbf{a u}$, in cause, sauce, author.
(d) aw, in awe (o:), saw.
(e) a, in all, talk, war (w5:).

Short " $\mathbf{0}$ " is spelt:-
(a) $\mathbf{0}$, in got, God, donkey (donki).
(b) a, in was (woz), watch, yacht (jot).

Not infrequently the short " $\rho$ " is made a little wider than the long " $\quad$ : ". The difference, however, is very small. Compare naught and not.
§44. The "o" sound (southern, o:u) occurs only long. It is represented by:-
(a) $\mathbf{0}$, in robe (ro:b; southern, ro:ub), Job, gross, both, most, roll, only.
(b) ou, in mould (mo:ld; southern, mo:uld), though.
(c) oa, in coat, boat (bo•t; southern, bo•ut).
(d) ow, in flow, blow, owe.
$\S 45$. The "u" sound occurs only short, and is spelt:-
(a) $\mathbf{u}$, in pull, full, cushion.
(b) 00, in book, good.
(c) ou, in could, would, bouquet.
(d) $\mathbf{0}$, in woman, wolf.
$\S 46$. The " $u$ " sound (southern, u:w) occurs, as a rule, only long. It is spelt:-
(a) u, in ruse (ru:z; southern, ru:wz), brute (bru•t; southern, bru•wt), blue.
(b) 00, in pool, soon, goose.
(c) ou, in croup, soup, youth.
(d) $\mathbf{0}$, in move, lose.
(e) ew, in flew, crew.
N.B.-It has already been mentioned that, since the narrow back vowel occurs naturally as " $u$ " when long,
and as " U " when short, it suffices for schoolroom purposes to use the same symbol " $u$ " for both these sounds, i.e., "u:" and "u" respectively. In Scotch proper, as we have seen, the " u " sound is unknown, so that pull and pool, good and food are generally only distinguished as regards quantity, but not as regards quality.

## The Mixed Yowels $\boldsymbol{n}$, ә.

§47. The " $\boldsymbol{\pi}$ " sound occurs long (or rather halflong) and short. Long " $\Lambda$ " is found only before " $r$ " and is spelt:-
(a) u, in urn, absurd, burn, fur, purse (pî̀s; southern, $\mathrm{p} \cdot \mathrm{s})$.
(b) $\mathbf{0}$, in work (wi:k; southern, wa:k); worm, word.
(c) $\mathbf{e}$, in observe, servant, pert.
(d) $\mathbf{i}$, in girl, third, bird. ${ }^{1}$
(e) ea, in heard.

Short " $\Delta$ " is spelt:-
(a) $\mathbf{u}$, in but, fuss, sublime, sun.
(b) 0, done, onion (ınjın), donjon, brother, money, love.
(c) 00, in blood.
(d) $\mathbf{o u}$, in tough ( $\mathrm{t} \Delta \mathrm{f}$ ), courage.
(e) $\mathbf{i}$, in fir, sir (as in Sir John).
§ 48. The " $\partial$ " sound occurs, as a rule, only short. It is usually spelt e in unaccented position, as in father, her (her sister; her unaccented), fillet, funnel. It is also represented by many other vowels in unaccented position, as in America, that (conjunction), balloon, direct, etc.

In the case of many unaccented syllables or words

[^11]it is often difficult to determine whether " $\Delta$ " or " $ә$ " is used, as for instance in such words as symbol, author, nation, sir (in yes, Sir; or Sir John), etc. As regards the treatment of the inflected -es, -ed, with sounded vowel, in houses, added, etc., the South prefer the " I ," the North the " $\partial$ "; " $\epsilon$ " also is used. In the suffix -age (language) the South employs, as a rule, the " I ," the North the " e " sound. A definite standard of pronunciation does not exist in these cases, but the reader should examine himself as to what sound he uses.

## The Diphthongs ai, au, oi.

§49. ai (more correctly "ar") is represented by :-
(a) $\mathbf{i}$, in mine, bite (main, bait).
(b) $\mathbf{y}$, in cycle, thyme.
(c) ei, in height.
§ 50. au (more correctly "au ") is spelt:-
(a) ou, in house (haus), bough.
(b) ow, in now, bow.
§ 51. oi (more correctly " ог") is spelt:-
(a) oi, in soil, foible.
(b) $\mathbf{0 y}$, in boy, toy.

## General Remarks.

§ 52. (a) Most short vowels, in accented position, are frequently pronounced half-long before voiced consonants (b, d, g, v, z) : compare bat and bad, bit and bid, cat and cad, back and bag, cuff and love, ass and as.
(b) It is of great importance that the learner should acquire the necessary power over his speech organs to produce all the above vowels by themselves and to
make himself quite conscious of the nature of their articulation. For this purpose all the sounds should be lengthened. The only difficulties he may experience will be in connection with $\mathrm{I}, \mathrm{U}, \Lambda, \partial$, and the front " a ". As regards the first two he will have to endeavour in lengthening these sounds, for instance in it and pull to keep clear of eat and ate, of pool and pole. In order to properly distinguish the " $\partial$ " from " $\Delta$," bear in mind that the former verges more upon "e," the other upon " $\alpha$ ". The " $a$ " and " $\alpha$ " are easily distinguished : to produce "a " slightly press the point of the tongue against the lower row of teeth; for " $\alpha$ " draw the tongue back.
(c) A useful help for gaining an insight into the effect of lip-articulation is obtained by rounding all the vowels, i.e., pronouncing them with the lips rounded. Thus, for instance, pronounce a prolonged " $\alpha$," and then, whilst the sound continues, round your lips, when it will be found that the " $\alpha$ " changes to " $\rho$ ". Or round your lips first and then try and sound " $\alpha$," when the result will be " $\rho$ " instead of the intended " $\alpha$ ". Treat all the vowels in the same way. Experiments of this kind are indispensable to the student of French and German pronunciation, as we shall have occasion to show.

## French Vowels.

V.

Front-palate.
Back-palate.



widest a $\alpha$ widest $\tilde{\boldsymbol{a}}$


In these groups the vowel of the first word is long, that of the second is short. "e" and "ə" occur only short.

## The French Vowels.

§ 53. The system of French vowels (Diagram V.) seems at first a little complex; however, if we confine our attention to the two sides of the triangle (Diagram VI.) things will soon become clear.

The observant student who has so far fully familiarised himself with the system of English vowels, will, on examination of the accompanying two diagrams, have already noticed the following points :-
(1) What we have called the eight primary vowels, viz., i, e, є, a, $\alpha, ~ o, ~ o, ~ u$, are the same in French and English and have practically the same tongue-positions (see, however, § 55).
(2) There is no difference in quality (i.e., the sound proper) in French between long and short " i " and long and short " $u$," and there are therefore no "I" and " U " sounds in French. ${ }^{1}$
(3) The narrow "e" sound occurs in French only short, whereas in English it is found only long.
(4) There is no $e$-sound in French as wide as the English " $æ$ " in the southern pronunciation of "bat," "bad," etc.
(5) Of the two mixed (or obscure) English vowels, the " $\Delta$ " sound is unknown in French. On the other

[^12]hand, the French language possesses three vowels, viz., $y$, $\boxminus$ and œ, which do not occur in English, and which therefore require special attention.
§54. The y-sound (in the ordinary spelling represented by " $u$ "), as we find it in ruse, russe (phonetically, ry:z, rys), has the same tongue-position as "i," combined with the French rounding of the lips for " u " (see § 25 ).
§55. The " $\varnothing$ " (in the ordinary spelling represented by "eu") combines the tongue-position of " $e$ " with the French lip-rounding of "o". It occurs long and short: creuse, creux (phonetically, krø:z, krø).
$\S 56$. The " $œ$ " is a variation of " $\Theta$ " with a wider articulation. It combines the tongue-position of " $\epsilon$ " with the lip-position of " $\rho$," and usually occurs long and most frequently before "r," as in peur, seur (phonetically, pœ:r, sœ:r). Short, it occurs in neuf, bœuf (nœf, bœf). This wide "œ" has the same ordinary spelling as the narrow " $ө$," i.e., eu. ${ }^{1}$
$\S 57$. The " $\partial$ " is not quite the same as the English " $ә$," it is a little more forward, has a slight rounding of the lips and verges upon "ø," whereas the English " $\partial$ " verges more upon " $e$ ". It only occurs unstressed, as in $m e, ~ l e, d e$, regard, etc. Under stress it naturally changes to " $\theta$ " or " $\propto$ "-according to the individual speaker-as would happen in contrasting faire and refaire.
§58. We call these vowels mixed, like the English ə, $\Lambda$, but not for the same reason. The English sounds have a mixed tongue-articulation (see $\S 22$ ), the French

[^13]a combination (mixture) of the tongue- and lip-articulation of two different vowels. This identity of tongueposition we indicate in Diagram V. by ~. .

For the treatment of the towels $y, \propto, \propto$, in the classroom see § 123.
§ 59. There are no Diphthongs in the French language (see § 157).

## Some General Remarks on the Articulation and Ordinary Spelling of French Yowel Sounds.

## A. Articulation.

§ 60. The i, u, e, o are articulated a little higher up in French than in English, which gives these French vowels a somewhat brighter and clearer sound. This is especially noticeable in " i " and " u ," and the higher position of the tongue in these two vowels requires a greater tension of the tongue, as it were, for ile and coule than for eel and cool.

What is said in this respect of " i " and " u " applies naturally also to " y ".
§ 61. The lip action, i.e., gradual drawing back of the corners of the mouth from "a" to " i ," and gradual rounding and pouting from " $\alpha$ " to " $u$ " is more pronounced in French than in English, and may be regarded as a second factor in the greater clearness of the French i, e, o, u sounds.

The rounding and pouting of the lips are of special importance for the production of the $y, \varnothing$ and $œ$ sounds.
§ 62. A final vowel, not followed by a sounded consonant, is always short. Examples: beau, nez (ne), paix (p€), fini, tableau, beaucoup, parlais and parlaient (parle), parler and parlez (parle), respect
(respe), voulu (vuly), Paris (Pari), creux (krø), but creuse (krø:z) ; marquis (marki), but marquise (marki:z); écossais (ekosє), but écossaise (ekosє:z). This question of quantity (length) is treated more fully in $\S 240$.
§63. All French vowels, whether they are stressed or unstressed, are, as a rule, articulated with greater distinctness than the English vowels. This explains the fact that in French only one unstressed vowel is " obscured " to " ә," namely the vowel "e" (see §§ 75, 122), whereas in English "obscuration" may befall almost any unstressed vowel, as is the case in balloon; he is not at home ; directly (see $\S 21$ ). Give therefore to all the unstressed syllables in bataille, canif, école, directement, boulangerie, utilité very clear and distinct sounds, and do not pronounce canif as kənif, école as əkol, etc.
$\S 64$. The long French vowels have always a uniform sound, and the "olf-glide" of the long divided i, e, o, u of southern English pronunciation (see § 30), as also the "off-glide" before "r" (see § $29(b)$ ), are unknown in French. The French côte is therefore not to be pronounced like the southern coat, nor dire (di:r) like the English dear (di:X) (South = di:ə), pour (pu:r) like poor (pu:乏), mère (m€:r) like mare (mê:), (or South, $\mathrm{m} \epsilon$ : or $\mathrm{m} \epsilon: ə$ ).

It should also be noted that in French no shortening of long vowels takes place before certain consonants, as $\mathrm{p}, \mathrm{t}, \mathrm{k}$ (see § 28) ; the vowels in côte and in chose are of the same length.
$N . B$.-The facts mentioned in the above paragraphs form some of the most important characteristics of French articulation; they are too frequently neglected, and yet even a decent French pronunciation is not possible without due regard being given to them. We
strongly recommend them to the careful attention of the teacher.

It may also be added here that there are no coronal vowels (see § 29a) in French.

## B. Spelling and Pronunciation.

§ 65. The "i" sound.-The main fact to be remembered about the " i ". sound is that, long or short, its articulation is always narrow (see, however, p. 29, footnote). There is therefore no difference of quality between the long " i " in vive (vi:v) and the short " i " in vif (vif), in marquise (marki:z) and marquis (marki). The "i" sounds in divinité, politique, lexique are all short and bright, compared with which the English pronunciation sounds somewhat lax and slurred. We have seen that the narrowest and therefore also the brightest articulation of the "i" sound occurs in English, as a rule, only long, and this is the reason why the narrow and bright " i " in words like lexique, mérite, Marie, though they are short, often strike the English ear as long, especially when, as not unfrequently happens, the following " $t$," " $k$ " are slightly lengthened.

In the ordinary spelling the " i " sound is generally represented by "i," sometimes by " y ," as in cynic, type, etc., being words of Greek origin.
Note that pays is pronounced = "pei," two syllables.
§ 66. The "e" sound occurs only short: été, (je) parlai (parle), nez (ne), parler, parlez (parle). When it is lengthened it changes to " $\epsilon$ ": ouvrier (uvrie) ouvrière (uvric:r). ${ }^{1}$

[^14]The most common spellings of this sound are :-
(a) é : êté, général, parlé.
(b) ai : j’ai, je parlai, je parlerai, aigu (egy).
(c) er, ez final (parler, parlez, nez).
(d) It also occurs in je sais, etc., je fais, etc., in les, des, mes, tes, ses, ces and in et. ${ }^{1}$
$\$ 67$. The " $\epsilon$ " sound is the same as the English vowel in there, bet. It must never be made as wide as in the southern pronunciation of bat (bæt). It occurs short and long, and in the ordinary spelling is commonly represented by :-
(a) e, without a written accent, whenever it is followed by two consonants : belle (bel), cette (set), quelque (kelk), respect (respe). It also occurs in tu es, il est.
(b) $\grave{\mathrm{e}}$ : long in mère, scène ( $\mathrm{s}: \mathrm{n}$ ), collège, cèdre ; short in dès, très, procès.
(c) ê, always long $\epsilon$ : rêve ( $\mathrm{r} \in: \mathrm{v}$ ), bête, guêpe, mêle.
(d) ais, ait, aient, aid, aim, etc. : long in chaise, chair, plaine, aime, aide, aigre, aile; short in je parlais, je parlerais, il parlait, ils parlaient, laid, aimons, aider. The pronunciation of "ai" is, as a rule $=\epsilon$.
(e) ei: long in reine, Scine, peine (the latter also with short " $\epsilon$ ").
$(f)$ e before a sounded final " $r$," as in fer ( $\mathrm{f} \in: \mathrm{r}$ ), amer (ame:r), cher. ${ }^{2}$
N.B.-The reader should especially note the "e" sound in je parlai, je parlerai, and in et; and the " $\epsilon$ " in je parlais, etc., je parlerais, etc., in tu es, it est.

[^15]§68. The "a" and " $\alpha$ " sounds. Both these sounds occur short and long (see Diagram V.), but it is quite useless to give rules. The " $a$ " is by far the more frequent of these sounds, it occurs in the suffixes -age, (long a:), -ade (short a), in -oi (moi, soi = mwa, swa), (see §154), it is also the sound of $i l a$, and of $\dot{d}$. The back " $\alpha$ " is generally found before " $s$ " as in pas ( pa ), tasse (ta:s), il passe ( $\mathrm{pa}: \mathrm{s}$ ), classe (kla:s); before " m " and " n " as nasal " $\tilde{\alpha}$ " where it occurs quite naturally (see § 79). Otherwise spelling offers no help, except that " $\hat{\mathrm{a}}$ " represents as a rule the back " $\alpha$ ".

The " $\alpha$ " sound has in the pronunciation of many French people an articulation verging upon " $\rho$," so that the pas in je ne sais pas often strikes the English ear as paw, with a short " $\rho$ ". However, the French sound here should not be articulated so far back as that.

The "a" sound is represented by "e" in femme (fam), solennel (solanel).
§ 69. The wide " 0 " sound occurs long and short. It should never be made as wide as the overwide English " $\rho$," as it is frequently heard in lot, bottle, not, etc. It is usually represented in the ordinary spelling by :-
(a) $\mathbf{0}$ as long 0 : before " r ": port, sort, cor, or ; as short 0 in pomme, note, sotte, école, robe, mode, Rome, noce, bosse, etc., and whenever it is unstressed, as in modeste (modest), moquer (moke), monopole (monopol), moment, etc.
(b) $\hat{\mathbf{o}}$ unstressed in hôtel (otcl), rôti (roti or ro•ti).
(c) au in a few cases like Paul (Pol), Laure (Lo:r) sauf (sof).
(d) $\mathbf{u}$ in foreign words: album (albom), dominum (dominom).
§ 70. The narrow "o" sound occurs long and short. It is usually spelt:-
(a) $\mathbf{0}$, as long o: in rose (ro:z), chose, etc. ; as short o in sot, trop, etc.
(b) $\hat{\mathbf{o}}$, generally only as long o: in côte, rôle, zône.
(c) au, eau, as long o: in cause (ko:z, not ko:z, as in English), sauce, saute, sauve, etc.; as short o in saut, haut, beau, etc.; as half long o. in audace (o.das), audience, etc. N.B.-Unstressed "au" is, as a rule, always half long "o.".
$\S 71$. The " $\mathbf{u}$ " sound occurs long and short. It is always represented by:-
ou, as long u: in rouge, boule, blouse, louve, etc. ; as short u in route, coupe, loup, roux, mou, coup, etc. N.B.-The " u " sound is always narrow, whether it is long or short (see, however, footnote, p. 29).
$\S 72$. The " $\mathbf{y}$ " sound occurs long and short. It is usually spelt:-
(a) $\mathbf{u}$, as long y: in mur (my:r), ruse, Jules, une; as short y in $d u, b u$, voulu, chute, russe.
(b) eu, as long y: in gageure, nous ellmes, vous eûtes; as short y in $j$ 'eus, etc., $j$ 'eusse, etc., and $j$ 'ai eu, etc. ${ }^{1}$
$\$ 73$. The " $\varnothing$ " sound occurs short and long. It is always spelt:-
eu , as long $\varnothing$ : in creuse, meute, etc.; as short $\varnothing$ in creux, bleu, peut, veux, peu, monsieur (mœsjø, $j=$ English y in yes).
$\S 74$. Thき "œ" sound occurs short and long. It is represented by:-
${ }^{1}$ It is important to remember that in the groups -gue-, -guiof the ordinary spelling the " $u$ " is mute: Guillaume, fougue, fougueux, fatigué are $=$ gi.jo:m, fu.g, fug $\phi$, fatige. But aigu, aiguë, ciguë are = egy, sigy. For aiguille see § 174.
(a) $\mathrm{eu}+\mathbf{r}$, as long œ: in peur, cour, etc.
(b) $\mathbf{e u}+\mathbf{y}$, as long $\propto:$ in veuve, Aleuve, neuve, etc.
(c) $\mathbf{e u}+\mathrm{l}$, as long œ: in ils veulent; as short œ in seul.
(d) $\mathbf{e u}+\mathbf{f}$, only as short " œ" in neuf, ouf, bœuf.
(e) $\mathbf{e u}+\mathbf{p l}$, in peuple (pœpl); also in meuble (mœ:bl).
( $f$ ) eu(ue) + il(le), only as long œ: in feuille (fœ:j), cercueil (sєrkœ:j).
§ 75. The " $\boldsymbol{\text { " sound occurs only short and un- }}$ stressed, and is always represented by " $e$ " without the written accent
(a) In monosyllables: me, te, le, que, ne, etc.
(b) In the body of words: petit (pəti), querelle (kərєl), refaire, debout, second; crever (krəve), secret (səkr€ ; cr, tr, vr, etc., are usually counted as units of consonants).

This " $\partial$ " is, as a rule, entirely mute at the end of words, as in mère, elle, pure, and also frequently, in particular, in sentence-reading, in the body of words, as in cela (sla), petit (pti), cheval, donnerai (donre), and in monosyllables, as $l e, t e$, se, ne, me, etc., so that tu ne peux pas le faire is pronounced ty n px palfe:r (see the phonetically transcribed text). It also occurs in nous faisons (fəzõ), je faisais, etc., faisant.

It should not be heard in notre, propre, table, etc., which are pronounced notr, propr, ta:bl.

## The French Nasal Yowels.

$\S 76$. The vowels which we have considered so far are uttered with the soft palate pressed against the back part of the mouth, and the passage to the nasal cavity shut off. English pronunciation knows no other vowels than these, which, since their resonance is oral only, are called oral vowels. French, however,
possesses four vowels, namely, $\epsilon, \alpha, \supset$, $\propto$, which can be articulated with the soft palate lowered and the passage open to both the oral and nasal cavities (see the position of the soft palate in Diagram I. on p. 2). The phonetic symbols for these vowels are $\tilde{\epsilon}, \tilde{\text { a }}, \tilde{0}, \widetilde{\propto}$ (see Diagram V., p. 28). They are articulated in this way: the vocal chords vibrate, and the voice, or let us say the voiced current of expiration, finding the way open to the oral and the nasal cavities, divides and travels both ways, with the result that it receives a double, i.e., an oral and a nasal, resonance. The former, according to the shape which the oral resonance chamber receives through the respective position of the tongue (and lips), gives the voice that resonance which strikes our ear as $\epsilon, \alpha, \rho, \propto$, to which is added the nasal resonance produced by the other part of the voiced current of expiration which passes through the nose. Strictly speaking, therefore, these vowels should be called not nasal vowels, but nasal-oral vowels. But the former term is the one usually employed; it is shorter and sufficiently clear for all practical purposes.

That only four of the eleven French oral vowels are nasalised is mainly a question of convenience: they are made nasal with greater ease than the others, as the reader can easily find out by experiment on himself, and this question of greater ease is also connected with the fact that those four vowels have all a wide articulation. ${ }^{1}$

[^16]It follows from the above description that all that is required to change $\epsilon, a, \partial, \propto$ to $\tilde{\epsilon}, \tilde{a}, \widetilde{\imath}$, $\widetilde{\propto}$, and vice versa, Chan is to lower,or to raise the soft palate. That this process is neither difficult to perform nor difficult to teach will be shown later on. ${ }^{1}$

The nasal vowels occur short, long and half long; they are always short unless a sounded consonant follows, in which latter case they are long. Unstressed they are, as a rule, half long. Examples: grand, grande, grandeur are pronounced grã, grã:d, grã•dœ:r ; rond, ronde, rondelette $=$ rõ, rõ:d, rõ.d(ə)let.

## Ordinary Spelling of the Nasal Yowels.

$\S 77$. Nasal vowels occur as a rule only before " $m$," " n," not immediately followed by a vowel. In such position the " m " and " n " are mute, and merely indicate the nasality of the preceding vowel.
$\S 78$. The " $\tilde{\epsilon}$ " sound is represented by :-
(a) in, im, in fin (fẽ), impossible ( $\tilde{\epsilon} \cdot$ posi:bl).

(c) ien, yen, in bien (bjê), chrétien (kretjê), moyen (mwajẽ). N.B.-The ending -ience has " $\tilde{a}$," not " $\tilde{\epsilon}$, " audience (o•djã:s).
§ 79. The " $\tilde{\mathrm{a}}$ " sound is represented by :-
(a) an, am, in dans (d $\widetilde{\alpha})$, danse (d ư:s), français (frã.se), ample (ã:pl).
(b) en, em, in enfant ( $\widetilde{\alpha} \cdot f \tilde{\alpha})$, contente (k̃.tã:t), emporter ( $\widetilde{\alpha} \cdot p \not r t e$ ).
${ }^{1}$ It is fair to remark that for the nasal vowel the shape of the oral cavity is slightly different from that of the corresponding nasal vowel. Thus " $\widetilde{\alpha}$ " corresponds to an oral vowel intermediate between " $\alpha$ " and " $\rho$ ". However, this is a matter for the more advanced student of phonetics.
$\S 80$. The " $\tilde{0}$ " sound is represented by :-
on, om, in mon (mయ̃), conte (kõ:t), compte (kõ:t), compter (kõ•te).
§ 81. The " $\widetilde{\propto}$ " sound is represented by :-
un, um, in brun (brœั), un (œ), humble (œॅ:bl).
§ 82. Whenever $n(n), m n, m(m)$ are followed by a vowel, the nasality of the preceding vowel disappears and these consonants themselves are sounded. Examples: an ( $\tilde{\alpha}$ ), année (ane) ; condamner (kõdane) ; sain ( $\mathrm{s} \tilde{\mathrm{E}}$ ), saine ( $\mathrm{s} \in: \mathrm{n}$ ); bon (bæ̃), bonne (bon); fin (fẽ), fine (fi:n) ; ennemi (єnmi) ; innocent (inos̃̃), imminent (imiñ̃) ; un ( $\widetilde{œ})$, une ( $\mathrm{y}: \mathrm{n}$ ). Note especially the change in "in" and "un," as also the following exceptions to the above rule: pronounce ennui = ãnyi, ennoblir $=$ ãnobli:r, enivrer $=\tilde{\alpha} n i v r e$, emmener $=$ đ̈m( $ө$ )ne; but femme $=$ fam, solennel $=$ solancl.
$\S 83$. The words mon, ton, son, un, en, before a noun, and on before a verb beginning with a vowel or silent " h," are pronounced mõn, tõn, sõ, ©̃n, ãn, วัn. Examples: mon, ton, son, un, ami are pronounced (in Paris) $=$ mõnami, tõnami, s̃̃nami, õnami ; en Angleterre
 $a m i=m \check{~ b o n a m i, ~ n o t ~ b o ̃ n a m i . ~}$

The question of this liaison with regard to final " m " does not arise; nom, which is about the only word of any practical importance here, is always pronounced nว̃ : son nom est inconnu $=$ sõ nฮ̃ єt êkony.

## German Vowels.

VII.


$$
\left.\begin{array}{c}
\text { Saat } \\
\text { satt }
\end{array}\right\} \text { a }
$$

## The German Vowels.

§ 84. The following are the main points to be noted in the system of German vowels, as represented in Diagrams VII. and VIII.:-
(a) As in English the narrow vowels i, u, e, o occur only long, and the short vowels are all wide. There are only two vowels which are both short and long, namely, " $\epsilon$ " and " a " (see Diagram VIII.).
(b) There is no " $\epsilon$ " sound in German as wide as the English " $¥$ " in bat, bad, etc.
(c) There is in Hanoverian German only one " a " sound, and that is the front "a" (see, however, § $96 c$ ).
(d) There is no sound in German corresponding to the English " $\Delta$ " in but, much, etc.
(e) The German language has four vowels which are unknown in English, viz., y, у, ø, œ. The first, always long and spelt "üu," has the tongue-position of " i " and the narrow lip-rounding of "u". This " $u$," where it occurs short, has a wider articulation and is then represented by x , which sound thus combines the tongue-position " $I$ " and the lip-rounding of " U ".

The third of the above sounds, viz., " $\varnothing$," spelt "ö," combines the tongue-position of "e" with the lipposition of "o". It occurs only long.

The last, " œ," spelt " 0 ," has the tongue-position of " $\epsilon$ " and the lip-position of " $\rho$ ". It occurs only short. ${ }^{1}$
${ }^{1}$ In our German sound chart, intended for the classroom, we have omitted the sounds $\mathrm{I}, \mathrm{y}$, U for the following reasons:-
(1) To make the chart as simple as possible.
(2) Because the difference between " i " and " r ," " u " and " U " is not so marked in German as in English.
(3) Because in transcribed texts these three sounds are generally represented as short $i, y, u$, whereas the proper $i, y, u$ sounds always occur as $\mathrm{i}:, \mathrm{y}:, \mathrm{u}$ :, and that is quite a sufficient distinction for the classroom,

The identity of lip-position for the above vowels is indicated in Diagram V. by ~. These vowels are called mixed, because they have a mixed articulation, i.e., a combination of the articulation of the front vowels (their tongue-position) and of the back vowels (their lip-position). As regards the teaching of these vowels to beginners see p. 55.

## Diphthongs.

§ 85. There are three German diphthongs, viz. :-
ai (mein = main);
au (Haus = haus);
$\mathbf{0 i}^{1}$ (heute $=$ hoite, or more correctly hoyta).

## Some General Remarks on the Articulation and the Usual Spelling of the German Yowels.

## A. Articulation.

§ 86. The lip action (see $\$ 25$ ) is more pronounced in German than in English, but not so much as in French. A distinct rounding and pouting of the lips, however, is essential for the learning of the " y " and " $\varnothing$ " sounds (see § 123).
§ 87. The tongue-articulation is a little more tense and energetic than in English, especially for the narrow "i:" and "u:," i.e., the tongue-position for these vowels is slightly higher and the vowels therefore more narrow than in English. The same applies to "I" and "U".
${ }^{1}$ The Hanoverian pronunciation of heute, etc., is hœeitə (or more correctly, hœytə). Those English readers who pronounce boy $=$ bæi instead of the usual boi-there may be some--may adopt the Hanoverian pronunciation, The others should keep to " i ," or better " oy ":

On the whole there is this important similarity between English and German articulation, that the same relation between the quantity and quality of vowels exists in both languages, i.e., in vowels of the same class the relatively more narrow one is long, the relatively wider one is short. As in English, in changing from eel to $i l l$, from ale to ell, from pool to pull, from note to not, the tongue assumes quite naturally a wider position, so also in German in changing from bieten to bitten, from beten to betten, from Mut to Mutter, and from Rose to Ross. Provided the teacher watches that the "I" and " $u$ " and " $\rho$ " are not made too wide, and that the " $x$ " sound is absolutely avoided, both for " $\epsilon$ " and especially for "a," the English-speaking pupil may follow, as he instinctively will, the English tendency in the articulation of short German vowels. Note the striking difference in this respect between the two Teutonic languages on the one hand and French on the other (see $\S \$ 27,53^{2}$ ).
§ 88. There is no off-glide in German; it occurs neither before " $r$ " (see § 29b) nor in the pronunciation of the long vowels $i, u, e, o$. The German vowel has always a uniform sound: geben is ge:bən (not ge:ibən), Rose is ro:z (not ro:uz), etc., dir is di:r (not di: $\AA$ ), nur is nu:r (not nu:s), Moor is mo:r (not mo: $\stackrel{\text { r }}{ }$ ), mehr and Meer are me:r (not mé or me:s).

It should also be noted in this connection:-
(a) That there are no coronal vowels (see $\S 29 a$ ) in German.
(b) That the "r" has generally no more influence upon the articulation of a preceding vowel than any other consonant: wird is virt (not va:t), Erde is erdo (not $\Lambda: d ə$ ), etc. Nor does it influence the quantity of
the preceding vowel: Garten is gart $(\partial) \mathrm{n}$, geworden is gəvord(ə)n, (not ga:t(ə)n) ; (see, however, § 206).
§ 89. The only vowel which suffers obscuration, i.e., changes to " $\partial$ " (see § 105) is unaccented "e" of the ordinary spelling : Gabe = ga:bə, betrogen = bətro:gən, die Zimmer des Hauses = di tsimər dəs hauzəs. Every other vowel keeps its distinct sound: geh $z u$ Bett is therefore = ge: tsu bet, not ge: tsə bet; ein direkter $Z u g=$ ain direktər tsu:g, and not $=$ ain dərektər tsu:g.
§ 90. Length.-Every accented (stressed) vowel is long when in the stem of the respective syllables it is followed by a single consonant: Grab (gra:p), Weg, Wegs (ve:g, ve:gs), Gretchen (gre:tchən), Mut (mu:t), Rad (ra:t). Certain monosyllables, especially adverbs and prepositions, form exceptions, like mit, in, bis, von, also hat. A following " $r$ " has no lengthening influence (see § 89).
$N . B$.-The vowel before ss=intervocalic $\tilde{B}$ is always

§ 91. No shortening of long vowels takes place before certain consonants (see § 28). The vowels in Riese and Miete, Saal and Saat, Rose and rot, Blume and Blut are of the same length.

## B. Spelling and Pronunciation.

$\S 92$. The " $\mathbf{i}$ " sound occurs only long, and is represented by :-
(a) ie, in viel (fi:l), bieten (bi:t(ə)n. This is the usual spelling.
(b) ih, in $i h n$ (i:n).
(c) i, in dir (di:r), Ruine (rui:nə).
§ 93. The " I " sound ( $=\check{\mathrm{I}}$ ) is always spelt:-
i, in mit, Himmel, wird, in, etc.
Note that the phonetic letter " i ," without the sign of length, is practically sufficient to indicate this $r$-sound (see $\S 85$ ).
$\S 94$. The "e" sound occurs, as a rule, only long, and is spelt:-
(a) e, in reden (re:d(ə)n), Segen (ze:gən).
(b) ee, in Seele (ze:lə), Meer (me:r).
(c) eh, in Ehre (e:rə), fehlen (fe:l(ə)n).
$\S 95$. The " $\epsilon$ " sound occurs short and long. It is spelt:-
(a) ä, long in wäre (vє:rə), Väter (f $\epsilon$ :tər); short in Wälder (v $\epsilon$ ldər), kälter (kєltər).
(b) e, when short, i.e., followed by two consonants belonging to the stem of the word, in Bett (bet), Held (helt).
N.B.-The " $\epsilon$ " if spelt " $a$ " is, as a rule, slightly wider than when spelt "e"; cf. Wälle and Felle, wählen and Wellen, which have not quite the same " $\epsilon$ " sound. The difference, however, is slight-the "ä" is never as wide as the English "æ"-and for practical purposes requires no special phonetic symbol. The difference in the quality of " $\epsilon$ ", in wählen and Wellen seems more pronounced than it is owing to the difference in the quantity.
$\S 96$. The " $a$ " sound occurs long and short, and is spelt:-
(a) a, long in aber (a:bər), Rad (ra:t), Rat (ra:t), Gras (gra:s) ; short in Fass (fas), Hand (hant), kann (kan), Fall (fal).

Strictly avoid the English "æ" sound here, as, of course, also the " 0 " in Fall, alt, bald, Wald, Ball, etc.
(b) aa, in Saat (za:t), Saame (za:mə).
(c) ah, in Kahn (ka:n), Hahn (ha:n).

Note the long " a " in the verbs ass, frass, sass.
N.B.-As a rule, Hanoverian German knows only one " a " sound, viz., the front " a ," though " a " is by no means unknown, as it occurs quite naturally before back vowels and consonants, as in the diphthong "au," in ach, Sack. This " a," however, 'where it occurs in Hanoverian pronunciation has an intermediate articulation between " a " and the (long) English back " $a$ ". In other parts of North Germany and in Middle Germany the back " $\alpha$," especially when long, is the common sound.
§ 97. The " o " sound occurs only short, and is always spelt :-
o, followed by two consonants: Wort (vort), Dorf (dorf), Sonne (zənə), sollen (zol(ə)n), Topf (topf).
N.B.-The German " $\rho$ " is never as wide as the English overwide " 0 " (of not, bottle, etc.) is in the pronunciation of many people.
§ 98. The " o" sound occurs, as a rule, only long. It is spelt :-
(a) $\mathbf{0}$, in $r o t$ (ro:t), Lob (lo:p), tot, Tod (to:t).
(b) 00, in Boot (bo:t), Moos (mo:s).
(c) oh, in Sohn (zo:n), ohne (o:nə).
N.B.-Note the long " o :"
(a) often before $\mathbf{s s}=\tilde{\tilde{B}}$, as in gross (gro:s), Stoss, bloss, Schoss.
(b) in Mond, Obst (o:pst), Ostern, hoch, Osten.
\& 99. The "u" sound ( $\breve{\mathrm{u}}$ ) is always spelt :-
$\mathbf{u}$, in unter (Unter), Mutter, um, wurde.
Note that the phonetic letter " u ," without the sign of length, is practically sufficient to indicate this U -sound (see $\S 68$ ).
$\S 100$. The "u"sound occurs, as a rule, only long. It is spelt:-
(a) $\mathbf{u}$, in Bruder (bru:dər), rufen (ru:fən), gut (gu:t).
(b) uh, in $U h r$ (u:r).
N.B.-Note the long " u : "-
(a) often before $\mathbf{s s}=\tilde{\mathfrak{B}}$, in Fuss (fu:s), Gruss (gru:s).
(b) in Husten, Kuchen, suchen, Buche, Buch.
§ 101. The " $y$ " sound occurs, as a rule, only long. It is spelt :-
(a) ü, in müde (my:də), über (y:bər), Hïte (hy:tə).
(b) uh, in Mühle (my:lə), kühn (ky:n).
(c) $\mathbf{y}$, in Greek words : cynisch (tsy:nish), hyper (hy:pər).

Note the long " y : " in silss, Wiuste.
§ 102. The " $\mathbf{y}$ " sound (y̆) occurs, as a rule, only short. It is spelt:-
(a) $\mathbf{u}$, in Hütte (hytə), Nïsse.
(b) $\mathbf{y}$, in Greek words : in Hymne (hymnə).
(c) in the diphthong "əу" in heute, Mäuse (həvtə, moyza).

Note that the phonetic letter " $y$," without the sign of length practically suffices to indicate this Y -sound (see § 85).
$\S$ 103. The " $\varnothing$ " sound occurs, as a rule, only long. It is spelt:-
(a) ö, in böse (bø:zə), töten (ta:t(ə)n), Göthe (gø:tə).
(b) öh, in Söhne (zø:nə), Höhle (hø:lə).
$\S 104$. The " $\propto$ " sound $(\breve{\mathscr{C}})$ occurs only short. It is spelt:-
ö, in Götter (gœtər), Dörfer (dœerfər), Mörder, Röcke.
§ 105. The " $\partial$ " sound occurs only short, and is only represented by unstressed "e," as in Geduld (gədult),
vergessen (fərges(e)n), (more carefully and distinctly pronounced ferges $(\epsilon) \mathrm{n})$, Blume (blu:mə). This " ${ }^{\text {" }}$ should be pronounced very lightly, especially where it is final, as in Blume, Liebe, etc. It is usually dropped in the suffix en, as in reden, essen, geben, etc.

## Diphthongs.

§ 106. The " ai " diphthong is spelt :-
(a) ei, in mein, weil, seit, etc. This is the usual spelling.
(b) ai, in Kaiser, Main, Mai, Hain.
§ 107. The " au " diphthong is spelt :-
au, in Haus, Bauer, etc.
§ 108. The " oi " (more correctly " oy") diphthong is spelt:-
(a) eu, in heute, Freude, Leute, etc.
(b) äu, in Häuser, Häute, häufig, etc.

## Hints how to Teach the Yowels Phonetically.

§ 109. We would first of all strongly recommend the principle that in the teaching of pronunciation, as well as of any other branch of language, the teacher should always use as much as possible the personal observation of the children. The opportunity for this presents itself almost at every step, and can be taken advantage of in various ways as we shall have occasion to point out.

It stands to reason that the chief qualifications requisite on the part of the teacher for the method of teaching pronunciation which we are advocating are that he should have a clear conception of the English sounds, their shades of difference and mode of production, and in addition to this, if he is a teacher of modern languages,
the same knowledge of the French and German sounds. He must have the necessary power over his tongue, lips (in French also the soft palate) to articulate clearly and accurately every vowel, to reproduce exactly the wrong sound used by the pupil and contrast it with the correct one, and be able to give the necessary directions as to the proper use of the respective speech organs. It will also have become obvious to the reader that, in classroom teaching, the proper observation and statement of the differences among the various sounds will be greatly facilitated by the help of phonetic symbols and a sound chart representing them. We doubt if success is possible without these aids.

The following remarks and hints are the outcome of personal experience in teaching the vowels phonetically, and will, we trust, be found helpful.
§ 110. According to the principal of Apperception, i.e., of proceeding from the known to the unknown, the study of the French and German sounds should start from that of the English ones. The course of instruction suggested in the following paragraphs, by dealing in the first place with the English sounds, forms, therefore, also the basis for the French and German ones. Noteworthy divergencies will be treated in separate chapters.
§ 111. The vowels, whether English, French or German, should first be studied by themselves, not in words. ${ }^{1}$ If studied in words the surrounding consonants detract from the attention to be given to the purity of the sounds in question. The triangular

[^17]system of the vowels with the mode of their articulation should take shape and form before the children's eyes; in fact the latter should help to build it up. The sound chart should therefore not be hung up at the initial stage.
§ 112. If the teacher wishes to make a few introductory remarks about the speech organs, he can easily do so with the help of a cast representing them, for instance, F. Ramnés Kopfmodell No. 1, Hamburg, St. Pauli, or of an enlargement of the diagram on p. 2. This interests the children and takes up very little time. Or the teacher may prefer to begin with the exercise in the next paragraph and give these explanations only after the "a" sound has been treated.
$\$ 113$. Draw on the blackboard the interior of the mouth (see diagram on p .2 ), then pronounce the letter " a " ${ }^{1}$ and ask the children what sound it is, and what you are doing in pronouncing it (the position of the tongue and shape of the mouth and the production of the sound itself to be elicited by questioning the class). Then put the "a" in its place and ask where the sound occurs in English, and write a suitable word opposite the letter.
N.B.-All the vowels in this practice should be made sufficiently long to enable both teacher and pupils to catch the sounds properly. For the sake of a clearer understanding, based on contrast, the teacher will not infrequently find it necessary to exaggerate the articu-

[^18]but a few suggestions of a general character may not appear superfluous here.
(1) Most districts have certain peculiarities of pronunciation which are purely local and should be corrected. If this correction merely means substituting one known sound (the proper one) for another sound (the improper one), as " o " for " $\rho$," " $\rho$ " for " $\alpha$," " $\epsilon$ " for " $e$," etc., the matter is very simple; but it is less so where the proper sound is not known. So in many parts of Scotland the frontal "a" and "æ" sounds are quite unknown and are replaced by an " $\alpha$ " sound which verges upon a very wide " $\rho$," so that back, mine are pronounced bokk (or even bok), main (or even moin). The " $\alpha$ " (or " $\quad$ ") here should be changed to the " $a$ " of what we may call the standard Scotch pronunciation. But how is the pupil to produce this "a," which is quite unknown to him? If the proper sound pronounced by the teacher cannot be properly imitated by the pupil, the latter should be told to pronounce ask so to speak near the teeth, the tongue lying flat in the mouth and pressing against the lower row of teeth, when the proper sound will be produced quite naturally. In order to make the learner quite conscious of the difference between " $a$ " and " $\alpha$ " he should pronounce them alternately, putting for the first the tongue forward and drawing it back for the second.
(2) We have met with several students who could not pronounce a long "u" without beginning it with a short "i," thus invariably changing booty to beauty. In order to avoid this pronunciation the tip of the tongue has to be prevented from moving up to the i-position, which is easily affected by keeping it down with a lead pencil whilst pronouncing " $u$ : ". If this

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is repeated the will alone suffices for the proper control of the tongue.

These examples will suffice to show how a faulty pronunciation can be corrected by rectifying the articulation of the respective speech organs. Whenever the teacher meets with a mispronunciation which imitation alone cannot cure, he should always ask himself by what articulation the wrong sound is produced, and what articulation the correct one requires, and then devise the proper means to produce it.

## French and German.

The vowels of the two languages are so much alike, that, except for the French nasal vowels, no separate treatment is necessary here.
§ 119 The " a " sound.-A knowledge of this sound is necessary for French, where it is by far more common than the back " $\alpha$," and at least desirable for German, though, as we have seen ( $\$ 96$ ), the back " $a$," especially when long, is very common. Where the sound is unknown, as in the South of England and in many parts of the North of Scotland, it should be acquired as indicated in § 118 (1). Show the difference of the two " a " sounds in such expressions as il est lda-bas ( $=\mathrm{il} \in \mathrm{la} \mathrm{ba}$ ); il ne l'a pas (=il nə la pa), or il n'y va pas (=il ni va pa). The English back " $\alpha$ " as it is so often heard in tu as, il $a$, is very objectionable to the French ear. On the other hand the back- $\alpha$ in pas, passer, etc., should never become the " 0 " in paw.

The short " a " in patte, canne, tappe and famm, bat, $\mathfrak{f} \mathfrak{\beta}$, fanmo, etc., must never be allowed to become or verge upon " $æ$ ". The tendency towards this " $æ$ " is often very strong, on the part of the southern English-
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The short " a " in patte, canne, tappe and faum, 向at, $\mathfrak{d}$ 追, fant, etc., must never be allowed to become or verge upon " $æ$ ". The tendency towards this " $¥$ " is often very strong, on the part of the southern English-
man, but it must be resisted, otherwise it entirely spoils an otherwise good pronunciation. This had best be done by opening the mouth sufficiently wide, whilst pronouncing "a". It is not an easy task to steer this " $a$ " clearly between the Charybdis of " $\alpha$ " and the Scylla of "æ," yet it has to be done and will be done with the exercise of proper care and perseverance.

Where the " a " is unstressed as in camaraderiè, bagatelle, parapluie, canaille, baraub̧, barin, Barometer, jemand, the English tendency goes towards an obscuration which may be " $¥$," " $\Delta$ " or " $ә$ ". The " $a$ " in all such cases -and they are very numerous in French, less so in German-is as clear as it is in il $a$.
$\S 120$. The " $\epsilon$ " sound is of some difficulty only to many Scotch children, who show a strong preference for the narrow " e " sound, which they use for instance in fair, there, stairs, Mary, etc. The pupil who cannot distinguish between the " e" in rein and in there should open his mouth pretty wide and keep the tongue down and pronounce air with a very long vowel. It will then be found that the right sound will be forthcoming quite naturally. He may try hard to pronounce the narrow "e" (as in rein), as he very likely will, but the sound will be " $\epsilon$ " all the same, provided the mouth is kept open and the tongue sufficiently low. After the sound has properly penetrated into his ear and he feels that he has mastered it, which will be more easily effected if, without interruption, he changes from " $\epsilon$ " to " e " and vice versa, i.e., pronouncing $\epsilon:, \mathrm{e}:, \mathrm{\epsilon}:, \mathrm{e}:, \mathrm{\epsilon}:$, e: very distinctly, he will be able to produce it with the normal opening of the lips.
N.B.-Reference to the bleating of sheep may be
made here, provided the necessary distinction is made between the three varieties of b $\epsilon$ :, be:, bœ::

We remind the teacher once more that the French long " $\epsilon$," as in rêve, même, etc., is just a little wider than the short " $\epsilon$ " in mettre, belle, il chantait, complet, etc., and that the German " $\epsilon$ " also is slightly wider when spelt " a ," than when it is spelt "e," cf. ₹elier and Waitor, Geld and fält.
$\S 121$. The e, i, o, u sounds offer no difficulty besides that of their characteristically French and German articulation, for which see $\$ \$$ 60-64, 84-88. However, the off-glides (see $\$ \$ 29(b)$ and 30), where they are used, must be carefully avoided, and the teacher should see that the vowels in brise (not like breeze), dire (not like dear), pore (not like pour), rose (not like rose), foule (not like fool), pour (not like poor); and the German Mëhl (not like mail), mehr (not like mare), viel (not like feel), vier (not like fear), Rose, Moor (not like rose and more), Ruhm, Flur (not like room and poor), are made absolutely uniform. Proper demonstrations and injunctions will probably suffice in most cases, but where the necessary uniform articulation is found to be very difficult, it had best be acquired in connection with the vowels " $y$ " and " 9 " (see § 123), which, being unknown in English, are more easily produced without the off-glides than the other vowels. After the necessary tension of the tongue for uniform vowel articulation has once been acquired in a few cases, the pupil will be able to adopt it in others.
§ 122. The " $\theta$ " sound, always represented in the ordinary spelling by "e," as has already been mentioned, is the only obscure or indefinite vowel used in French and German ; all the others have their distinct
articulation, as, for instance, all the unaccented vowels in canaille (=kana:j, not kəna:j or kæna:j), in étudiant (= etydjã̃, and not єtudj$\tilde{a})$, in favoriser, camarade, etc. Both the German and French " $\partial$ " have practically the same articulation: they have slight lip-rounding and verge upon " $\varnothing$ ". This sound should be treated very lightly, and it is altogether un-French to hear it in cheval, petit, venir, empereur, que ne le dit-il pas! pronounced with too much force, though the articulation be correct. This " $\partial$ " often disappears entirely, as in empereur, petit, etc., but must be retained in quelque chose, quelques uns (see transcribed texts). A similar unpleasant impression is also produced upon the German ear by reading, for instance, in the line In einem kiihlen Grunde, every "e" phonetically as a clear " $e$ ". The vowel sound here is nothing but a kind of echo, which may quite disappear in kühlen (ky:ln), finden (findn), Garten (gartn), etc. And even where it is to be heard as in Grunde, Liebe, Mutter, Mutterliebe, it should never obtrude itself, and in natural reading be nothing but a kind of short Ausklingen of the preceding syllable. A good French and German pronunciation is not possible without proper treatment of this " $\partial$ ". ${ }^{1}$

The preference for the narrow "e," of which mention has been made in § 120, leads a great many Scotch pupils to pronounce $l e, m e, r e-$, etc., with the narrow "e" sound, thus making no distinction between le livre and les livres, and pronouncing que à la Tartarin =

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qué (ke). This is one of those little flaws which entirely spoil an otherwise good pronunciation, and unless they are dealt with firmly at the beginning, it is difficuit, indeed almost impossible, to eradicate them later.
§ 123. The real difficulty of the teacher begins with the " $y$," "ø" and "œ" sounds.
(a) y. It has already been mentioned that the "y-sound" (mur, uffer) combines the tongue-position of " i " and the close lip-rounding of " u ". All the pupil has to do therefore is to pronounce a prolonged " i " and round his lips, without interrupting the " i " sound. The rounding of the lips should be sufficiently energetic, so as to leave an opening just wide enough to admit the end of an ordinary pencil, i.e., the liprounding required for whistling. The teacher who tries this experiment will frequently find that the " i " sound of the pupil, when the rounding of the lips takes place, is changed to " $u$," which means that the latter no longer says " i ," but has changed the position of his tongue to " $u$ ". Though we cannot control the action of the tongue in the same way as that of the lips, yet the pupil will soon learn to perform the experiment satisfactorily, provided the teacher gives the necessary demonstrations and injunctions as to strictly keeping the " i " sound throughout the performance.
The experiment may also be tried, and perhaps more successfully from the other end, i.e., by rounding the lips first, keeping them tightly round and then pronouncing a long " i ," when the pupil, to his astonishment no doubt, will find he actually cannot produce the "i" sound, however hard he may try.
(b) ø. To pronounce "ø" (Meuse, fin $\mathfrak{y}$ ) make the
pupils say a continuous " $e$," and, without interrupting the sound, round his lips tightly as for " o," i.e., so as to admit the end of the little finger; or make the pupil round his lips first and then, whilst keeping them tightly round, say " e: ". ${ }^{1}$
(c) œ. Here the " $\epsilon$ " has to be sounded whilst the lips are rounded as for " $\rho$ ". Scotch children with their tendency of using " $e$ " for " $\epsilon$ " (see § 120) have to be carefully watched, as, owing to that tendency, they will constantly substitute " $\varnothing$ " for " $\propto "$.

The difference between " $\propto$ " and " $\propto$ " ( $c f$., menteur $=$ mãtoe:r, menteuse $=$ mãta:z) must be insisted upon; it is as important as that between " $e$ " and " $\epsilon$," "o" and " $\rho$ ".

That the " œ" sound occurs only short in German (Götter, Dörfer, etc.) has already been mentioned.

The German " y" (= $\mathbf{y}$ ) sound (Hïtte, müsste, etc.) will occur quite naturally instead of " $y$," in a short syllable.
N.B.-Do not confound the "œ " sound with the " $\Lambda$ " of the English vowel in burn, but, which is wider, verging upon " $\alpha$ ". Though the vowels in beurre and burn, in Götter, and gutter show similarity, yet they are not the same.
§ 124. What the teacher has to watch in particular in the above three vowels is the proper rounding of the lips, especially for the " $y$ " and also for the " $\because$ ". Unless this is attended to there is no hope of a satisfactory pronunciation. The lip action in English articulation is

[^20]so indifferent that it requires considerable perseverance on the part of the teacher to overcome it in his pupils, and he will find that the injunction "round your lips" will have to be repeated for a considerable length of time. The proper energetic articulation in these sounds, both of the tongue and of the lips, must be insisted upon from the beginning, otherwise these sounds will never have that clearness which is required for a good French and German pronunciation.
$\S 125$. After the articulation of the single vowels has been mastered, they should be practised in the following groups : a, є, e, i; i, y, u; y, ø, œ; e, ø, о; є, œ, ๖; $\mathrm{u}, \mathrm{o}, \mathrm{o}, \mathrm{a}$, both forward and backward, the teacher always insisting upon neat and energetic articulation. This kind of exercise is as necessary for a correct pronunciation as finger exercises are for piano playing. Chorus speaking is recommended, but the teacher himself must decide when to resort to it. It is also highly desirable that in these exercises, when the teacher points to the symbols on the blackboard (or later, on the sound chart) and asks for the corresponding sound, or vice versa, the children should watch and correct each other's pronunciation and answers.
§ 126. In the German diphthongs ai (spelt ei,ai), au (au), oi (әy) or œi (œy) (eu, au), the first element has the stress, but is as short as the second. Any drawl must be absolutely avoided. In "ai " (mein, etc.) the back " a," which in the North of Scotland often verges upon " $\rho$," in mine, thine, etc., must be avoided, as also the " $æ$ " sound in "au" ( = æau) (Haus, Baum, etc.), which one so frequently hears in the South. These three diphthongs, especially the "ai" and "au," are not so easy as is generally supposed; they are often
spoiled by the two facts just mentioned, as also by too heavy a kind of articulation. The sounds should be clearer and lighter than they are, as a rule, in English.

## The French Nasal Yowels.

§ 127. If the teacher pronounces the French son (sõ), and asks his pupils to repeat it after him, what will happen is this: some, who do not catch the nasal resonance, as happens if the " $\tilde{0}$ " is made very short, will pronounce "so" pure and simple; the others will say "song" (the English song), and to this, in spite of the efforts of the teacher, the majority will stick for a long time, and a good many, as daily observations show, until the end of their days. The mere imitation method fails here conspicuously, or succeeds only after a great deal of trouble.

We have already seen that in order to change, for instance, " $\rho$ " to " $\widetilde{0}$," all that is required is to continue the " $\rho$ " and lower at the same time the soft palate, which is not so difficult as it may appear at first. The teacher begins with " $\tilde{\alpha}$," making it sufficiently long and sonorous to show the oral resonance distinctly. ${ }^{1}$ The pupil, in trying to imitate the sound, will, as a rule, pronounce -ang, which means that he not only lowers the soft palate, but at the same time raises the tongue so that both meet and thus shut off the passage through the mouth, which, however, as we have seen on p. 38, must be left open for the oral resonance of the vowel. In order to avoid this the tongue has to be kept low. A mere injunction, accompanied by demon-

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## TEACHING OF FRENCH NASAL VOWELS

strations on the part of the teacher, not to say "-ang" but " $\tilde{\alpha}$," i.e., to speak the " $\alpha$ " through the nose, will suffice in some cases, but the majority will probably require other help. In pronouncing " $\tilde{a}$ " correctly, i.e., with both the soft palate and the tongue low, we may press our nostrils together without altering the sound. But if we pronounce "-ang," and press the nostrils together, every sound ceases, since the "ng" position closes the exit through the mouth, whilst our fingers do the same for the nose. All the learner, therefore, has to do to produce " $\tilde{\alpha}$ " is to say " $\alpha$ " through the nose, and press at the same time his nostrils together. This makes the vexatious "ng" sound quite impossible, so that, if a nasal sound is forthcoming, it is sure to be a pure nasal vowel. If, however, the sound produced is oral " $\alpha$," or if no sound at all is forthcoming, the teacher knows that the effort to pronounce " $\alpha$ " through the nose was not sufficiently strong, which is easily corrected by moral influence.

A good many pupils, after they have mastered the correct nasality of the " $\tilde{a}$," show a strong tendency to change " $\tilde{\alpha}$ " to " $\tilde{\sim}$ ". This must not be tolerated, because the pronunciation of Continent, Champs Elysées as kõtinõ, chõzelize, has a touch of vulgarity. ${ }^{1}$
§ 128. The " $\tilde{\text { " " sound }}$ presents now no longer any difficulty; it is easier than " $\tilde{\text { a }}$," and might be preferred to " $\tilde{\alpha}$ " as the subject of the above experiments, if it were not that in that case the inclination to use later on " $\tilde{\sim}$ " instead of " $\tilde{\alpha}$ " would be strengthened.

[^22]§ 129. $\tilde{\epsilon}$, œ. There is now no need to give directions as to the treatment of these vowels; we would, however, recommend the teacher to begin these two, which are somewhat difficult, only after " $\tilde{\alpha}$ " and "ə̃" have been completely mastered. To practise them together in one lesson is sure to produce confusion, and to lead to failure and waste of time.
$\$ 130$. It is necessary that in practising the nasal vowels they should be sustained sufficiently long; it is only thus that the children acquire the necessary power over the activity of their soft palate.
§ 131. The French nasal vowels, if they are properly pronounced, add softness and sonority to French pronunciation, but if their articulation is too harsh or lacks the necessary purity (i.e., if " $\tilde{\epsilon}$ " becomes " $\tilde{\alpha}$ " or -ang, faim $=$ fã, forng; if " $\tilde{\alpha}$ " becomes " $\tilde{\text { " }}$ or ong and " $\widetilde{\text { e" }}$ becomes " $\tilde{\text { " " or something else), they prove a regular }}$ torture to the unfortunate Frenchman who has to listen to them.

## Consonants.

§ 132. (a) We have seen (§ 35) that in a vowel there is no other sound but the voice, i.e., the sound produced in the glottis by the vibration of the vocal chords. In a consonant this is different. The exclamations " $p s t$," "brr," consist of sounds which are produced (articulated) in different places above the vocal chords, i.e., in one of the superglottal passages, by the lips in " $b$ " and " $p$," and somewhere by the tongue in " $s$," " $t$ " and " $r$ ". This difference in the place of articulation naturally leads to different divisions in the sounds.
(b) In pronouncing the " $b$ " and " v " in $e b b$ and love, it will be noticed that the sound of the first is momentary, whereas the latter can be prolonged, i.e., can be made continuant, and this difference in the mode of articulation points to two different classes of consonants.
(c) Again in pronouncing the " f " in if and the " v " in love, it will be found that on pressing the palms of the hands to the ears, the " v " is accompanied by the murmur in the head, caused by the vibration of the vocal chords, which is absent in sounding the " f ". This fact points to a further division of consonants. ${ }^{1}$

[^23]In the accompanying diagram, No. X., the place of articulation is indicated in the vertical, the mode of articulation in the horizontal columns. The voiced consonants are underlined.
X. English Consonants.

|  |  |  |  |  | ${ }^{\text {ngue an }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ${ }^{\text {Gum }}$ |  |  | ate |  |
|  | Teeth. | Lip. | Teeth. | Fore. | After. | Front. | Back. | Glottis. |
| Fricative | f, v | ${ }_{\text {M }}$, w | ө, $\underline{8}$ | s, Z, ${ }_{\text {, I }}$ | f, ㅍ | j |  | h |
| Plosive |  | p, b |  | t, d |  |  | k, g |  |
| Nasal |  | $\underline{\mathrm{m}}$ |  | $\underline{\sim}$ |  |  | $\underline{\square}$ |  |
| Lateral |  |  |  | $\underline{1}$ |  |  |  |  |
| Vibration of the Tip of the Tongue. |  |  |  | $\underline{\text { r }}$ |  |  |  |  |

## English.

## Fricative Consonants.

§ 133. Place of Articulation: Lip and Teeth (see Diagram 1, Table B).

The consonant sounds which admit of prolongation, such as $v, f, s, z, s h$, are called fricative (or narrow)



S Z
5


$\theta$ ©
4

$\int 3$
6


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consonants, because in uttering them a narrow passage is formed somewhere, through which the current of expiration is forced, thereby causing friction and vibration of the air in that passage, which reaches our ear as a blowing or hissing kind of sound. Thus in pronouncing " $f$ " and " v " we slightly press the underlip against the upper teeth, leaving sufficient space for the air to squeeze through (see Diagram 1, Table B). The only difference between " $f$ " and " $v$ " is that in " $v$ " the blowing sound is accompanied by the voice of the vibrating chords, which is absent in " $f$ ". We call, therefore, " $v$ " a yoiced, and " $f$ " a yoiceless labiodental fricative. We may also express the difference between these two consonants thus: $\mathrm{v}=\mathrm{f}+$ voice ; $\mathrm{f}=\mathrm{v}$ - voice.

With some practice the student will be able to close and open the vocal chords at will, i.e., to make them vibrate or keep them silent, and thus to pronounce with a continuous expiration-fvfvfv.
§ 134. Lip and Lip (this articulation is not represented in Table B). If both lips form a narrow passage, accompanied by the " $u$ " position of the tongue and the voice of the vocal chords, we have the fricative "w," as in were, was, wise, etc., phonetically woz, waiz. The same articulation without the vibration of the vocal chords produces the voiceless " wh," in why, whale $=$ mai, me:il, which is phonetically represented by " $M$," i.e., a reversed " $w$ ". The articulation of these two sounds is a double one, as has just been stated: narrow passage formed by the lips and "u" position of the tongue. The real consonant sound is produced .by the lips only, the tongue in its " $u$ " position not rising high enough to form with the palate
the narrow passage necessary to produce that friction of air which characterises the fricative consonants. This tongue-articulation is therefore not indicated in Diagram X., nor on our sound charts. It may, however, be added that in northern English, and especially in Scotch, in the pronunciation of "wh" ( $M$ ) the back of the tongue does rise frequently sufficiently high to. produce friction, which gives to this sound a guttural kind of timbre. The south, as a rule, does not know this " M " (see p. 154).
§ 135. Tongue and Teeth.-Diagram 2, Table B, shows us the tongue-position of the "th". sound in thin, thought, etc. $(=\theta$ in, $\theta o: t)$, represented by the phonetic symbol $\theta$. If the hissing sound of this " $\theta$ " is accompanied by the vibration of the vocal chords, we have the "th" sound in then, though, etc. ( $\delta \in \mathrm{n}, \delta \mathrm{\delta o}$ :), represented by " $\delta$ ". We therefore call " $\theta$ " a voiceless and " $\delta$ " a voiced linguo-dental fricative.
N.B.-In this and the next three places of articulation the activity of the tongue is always understood, and the expression linguo is therefore omitted.

The postdental position of the tongue of Diagram 2 is the normal articulation of the "th" sounds, but there is also an interdental position which is not unfrequently met with. The difference in the sound of the two articulations is, however, insignificant.
§ 136. Tongue and Fore-gum (Diagram 3).-This articulation gives the voiceless " $s$ " sound (so, house, stone, etc. $=$ so:, haus, sto:n), and the voiced " $z$ " sound (zeal, rose, is, was, houses, tales, wins, beds, etc. = zi:l, ro:z, iz, woz, hauzəz, te:ilz, winz, b $\in d z$ ). In the ordinary spelling both the voiceless " $s$ " and the voiced " $z$ " are generally represented by " $s$ ". It is not our place here to enter into the details of this question, and it
may suffice to state that as a general rule the letter "s" in the usual spelling represents the voiceless " $s$ " sound, except where it occurs between two sounded vowels, and, as the nominal and verbal inflection, after a voiced consonant. Compare: bits (bits) and beds (bedz) ; seeks (si:ks) and feels (fi:lz).

The only difference between " $s$ " and " $z$ "-to further illustrate the important principle explained in § 132 (b)-is that " $s$ " consists only of the hissing sound produced by the current of expiration squeezing through the narrow passage formed between tongue and fore-gum, whereas in the " $z$ " this hissing sound is accompanied by the voice of the vibrating vocal chords, that is, " $z$ " is $=s+$ voice, and $s=$ z - voice.

The " $x$ " sound of Diagram X. will be discussed in connection with the " $r$ " sound in § 149.
$\S 137$. Tongue and After-gum (Diagram 4).—This articulation gives the voiceless sound " $\int$," represented in the usual spelling by "sh " (shell, shawl, phonetically $\left.=\int \epsilon \mathrm{l}, \int \mathrm{\rho}: \mathrm{l}\right)$, or by "ti," "si" (nation, possession $=$ ne:ij^n, pכze $\left.\int \wedge n\right)$. With the voice added we have the voiced sound 3 in azure, vision, phonetically $=e: i \bar{\jmath} u_{\Lambda}$, vī$\langle n$.

The " $\int$ " and " 3 " sounds are of frequent occurrence, combining the first with " $t$ " and the second with " $d$," which combinations are in the ordinary spelling represented by "ch," and "j,"" "g," respectively. Examples: church, chin; jolly, gin; phonetically $=\mathrm{t} \int_{\Lambda}^{\mathrm{r}}: \mathrm{t} \int$, tfin; d, 3 oli, d3in.

The sounds $\mathrm{s}, \mathrm{z}, \mathrm{x}, \int, 3$, which we call Gum (Fore-, After-) fricatives, are also called alveolar fricatives, from alveolus $=\mathrm{a}$ small hollow.
§ 138. Tongue and Front-Palate (Diagram 5).This articulation produces in English only the voiced sound " j " in you, yes, phonetically $=\mathrm{ju}$ :, $\mathrm{j} \in \mathrm{s}$, and is also frequently heard in hideous, million, etc. (phonetically $=$ hidjıs, miljın). It forms the off-glide of the southern long "i" sound, as in eel, sea $=\mathrm{i}: \mathrm{jl}$, si:j, and occurs frequently in connection with the long " $u$ " sound, as in few, due, etc., phonetically $=$ fju:, dju:.

This " j " sound is usually called yod, the German name for the letter " j ," which in German is pronounced like English " y " in yes.

The voiceless front-palate fricative, represented by ¢̧, occurs in the Scotch licht; in English it is sometimes heard in he, hue, pronounced like "hçi," "hçu ".
§ 139. Tongue and Back-Palate (Diagram 6).-The sounds produced by this articulation do not occur in English. The voiceless fricative of this articulation, represented by " $\chi$," occurs in the Scotch loch.
|Both the " c " and the " $\chi$ " (g) sounds are of frequent ocsurrence in German.

## § 140. The Glottal Fricative "h".

If the vocal chords be brought near each other, but not near enough to cause vibration, the current of expiration brushing past the edges produce a fricative which we call " h ". This sound is slightly modified as it passes through the oral (or nasal) cavity. As, strictly speaking, we do not know, in the vowels, for instance, the exact sound caused by the vibration of the vocal chords, because that sound only reaches us after it has been modified by the different resonances of the oral cavity, so it is with the " $h$ " sound. There is no " $h$ " per se. As it only occurs before vowels, it passes
through that form of the resonance chamber which has already been prepared for the respective vowel, so that the "h" of he, hair, half, hall, home are not quite the same.

The English "h," like many English vowels, is characterised by "gentle beginning and gentle cessation " $:=\langle\mathrm{h}\rangle$, gentle increase and decrease of breath, before the following vowel sound sets in, old $=\langle\mathrm{h}\rangle$ old. This explains the peculiar consistency of the "Cockney" in using and dropping his "h" always in the wrong place. He has in reality the same articulation, let us say, for eel and heal, i.e., <h>i:jl, only the $<\mathrm{h}>$ has too strong an expiration for our ear in eel, and one not strong enough in heal.

## Plosive Consonants.

$\S$ 141. (a) The momentary sounds (see § 132 (b)) $\underline{\mathrm{p}}, \mathrm{b} ; \mathrm{t}, \mathrm{d} ; \underline{\mathrm{k}}, \mathrm{g}$ are called stops or plosives (Diagram $\overline{\mathrm{X}}$ ), because in their articulation the exit of the current of expiration is stopped somewhere in one of the superglottal passages, and on the stoppage being suddenly removed, there is a kind of explosion, which strikes our ear as one of the above consonants. This is best observed with-
(b) " $\mathbf{b}$ " and " $\mathbf{p}$ ". Here the stoppage is formed by both lips being pressed closely together, the mouth is filled with air, and then the lips are suddenly parted. The only difference between "b" and "p" is that whilst the explosion takes place, the vocal chords vibrate for " b ," and are silent, i.e., wide open for " p ". We therefore call " $p$ " a voiceless, and " $b$ " a voiced labial plosive.
(c) "t," "d "; "k," " g," are articulated in a similar
way, only in the first group the stoppage is formed by the front part of the tongue pressing against the fore-gum-in the latter group by the back part of the tongue pressing against the back part of the palate; " $t$ " and " k " are voiceless, " d " and " g " are voiced plosives.
(d) The place of articulation is the same for " $p$," " $b$," and for " $m$ " and " $w$ "; for " $t$," " $d$," and for "s," " $z$," for " $k$," " $g$," and for the Scotch (and German) " $x$," only the mode of articulation is different in so far as in the one case a stoppage is formed in the respective places and by the respective speech organs, in the other a narrow passage.

## Some General Remarks on the Plosive Consonants.

§ 142. In the articulation of a plosive we have to distinguish two different movements: (1) the forming ; (2) the removing of the stoppage. In a word like ticking the voice of the " i " is suddenly stopped by the back part of the tongue moving up against the backpalate, and is heard again after the stoppage has been removed. If the time that elapses between 1 and 2 is of a certain duration, as is or should be the case in coat-tail, bookcase, the consonant is called long, or more usually double. Double consonants, in the strict sense of the word, i.e., with the respective stoppages formed and removed twice, do not occur. In coat-tail, bookcase, the " $t$ " and " $k$ " sounds are merely long, whereas in words like hitting, ticking, tapping, the consonants have the same duration as in hit, hate, tick, take, etc.

However, where the two plosives with different places of articulation follow each other, as in act, slept, the two respective stoppages are formed in rapid succession; but without audible removing of the stoppage
in the first consonant. If a third consonant follows, as in acts, no distinct removing of any stoppage is heard.

The student can easily ascertain these facts for himself.
§ 143. In the pronunciation of a good many people, especially in the South of England, a kind of "h" sound makes itself heard after the voiceless plosives, as in cap, tip, hit, etc. This happens in this way: when in a word like cap the " k " stoppage is removed, the vocal chords remain open a little while before they close and vibrate for the following "a" sound. This short interval is filled by the voiceless expiration " $h$," which changes the simple plosives " p ," " t ," " $k$," to the aspirates " $\mathrm{p}^{\mathrm{h}}$," " $\mathrm{t}^{\mathrm{h}}$," " $\mathrm{k}^{\mathrm{h}}$." These aspirates are not recognised in standard English pronunciation.

## The Nasal Consonants.

§ 144. (a) Whilst in the consonants which we have considered so far-the fricatives and plosives-the passage through the nasal cavity is closed by the softpalate, we have now to consider three consonants in which the passage through the nose is open, the softpalate being lowered, and the passage through the mouth clothed by a stoppage somewhere. The vocal chords vibrate.

These consonants are " $m$," " $n$," " $\eta$ ".
(b) The stoppage in " m " is formed by both lips, in " $n$ " by the front part of the tongue and the gum of the upper teeth.
(c) In " $\eta$ " the stoppage is formed by the back part of the tongue pressing against the back part of the palate. This sound is usually represented by "ng," as in sing, singer, phonetically : si $\eta$, $\operatorname{si} \eta{ }^{\mathfrak{r}}$ ? ; and by " n " alone before a following " $k$," and sometimes also before
"g," as in think, sunk $=\theta \mathrm{i} \eta \mathrm{k}$, s $\Delta \eta \mathrm{k}$; finger, longer,

N.B.-It is hardly necessary to remark that the pronunciation of running, singing, like ranin, si $\eta$ in, instead of rani $\eta$, si $\eta i \eta$, is dialectical, though it is very common.

## Some General Remarks on the Nasal Consonants.

§ 145. The nasal consonants are really vowel sounds in so far as they contain no other sound but the voice of the vibrating chords, which receives the nasal resonance as it passes through the nasal passage. If this, however, were the only distinctive feature, this nasal resonance being the same for " $m$," " $n$," " $\eta$," we should be unable to distinguish, for instance, between ram, ran, rang. What distinguishes these consonants among themselves is this: the voiced current of expiration finding both the nasal and oral passages open, divides: one part passes directly through the nose, the other part enters the mouth, proceeds for " m " as far as the lips, for " $n$ " as far as the teeth, and only a short distance for " $\eta$," then finding the exit blocked, it returns and passes in its turn also through the nose, but carrying with it for " $m$ " the resonance of the whole, for " $n$ " and " $\eta$ " of a smaller part of the oral cavity. Whilst, therefore, these consonants have the same nasal resonance, they are distinguished from each other by the different oral resonance which forms a constituent part of their articulation.

The vocalic nature of the nasal consonants, to which reference has been made above, is seen in the fact that they share with the vowels the faculty of forming syllables: cf. open, bitten, broken $=0: p m$, bitn, bro:k $\eta$.
§ 146. There is a certain similarity between "b,"
" $d$," " $g$," and " $m$," " $n$," " $\eta$," which the reader will probably already have noticed. Their articulation is the same in so far as they are voiced, and a stoppage is formed in the same place, only with this difference, that in " $m$," " $n$," " $\eta$ " the stoppage (and the sound) is continuant, and the passage through the nose is open. " m ," " n ," " $\eta$ " are stop consonants (not plosives), but only in so far as the exit through the mouth is concerned. A "b," "d," "g" will become "m," " $n$," " $\eta$ " if spoken through the nose, and an intended " m ," " n ," " $\eta$ " will sound like " b ," " d ," " g " if the nasal passage is partly closed, as happens if the speaker is troubled with a cold in his head.
$\S 147$. In close connection with a voiceless consonant " m ," " n ," " $\eta$ " lose part of their voice. In pronouncing camp, snake, hint, think with a somewhat long " mm," "nn," " $\eta \eta$," the reader will find that that part of these lengthened sounds which is immediately connected with " $p$," "s," "t," "k " is voiceless. If we mark the absence of the voice by the sign " $o$ "-generally used for this purpose, and intended to indicate the openness of the glottis-placed underneath the respective consonants, the pronunciation of the above words will be represented as: kammp, snne:k, hinnt, $\theta^{i} \eta \eta^{\circ} \mathrm{k}$. In more rapid speaking the same process takes place, only it is less noticeable.

## The Lateral Sound "l".

§ 148. In the articulation of " 1 " both sides (or only one side) of the tongue form a narrow passage with the molars and side gums, hence the term lateral articulation. The tip of the tongue touches at the same time the gums of the upper teeth, whilst its back part is slightly raised.

## The "r" Sounds.

§ 149. If the tip of the tongue is pointed towards the upper gums and made to vibrate, we have the trilled "r" sound of northern English and Scotch. If no vibration or trilling takes place, but mere friction (slight) of the current of expiration between the tongue point and upper gums, we have the southern English " $r$," phonetically represented as " $x$ ". This " $x$ " we may therefore call an untrilled " $r$ ".

The southern " $\tau$ " as well as the northern " $r$ " lose their consonantic value whenever they are not followed by a vowel. The following examples with " $r$ " and " $x$ " as initial and final, before vowels and before consonants, will make the different values clear. ${ }^{1}$

|  | South. | North. | Scoter. |
| :---: | :---: | :---: | :---: |
| red | ${ }_{\text {a }} \mathrm{d}$ d | red | r ¢ ${ }^{\text {d }}$ |
| $d r y$ | dıai | drai | drai |
| garden | ga:dn | gádn | gasrdn |
| lord | lo:d | $\stackrel{r}{\text { lof }}$ | lord |
| more | mo:^ | mo: ${ }^{\text {r }}$ | mo:r |
| more and more | mo:x ænd mo:s | mo:r and mo: ${ }^{\text {r }}$ | mo:r and mo:r |

${ }^{1}$ We would recommend the student to draw up for himself a similar table, illustrating the other differences between southern and northern English and Scotch which have been mentioned so far.

## Some General Remarks on the " 1 " and " $r$ " Sounds. ${ }^{1}$

§ 150. The " $x$ " is a proper fricative sound and easily changes to " z ," as is seen in the language of children. The " 1 " is also a fricative, but with a mixed articulation. The trilled "r," produced by the vibration of the tongue point, has an articulation of its own.
$\S$ 151. Like the nasal consonants " $m$," " $n$," " $\eta$," the " $l$ " and " $r$ " sounds may lose their voice or part of it in close connection with voiceless consonants, so that clay is pronounced klle:i (or even kle:i), kilt = kill ; try $=$ trrai (or even trai). On close examination the reader will find that the " r " in $d r y$ and try is not $=$ quite the same.

The " $l$ " and " $r$ " also share with the nasal consonants the faculty of forming syllables, cf. bottle $=$ btl ; proper examples with "r" do not occur in English, but the Scotch pronunciation of yes Sir as yest may serve as an illustration for want of something better.
${ }^{1}$ An older but still common term for these sounds is liquids.

|  | ． |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 3 \\ & 8 \end{aligned}$ |  |  |  |  |
|  |  | － | F |  |  |
| 范范 | $\square$ |  |  |  |  |
|  | 12 |  |  |  |  |
| 馬喊 | \％ | r | $\square$ | － | － |
| \％ | $\begin{aligned} & \mathrm{N} \\ & \text { in } \end{aligned}$ |  |  |  |  |
|  | $\begin{aligned} & 10 \\ & 0 \end{aligned}$ |  |  |  |  |
| （ 3 |  | \＆ | E |  |  |
|  | $\stackrel{\rightharpoonup}{i}$ |  |  |  |  |
|  |  | $\begin{aligned} & \stackrel{0}{\dot{\omega}} \\ & \stackrel{0}{0} \end{aligned}$ | \＃్ \％ \＃ |  | F |

Diagram XI．，which we owe to the kindness of Dr．Lloyd，represents the articulation of English con－ sonants in a more minute and exact way than Diagram X．，which is more intended for school purposes．The terms tip，blade（fore and after）refer to different parts of the tongue．Phoneticians distinguish between tip （or point），blade（fore and after），middle and back of the tongue（dorsum，front and back）．The tongue－ articulations of Table B，compared with the terms of Diagram XI．，will make these distinctions clear．

## Assimilation of Sounds.

§ 152. In ordinary speech the sounds and their articulation, i.e., the different movements of tongue, lips, soft-palate, vocal chords, follow each other in such quick succession that they necessarily exercise a certain influence upon each other. In pronouncing the syllables eke (i:k), soak (so:k), key (ki:), coat (ko:t) the "k" before or after " i " has a more forward tongue-articulation than where it is combined with the " 0 " sound. ${ }^{1}$ The explanation is very simple : the tongue naturally endeavours to make the transition from the " $k$ " to the " i " or " o " position as easy as possible. Analysing and following the articulation of the different sounds in words like quiet (kwaiət), picked (pikt), crouch (kraut $)$, the reader will easily convince himself that the tongue and the vocal chords have in the succession of their different movements to accommodate themselves a little to circumstances, with the result that the articulation of a given sound can, in a group of sounds, hardly be expected to be always what it is or should be when pronounced isolated. We need not enter here into the details of this "economy" of sound production, and merely mention that words like open, broken, Banff become quite naturally o:pm, bro:k $\eta$, bamf. The reader, on closely examining his own pronunciation, will easily find and easily explain other examples of the same nature. We have to add, however, a few remarks on the demeanour of the vocal chords in certain groups of sounds. A word like packed, with the "e" dropped out, should, theoretically, be pronounced "pakd," which,

[^24]however, is next to impossible without an intervening pause or a vowel. If we try to pronounce the " $d$," we will very likely change " $k$ " to " $g$," the reason being that we cannot under the given circumstances make the vocal chords vibrate for "d," i.e., voice it without also partly voicing the " $k$," and if we begin with the voiceless " $k$," there is no time to make the chords vibrate for the voiced " $d$," which therefore naturally gives way to the voiceless " $t$ ". It is therefore easy to understand why we pronounce dropped, dressed, pushed, robed, robes, begs, observe, popgun, paths, sit down as dropt, drest, puft, ro:bd, ro-bz, bєgz, obzǐv, pobg^n, pa:ठz, si(d)daun. The pronunciation of such words as absurd $=$ absı: $d$ is in reality $=a b-p s A \cdot d$.

The influence which " $m$," " $n$," " $\eta$," " $r$," " 1 " suffer from close connection with voiceless consonants has already been referred to. On the whole the activity of the vocal chords in the closely connected sound groups in words and in sentences affords the reader interesting material for self-observation.

The laws of the assimilation of sounds, vowels as well as consonants, form one of the most important factors the philologist has to reckon with in following the historical development of languages.

## Spelling and Pronunciation.

Since this book is intended only for the English reader, we may assume that the relation between the ordinary English spelling and pronunciation has, on the whole, already been sufficiently dealt with, and therefore we merely call attention to the following facts:-
§ 153. Ordinary English spelling shows several
cases where one single sound is represented by two letters，and others where one letter represents two sounds．As an example of the first we have＂wh，＂ ＂th，＂＂sh，＂＂ph，＂＂ch，＂＂gh，＂＂ti，＂＂si，＂＂ng＂； of the second，＂$g$ ，＂＂$j$＂and＂$t$＂before unaccented ＂u＂．Examples：white（mait），that（ fa t ），thin（ （in）， shop（ $\int \mathrm{op}$ ），phrase（fre：iz），school（skuil），rough（rıf）， nation（ne： $\int \Delta \mathrm{n}$ ），vision（vi弓ムn），song（so $)$ ；gin（d引in）， jolly（djoli）．The group＂ch＂represents two sounds， which，however，have no connection with either the ＂ c ＂or the＂h＂．Words as chin，child spell pho－ netically tfin tfaild．Certain letters or groups of letters represent sounds which have ceased to be pronounced， as＂ b ＂in debt，＂gh＂in night，＂w＂in bow，＂ k ＂ in knee．It may not be superfluous to remark here that the＂$\eta$＂sound is sometimes represented by＂$n$＂ alone as well as by＂ng＂；compare singer（sinər）， finger（fi $\eta$ gər），English（i$\eta \mathrm{glij})$ ，think（ $\theta \mathrm{i} \eta \mathrm{k}$ ）；and that there is no difference between the＂ch＂and＂tch，＂ the＂ g ＂and＂dg＂in rich and itch，in gin and bridge．

The giving of rules as to when the＂th＂and＂s＂ represent＂$\theta$ ，＂＂$\delta$＂；＂s，＂＂z＂respectively，when the ＂ g ＂is sounded＂ g ＂or＂ 3 ，＂and the mention of similar sufficiently well－known facts，do not fall within the scope of this book．However，we wish to observe that the ＂ s ＂of inflection represents＂ z ，＂except where it suffers the influence of a preceding voiceless consonant．Ex－ amples：dishes，rings，beds，sins，bells，goes，hates， rocks，are phonetically dijəz，ri $\eta z, b \in d z, \sin z, b \in l z$ ， go：z，he：ts，roks．

More detailed information on the relation between English spelling and pronunciation will be found in the books mentioned on p． 162.

French Consonants:
XII.
(The voiced consonants are underilined.)

|  | Lip and |  | Tongue and |  |  |  | Glottis. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Teeth. | Gum. | Palate |  |  |
|  | Teeth. | Lip. |  |  | Front. | Back. |  |
| Fricative | f, v | w, प | s, $\underline{z}$ | $\int, \underline{3}$ | j |  |  |
| Plosive |  | $\mathrm{p}, \underline{\mathrm{b}}$ | t, $\underline{\text { d }}$ |  |  | k, g |  |
| Nasal |  | $\underline{m}$ | $\underline{n}$ |  | $\underline{\square}$ |  |  |
| Vibration of the Tongue |  |  | $\underline{1}$ |  |  | $\sim$ |  |
| Vibration of the Tip of the Tongue or of the Uvula. |  |  | $\underline{r}$ |  |  | (R) |  |

## French Consonants.

For practical purposes we assume that most of the English and French consonants, which on Diagrams X. (English) and XI. (French) are represented by the same symbols, are identical, and therefore only call attention to the following facts :-
$\S$ 154. The bilabial fricatives "w," " $\mathbf{~ "}$ ". The French "w" sound does not occur, so to speak, as an independent consonant; it is in reality nothing but a
"u" consonified, i.e., a " u" with sufficient narrowing of the lips to produce a fricative sound. It occurs chiefly as the first element in the so-called diphthong " oi" (pronounced = wa in moi, toi, quoi, etc., and = wẽ in soin, loin, etc., phonetically = mwa, twa, kwa, swẽ, lwẽ). ${ }^{1}$ The only difference between the English and French " w" is that the latter has more lip-rounding, which, apart from the short "i" in French and the long " i " in English, distinguishes, for instance, we from oui, spelt phonetically " wi" in French, and "wi:" -if fully stressed-in English.

The " Y " sound is a consonified "y," i.e., a "y" with sufficient narrowing of the lips to produce a fricative sound. It occurs chiefly before "i," with which it forms one syllable, as in huit, ruine, pronounced $=$ yit, ryi:n (and not = yit, ryi:n, with a dissyllabic " $y-1$ ". $)^{2}$

The " $w$ " and " Y " have these points in common:-
(a) They have a vowel position of the tongue-in " $w$ " that of " $u$," in " $\varphi$ " that of " $y$ ". To this is added the same narrowing of the lips, producing the same bilabial buzzing kind of sound, which prevents of course the " $u$ " and "y" from entering with the following vowel into a dissyllabic or a diphthongal combination.
(b) They are both voiced as a rule (see, however, § 165).
§ 155. The consonants " s ," " z "; " t, " " d "; " n ,"

[^25]"l," "r," have in French tongue-teeth, in Englișh tongue-gum, articulation. This difference in the articulation, however, does not produce a sufficiently pronounced difference in the sounds to deserve our attention. But the more advanced student of phonetics should bear this difference in mind, as also the fact that for " $t$," " $d$," " $n$," " $l$ " the tongue is more advanced than in English.
§ 156. The " j " sound (the yod). This sound is of considerable importance in French; it occurs chiefly as the so-called "l mouillé" (see § 177), and as a consonified " i ," i.e., an " i " with a tongue-position sufficiently high to form the narrow passage between the front part of the palate and the tongue, which is characteristic of the " j " position. ${ }^{1}$ The " i " assumes, as a rule, this tongue-position, whenever it is followed by another vowel belonging to the same syllable. Examples: manière $=$ manje:r; lumière $=$ lymjє:r; hier $=j є: r$; chevalier $=$ §ovalje ; étudiant $=$ etydj $\tilde{\alpha} ;$ passion $=\mathrm{pa}: \mathrm{sj} \check{\text {; }}$; bien $=$ bjẽ ; rien $=$ rjẽ ; pied $=$ pje.
$\S 157$. It has already been mentioned that there are no diphthongs in French. The only vowel combinations which are sometimes regarded as diphthongs are those in which the first elements are " u ," " y ," " i, " as in roi, loi, huit, muet, miel, etc., but these vowels, as we have seen, being consonified, a diphthong in the usual sense of the word becomes impossible.

The consonification of these three French vowels is a very important fact in French pronunciation, and ought

[^26]to receive proper attention on the part of the student. It is, however, necessary to remark that consonification takes place only where the conditions are favourable, and that it therefore does not occur in words like prier, plier, etc., which could hardly be pronounced as prje, plje. This consonification, mostly for historical reasons, is less frequent in verse reading than in ordinary prose. ${ }^{1}$
§ 158. There is no " $\mathbf{h}$ " sound in French. The letter " h ," where it is called aspirate, is merely a graphic sign indicating that there can be neither liaison nor elision, but otherwise there is no difference between this " $h$ " and the so-called mute " $h$ ". Though the " h " in haut is considered aspirate, this word" is pronounced exactly like eau, but les eaux is = lez o, and (il jota) les hauts cris is (il jəta) le o kri ; en eau is = $\tilde{\text { uno }}$, but en haut $=\tilde{\alpha}$ o, and it is no doubt well worth while to distinguish between aller en eau and aller en haut.
$\S 109$. The French plosive consonants call only for the following remarks :-
(a) Where two plosive consonants are pronounced together, which does not occur very frequently, the transition from the one articulation to the other is facilitated by an off-glide in the shape of a rapidly articulated " $ə$," so that acte, for instance, is pronounced $=$ akət (with voiceless " $\partial$ "), not akt.

[^27](b) The articulation of the French " b ," " d ," " g " is not quite the same as the English in so far as the vibration of the vocal chords, where these consonants are initial, begins before the explosion takes place, and continues, where they are final, after the explosion. In pronouncing beau, for instance, the vocal chords already vibrate before the lips are parted for the "b" explosion, i.c., the " $b$ " is preceded by what seems a short " m ," pronounced with the passage through the nose closed. The " $d$ " in donne and the " $g$ " in gout are similarly preceded by what seems a short " n " and " $\eta$," produced like the " $m$ " just mentioned.

Where the " b ," " d ," "g" are final, as in robe, fade, bague, they are followed by a short "ə" kind of sound, so that the pronunciation of these words may be represented thus $=$ robə, fadə, bagə. ${ }^{1}$
§ 160. Of the French nasal consonants the " j " only demands our attention. The sound is in ordinary spelling always represented by "gn". The place of articulation is the same as for "j" (see Table B, Diagram 5), only the tongue is raised a little higher, so that a stoppage is formed. Here the tongue stays, while the voice passes through the nose. This is no doubt the most difficult French sound, but the student who has his speech organs under proper control will not have much difficulty in producing it. He can do that either by pronouncing the " j " (yod) in you through the nose, and raising the tongue in the same position till it touches the roof, or by pronouncing the English " $\eta$ " (ng) in song, and whilst keeping that sound move the tongue along the roof to its highest part. But all

[^28]this is generally not applicable in the schoolroom, where another treatment is required, for which see § 208.
§ 161. The French " 1 " is practically the same sound as the English " 1 ," only in French there is a slight vibration of the two sides (or only one) of the tongue, and English-speaking people keep the point of the tongue too far back for the sound.
$\S 162$. There are two " $\mathbf{r}$ " sounds in French; both have vibration or trilling, in the one case of the tip of the tongue, in the other of the uvula, which vibrates in a small groove formed in the middle of the back part of the tongue. The phonetic symbol for the first sound is " r ," for the second " R ". The " R ," the " $r$ grasseyé," .is the more modern, and at the same time the more general sound, especially in Paris, but the stage has preserved the older "r," which had therefore better be adopted by those who are familiar with it, as the Scotchman and the northern Englishman. The Southerner will have his difficulty with both the " $r$ " and the " $R$," but on the whole the former will probably be found the easier to learn, though the " $R$ " requires less physical effort after its articulation has been mastered. The reason why the stage prefers the " $r$ " is to be sought in the fact that it is more sonorous. ${ }^{1}$

The southern " $x$ " (see § 149) is unknown in French.
$\S 163$. The consonant groups $v r, b r, p r, t r, d r, b l$, etc., are pronounced as they are spelt, i.e., without a linking vowel. Examples: vivre, chambre, rompre, notre, tendre, noble are pronounced vi:vr, $\int \tilde{a}: b r, r o ̃: p r$, notr, tũ:dr, nobl, and not vivər, jãbər, etc.

[^29]
## The Place of the Consonants in the Division of Sounds into Syllables.

§ 164. In the division of sounds into syllables, it is, as a rule, the vowel which closes each syllable (except of course, the last, ending in a sounded consonant), so that words like cadeau, matinée, divinité, patrie, tableau, église, résister, restreindre, are divided ca-deau, ma-ti-née, di-vi-ni-té, pa-trie, ta-bleau, é-glise, ré-si-ster, re-streindre; likewise, double consonants being, as a rule, pronounced as single ones, words like garrotter, immobile, attrister, brosser are pronounced ga-ro-ter, i-mo-bile, a-tri-ster, bro-ser (the "s" voiceless). The same rule applies where liaison takes place: c'est un de mes amis reads phonetically $=\mathrm{s} \epsilon$ toe də me zami

In groups like obtenir, merci, perdre, the division is naturally ob-te-nir, mer-ci, per-dre.

## Assimilation (see § 152).

§ 165. The influence of neighbouring sounds upon each other is even more pronounced in French than in English, and what has been said about the different " $k$ " sounds in English (\$ 152) applies more particularly still to the French " $k$ " in car, qui, coup, etc. With regard to the voiced and voiceless consonants it may be stated, as a general rule, that in a group of consonants belonging to the same syllable, the first assimilates the second, so that in quatre, peuple, prisme, toi, tuile, tiens, pied (= katr, pœpl, prism, twa, tuil, tjẽ) the " r," " 1 ," " $m$," " w," " 4 ," " $j$ " are voiceless, and would, in a treatise aiming at strict accuracy, be represented as "r," " 1, ," "m," " o ," " ${ }^{\circ}$,"" "J". In these groups the assimilation is progressive, the first sound influences the second.

In groups of consonants belonging to different syllables the second sound influences the first, the assimilation being regressive. Examples: obscur, obtenir, obstacle read phonetically opsky:r, optəni:r, opstakl. The same rule applies to similar combinations in word groups : chapeau haut de forme and tout de suite are pronounced $=\int$ apo o.t form, tut syit.

The group of sounds represented in ordinary spelling by " x " is generally "ks," as in fixer, axe, Alexandre, excuser (familiarly eskyse) ; it is "gz" in the prefix "-ex," followed by a vowel, as in exemple, exile, etc.

## Spelling and Pronunciation.

§ 166. The most noteworthy discrepancy between the ordinary spelling and the pronunciation of French consonants is to be found in the fact that most of the written final consonants are mere dead letters-tombstones, so to speak, of former sounds, which, in course of time, have ceased to be pronounced. The only final consonants which, as a rule, are still sounded are:-
f, in vif, canif, bouf, neuf, etc. (it is mute in clef = kle).
l, in col, nul, calcul, Avril, cil, fil (it is mute in soull, and in fusil, baril, gentil, sourcil, outil, as also in fils, pouls, cul-de-sac).
$\mathbf{k}$, in arc, lac, avec, sec, duc, bloc, public, échecs, donc, $\operatorname{cinq}=\mathrm{se}: \mathrm{k}$ (it is mute in clerc $=\mathrm{kle}: \mathrm{r}$, porc, franc, blanc, flanc, tabac, estomac).
$\mathbf{r}$, in finir, cor, malheur (it is mute in monsieur $=$ mœsje or məsj $\omega$, familiarly msjø; messieurs $=$ me•sj ; and after " e ," as in chanter, berger, ouvrier, écolier ${ }^{1}$ ).
${ }^{1}$ In monosyllabic words the " $r$ " is also sounded after " $e$," as in cher, fer, hier, fier, mer, and also in amer, hiver, enfer, cuiller $=\mathrm{kyije}$ : .

Most of the other consonants are here and there sounded in monosyllabic words，so ：－
$\mathbf{p}$ ，in cap，cep．
t ，in but（byt or by），sept（set），huit（ $\mathrm{q} i \mathrm{t}$ ），dot，fat， soit！（＝be it so ！all right！），net，l＇ouest，l＇est，Christ． Also often in the group－ct：direct，exact，correct，tact （see also § 67）．
d，in sud，and in proper names：David，Alfred， Madrid，George Sand（sã：d）．Otherwise mute as in grand，mord，etc．
g，in legs（le：g），joug（3u：g，or gu）．
s，in fils（＝fis），lis（lily），os，ours，Mars，six，dix（＝ sis，dis），sens（s⿱⿰㇒土儿：s），tous ${ }^{1}$（tu：s），plus，${ }^{2}$ hélas（ela：s）； and also in the foreign endings－us，－as，－os，－is，as in omnibus，obus（o•bys），atlas，pathos（patos），gratis，Jésus．${ }^{3}$ Pouls may be pronounced as pu or pus．
$\mathbf{h}$ ：that the＂$h$ ，＂whether called mute or aspirate， represents no sound value，has already been explained in § 158.

Every consonantic sound，except the consonified＂w＂ and＂ Y ，＂may close the word，provided it ends in＂e mute，＂or is followed by a word beginning with a vowel or a＂mute h＂．Examples：brosse，cache，trappe， robe，dette，fade，bague，bonne，Rome；tout à coup （＝tutaku），trop a faire（＝tropafe：r）．The liaison of consonants，as exemplified in the last tiwo examples， will be treated more fully in $\$ 247$ ．
${ }^{1}$ The＂$s$＂in tous is sounded when it is used as a pronoun： ils étaient tous lda ；je les ai vus tous；but it is mute otherwise，as in tous les jours，tous mes amis，etc．
${ }^{2}$ The＂$s$＂in plus is generally pronounced when it stands at the end of the sentence and is not accompanied by＂ne，＂ donnez－m＇en plus ！vous devriez travailler plus．
${ }^{3}$ Jésus and Christ are pronounced zezys，krist，when used separately；when used together their pronunciation is jezy kri．

In the following statements the pronunciation of sounds which are produced through assimilation is not taken into consideration, so that, for instance, though the sound "p" may be represented by "b," as in obtenir, it will be stated that the "p" sound is always represented by " $p$ ".

## § 167. f, v.

The "f" sound is generally represented by "f"; in some cases, especially in learned words, by "ph," as in orphelin, paragraphe, phrase, etc. The "v" sound is always spelt " v ".

Note that the pronunciation of bœuf, œuf, nerf, is bœf, œf, nєrf, and of bœufs, œufs, nerfs = bø, $\varnothing, ~ n є: r$.
§ 168. w, 4.
The " w" sound is represented by :-
(a) $\mathbf{o}$, followed by a vowel belonging to the same syllable, as in oiseau (wazo), roi (rwo), soin (swẽ), soigner (swaje), soit! (swat). ${ }^{1}$
(b) By ou, followed by a vowel belonging to the same syllable, as in oui (wi), ouir (wi:r), fouet (fwє or fwa), ouest (west), ouais! (wє!); souhait in familiar style pronounced as one syllable is $=\mathrm{swc}$, otherwise = sue.

The " $\mathbf{Y}$ " sound is represented by $\mathbf{u}$, followed by a vowel belonging to the same syllable, as in suis (syi), huit (чit), Tuileries (tuilri), nuit (nчi), Juin (Зч $)$, contribuer (kə̃•tribчe), aiguille (єgчi:j), linguiste (l゙̃•gчist), aiguiser (egyize). ${ }^{2}$
§ 169. s, z.
The " $s$ " sound is represented by:-
(a) s and ss, in si, escalier (єskalje), ouest, espérer,

> ' Oignon is = эృว̃.
${ }^{2}$ The " $u$ " after the " $g$ " is generally mute; the above three words are noteworthy exceptions (see also p. 36 foot-note).
absent, Lesage, fils, gisons (-ez, -ent, -ant -ais, etc.), posséder, brosse. ${ }^{1}$
(b) sc, in scène, scie, conscience (kõ•sjส̃:s).
(c) c and ç, in cesser, accepter (aksєpte), reçu.
(d) $\mathbf{x}$, in dix, six, soixante (swasã:t), Bruxelles (brysel, also bryks $\epsilon$ ). Cf. Aix-la-Chapelle, where Aix $=\epsilon \mathrm{ks}$. In flux the " x " is mute.
(e) t before " i ," followed by a vowel, in patience (pasjã:s), nation (na:sjõ), notion (no•sjõ), aristocratie (aristokrasi), prophétie (profesi).

Note that the "t" is " $t$ " in chrétien (kretje $)$, maintien, soutien, in châtié, amitié, pitié (pitje), and always after " s," as in bastion, question (kestjõ).

The " $z$ " sound is represented by:-
(a) z , in zéro, gaz (ga:z), gazon.
(b) $\mathbf{s}$, between vowels, in rasé, cause (ko:z), nous avons (nuzavõ), vision. (N.B., no " 3 " sound as in English.)
(c) $\mathbf{x}$, between vowels in liaison, in dix ans (dizã), dixhuit (dizyit), dix-neuf (diznof), ${ }^{2}$ and-also in dixième (dizjє:m).

As regards the pronunciation of "x" as "ks" or "gz," see § 165.
(d) sh, in fashionable (fazjona:bl), fashion, also pronounced fafjona:bl, fafjõ.
§ 170. §, $\overline{3}$.
The " s " sound is represented by :-
(a) ch, in chose, cacher, cloche (klo§), etc.
(b) sh and sch, in foreign words, as in shériff, schisme, Schiller.

[^30]The " 3 " sound is represented by :-
(a) $\mathbf{j}$, in $j e, ~ j e u, ~ a j o u t e r . ~$
(b) g, before "e," "i," " y," in gêner, gigot, Egypte, pigeon (pi3̃), mangeons (m $\widetilde{\alpha} \cdot 3 \tilde{o})$, chargea ( (Jar3a). The " e " is mute in the groups -gea-, -geo-, also in gageure.
§ 171. The " j " sound is represented by:-
(a) $\mathbf{y}$, in yeux (j , the word, however, admits of liaison (mes yeux $=\mathrm{mez} \mathrm{j} \propto$ ), payen $(\mathrm{paj} \tilde{\epsilon})$, payer ( $\mathrm{p} \in \mathrm{je}$ ), noyer (nwaje).
(b) ї, in ä̈eul (ajœl), aïeux (ajø).
(c) i, followed by another vowel belonging to the same syllable, as in lumière (lymjє:r), bien (bjẽ), étudiant (etydjã), notion (no•sjõ), Janvier (弓̃ॅّvje).
(d) ll, in fille (fi:j), piller (pi•je).
(e) $\mathbf{i l ( 1 )}$, in pareil, pareille (both pare:j), œil (œ:j), cercueil (sєrkœ:j), cueillir (kœji:r), deuil (dœ:j), feuilleton (fæjtõ), travail (trava:j), bataille (bata: j), travailler (travaje), bataillon (batajõ). ${ }^{1}$

The "-il" followed by a vowel is pronounced "il," as in file, Tuileries (tuilri), bile, ile.
§ 172. p, b.
These sounds are always indicated either by "p," " b," or "pp," "bb," as in chapeau, apte (apt), frapper, robe, abbaye. ${ }^{2}$

## § 173. t, d.

These sounds are represented by "t," "tt," "d," "dd". Examples: tête, dette, attendre (atã̃:dr) ; don, addition.
${ }^{1}$ The pronunciation of ville, mille (and their derivatives), tranquille, pupille, is vil, mil, trã.kil, pypil. Note also the pro-

${ }^{2}$ Note that the " p " is mute in baptême, baptiser, dompter, compte and compter, prompt (prõ) and prompte (prõ:t), sculpter, sept, temps.

N．B．－In liaison the＂$t$＂sound is also represented by＂$d$ ，＂as in un grand homme（匹厄 grõtom），répond－il （repã：t il）．Pronounce Metz as＂mes，＂and czar as ＂tsa：r＂．${ }^{1}$
§ $174 . \mathrm{k}, \mathrm{g}$ ．
The＂$k$＂sound is represented by ：－
（a）c，cc，in car，caractère，lac，accabler，tact，correct， cour（ku：r），direct，exact，strict．${ }^{2}$
（b）qu，in quand（k $\tilde{\mathrm{a}}$ ），quoi（kwa），quai（ke），quête （ke：t），béquille（beki：j）．Note that the＂ u ＂is mute after＂$q$＂．
（c）cqu，in acquisition（akizisjõ），grecque（grek）．
（d） $\mathbf{q}$ ，in $\operatorname{cinq}$（sẽ：k），coq（kok）．
（e）ch，in chaos（kao），chœur（kœ：r），orchestre．
$(f) \mathbf{x}=\mathbf{k s}$ ，in Alexandre，fixer（see § 165）．
（g）g，in liaison：un rang élevé（冗̛̃ rãk elve）．
The＂$g$＂sound is represented by：－
（a） g ，in grand，legs（l $\mathrm{l}: \mathrm{g}$ ），joug（ $3 \mathrm{u}: \mathrm{g}$ ）．It is mute， when final，after＂ n ＂：long $=1$ ．
（b）c，in second（səgã or zgõ），seconder，anecdote．
（c）gu，in guerre，longue（lã：g），bague（ba：g），fatigué （fatige），guet，gue（both＝ge）．${ }^{3}$ ．
（d） $\mathbf{x}=\mathbf{g z}$ ，in exile，examen，exemple（see § 165）．
§ 175．The＂$m$＂and＂$n$＂sounds．
They are represented by＂ $\mathbf{m}$ ，＂＂ $\mathbf{m m}$ ，＂＂ $\mathbf{n}$ ，＂＂ $\mathbf{n n}$ ，＂ ＂mn＂．Examples：mère，foreign words like album （albom），dominum（dominom），Jérusalem（弓eryzalem），
${ }^{1}$ Where the final＂$t$＂is sounded in certain sound groups， as in＂st，＂＂ct，＂the first consonant is sounded likewise． Examples：l＇est，l＇ouest，Brest，correct，strict（see § 174）．
${ }^{2}$ Both the＂ c ＂and＂ t ＂are mute in aspect，respect，suspect， instinct（ ${ }^{\boldsymbol{\epsilon}}$－stê）．
${ }^{3}$ In aiguille，aiguiser，linguistic，the＂ u ＂is not mute，but pro－ nounced＂ y ，＂so that aiguille is phonetically egui：j．
immortel (imortcl), femme (fam), nappe, une, innocent (inosã), condamner (kõ•dane). ${ }^{1}$
§ 176. The " n " sound is always represented by "gn". Examples: signe (sij), signer (sipe), oignon (วృว̃), lorgnon (lornจ̃), Boulogne (buloŋ), Champagne ( ( $\tilde{\alpha} \cdot \mathrm{pap})$.
§ 177. The "l" sound is always represented by "1" or "ll". Examples: vouloir (vulwa:r), seller (sєle), pulluler. In illégal, illusion, illettré, etc., it is often made long to produce the impression of a double "l".

The (ordinary) spelling " -il" gives frequently rise to mispronunciation; we shall therefore recapitulate the facts.
(a) il followed by a vowel is always pronounced il, as in île, filer, Tuileries (tqilri), huile ( $\mathrm{q} i: 1$ ).
(b) Final il is $=$ " $\mathbf{i}$ " after a consonant: fusil (fyzi), péril, sourcil (sursi), gril, baril, gentil, outil, fils. (Exceptions are cil, fil, Avril, civil, viril, mil, il, puéril, where the " 1 " is sounded as well as the "i".)
(c) Final il is $=$ " $\mathbf{j}$ " after vowels: pareil (pare:j), travail (trava:j), œil, (œ:j), deuil (dœ:j), accueil (akœ:j).
$(d)$ ill is $=$ " $\mathrm{i}: \mathrm{j} "$ after consonants : fille (fi:j), fillette (fi•jet), piller (pi•je), billet (bi•je), brillant (bri•jã). Exceptions: ville (vil), mille (mil), tranquille (trã•kil), distiller (distile), pupille (pypil).

[^31](e) ill = " j " after vowels : pareille (pare:j), bataille (bata:j), bataillon (bata:jã), travailler (trava:jer), feuilleton (fœj(ə)tã), fouiller (fou•je), joaillerie (3wa.jri), Juillet ( $3 \mathrm{y} \cdot \mathrm{j} \epsilon$, also $3 \mathrm{q} \cdot \mathrm{j} \mathrm{j}$, or 3 q ilj e , cuiller (kyje:r, also kuije:r).
( $f$ ) Initial ill is always $=$ il : illégal (il:egal).
The so-called $l$ mouillé, which may be regarded as extinct in Paris and the northern parts of France, is a combination of " l " and " j ," and occurs where the Parisian pronunciation has now " j " alone. In Switzerland, in Lyons, etc., the pronunciatian of fille, meilleur, billet, etc., as filjə, me•••@:r, bilje, is still very common. In the north it still survives in Juillet, pronounced as 3 4 ilje.
§ 178. The "r" (or " $\mathbf{R}$ ") sound is always represented by "r": rouge, brun, merci, mourir, errer, serrer, vouloir (vulwa:r). In mourrais, courrais the " rr " is made long, and it is thus that these forms are distinguished from mourais, courais.
§ 179. We have tried to collect in the present chapter all that is important for practical use, including the exceptional or difficult pronunciation of certain words, and we would strongly recommend the reader to collect what may be new to him on the blank leaves at the end of the book. We add here the pronunciation of the names of the months and of the numerals, which in some cases are exceptional.


| 1. œ.. | 14. katorz. |
| :---: | :---: |
| 2. dø. | 15. kẽ:z. |
| 3. trwa. | 16. se:z. |
| 4. katr. | 17. diset. |
| 5. sẽ:k | 18. dizuit. |
| 6. sis. | 19. diznœf. |
| 7. set. | 20. vє̃. |
| 8. yit. | 21. vé•te $\widetilde{¢}$ (vingt-et-un). |
| 9. nœf. |  |
| 10. dis. | 23. V - t 'trwa. |
| 11. วั:z. | 24. vẽ.t'katr. |
| 12. du:z | 25. vẽ.t'sẽ:k, etc. |
| 13. tre:z. |  |

If the numerals are followed by a word beginning with a consonant, the final sounds, " $k$," " $s$," " $t$," "f" becomes mute. Examples: combien de francs ça con̂te-t-il? ça coûte cinq (sẽ:k) ; ça coñte cinq francs ( $s \tilde{\epsilon}$ frã). The " $t$ " in sept is, however, sounded in sept sous, sept francs.

Note the pronunciation of vingt (vẽ), vingt-deux, vingt-trois, etc.

## German Consonants.

XIII.
(The voiced consonants are underlined.)

|  | Lip and |  | Tongue and |  |  |  | Glotis. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Teeth. | Gum. | Palate |  |  |
|  | Teeth. | Lip. |  |  | Front. | Back. |  |
| Fricative | f, v | w | s, Z | $\int, 3$ | ¢, ${ }^{\text {j }}$ | $\chi(\mathrm{g})$ | h |
| Plosive |  | p, b | t, d |  |  | k, g | , |
| Nasal |  | $\underline{m}$ | $\underline{\mathrm{n}}$ |  |  | $\underline{\eta}$ |  |
| Vibration of the sides of the Tongue |  |  | $\underline{1}$ |  |  |  |  |
| Vibration of the Tip of the Tongue or of the Uvula |  |  | r |  |  | (R) |  |

## German Consonants

from the practical, i.e., our, point of view, show few deviations from the English ones, and therefore call only for a few remarks.
§ 180. There is, properly speaking, no " $\mathbf{w}$ "' sound in German, but the " u " in Quelle, Qual, and the " w " in Schwester, zwei, etc., are like it. This sound has the same lip-articulation as the English "w," but not its "u" position of the tongue (see § 134). It is, properly speaking, a bilabial " $v$," but for practical reasons it is
desirable to identify it with the English "w ". A great many English speakers of German pronounce the "w " in Schwester, schwer, zwei, etc., like the usual German " w," i.e., like "v," as in wohl, with a laboured kind of effect.
§ 181. The consonants "s," "z"; "t," "d"; "n," "l," "r," have in German tongue-teeth, in English tongue-gum articulation. This difference in the articulation, however, does not produce a sufficiently pronounced difference in the sounds to deserve our attention But the more advanced student of phonetics should bear the difference in mind, as also the fact that for " $t$," " $d$," " $n$," " $l$ " the tongue is more advanced than in English.
§ 182. The " $\int$ " sound shows considerably more pouting of the lips than it does in English, with the result that the German sound is fuller and more sonorous. The same applies, as a matter of course, to the " 3 ," which, however, is but of comparatively rare occurrence (see § 196).
§ 183. The voiceless "ç" sound (see Table B, Diagram 5) is a voiceless " j " (yod). It occurs only after front vowels and after consonants, as in ich, Weg, möglich, Bücher, leicht, Sträuche, solch, durch, Gretchen, phonetically = iç, ve:ç, mø:çliç, by:çər, laiçt, stroiçə, zolç, durç, Gre:tçən. It is the same sound as the Scotch "ch" in licht, but is unknown in English, though the " $h$ " in hue is sometimes pronounced like it.

The simplest way for the Englishman to pronounce the " $\mathrm{c}_{\text {" " }}$ is to sound first " j ," as in you, and continue it without the vibration of the vocal chords. This power over the action of the vocal chords is easily
acquired-on the part of the student, with the child it is different-by changing, without interrupting the current of expiration, " $z$ " to " $s$," " v " to " f ," " 3 " to " $\int$," and vice versâ. A yet simpler way is to whisper the " $j$ " with a strong expiration.
§ 184. The articulation of the "x" sound-doch, ach, etc. (see Table B, Diagram 6)-is the same as for " $k$," with the difference that in " $k$ " the tongue is pressed against the soft-palate, whereas in " $\chi$ " a small passage is left between them. This sound is the same as the "ch" in the Scotch loch. In English it is unknown. The student who has already acquired some power over his speech organs will easily produce the sound by pronouncing "talk" and trying to make the last consonant continuous. A simpler expedient is to whisper the " wh" in who, or the " h " in hoof, with a strong current of expiration, lifting the back part of the tongue for the following " $u$ " sound as high as possible.

The " $\chi$ " sound occurs only after back vowels, as in Dach, Tag, doch, Kuchen, auch; phonetically = dax, ta: $\chi$, do $\chi$, ku: $\chi ə n, ~ a u \chi$.

That the "ç" sound with its articulation in the front part of the palate occurs only after front vowels, and the " $x$ " sound with its back-articulation only after back vowels, may be regarded as a very natural fact in the economy of sound production.
§ 185. The voiced fricative " $\boldsymbol{g}$ " (see Table B, Diagram 6) occurs only in certain districts (Hanover, for instance, and is represented by intervocalic " g " after back vowels, as in Tage, Bogen, Kluge), and may therefore be disregarded. It is a sound difficult to acquire. The majority of North Germans pronounce sagen, Bogen, etc., with the ordinary " g " sound.
§ 186. The German " $h$ " sound does not know the gentle beginning of the English "h" (see § 140), but sets in with full force. The pronunciation of the syllable "ho" would therefore be represented in English as $<h>0$ : in German as $h>0$.

The "h" sound occurs only at the beginning of words, and is absolutely silent in mehr, wohl, sehen, fliehen, Weh, etc., as, of course, also in That, thun, etc.
$\S 187$. Of the plosives we need only consider the socalled glottal stop (or catch), phonetically represented by '. It is produced by closing and suddenly re-opening the glottis (i.e., the vocal chords), as the lips, for instance, may be closed and opened in rapid succession without emitting any breath, producing a slight gurgling kind of sound, as that of water from a full bottle. The sound is not indicated in ordinary spelling, but is very common, as it precedes every initial vowel in simple and mostly also in compound words. It is best noticeable in whispering. The French and English languages make no use of it.

Examples : aber, über, Verein are pronounced 'a:bər, 'y:bər, fer'ain. Though the sound of the glottal stop is only slight, yet the German notices its absence ; the words and syllables then seem to him to run or glide into each other. These two lines of Bürger's Lenore -

> Und überall, all überall
> Auf Wegen und auf Stegen-
will sound different to the German ear when read with the glottal stop and without it before und, über-all, all über-all, auf, und, auf.

The glottal stop does not occur in the body of simple words (as, for instance, before the " e " in bauen, schauen), nor in compounds which are no longer felt
as such, as in herein, hinaus; or in unaccented little words like er, es, ich, etc., as, for instance, in these sentences: denn er sagte; nun will er es nicht thun, where they are quickly pronounced together with other words. In wer ist da? 'ich! the ich requires the stop, but ist is without it.

It is difficult to teach the sound in question theoretically ; however, the following experiment will perhaps assist the student who has not yet acquired the necessary power over his speech organs: set your vocal chords as if you were going to sound " $\alpha$," which will produce a certain tension in the larynx, then, instead of sounding the " $\alpha$ " fully, whisper it, when the "click" of the glottal catch may perhaps be heard. As a shift, make in reading a very short stop before the initial vowels which require the "catch".
§ 188. The German " m ," " n, " " $\eta$ " call for no remarks; they are identical with the English sounds.
§ 189. The German " l," though it has slight vibration of the sides (or of one side) of the tongue, may, for our purpose, be regarded as practically the same as the English " 1 ".
§ 190. There are two " $r$ " sounds in German. The one, represented by " $r$," is identical with the North English and Scotch " $r$ "; the other, represented by " R ," is produced by the woula vibrating or trilling in a small groove formed in the back part of the tongue. Both these sounds are about equally common, the north, especially the north-west, and the stage all over Germany prefer the " $r$ ". The " $R$ " is physically easier to pronounce, after its articulation has once been acquired, but the Scotchman and North Englishman had better use his own " $r$," which the southerner will
no doubt also find easier to acquire than the " $R$ ". All he has to do for this purpose is to trill his " $x$ " (see § 149). This " $x$ " is unknown in German.

The stage prefers the " $r$ " because it possesses greater sonority than the " $R$ ".

## Assimilation.

$\S$ 191. In German, assimilation between voiced and voiceless consonants does not play a very important part. The " $m$," " $n$," " $\eta$," " $l$," " $r$ " sounds in connection with voiceless consonants are treated as in English (see $\S 151$ ). Where assimilation takes place between consonants belonging to different syllables, it is progressive, as in English, but it is not quite so thorough. Words like abbrechen, abgeben, mitbringen, ausgehen, er hat das Buch are pronounced apbreçən, apgoe:bm, mitbri $\eta ə n$, ausge: $n$, ər hat dias bu: $\chi$, i.e., the " $b$," " $g$," " $d$ " are merely unvoiced, but do not quite become "p," "k," "t". These voiceless " ${ }_{0}$," "d ${ }_{0}$," "go" are produced quite naturally if the speaker endeavours to sound " $b$," " $d$," "g" as "b," "d," "g" after voiceless consonants, as in the above words. The difference between voiceless "b," "d,", "g." and "p," "t," "k" will be referred to in § 211.

Such assimilations as we find in $h a: b m$ (hab( $\theta$ )n), komm (komm(ə)n) are as frequent as they are natural in ordinary conversation and reading.

## Spelling and Pronunciation.

§ 192. German spelling represents German pronunciation in a fairly regular way, but the following facts should receive special attention :-

1. $z$ represents a group of two sounds, i.e., "ts": $z u$ (tsu:), zahl (tsa:l), sitzen (zitsən).
2. t before unaccented " i " in foreign words is likewise $=$ "ts": NTation (natsio:n), Titian (titsia:n).
t before accented " i " is $=$ " t ": Aristokratie (aristokrati:), hantieren (hanti:rən).
3. c before front vowels represents in foreign words also "ts": Cigarre (tsigárə), Citat (tsitá:t), decimal (detsimá:1), cynish (tsy:ni§).
4. ch represents three different sounds, i.e., "ç," " $\chi$," "k": ich (iç), ach (ax), sechs (zeks), (see §§ 183, 184).
5. g represents four different sounds, i.e., " g ," " $\mathrm{ç}^{\prime}$," " $\chi$," " 3 ": gehen (ge:(ə)n), gütig (gy:tiç), Tag (ta: $\chi$ ), Genie (弓əni:). 'The latter only in foreign (French) words (see §§ 196, 197).
6. $s$ represents three sounds, i.e., " s ," " z ," " s ": das (das), so (zo:), Stuhl ( $\int$ tu:l), (see §§ 195, 196).
7. $\mathbf{b}$, $\mathbf{d}$ at the end of syllables are pronounced "p" and "t": Grab (gra:p), Rad (ra:t).
8. $\mathbf{y}$ in all German words represents " f " : vor (fo:r), Vetter (fєtor), Vater, Vogel, etc.
9. Foreign words keep, in a more refined pronunciation, their national sounds: Genie (Jəni: and Jeni:), Chef ( $\left.\int \in f\right)$, Orange (orã:Зə), Gentleman (dろentlmən).
§ 193. f, $\mathbf{y}$.
The " $\mathbf{f}$ " sound is represented by :-
(a) f, in für, hoffen, Pferd (pf $\epsilon \mathrm{rt}$ ), Kampf (kampf), Topf (topf), Schiff ( $\int$ if).
(b) $\mathbf{y}$, in vier, verlassen, Veilchen (failçən).
(c) ph, in Greek words: Photographie (fotografi:).

The " $\mathbf{x}$ " sound is represented by :-
(a) w, in wahr, wohl, Wasser, etc.

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(b) $\mathbf{y}$, in foreign words: Veranda (vəranda:) Vasall (vazal, accent on the last syllable).
$\S$ 194. The " $\mathbf{w}$ " sound is represented by :-
(a) $\mathbf{u}$ after " Q ," in Quelle, Qual (kwa:l).
(b) $\mathbf{w}$ after " $z$ " and "sch," in zwei, zwischen, Schwester ( $\int$ wester), schwarz. ${ }^{1}$
§ $195 . \mathrm{s}, \mathrm{z}$.
The " $s$ " sound is represented by :-
(a) s, ss, in das, dass, Gras, Kindes, hassen, ist, musst.
(b) $\mathbf{z}$ (part of), in $z u$, etc. (tsu:).
(c) t (part of) before unaccented "i," in Nation (natsio:n), Titian.
(d) c (part of) before front vowels in foreign words: Cider (tsi:dər), Concept (kõntsépt).
(e) $\mathbf{x}$ (part of) in Axt (akst), Alexander. ${ }^{2}$

The " $z$ " sound is represented by :-
(a) s before vowels at the beginning of syllables, in sein, sittsam (zitza:m), Festsaal (festza:l), Illusión.
(b) z, in some foreign words : Bazar (bazá:r).

In Zone, Skizze, etc., it has the usual pronunciation of the German " z ".
§ 196. $\int, 3$.
The " $\int$ " sound is represented by :-
(a) sch, in schön, Schule, rasch, Schlange, schwach.
(b) $\mathbf{s}$, initial before " p " and " t ," in stehen ( ( $\mathrm{fte}:(\partial) \mathrm{n})$,
${ }^{1}$ We once more call attention to the fact that the "w" in Schwester is not the ordinary " v " sound (as in wohl), but the English " $w$ " without the " $u$ " position of the tongue; in other words, a bilabial " v" (see § 180).

The German "x" is always "ks," never " gz ," as in English.
sprechen ( $\int p r e c ̧ ə n$ ), Beispiel (baifpi:1), Verstand (fərftant), Studentensprache (Studéntnfpra: $\chi$ ). ${ }^{1}$

The Hanoverian pronunciation of "st," "sp" with " $s$ " instead of " $\rho$ " is purely dialectical, and should not be adopted.
(c) ch, in French words: Chef, Chicane (Siká:nə), Charlotte ( (JarlSta, with the stress on the " o").
(d) $\mathbf{g}, \mathbf{j}$, in French words: logieren ( $\operatorname{lofi} \mathrm{i}:(\partial) \mathrm{n})$, sich genieren ((əəni:r(ə)n), Journal (gurna:1).

The " 3 " sound is not a genuine German sound, and occurs, as a rule, only in a more refined pronunciation of French loan words, as in Logis, Journal, etc.
§ 197. ç, j.
The "ç" sound is represented by :-
(a) ch, after front vowels and after consonants : mich (miç), freundlich (froyntliç), recht, durch, solch (zolç), Liebchen (li:pçən). In foreign words : Chemie (çəmi:), China (çi:na:).
(b) $\mathbf{g}$, after front vowels at the end of a syllable, and after consonants : König, Weg (we:ç), unsäglich (unze:çliç, accent on the " $\epsilon$ "), Berg (berç).

The " j " sound is represented by :-
(a) j , in ja, Jahr.
(b) ll, gn, in French words: Batallion (bataljo:n), Mignon (minjz̃). ${ }^{2}$
${ }^{1}$ In the body of the word the "st" and "sp" are pronounced as in English: fast (fast), fasten (fast(ə)n), Liebste (li:psto), Knospe (knospe).
${ }^{2}$ In many parts of Gërmany, Berlin for instanse, " j " is also represented by intervocalic "g," as in Tage $=$ ta:ja, gegen $=$ ge:jon, liegen $=$ li:jən. Also by " $g$ " after " $l$ " and " $r$ ": folgen $=$ folgən, Morgen $=$ morjon. This pronunciation had better be avoided.
§ 198. $\mathrm{x}(\mathrm{g})$.
The " $x$ " sound is represented by :-
(a) ch, after back vowels, in ach, Dach, doch, Buch, sachlich (zaxliç).
(b) g, after back vowels, in Tag, Betrug, sagte. ${ }^{1}$
(The " $\mathfrak{g}$ " sound occurs after back vowels, chiefly in Hanoverian pronunciation: Tage (ta:gə), Woge (vo:gə), etc. It is advisable to pronounce here the "g" sound.)
\$ 199. h.
The " h " sound is only represented by " h ": haben, hoch, etc. The " h " is mute in the body and at the end of words, as in thun (tu:n), Mïhe (my:ə), höher (hø:ər), sehen (ze:(ә)n), sah (za:).
§ 200. p, b.
The " $p$ " sound is represented by :-
(a) p, pp, in Pein, Pfund, Klappe.
(b) b, at the end of a syllable, in $a b$ (ap), Grab (gra:p), Lob (lo:p), löblich (le:pliç).

The "b" sound is always represented by "b," "bb" in bei, Ebbe (ebə).
§ 201. t, d.
The " t " sound is represented by :-
(a) t , tt , in Teil, treiben, hatte, Demokratie, flattieren. ${ }^{2}$
(b) th, in thun, That.
(c) d, at the end of syllables, in und (unt), Rad (ra:t), stïndlich (Styntliç).
(d) dt, in Stadt ( (5tat).
(e) $\mathbf{z}, \mathrm{ti}, \mathrm{c}$ (part of), in $z u$ (tsu:), Nation (natsio:n), Cider (tsi:dər), (see § 192).

[^32]The " $d$ " sound is always represented by " $d$," in $d u$, müde, etc.
§ 202. k, g.
The " $k$ " sound is represented by :-
(a) k, ck, in kïhl, dick, Rücken.
(b) ch, before " $s$," belonging to the stem of the word : sechs (zeks), wachsen (vaksən), Fuchs (fuks). ${ }^{1}$
(c) $\mathbf{q}$, in Quelle, quälen ( $\mathrm{kw} \in: \ln$ ).
(d) ch, in Greek words: Chaos (ka:os), Chor (ko:r), Cholera (ko:lera:).

The " g " sound is always represented by " g ," "gg," in gut, fragen, Flagge.
§ 203. The glottal stop (catch) is not indicated in ordinary spelling (see § 187).
§ 204. m, n.
These two sounds are always spelt $\mathbf{m}, \mathbf{m m}, \mathrm{n}$, nn , in mein; Amme (amə), nein, Nonne (nənə).
§ 205. $\eta$.
This sound is represented by :-
(a) ng, in Finger (fi$\eta \ni r), ~ S i n g e r ~(z i \eta ə r), ~ G e s a n g ~$ (gəzaŋ).
(b) n, in French words, in Ballon (baloŋ), Bassin (base $\eta$ ). ${ }^{2}$

The group " $\eta \mathrm{g}$ " (as in the English finger, single, etc.) occurs in received German only in a few foreign words like fungieren (fungi:r(ə)n).
(c) $\mathbf{n}$, before " k ," in Dank (da $\eta \mathrm{k}$ ), denken (de $\eta \mathrm{k} ə \mathrm{n}$ ). ${ }^{3}$
${ }^{1}$ ch before the " s ". of inflection is " c " or " $\chi$ ": ich räche, du rächst ( $\mathrm{r} \epsilon$ ęt), ich wache, du wachst (va $\chi \mathrm{st}$ ).
${ }^{2}$ It is best to pronounce such words as they are pronounced in French, i.e., Ballon = bal乞̃, Bassin = bas̃..
${ }^{3}$ The pronunciation of final "-ng" like " $\eta \mathrm{k}$ " is Hanoverian and provincial, as in Gesang $=$ gaza $\eta \mathrm{k}$, fing $=\mathrm{fi} \eta \mathrm{k}$.
§206. The " 1 " and " $\mathbf{r}$ " sounds are represented by "l," "ll," "r," "rr". Examples: Liebe, voll, sollen, rot, für, hören, Karren (karən), hart (hart).
N.B.-Neither the "r" nor the "l" exercise any influence on the preceding vowel. The " $r$ " is always sounded, as it is in Scotch: hart (hart), Garten (gartn), Meer (me:r), für (fy:r), fahren (fa:rən), (see §§ 88, 190).

## Definition of Consonants.

$\S 207$. We have seen $(\$ 35)$ that a vowel contains no other sound but the voice, which, passing unimpeded through the oral-and in French also the nasal-cavity, and between the lips, is thereby modified in different ways. In a consonant the oral passage is either contracted (narrowed) or closed, whereby a sound is produced in one of the superglottal passages where the contraction or closure takes place. This sound may or may not be accompanied by the vibration of the vocal chords, the voice. The nasal consonants, "m," "n," " $\eta$," French " $n$ " are reckoned amongst the consonants, because in their articulation the passage through the mouth is closed. They are, however, vowels in so far as they contain no other sound but the voice, which becomes here modified, partly in the oral, and partly in the nasal cavity.

How a slight difference of articulation changes a vowel into a consonant is best observed in the socalled consonified French vowels " $j$," " y," "w " (see § 154).

## Hints how to Teach the Consonants Phonetically.

§ 208. The consonant system, like the vowel system, has to take shape and form before the eyes of the children, and the sound charts are therefore to be hung up only after all the sounds have been examined and represented on the blackboard. There are a good many things in this examination which the children can find out for themselves, and of this pleasure and advantage they should not be deprived.

The teacher begins with a continuous " $f$," carefully articulated, and asks the class what sound it is. If they do not find out, or if there is a difference of opinion, repeat the sound, or pronounce if or of with a long " $f$ ". Then ask how you produce the sound, and unless the view of the teacher's lips was obstructed, the answer will be readily given.

Hereupon the first two vertical and horizontal lines of the diagram (p. 66) are drawn on the blackboard, leaving for the present the space open for the term fricative, i.e., for the manner of articulation; put the " $f$ " in its place, and let the children suggest the term for the horizontal division, i.e., for the place and organs of articulation. Then sound " $v$," repeating the above questions, and put the letter in its place, and then sounding " $f$ " and " $v$ " one after the other, ask the difference between them. This will no doubt puzzle the class at first, but the experiment with the palm of the hands (see p. 4), which should now be resorted to, will soon make matters clear. After the difference is understood, underline " $v$ " with red chalk.

After this the other fricatives are treated in the same way.

Then the third horizontal line is drawn and " $p$," " $b$ " are treated like " $f$ " and " $v$," and pronounced by themselves, i.e., not as pee and bee. After the children have found the proper squares for them in the diagram on the blackboard, they are asked to find out the difference between " $w$ " and " $b$ " (or " $v$ " and " $b$ "). The children's own observation will thus lead to the classification of fricative (narrow) and plosive (stop).

On coming to the third horizontal group (after completing the plosives), the " $m$ " will prove a great puzzler. The children soon find out what sound it is, and that the lip-articulation is the same as for " $b$," but what will puzzle them is that a continuous sound is produced, though the lips remain closed. However, they are sure to brighten up if they are told that, though the door is shut, there is perhaps a window open through which the sound escapes. Some of the children will now be able to explain both the analogy and difference between " $w$," " $b$," " $m$ " (and " $s$," " $d$," " $n$ "). ${ }^{1}$

We do not consider it necessary to give any further indications. The teacher who has so far mastered the subject, and takes an interest in teaching it, will have no difficulty in arranging it so as to make it instructive, clear and interesting to his pupils. We wish, however, to mention once more that all the consonants in this practice should be produced by themselves on the part of both teacher and pupils (i.e., " $f$ " $=$ " f " and not

[^33]as "ef," etc.). Where a pupil has any difficulty with a consonant, the teacher's knowledge of the proper articulation of the respective sound ought materially to assist him. ${ }^{1}$

## Whispered Sounds.

§ 209. Though this subject is of little importance for the schoolroom, it is not without interest to the teacher. We have left it until now, when we may expect that the learner has obtained a clear idea of the production and articulation of the ordinary speechsounds.

The only difference between the spoken and the whispered language consists in the latter containing only voiceless sounds, which are produced, vowels as well as consonants, in the superglottal passages, by friction or explosion. As the oral passage is rather wide in the articulation of the vowels, especially of "a," " $\alpha$," " $\epsilon$," " $\rho$," the current of expiration, in order to be audibly modified, is stronger here than in the consonants. In strong whispering, especially in what is called stage whisper, there is a fricative sound pro-

[^34]duced, it seems-the phoneticians are not agreed as to the exact spot-by the contraction of the throat. This sound is especially perceptible in the vowels, where it is modified in the usual way. In ordinary whispering it is hardly audible, and for practical purposes we may assume that it is absent altogether. The principal fact to be remembered in whispering is that there is no voice, and that therefore the difference between whisper and ordinary speech affects the vowels and voiced consonants only. There is thus practically no difference between spoken and whispered "p," "t," "k," "f," " $\theta$," "s," " $\int$ ". The exclamation pssst! sounds exactly alike in the spoken and in the whispered sentence: he said pssst! Since it is only the presence of the voice which distinguishes "b" from "p"; "d" from "t"; "z" from "s"; " 5 " from " $\int$," etc., bed in whispering ought to sound like pet, and bridge like pritch. That the hearer is able to make the necessary distinction is merely owing to the fact that the speaker whispers the voiced consonants, "b," "d," etc., more gently than the voiceless ones.

## Yoicing and Unvoicing of Consonants.

$\S 210$. We have already had occasion to observe that the student of phonetics should have the necessary power over his speech organs to produce every sound of the different diagrams by itself, i.e., " b," "f," "s," " $z$," etc., as "b," "f," "s," "z," and not as "bee," "eff," "ess," "zed," and further that he should be able to close and open the glottis at will, i.e., to voice the current of breath, or leave it unvoiced, as it passes between the vocal chords. For this latter exercise he will find whispering a very useful help. If he has not already
learned to pronounce without interruption fvfvfv, $\theta \delta \theta \delta \theta \delta$, etc., he will do well to start the necessary exercise by alternating whispered and spoken (i.e., voiced) vowels, i.e., by sounding, without interrupting the current of breath $\alpha \alpha{ }_{0}{ }_{0} \alpha$, eeeeee, etc. ${ }^{1}$ After this practice has been continued for some time, the production of fvfvfv, etc., will be an easy matter.

In order to produce voiceless " m," "n n," " $\eta_{\eta}$," " j ,"" " ${ }_{0}$," "r ${ }^{\mathrm{r}}$," whisper words where they occur, such as aim, own, hang, French digne, all, oar. The "l" in all, if whispered with sufficient force, produces the Welsh " 11 " sound in Llewelyn, Dolgelly.
§ 211. The " b, ," " v, ," "d," "z," " g ," i.e., whispered "b," "v," "d," " $z$," "g," are of practical importance only in German pronunciation, where they occur in certain districts, as Saxony, Thuringia, regularly instead of " $b$," " $v$," " $d$," etc. In fact these dialects have only one sound for " $b$ " and " $p$," "v" and " $f$," "d" and "t," "s" and " $z$," " $g$ " and " k," namely, " ${ }_{0}$," " ${ }_{0}$," " d ,", " result that where the Saxon says bed (bed), he seems to our ear to be saying pet, and vice versá. But even in North German these whispered and voiceless " $\underset{o}{\mathrm{~b}}$ " "d." occur in such combinations as der Vater und der Sohn ( = dər fa:tər unt d̈or zo:n) ; abbitten ( = apbit(ə)n).

## Sound Charts and the Phonetic Transcript in the Classroom.

Some of the points treated in the following paragraphs have already been mentioned (p. 50) in another connection.
§ 212. A proper teaching of pronunciation, in the mother tongue as well as in foreign languages, is not
${ }^{1}$ Sounds, which are, as a rule, voiced, are marked by the figurative sign o when they are produced with the glottis open.
possible without systematic sound-drill. The pupils must be able to analyse the different sounds of a word, to produce them singly and properly distinguish them from each other. For this purpose it is essential that each sound should be represented by a distinct symbol, and that these symbols should be placed before the pupils in a practical way. Whether the latter should be able to explain the nature of a plosive, of a fricative, etc., may be regarded as a matter of secondary importance. But as the few terms on the sound charts are easily learned, we are of opinion that they should be taught. However, what is of essential importance is that the teacher should possess the means, firstly for the indispensable sound-drill and further of constantly testing whether, in connection with reading or speaking, a sound has been properly understood and correctly reproduced. This task will be considerably facilitated if the eye is called in to assist the ear, i.e., if the pupil has been taught and is now able to connect at once with a given symbol its proper sound. Supposing a child confuses "e" and "є," "o" and " 0 ," " $\int$ " and " 3 ," using the same vowel in fail and fair, boat and bought, and pronouncing pleasure $=$ ple ${ }^{\mathrm{r}}$, George $=\mathrm{t} \int 5$ : t $\int$, reference to the sound chart will always be found of considerable help.

The following suggestions are the outlines of what we consider the proper course for the systematic teaching of pronunciation.

## English.

§ 213. (a) The whole system of vowels and consonants has to take shape and form before the eyes of the pupils, as explained, $\S \S 109,208$. This, together with the necessary practice of familiarising the children with the
different sounds and their symbols, will require from three to five hours, according to the size of the class. Whether the study of the vowels should be immediately followed by that of the consonants is a matter which may be left to the discretion of the teacher.
(b) After the sounds have been explained and practised from the blackboard, the sound charts are hung up for further drill and reference. The sound-drill should be continued until the children are able to give at once the correct sound to its symbol. ${ }^{1}$ Every sound, during this drill, must be very clearly articulated, whether they are used by themselves or in specimen words. In a class of forty young children of average ability, this practice and instruction, which will give them a firm grip of every individual sound, will occupy from six to eight hours in all, spread over as many or more lessons.
(c) In the course of reading (or speaking) a faulty pronunciation should at first always be corrected with

[^35]the help of the phonetic letters. This may be done in this way: the teacher (or one of the pupils) writes the respective word as it has been pronounced on the blackboard in the phonetic transcript, and then asks for the correct pronunciation and the correct phonetic spelling. In this kind of practice the children should watch each other's pronunciation and correct it.
(d) The pronunciation of single words, such as bitten, singing, finger, English, drink, cheep, gentle, soldier, question, language, handkerchief, as also the everyday pronunciation of short sentences, such as bread and butter, I have not seen him, should be transcribed phonetically by the pupils. Exercise of this kind teaches them to properly analyse the spoken words, to distinguish them from the written ones, and thus offers them excellent material for observation, and is of great educative value, resting, as it does, on sound psychological principles. The student of phonetics should carry this practice still further and transcribe phonetically his own pronunciation of continuous passages of a familiar and an elevated style.

## French and German.

$\$ 214$. If the pupils, before beginning the study of a foreign language, have been taken through a systematic course of English pronunciation-as should be the case -the teacher of French and German will have his initial task considerably lightened. His class has received the greater part of the necessary sound-drill, it knows the arrangements of the vowels and consonants, and most of the phonetic signs used in the foreign language. All the teacher, therefore, has to do is to add and practise the sounds which are new to the
class. If the class has received no such instruction, he begins his first lesson in the foreign language with the study and practice of the vowels, as described in the preceding paragraph and on p. 52. This will occupy, according to the size of the class, from three to six hours. The consonants demand less time-from two to three hours. If the teacher thinks that the children are wearied by the continuity of these exercises, the systematic study of the consonants may be taken together with the first lessons of the text-book. After the different sounds have been demonstrated and practised with the help of the blackboard, the sound charts are hung up during every French and German lesson. Frequent occasion to refer to them will arise, not only during the periodical repetition of the sounddrill (see § 125), but chiefly in connection with the phonetical transcript of the pronunciation of the more difficult words of the text-book used.

The advisability of the exclusive use of the phonetic transcript at the beginning of a foreign language course is still a much debated point. But all those who have given the transcript a serious trial are agreed that, if used in something like the following manner, it is a valuable and unobjectionable help for pronunciation.

After the vowels (and consonants, see above) have been practised, the teacher starts with his text-book, whatever that may be. In the first few lessons of a French grammar, which is largely used in this part of the country, occur the following words and phrases : le livre, la robe, porte, école, cheval, petit, fille, corbeille, chapeau, pain, champ, bois, coin, derrière, agréable, elle, vu, je suis, tu es, il est, timidement, le

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chien de la maison，il a perdu son cheval，son petit frère，où est le père，j＇ai soif et faim．The teacher will pronounce these words（and others）as they occur， and ask the pupils，individually or in chorus，to pro－ nounce them after him．Whenever a sound has not been properly caught，he will write the respective word on the blackboard in phonetic letters．This may be necessary for such words as école（where the＂é＂is often pronounced as＂$\epsilon$ ，＂owing to the following wide ＂$\rho$ ，＂or as＂ө，＂being unstressed），fille，corbeille（kor－ $\mathrm{be}: \mathrm{j})$ ，chapeau（（арроे，not §əpo），pain，coin（kwẽ），bois （bwa）．derrière（dєrje：r），elle（ $\epsilon$ l，not el），je suis（弓ə syi），tu es（ty e，not ty e），le chien de la maison（lə〔jẽ dla mezõ），cheval（〔əval），il a perdu son cheval （il a perdy sõ fval），petit（pəti），son petit frère（sõ pti fre：r），où est le père？（u єl pє：r？），j＇ai soif et faim（弓e swaf e fẽ）．

In this transcript the eye will assist the ear in various ways ；it will show the pupils that：－
（1）livre and agréable are li：vr，agreabl，and not liver and agreabəl．
（2）The＂o＂in robe，porte，école is short and wide．
（3）The＂$n$＂and＂ m ＂in pain，champ are only graphic signs．
（4）The＂ch＂represents a single sound．
（5）＂i＂before＂e，＂＂o＂and＂u＂before＂i＂are consonified in derrière，chien，bois，coin，suis．
（6）The different treatment of the＂$e$＂of the ordinary spelling：－
（a）as＂ e ＂in école，agréable，et．
（b）as＂$\epsilon$＂in derrière，elle，est，corbeille，
（c）aș＂$\partial$＂in je，petit，cheval；
(d) that it is mute in fille, elle, etc., and also in petit, cheval, de la in sentence-reading.
(7) The exact pronunciation of fille, corbeille. (The " j " here is very short.)

Such help will be more welcome still in difficult words like cueillir (kœ•ji:r), monsieur (mœsjø), tout de suite (tutswit), au-dessus (odsy).

In German the transcript will prove useful, anong other instances:-
(1) to properly distinguish between der, des, dem, den, die, as de:r, des, de:m, de:n, di:, when they are stressed, as is the case in declining them, and like dər, dəs, dəm, dən, di, as used in sentence-reading: der Hund hat den (die) Knaben gebissen $=$ dər hunt hat dən (di) kna:bən (or kna:bm) gəbisən (or gəbisn).
(2) to show the proper treatment of the unaccented syllables, containing " ə," die Blätter des Baumes sind abgefallen $=$ di bletər des bauməs zint apgəfal(ə)n.
(3) to constantly remind the learner of the treatment of final " b " and " d ," for instance, in halb $=$ halp, er schreibt $=\epsilon r$ Sraipt, Wald $=$ valt, as also of the different pronunciation of "s," like " $\int$ " in Stein ( $\int$ tain), like " s " in das, Kindes; like " z " in sehr (ze:r), and that German " $z$ " is always " $t s$ ".
(4) to call attention to the glottal stop.

These obvious advantages are to a certain extent counterbalanced by the fact that the phonetic alphabet makes use of three letters ("j," "y," "u") of the ordinary French alphabet and assigns new values to them. This, no doubt, causes some confusion at first, which, however, does not last. This drawback is less felt in German.

As the pupils progress the teacher will ask them from

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time to time to transcribe words which he or individual pupils have pronounced, and the transcript will thus prove a ready help to find out whether the children have correctly observed. Frequently naming or pointing to the letters on the sound charts will, as a rule, suffice at this stage.

Length (quantity, duration) ; Force (stress, emphasis, dynamic accent) ; Pitch (intonation).
§ 215. The principal object in our study of sound production so far has been the consideration, how, under normal conditions, the voiced or voiceless expiration is moulded, as it were, into the different sounds, vowels and consonants. It is this processarticulation, as we have called it-which enables us to distinguish the different sounds from each other, " a " from "e" from "i," etc. However, this does not exhaust the modes of sound production. In pronouncing papa! (papa:!), was she laughing or crying? we not only distinguish between the different sounds of different articulation, such as "a," " $\alpha$," " p," " l," " $i$, " etc., but we also notice that the second " $\alpha$ " in papa is longer and stronger than the first, that the "-ing" (iŋ) in laughing has a higher tone than in crying. These three qualities, length, force, pitch, affect, as a rule, the different sounds only when they are combined to form syllables, words and sentences. ${ }^{1}$ In sounding
$\rightarrow \quad{ }^{1}$ In the spoken language the sounds are uttered in bars, which depend upon the length and force of each expiration. The bars of the first kind are called breath-groups, those of the second stress-groups. In the sentence she was crying, crying, crying, we have only one breath-group, but three stress-groups. The division of the written language into words and sentences ị not always identical with the above division of sounds. The
"a," "e," "i" by themselves, we may give to each vowel the same length and force, but we could not treat them in the same way in pronouncing America without offending our sense of rhythm and harmony.

There is generally, though not necessarily always, a certain equilibrium to be found between the different factors of sound production which the learner can easily observe from his own speech. If the current of expiration is produced with a certain force, the pitch is raised correspondingly, and the tongue- and lip-articulation shows increased tension. This explains the fact that long vowels have, as a rule, a narrower, i.e., a tenser articulation than the short ones (see § 27), because a long sound requiring necessarily more breath than a short one, the greater exertion connected with the longer exhalation leads instinctively to increased exertion, i.e., increased tenseness of the tongue-articulation. Stress naturally carries with it the same effect, as is seen, for instance, in the word pity, the first " i " showing a slightly narrower articulation than the second.

Length (quantity, duration).
§ 216. For our purpose it suffices to distinguish between long sounds, marked : $($ note $=$ no:t $)$, half long, marked . (notation $=$ no:te: $\int \wedge n$ ), and short, left unmarked ( $n o t=n \nu t$ ). In most cases even the broadest
expression how do you do? though consisting of four parts when written, presents itself undivided when spoken, and as a group of sounds is equivalent to superintend. We may, however, say that the breath-groups correspond partially to the logical division into sentences, in so far as one breath-group cannot include more than one sentence, though one sentence may contain several breath-groups,
distinction of long and short may be regarded as sufficient for school purposes.

Length affects both vowels and consonants. Length in consonants is marked in the same way as in vowels.

## English.

## I. Yowels.

§ 217. Long vowels occur, as a rule, only in stressed position : feel, coronation, abused, etc.

Long vowels are habitually reduced to half length before voiceless consonants. Compare nose (no:z) and note (no•t), (see $\S 28$ ).

Short vowels before voiced consonants are generally lengthened, especially in the South, where we find man, bad, God, bed, bud, dig, pronounced as mæ:n, bæ:d, go:d, be:d, ba:d, di:g.

In the diphthongs ai, au, əi, both elements are of equal length. In the southern diphthongal vowels, $\mathrm{e}: \mathrm{i}, \mathrm{o}: \mathrm{u}$, the first element is longer than the second.

## II. Consonants.

§ 218. Long consonants generally occur where they are final, and follow a short accent vowel, as in $u s$, fish, will, build (bil:d), bit, cap, rock, and in such combinations as coat-tail, black cat. ${ }^{1}$ Where the preceding vowel is long or half long, the following consonant is, as a rule, short; compare the different pronunciations of gone $=$ gon: and go:n.

[^36]
## French.

## I. Yowels.

§ 219. One of the most important things to remember in French pronunciation is the rule that all final free vowels (free $=$ not followed by a sounded consonant belonging to the same syllable) are short, as in beau, vue, matinée, ŗ̣̂t (ro), matin (matẽ), voulu, courroux (kuru), complet (kõ.ple). The English inclination to lengthen accented final vowels (blow, see, blue, pay) must be strongly resisted, as it is altogether un-French to pronounce beau for instance like bow (the archer's), and si (n'est-il pas venu? Si!) like sea.
$\$ 220$. In accented final syllables the vowel is long if it is followed by a sounded voiced fricative, i.e., " v ," "z," " $\overline{\text {, " " }} \mathrm{j}$, ," and by sounded "r". Examples: vive (vi:v), brise (bri:z), loge (lo:3), fille (fi:j), peur (pœ:r), mort (mə:r), finir (fini:r). ${ }^{1}$
$\$ 221$. Followed by other consonants, they are, as a rule, short, unless they have the accent circumflex: mode (mod), fade (fad): vite (vit), Rome (rom), drogue (drog), tête (te:t).
§ 222. The nasal vowels, and au, eau, eu (i.e., "o" and " $\varnothing$ "), are always long before any sounded consonant, when under stress, and half long when more or less unstressed. Examples: blanc (blã), blanche (blã:j), blanchir (blã.fi:r); rond (rõ), ronde (rõ:d), rondeur (rõ.dœ:r); haut (o), haute (o:t), hauteur (o.tœe:r); meute (ma:t), Eugène ( $\varsigma \cdot \overline{\mathfrak{b}}: \mathrm{n}$ ), sauf (so:f), sauver

[^37](so•ve) ; France (frã:s), français (frã•sє, frã:s $\epsilon$ ), on conviendra (õ kõ•vjẽ.•dra), beaucoup (bo*ku), commencer (komã.se). ${ }^{1}$
$\S 223$. The " $\epsilon$ " sound, followed by a single sounded consonant, is, as a rule, long, except before "p," "t," "k". Examples: scène ( $\mathrm{s} \in: \mathrm{n}$ ), flèche (fle: $\int$ or $\mathrm{fl} \in \mathrm{j}$ ), bègue ( $\mathrm{b} \in: \mathrm{g}$ ), fève ( $\mathrm{f} \epsilon: \mathrm{v}$ ), cortège (kərt $\mathrm{i}: 3$ ), aime ( $\epsilon: \mathrm{m}$ ). Compare complète (kõ•plet) and cède ( $\mathrm{s} \in: \mathrm{d}$ ).
§ 224. The accent circumflex always marks a long vowel : bête (be:t), maître ( $\mathrm{m} \epsilon: \mathrm{tr}$ ), rôle (ro:l), côte (ko:t), and a half long vowel in unstressed position, côtelette (ko•tlet), vêtement (ve•tmã).
§ 225. Vowels preceding two consonants belonging to the same syllable, are short: morte (mort; but mort $=\mathrm{mo:r})$, bonne (bon), belle (bєl). However Jeanne and flamme are $=3 \mathrm{a}: \mathrm{n}$, fla:m.
§ 220. Unaccented vowels are mostly short, except those mentioned in $\S \S 214-216$. But all the vowels in société, divinité, Bois de Boulogne (bwa d bulon, with only one accent on the three words, namely, on " $\rho$ "), barricade (barikad), commodité (komodite) are perfectly short (see, however, § 240 under French Accent).

These rules are a mere sketch, and cannot be looked upon as complete. For further information the learner had best consult the books of transcribed texts, and the Dictionnaire Phonétique mentioned, page 162.

## II. Consonants.

$\S 227$. We have consonantic length in cases as the following: combien ça con̂te-t-il? (ku:t:il ?), nett(e)té

[^38](nєt:e), lḋ-d(e)dans (la d: $\tilde{a})$; il mourrait, courrait (mur: $\epsilon$, kur: $\epsilon$; but il mourait, courait, with short "r"), bonne nuit (bon:पi), est-il satisfait? il l'est (il: $\epsilon$ ) ; voici ce que nous aurons comme menu (kom:əny). The double consonants of the ordinary spelling are, as a rule, of the same phonetic value as single ones, as in commode, aller, année; l'attraction is pronounced like la traction.

## German.

## I. Yowels.

§ 228. The vowel of the stem-syllable (i.e., the accented vowel) is long when it is final or followed by a single consonant. Examples: Fröhlich (fro:liç, the "h" does not count), Wehmut (ve:mu:t), Hut (hu:t), Gras (gra:s), Tag (ta: $\chi$ ), gab (ga:p), Hof (ho:f). Sagst, sagt, lebst, lebt, etc., keep, as a matter of course, the long vowel of the infinitive.
sch is considered a double consonant, and also frequently ch. The vowel preceding "sch" is therefore always short, as in rasch (raf), waschen, etc. There is no definite rule as to the quantity of the vowel before "ch". Kuchen, suchen, Buch, Fluch, hoch brach, stach have long vowels; Geruch, brcchen, stechen, Sache, Dach, doch, Koch, Küche have short vowels. On the whole the short vowels are more frequent before "ch" than the long ones.

Certain light monosyllabic words, as $o b$ (op), um, in, mit, das, was, etc., have short vowels, though they are followed by one consonant only.

The auxiliary haben changes its long "a" to short " a" in hast, hat, hatte.
§ 229. Final vowels-except of course " $\quad$ " -accented or unaccented, are long: roh (the " $h$ " does not
count), Weh, froh, du, da, Anna, Komma, Kaffee, Otto, Veranda (veránda:).
§ 230. The vowel before " $\tilde{B}$," which remains " $\tilde{B}$ " between vowels, is always long. Compare $\mathfrak{N u}$ ( $n u s$ )
 remains " $\tilde{\beta}$ ".

The strong verbs in -iessen change the long vowel of the infinitive to a short one in the imperfect and past participle: gieß̃en, gop (gos), आeyoũ! (gəgəs(ə)n). Like-

§ 231. All accented vowels followed by more than one consonant belonging to the same syllable are short. Examples: Garten, Hïtte, Berg, fast, halb (halp).
$\$ 232$. For our purpose it suffices to say that all unaccented vowels are short ${ }^{1}$ (but if they are final, see above).

## II. Consonants.

§ 233. Long consonants may occur where they are final and follow a short and accented vowel. Their length in this case is chiefly a question of emphasis. Er muss! Wenn ich nur wïsste, ob . . . Ja, wenn! The " $s$ " in the first, the " $t$ " and " $b$ " in the second, and the " $n$ " in the third are long.

[^39]In careful pronunciation there are also long consonants in Betttuch, Nachttau, Packkorb. But otherwise the respective consonants in Betten, Komma, Anna, alle, etc., are treated as single sounds.

## Force

(stress, emphasis, dynamic accent).
§ 234. If we pronounce a single word, like bold, or a whole sentence, he was indeed a bold, strong, man, who stood there at the helm, we easily observe how the force of our voice increases, decreases, or remains stationary. In the isolated "bold" there is a decrease from the "bo" to " $l$ " and " $d$ "; in the sentence the force of the expiration increases to " deed," drops down again for "a," and then rises and may be regarded as stationary in "bold, strong, man," after which it ebbs away with slight undulations to the final " m ". Rising stress is marked $<$, falling stress $>$, level stress $=$. The increase and decrease in the force of expiration is best observed if we whisper the respective sounds, when the disturbing influence of the voice of the vibrating chords is not felt.

The close observation of the rise and fall of force as seen in the above sentence may be regarded as belonging to the department of the teacher of elocution; the teacher of languages is more directly concerned with what is usually called accent, i.e., the stress of utterance which raises one vowel or syllable above the neighbouring ones. The accent which affects the strongest vowel of the isolated dissyllabic or polysyllabic word and some word or group of words of the whole sentence is called the accent of the word and
the accent of the sentence respectively. ${ }^{1}$ A broad division distinguishes therefore in the word and the sentence between accented and unaccented vowels (or syllables) ; in a more minute division, however, we speak of strong syllables-having the principal accent, of half-strong syllables - with a secondary accent-and of weak syllables, being without any accent. The accent, as a mark of distinction, must, in a general sense, be regarded as emphasising what is logically most important, namely, in the word the root, and in the sentence the idea. If, however, we accentuate you must either résist or désist, and it is ón not under the table, we do so for logical reasons likewise. That the French accentuate on the last syllable of the word and of the sentence is largely a matter of historical development.

The presence or absence of the accent must necessarily exercise a certain influence on the articulation of both vowels and consonants. If a syllable receives the stress it is sure to be articulated distinctly; if it receives but a scanty share of force and breath it runs the risk of being obscured, as is the case especially in English (in the South more than in the North), less in German, least in French.

The mark of the principal accent is ', of the secondary accent ', placed above or before the respective syllable.
${ }^{1}$ Where the syllable consists of two vowels, as is the case in a diphthong, we may even speak of an accent of a syllable, which, as such, falls either on the first or on the second of the constituent vowels. If the first is the case, as in English and German, the diphthong is called falling; if the accent falls on the second vowel, it is called rising, as we find it in that pronunciation of the French "ie," "oi," "ui" which, contrary to the common practice, does not consonify the first vowel.

Where a distinction between the relative force of secondary accents is required, we may mark the stronger ", the weaker '.

## English.

§ 235. As a general rule the accent of the word is on the stem-syllable: marvellous, picturesque, biblical, unnatural, etc. Exceptions, however, are very numerous, chiefly in words of Romance origin: innocent, coronation, etc. In polysyllabic words the force is naturally both falling and rising. Note the wave of force in a word like incomprehensibility, which, according to Dr. Lloyd, may be marked numerically and graphically as:-


Level stress is, as a rule, not found in simple words.
The accents (stress), principal and secondary, the rising and falling force of expiration in compound and co-ordinate words, the reader will easily determine for himself. We give the following examples : black-board, King Street, good-looking, thirteen, King of Hearts, Mr. Smith, good-morning! Compare black-board and black board, the latter with level stress.
$\S 236$. The influence of the absence of stress on the articulation of vowel sounds is easily observed in such words as and, from, for, of, or. Examples: bread and butter (bred an(d) batir) ; he came from London (hi ke:im from lındın) ; is this for me or for you? (iz $\theta$ is fă mi Я fâ ju: ?) ; three o'clock ( $\theta \mathrm{ri}: ~ \ominus \mathrm{klok}$ ).

Under stress and, from, for, etc., as in I said "and" not "or," the pronunciation is " and," " $₹$ : " In this class of words we have therefore to distinguish between an accented or strong, and unaccented or weak form, each with a different pronunciation.

Stress, or the absence of it, exercises a similar influence on the quantity (length) of the syllable. Compare the first syllables in note and notation; nation and nationality.

The reader, by examining his own pronunciation, can easily supply the illustration of the different facts, which we have briefly referred to in this chapter. For further examples see the transcribed texts.

## French.

§ 237. The stress is on the last fully sounded syllable : enfant, papier, service, postérité, parlez-vous? The common misplacement of accent in these and a great many other words is quite enough to entirely spoil an otherwise correct pronunciation.

This rule does not mean that all ante-final syllables are to be hurried over. Such a pronunciation would be intolerable. There is a certain rhythmical balancing in polysyllabic words which cannot be taught theoretically. In order to get out of the English habit of accentuation there is no harm in hurrying on to the final syllable-where the quantity of the previous syllables allows it-and pronouncing that with a certain strength; but in course of time this should be reduced to a more level stress.
§ 238. It often happens in dissyllabic words that the first syllable is heavier, longer than the final one. In this case the latter receives a special mark of dis-
tinction in the form of a slight pause preceding it. In français $=\mathrm{fr} \tilde{\mathrm{a}}: \mathrm{s} \epsilon$, for instance, the first syllable is usually uttered with greater force than the second, which, on its part, is distinguished by a slight pause before it. You may give to the two syllables in Voltaire the relative force of the English Walter, and yet the accentuation will be French provided a slight pause is made before the syllable -taire ( $\mathrm{t} \in \cdot \mathrm{r}$ ). If this pause is properly observed the word in its last syllable may even end in a whisper, as sometimes happens to the "du" in tout est perdu!
§ 239. Very frequently the French accent is marked by pitch instead of stress. This gives the peculiar timbre or musical accent to French pronunciation, which every visitor to Paris cannot have helped noticing. ${ }^{1}$
§ 240. In French the quantity (length) of a vowel does not depend upon stress to the same extent as is the case in English. Examples : génie (3e-ni), beaucoup (bo-ku), blanchisseuse (blă: (isø:z), côtelette (ko.tìєt), Hugo (y.go), rosier (ro•zje), causer (ko•ze) ; also passer, casser, nation, etc., in the Parisian pronunciation (see

[^40]§ 68). The vowels which we have marked here as half long receive a secondary accent. Compare also what has just been said in $\$ \$ 229,230$, and in the footnote about French accentuation. The speaker who pronounces quel génie! as kel 弓e:ni! will, as a rule, use pitch (musical accent) to accentuate the last syllable.
$\$ 241$ Loss (partial or entire) of the accent does not affect the quality of the vowels sufficiently to deserve our attention. For practical reasons we say that the respective vowels have the same narrow articulation in brute and brutal, in vite and vitesse, pré and préau. But there are two vowels strongly affected by loss of accent, namely, " $o$ " and " $\epsilon$," the first being changed to " $\rho$," and the second to "e" or "ə". Examples: rôt (ro), rôtir (ro•ti:r), rabot (rabo), raboter (rabote), pot (po), potage (pota:亏3), il règne ( $\mathrm{r} \in: \mathrm{n}$ ), régner (rene), il cède ( $\mathrm{s}:: \mathrm{d}$ ), céder (sede), il pèse ( $\mathrm{p} \epsilon: \mathrm{z}$ ), peser (pəse), il aime ( $\epsilon: m$ ), aimer (e:me, and $\epsilon: m e$ ). For further information on this point see Rousselot, p. 100 ff.

## German.

§ 242. In German, as in English, accent is chiefly stress, i.e., force of expiration. This stress affects, as a rule, the root of the word (for exceptions, see Vietor). So far German accentuation presents little difficulty, but what requires special attention is the relative force of strong, half-strong, and weak syllables, and in this respect the English speaker of German goes frequently wrong.
(a) All syllables containing "ə," i.e., ordinary " e " in non-radical syllables or otherwise in unaccented position, are treated very lightly: die Mutter des Kindes; gerettet; verlor(e)n.
(b) The half-strong syllables receive a secondary stress: 'Jüngling, König, höflich. Likewise in compounds: Gästfrèund, Häusknècht, féststèllen, abbrèisen. Every root has an accent which, however, is stronger in the first than in the second component. In a word like gastfreundlich we have three accents which diminish in force from the first to the last syllable. But if we inflect it and add a substantive, as in gastfreundlicher Mann, the syllable ${ }_{0}$-lich is slightly stronger than freund. The relative strength of the various syllables in Höflichkeitsbezeugungen may be indicated in the following manner:-

## Hö́flichkeitsbeze ${ }^{6} \underset{\sim}{2} \stackrel{5}{5}{ }^{6}{ }^{6}$.

In "der Bediente des Gutes ist angekommen" there are three principal accents marked in fat letters, and one secondary one on "kom". All the other syllables are treated very lightly, including the "ist," which is only slightly stronger than the "es" in "Gutes".
§ 243 . We call special attention to the following facts :-
(a) The prefix un is accented inglücklich, innzufrieden, Únsichtbarkeit, etc. However, where the second part is formed from a verb, the stress is on the root of that verb: unglaublich, unnénnbar.
(b) The prefixes miss, voll are unaccented in verbs: misslingen, misśfällen, vollénden, vollbringen. Before a weak syllable containing " $\partial$ " the miss receives the stress : missverstèhen.
(c) In nouns miss and voll receive the accent: Missernte, Missdeutung, etc.; Völlmacht, vóllbiürtig, etc.
(d) Prepositions and adverbs generally receive the stress in compounds: ábfahren, heréinkommen, hináusgehen, bergáuf, bergáb. The treatment of unaccented or accented durch-, hinter-, über-, unter-, um-, wieder-, as verbal prefixes, belongs to grammar.
(e) In a compound of adverbs and prepositions the second part receives, as a rule, the stress: jawóhl, heraib, durcháus, obglëich, voraius, nachhér, hinéin, heráus, etc.
( $f$ ) Level stress is of rare occurrence. We have it in stéinréich, bluitärm (extremely poor); blu̇tàrm, on the other hand, means anæmic.
(g) Words of foreign origin retain, as a rule, the foreign accent: Kritik, Kürassier, amusieren, Natiur, etc. Words ending in $-e i$ (originally $=$ French $i e$ ) are likewise accented on the last syllable: Reiterei (ràiterái), Arzenei (àrtzənái).
$\S 244$. If a long vowel is deprived of the accent, it is, as a rule, shortened, without, however, changing its quality. Compare ja (ja:) and jawóhl (javó:l), je (je:) and jedóch (jedox), so (zo:) and sowóhl ats (zovó:l). The $u m$ - is the same in kimgehen and umgéhen. The only obscuration through loss of accent is found in der, des, dem, den.

## Pitch (Intonation).

§ 245. Pitch depends on the rapidity of the sound vibration, which again depends on the length and thickness of the vocal chords.

As in regard to force we distinguish between level, rising and falling intonation. It very seldom happens in speech that the intonation remains level for any length of time; as a rule, it is constantly rising and
falling. It is closely connected with stress, and under normal conditions increasing intensity of expiration will produce rising intonation, and vice versâ. Take, as example, the word incomprehensibility. The reader can easily observe his own intonation in the following expressions: What! you dare! take care! yes! Upon my word, I never! The German, with his ja so! manages to go almost through the whole scale. We can only recommend the learner to observe how he modulates his voice in reading and speaking; the teaching of the proper relation between intonation and thought and feeling belongs to the art of speaking, i.e., to the elocutionist. ${ }^{1}$
§ 246. French and German.-It would be quite useless to attempt to teach French and German intonation theoretically. All the reader can do is to observe the rules and facts of French and German accentuation, with which intonation is closely and naturally connected. In a general sense the voice has in French and German the same modulations as in English in questions, astonishment, anger, expectation, etc. In French the voice is on the whole pitched higher than in English and German.

## French "Liaison".

$\$ 247$. The simple rule is that words which grammatically belong so closely together that they are

[^41]almost pronounced as one word, are linked, as les hommes (le zom), ils sont grands amis (grã:zami), très aimable (tre zema:bl), c'est d̀ moi (s€ ta mwa). After a pause, however slight, liaison becomes, as a matter of course, impossible.

Remark. In mon, ton, son, un, on, en the vowel is nasal, but the " n " is linked (in the Parisian pronunciation): mon $a m i=m \tilde{}$ nami ; en un instant $=\tilde{\approx}$ ñ̃ nẽstã ; but mon bon ami = mõ bonami.

For further information see Passy, especially his Le Français Parlé, and Koschwitz, Les Parlers Parisiens.

## Basis of Articulation.

On this subject we cannot do better than quote Sweet (A Primer of Phonetics, § 69) :-
§ 248. "Every language has certain general tendencies which control its organic movements and positions, constituting its organic basis or basis of articulation. A knowledge of the organic basis is a great help in acquiring the pronunciation of a language.
§ 249. "In English we flatten and lower the tongue, hollow the front part of it, and draw it back from the teeth, keeping the lips as much as possible in a neutral position. The flattening of the tongue widens our vowels, its lowering makes the second elements of our diphthongs indistinct, front-hollowing gives a dull resonance which is particularly noticeable in our ' $l$,' its retraction is unfavourable to the formation of teethsounds, and favours the development of mixed vowels, while the neutrality of the lips eliminate front-sound vowels. Our neutral tongue-position is the low-mixed or mid-mixed one of the vowels in further ( $\mathrm{f}_{\Lambda}: \delta \theta$ ).
§ 250. "In French everything is reversed. The tongue
is arched and raised and advanced as much as possible, and the lips are articulated with energy. French, therefore, favours narrowness both in vowels and consonants, its point-consonants tend to dentality, and, compared with the English ones, have a front-modified character, which is most noticeable in the ' $l$,' while the rounded vowels are very distinct.
§ 251. "The German basis is a compromise between the English and French, standard North German approaching more to the French.
§ 252. "No language, however, carries out the tendencies of its basis with perfect consistency.
"Thus in English we have the point-teeth ' $\theta$,' and mixed vowels occur in French and German, etc."

## Phonetics and Philology.

§ 253. The study of the changes of sounds forms at present a considerable part of modern philology, in fact etymology is quite impossible without it. Since soundchanges are physiological not mental phenomena, it is essential to the philologist, that, in order to understand these changes, he should have a knowledge of the physiology of sound-production. In the transition from Latin to French we find that free accented "a" is changed to "e" (nasum-nez), "ě" to "ie" (pědem > pied), "u" to " $y$ " (murum-mur), "o" to " " " (curiosumcurieux). All these changes are easily explained by the tendency of the forward movement of the tongue, as we still see it in the French pronunciation of the present day (see § 250) Further, the change from carrum to char, from tibia (tibja), cavea (cavja) to tidge $>$ tige, cadge $>$ cage; the intercalation of " d ," " t " in ten(e) rem (tendre), ess(e)re (être), and other regular changes are
in most cases easily explained with the help of an elementary knowledge of phonetics. Similar illustrations could readily be multiplied from the sound-development of other languages, and the reader will not have much difficulty in finding a natural explanation for most of those changes of sound which may come under his notice. The basis of articulation of the individual language generally shows us the direction in which the respective changes tend.

## Summary of Hints and Observations.

## A. To the Learner.

§ 254. 1. Make yourself thoroughly acquainted, theoretically and practically, with the articulation of every sound on the sound charts. It is especially of great importance to the learner to acquire the necessary power over his tongue to give it at will any of the positions which we have called (Diagram II., p. 10) narrowest, narrow, wide, widest, of the front, back and partly also of the mixed articulation. For these ptrposes adopt the following experiments, pronouncing the vowels one after the other in their natural order :-
(a) Pronounce every vowel with the teeth slightly parted and without moving your lips.
(b) Pronounce every vowel with the lips rounded.
(c) Pronounce every vowel with your usual articulation, but whisper it very distinctly.
(d) Sound every consonant by itself with strong and distinct articulation, " $b$ " as " $b$," not as "bee," etc.
(e) Change from " f " to " v " and from " v " to " f " $=f v f v f v$, without interrupting the current of expiration. Treat likewise " $\theta$ " and " $\delta$, " " $s$ " and " $z$," " $\lceil$ " and " $\overline{\text {," }}$ i.e., voice and unvoice cognate consonants.

Use in all these experiments the hand-mirror as much as possible.
2. Carefully observe your own pronunciation-articu-
lation, length, stress, intonation-of words pronounced singly and in sentences, and write it out phonetically.
3. Study with care phonetically transcribed texts (see Bibliography, p 162), paying special attention to the unaccented syllables, in English in particular to the weak forms (see $\S 236$ ) of pronouns, auxiliaries, etc.

## B. To the Teacher, in particular of French and German.

§ 255. 1. Never introduce a new word without pronouncing it and having it pronounced by the pupils, and thus let the sound always accompany the letter.
2. In practising single sounds or words insist upon distinct and accurate pronunciation, and make the proper use of the sound chart.
3. In practising the vowels and the continuous consonants insist upon a prolonged sound-for careful observation a short one is not of much use. In order properly to train the ear as well as the tongue, practise together what is easily confounded, as " $e$ " and " $\epsilon$ "; " $\varnothing$ " and "œ"; "y" and " $u$ "; as also the different rows: " $\mathrm{i}-\mathrm{y}-\mathrm{u}$ "; " $\mathrm{y}-\varnothing-\infty "$; "e- -o ," etc.; point to the letters on the sound charts and ask for the corresponding sounds, or give the sounds and ask for the corresponding letter.
4. Let the children watch and correct each other's pronunciation. In this respect too make good use of the sound chart and of the phonetic transcript (see pp. 155-9).
5. Make due use of chorus speaking: it saves time. You will also find it helpful to make the individual pupil as well as the whole class pronounce a sound,
a word, or a whole sentence together with you, and then without you.
6. Allow no sleepy, languid kind of reading. The verbal use of a foreign language should be characterised by vivacity. There is no fear that the children will exaggerate in this respect.
7. Where the words are connected in sentences, have them read as the careful French and German child would read them, i.e., giving each syllable the value it has in comparison with others surrounding it. Remember, however, that excessive care in the pronunciation of unaccented syllables betrays the foreigner just as well as want of care.
8. Insist upon the proper activity of the lips, especially for the " $y-\varnothing-\infty$ " sounds. The young age is the time to overcome the difficulty here, later on it is often too late, as we know from personal experience with University and Training College Students.
9. The singing of French and German songs will be found very useful for the practice of vowel sounds, especially for the French nasal vowels. It is a wellknown fact that in singing the purity of the vowels is more easily produced than in speaking.
10. Strictly avoid everything which is characteristic of English articulation :-
(a) The "love of gentle beginning and gentle cessation," which easily leads to a drawl in the vowel sounds. (The Southerner should be particularly careful to avoid his long divided vowels, which would absolutely spoil his French and German pronunciation.)
(b) The influence of the " $r$ " on the preceding vowel. French père is $p \in: r$ and neither $p \epsilon:$, nor $p \in: ə$, nor $p \in: \AA$, according to the individual pronunciation of the English
pair ; dire is di:r, and the German hier is hi:r, with uniform " i : " and the "r" properly sounded.
(c) The indifference of English lip-action.
(d) In Scotch children the leaning towards the wide or back " $\alpha$," towards narrow " $e$ " instead of " $\epsilon$ " or " $ə$ ".
(e) The inclination to obscure unaccented vowels and to pronounce personne, chapeau, école, niemand, etc., like pərson, $\int ə p o, ~ ə k ə l$, ni:mənt, etc.
( $f$ ) The " $z$ " sound in such French and German words as: illusion, vision (see $\$ \S 169,195$ ).
11. Remember that there is no " $\epsilon$ " sound in French and German as wide as the southern English "æ" in bad (bæd). The " $\epsilon$ " is widest in French "ê" ("les moutons bêlent"), in German "ä" (wählen), but even here it is never wider than the ordinary English pronunciation of there.
12. Lastly, we would remind the teacher of two things, which are particularly applicable to the teaching of pronunciation: firstly, that what is done by halves is never done right; and secondly, not to worry the children unnecessarily, but to remember that the wise man's est modus in rebus applies to the teaching of pronunciation as well as to the "grinding" of rules and exceptions and irregular verbs. Be patient, but persevering; impress upon the children the fact that no sound, no word and no sentence will permanently satisfy you which is not strictly French or German, and you will, even in this branch of your instruction, have contributed your share towards providing them with something better than mere knowledge or skill, namely, with the sense of accuracy generally, and of that distinctness and neatness of articulation which so strongly marks off Continental, and in particular French, from English pronunciation.

## French.

§ 256. 1. Remember that French articulation, especially in the rounding and stretching of the lips, and the front action of the tongue, is more energetic than in English, and that all the front and mixed vowels (i, e, $\epsilon, y, \varnothing, \propto)$ demand a tension of tongue and lips which becomes almost fatiguing to a person used only to English articulation. See that the "i" in la brise be made brighter than in the English breeze-the tongue for the French word being raised higher-that the French short "i," as in vif, be as bright as the long one in vive, and be not pronounced like the " i " in if, which has a wider articulation. The same remark applies to short and long "u" and "y". Remember that the important and frequent narrow "e" exists only short-in English only long-and that every vowel in a word like divinité, hypocrite, is to be pronounced with perfect distinctness and brightness, though they are all short. It is needless to add that these qualities, which are as characteristically French as they are un-English, should not be exaggerated so as to produce a staccato-like pronunciation.

In order to make the English-we may call it muffled articulation-sufficiently clear, the teacher will find it helpful to pronounce certain English words-divinity, hypocrite, for instance-as a Frenchman who begins to learn English would pronounce them.
2. Remember that all final vowels, not followed by a sounded consonant, are short, as in beau, vue, bonté, nez, content, moi, parlez-vous? Do not, therefore, tolerate such pronunciation as rooah (roi), bowcoo
(beaucoup), see (si); further, that the French vowel is often short, where it is long in the same word in English, as in mode, place, Rome, barricade.
3. Repress pitilessly every attempt at English accentuation, as, for instance, järdin, pápier, fáché, divinité, instead of jardin, papiér, etc. Even if the teacher is a believer in the level-stress theory (see p. 133), he will find that the best way to rid his pupils of their inclination to accentuate French words on ante-final syllables is by laying at first a sufficiently strong stress on the last-sounded syllable.
4. Watch the proper articulation of the nasal vowels, especially that " $\tilde{\alpha}$ " be not confounded with " $\tilde{0}$," and " $\epsilon$ " with " $\tilde{\alpha}$ "; in other words, that sans be not changed to son, and main and pain to mã and p $\tilde{\alpha} .{ }^{1}$

The nasal vowels are one of the many charms of French pronunciation, if pronounced well; if pronounced badly, they are a torture.
5. The energetic articulation, to which reference has been made above, is also characteristic for the pronunciation of the consonants, especially the voiceless plosives. The energetic closing and opening of the stoppage in " $k$," for instance, produces a kind of "click" which is absent in English.
6. A very important item in French pronunciation is the consonification of " $i$," " $y$ " and " $u$ ".
7. Special attention should be paid to the treatment of the neutral vowel " $\partial$ ". Where it is to be kept and where it is to be dropped had best be studied in phonetically transcribed texts. Careful pronunciation naturally preserves it more than the more familiar pro-

[^42]nunciation, and with beginners it is no doubt preferable to $\sin$ on the side of the former. Compare, as regards the treatment of this " $\partial$," the different styles of pronunciation in Passy, Le Français Parlé.
8. Remember that French " ai" has, as a rule, the " $\epsilon$ " sound (see § 67).

Everything taken together we may say, without fear of exaggeration, that we have at least half the Frenchman in his pronunciation: his love of clearness, his sense of order and balance, his vivacity and sensibility, his insinuating manners and his characteristic rush, his élan. All these qualities are recognisable in his distinct and energetic articulation, the regularity of his accentuation with its well-balanced rhythm in words and sentences, his musical intonation, the softness and melodiousness of his numerous vowel sounds, including the nasal ones, especially at the end of worls, and the forward action of the speech organs, and the forward movement of accentuation.

## German.

§ 257. 1. Pronounce initial st, sp as $\int t, \int p$ : sprechen, stand as Spreçən, $\int \operatorname{tant}$. (But hast, Faust, kosten, etc., as hast, faust, kost(ə)n.)
2. Pronounce syllable-closing "b," "d" as "p," "t" (Bad = ba:t, wird $=$ virt, Grab $=$ gra:p, und $=$ unt, hïbsch = hyp $\int$ ). Pronounce, however, syllable-closing "g" as "ç" or " $\chi$ " (täglich = te:çliç, Tag= ta: $\chi$; Tag $=$ ta: k would be equally correct, but not Hanoverian).
3. Avoid voiced "s," i.e., " $z$," at the end of words : des Hauses is not dəz hauzəz, but dəs hauzəs; das, dies are das, di:s (not daz, di:z) ; and avoid voiceless "s" at the beginning of words before vowels: Sohn is zo:n, not so:n.

The voiced "s" of inflection in English is one of the lasting stumbling-blocks to the German speaker of English; on the other hand, this voiceless " $s$ " in German proves equally troublesome to the English speaker of German.
4. Never give to the inflected syllables es, et (Kindes, redet) the " i " sound of southern English in es and ed (houses, founded). The vowel here is always " $\partial$ " and must be treated very lightly, as also in Liebe, Glaube, sprechen, Bedeutung.
5. Accented vowels are long if followed by a single consonant, except $\operatorname{sch}(\varsigma)$ and frequently $c h(c, \chi)$ : Mut $=\mathrm{mu}: \mathrm{t}, L o b=$ lo:p.
6. $-n g$ is always " $\eta$," never " $\eta g$," as frequently in English: Finger $=$ fi $\eta \ni r$, not $=$ fi $\eta$ gər ; länger $=$ lє $\eta ə r$, not $=1 € \eta$ gər.
7. Avoid making " $\epsilon$," " $\rho$ " overwide, as is frequently done in English. But give to the "ä". a slightly wider sound than to the short "e," i.e., make the vowel in füllt a little wider than in Gelt.
8. Carefully avoid the South English "æ" in such words as an, Hand, hat, etc., and the "æau" drawl in auf, auch, Haus, etc.
9. Do not allow an " $r$ " to influence the quality of the preceding vowel: Herr, Hirt are $=$ her, hirt, and not like English her and hurt; and the vowel in hart, Garten, wird, Pferd, Dorf must be pronounced short and the "r" must be distinctly sounded. Remember, however, that the vowel before an isolated " $r$," as before any single consonant (see § 90 ), is always long when accented: dar, für, wer are = da:r, fy:r, v $\epsilon: \mathrm{r}^{1}$;

[^43]and that the " $\epsilon$ " sound in this case is always the wide " $\epsilon$," as in wer, unless this vowel is spelt eh, as in sehr, mehr, where the sound is narrow "e," sehr = ze:r. ${ }^{1}$
10. That all short vowels are wide, i.e., the "ě," "只," "о̌" of the ordinary spelling = " $є$,"" "ə,"" че" (see p. 44), would no doubt be a difficult rule to practise if English articulation did not tend to it quite naturally. However, it is well to bear the fact in mind.
11. Give the proper attention to the "glottal stop"; but neglect it, rather than produce it with a laboured kind of effect.
${ }^{1}$ The pronunciation of wer, etc., as ve:r, with narrow " e ," is very common; but the English student will no doubt prefer the Hanoverian ve:r.

## APPENDIX A.

## Phonetically Transcribed Texts.

The following texts are chiefly intended to familiarise the learner with the pronunciation of words in their natural context in sentences, as they would be read by an educated person. We must strongly recommend the learner to continue this kind of exercise with those books mentioned and briefly characterised on p. 162 ff . Space forbids us to give more than short specimens in each language.

## ! English.

The following text is the translation of an appeal to the public by the Association Phonetique Internationale, phonetically transcribed by Dr. Sweet and Dr. Lloyd, the former representing the southern, the latter the northern English pronunciation. ${ }^{1}$ The reader will find a minute comparison between these two transcripts and the two forms of English pronunciation they represent very interesting and instructive, especially as regards the different treatment of the unstressed forms of words and syllables, as also of short "ĭ," "ě," "ŭ". He skould, at the outset, dismiss all idea that, where his pronunciation does not agree with the one transcribed, the one or the other must be wrong. Individual differences are unavoidable, especially such as are based upon the degree of care which the individual reader is accustomed to apply to his ordinary reading.
${ }^{1}$ With Dr. Lloyd's permission we have here and there changed his translation of the French text in order to afford the beginner the opportunity to compare his pronunciation, word by word, with that of Dr. Sweet.

## English．

We have the honour to draw your attention to the work of the International Phonetic Association．

The object of this society，which counts now more than a thousand members－linguists，teachers，students of all nationalities－is the development of the scientific and practical study of spoken languages，by utilising the latest results of phonetic investigation and pedagogic experience．

As regards the teaching of foreign languages，it advocates the so－called direct or active methods，char－

## Southern English．

 intə＇næ〔ənəl fou＇netik əsousi＇eifən．
 ә $\theta$ auznd membəz－lingwists，tijt $\mathrm{J}_{\mathrm{zz}}$ ，stjuwdnts əv ə：l
 præktıkl stadi əv spoukn læ $\eta$ gwid3ız，bai juwtılaizi $\eta$ бә leitist $\pi^{\prime} z \Delta l t s$ әv fou＇netrk investi＇geifən $ә$ pedə＇－ godろırk Iks＇pıəлェəns．
 keits дə soukə：ld dr＇rekt əォ æktiv meӨədz，kæェıktəлaizd
 juws posibl əv $\delta ə$ læ $\eta$ gwidる stıdıd，bai $\delta_{1}$ in＇dıktiv stıdi əv græmə，ən bai $\delta ə ~ r i ́ d \jmath e k j ə n ~ ə v ~ s o u k ə: l d ~$ træns＇leijon eksəsaizız．


 kə＇xekt rijdi $\eta$ วt fə：st sait əv evaı日i $\eta$ סिət s xitn əkə：dı $\eta$ to $\mathrm{\delta}$ is sistım．
 tfuldxən end＇$\Lambda$ n＇ed3ukeitid pijpl to rijd in $\delta \in ə$ neitiv læクgwidる．

Henry Sweet．
acterised generally speaking by the quickest and most exclusive use possible of the languages studied, by the inductive study of grammar, and by the rejection of so-called translation exercises.

It further encourages the use of a phonetic alphabet, allowing the exact representation of the pronunciation of all languages, and, when one has the key to it, the correct reading at first sight of everything that is written according to this system.

It also favours the use of the phonetic alphabet for teaching children and uneducated people to read in their native language.

## Northern English.

 int $\Lambda^{\prime} n a \int \Lambda n \Lambda l$ fo'nttik $ә s o: s I^{\prime} e: \int \Lambda n$.
 ঠən $\partial_{\iota} \theta$ auzənd mєmbíz-lingwists, ti:tfaz, stju:dnts
 әn praktrkl stadi $\Delta v$ spo:kn la $\eta$ wed,jez, bai ju:tılaızi $\eta$ ठəə le:test rízalts $\Delta v$ fə"nєtık invєsti'ge: $\int \Delta n$ ənd pedə'god3ırk ek'spi:riəns.
 бә so:kə:ld "darrєkt" or aktiv mє $\theta_{\Lambda} d z$, karektaraizd dろenaxalı spi:kı $\eta$ bai $\delta ə$ kwikest ənd mo:st ek'sklu:siv

 €ksíssaizez.

It faঠ́лr en'kıredjez бә ju:s $\Delta v$ ө fo'nєtrk alfəbet,




 in $\delta \in$ ne:tiv la $\eta w e d 3$.
R. J. Lloyd,

## Notes.

1. Half-long vowels are marked :, like long ones.
2. The difference between " $\epsilon$ " and " $e$ " (founetrk, Sweet; fonctik, Lloyd) must not be looked upon as being everywhere as marked as in there and they.
3. Dr. Sweet represents the southern wh (which, when) as " $m$," though generally the South does not distinguish between which and witch (see § 134). But

## French.

Vous savez mon goût. Toutes les fois que je puis continuer un peu ma route à pied, c'est à dire convertir le voyage en promenade, je n'y manque pas.

Rien n'est charmant, à mon sens, comme cette façon de voyager.-A pied!-On s'appartient, on est libre, on est joyeux ; on est tout entier et sans partage aux incidents de la route, à la ferme où l'on déjeune, à l'arbre où l'on s'abrite, à l'église où l'on se recueille. On part, on s'arrête, on repart; rien ne gêne, rien ne retient. On va et on rêve devant soi. La marche berce la rêverie; la rêverie voile la fatigue. : La beauté du paysage cache la longueur du chemin. On ne voyage pas, on erre. A chaque pas qu'on fait, il nous vient une idée. Il semble qu'on sente des essaims éclore et bourdonner dans son cerveau. Bien des fois, assis à l'ombre au bord d'une grande route, à côté d'une petite source vive d'où sortaient avec l'eau la joie, la vie et la fraîcheur, sous un orme plein d'oiseaux, près d'un champ plein de faneuses, reposé, serein, heureux, doucement occupé de mille songes, j'ai regardé avec compassion passer devant moi, comme un tourbillon où roule la foudre, la chaise de poste, cette chose étincelante et rapide qui contient je ne sais quels voyageurs lents, lourds, ennuyés et assoupis ; cet éclair qui emporte des tortues.

## Victor Hugo.

the attempt is being made by philologists to reintroduce the lost＂ m ＂．

4．With regard to Dr．Sweet＇s pronunciation of the long vowels＂i，＂＂e，＂＂o，＂＂u，＂see § 30.

In conclusion，we wish to quote some of Dr．Lloyd＇s remarks on the General Character of Northern Eng－ lish（see Northern English，§ 31）．
＂The North is much less tolerant of obscuration and elisions；also of assimilations，such as ne：t $\int_{\Lambda}^{\mathrm{r}}$ ，
 less tolerant of dropt $h$（as in his，her，have，etc．）and dropt $r$ ；and the insertion of an unprinted＂$r$＂between vowels（the aid＇i：arıvit）is entirely vulgar．＂

## French．

Vu save mõ gu．Tut le fwa kəว pyi kõ．tinчe ๙̃ pø ma rut a pje，sєt a di：r kõvєrti：r lə vwaja：3 $\tilde{\alpha}$ promnad， उ̄ ni mã̃：k par．

Rjẽ nє $\int a r m \tilde{a}$ ，a mõ sũ：s，kom sєt fasõ də vwajāe．－
 e sã parta：З oz $\mathfrak{\epsilon} \cdot$ sidã̃ dla rut；a la ferm u lõ deろœn，a larbr u lõ sabrit，a legli：z u lõ s rəkœ：j．õ pa：r，õ sarє：t，
 la marfə bers la re：vri ；la re：vri vwal la fati．g．la
 $p \alpha$, õn $\epsilon$ r．a $\int a k$ pa kõ $f \in$ ，il nu vjẽt y：n ide．il sã：blə kõ sã̃：t dez єsẽ eklo：r e burdone dã sõ sєrvo．Bjẽ de fwa，asi a lõ：br o bo：r dy：n grã：d rut，a ko：te dy：n ptit surs vi：v du sorte avek lo la 了wa，la vi e la fre： $\int \propto: r$ ，
 sərモ̃，œrø，dusmãt okype d mil sõ：万，उe rgarde avєk kõ．pa•sjõ pase dvã̃ mwa，kom đ̃ turbijõ u ru：l la fu：dr，
 kel vwajaろろœ：r lã，lu：r，ãnuije e asupi；sєt ekle：r ki äport de torty．

Viktor y．go．

## Notes.

The above is the pronunciation of an educated Frenchman (Parisian) as he read the passage to us with that distinctness of articulation as suits the contents, and, we believe, also suits the teaching of French in our schoolrooms. A more conversational subject would naturally be read with more freedom, which would show itself in particular in dropping the $l$ in $i l(s)$ before consonants, in restricting the liaison, in shortening some of the half-long vowels and in suppressing a greater number of the indefinite vowel " $\partial$ ". The reader will find the necessary material for comparing the different styles of pronunciation, from the light conversational to the academic and rhetorical, in Paul Passy, Le Français Parlé.

We wish to call attention to a few points :-

1. Where the " $\partial$ " is retained in the above pronunciation, it should be pronounced very lightly (with slight rounding of the lips, and therefore verging upon " $\varnothing$ "). The question of retaining it is largely one of style of reading and speaking; however, it may be stated, as a general rule, that it should be retained where its suppression would produce a group of (three) consonants difficult to pronounce. Compare on rêve devant soi (õ re:v dəvã swa) with passer devant moi (pase dvã mwa). According to this principle the " $\theta$ " is retained in quelque chose (kelkə $\int 0: z$, familiarly $=$ $\mathrm{k} \epsilon \mathrm{k} \int \mathrm{o}: \mathrm{z}$ ) ; quelquefois (kєlkəfwa, familiarly $=\mathrm{k} \in \mathrm{kfwa}$ ); pardessus (pardəsy), but au-dessus $=0 \cdot d$ sy (or o.tsy); il sera (il səra), but tu seras = ty sra; il ne le veut pas is not $=\mathrm{i}(\mathrm{l}) \mathrm{nl}$ ə vя pa, but $=\mathrm{il}$ nəl vø pa.
2. With regard to liaison see $\$ 247$. There is no
linking between sortaient and avec, because the grammatical connection between them is not sufficiently close; the same remark may apply to assis à l'ombre; however, there is an additional reason here for omitting the liaison, namely, of distinguishing between assis and assise. The " $t$ " in et is never linked, therefore et assoupis $=$ e asupi.

Liaison is largely a question of individual taste and of style of reading. In the more conversational style it is disappearing more and more.
3. The beginner should carefully study the above pronunciation and repeat the passage until he is able to read it with perfect ease, combined with correct and distinct articulation. We would remind him once more :-
(a) That the accent falls always on the last vowel of the word in the transcribed text, but that the preceding vowels must be pronounced clearly and distinctly, and that in polysyllablic words the different syllables must be properly balanced as regards stress.
(b) That all final vowels are short.
(c) That the whole tone of French sounds is a little "higher" than in English, and that French accent is not only stress but frequently also pitch, as, for instance, in the above c'est $\dot{a}$ dire (which may be read as one word) and in promenade, where the voice rises on dire and in -ade to a higher note. This characteristic quality requires great tact and precaution, and must be learned from an educated French person. A clumsy imitation of it is apt to produce a strong impression of lack of naturalness. However, a good pronunciation is possible without it, provided it is correct in every respect and shows the proper combination of care and ease.

## German.

Es war einmal eine kleine, süsse Dirne, die hatte jedermann lieb, der sie nur ansah, am allerliebsten aber ihre Grossmutter ; die wusste gar nicht, was sie alles dem Kinde geben sollte. Einmal schenkte sie ihm ein Käppchen von rotem Sammet, und weil ihm das so wohl stand und es nichts anderes mehr tragen wollte, hiess es nur das Rotkäppchen. Eines Tages sprach seine Mutter zu ihm: "Komm, Rotkäppchen, da hast du ein Stück Kuchen und eine Flasche Wein, bring' das der Grossmutter hinaus! Sie ist krank und schwach und wird sich daran laben. Mach dich auf, bevor es heiss wird, und wenn du hinauskommst, so geh' hübsch sittsam und lauf' nicht vom Weg ab; sonst fällst du und zerbrichst das Glas, und die Grossmutter hat nichts. Und wenn du in ihre Stube kommst, so vergiss nicht guten Morgen zu sagen and guk nicht erst in allen Ecken herum." Rotkäppchen sagte: "Ich will schon alles gut ausrichten ". Und gab der Mutter die Hand darauf. Die Grossmutter aber wohnte draussen im Walde, eine halbe Stunde vom Dorfe.

Nach Jacob Grimm.

## German.

'єs va:r 'ain'ma:1 'ainə klainə zy:sə dirnə, di. hate je:dərman li:p, dєr zi nur ''anza:, 'am 'alər li:pstn 'a:bər 'i:rə gro:smutər; di. vustə gar niçt, vas zi 'aləs dəm kində ge:bm zoltə. 'ainmal $\int \in \eta \mathrm{ktə}$ zi 'i:m 'ain $k \in p c ̧ \nexists n$ fon ro:təm zamət, 'unt vail 'i:m das zo. vo:l $\int$ tant 'unt əs niçts 'andərəs me:r tra:gən volte, hi:s əs nur das ro:tkepçən. 'ainəs ta:gəs $\int$ pra: $\chi$ zainə mutər tsu 'i:m: " kom, ro:tkєpçən, da hast du 'ain Styk ku: $\chi$ ən 'unt 'ainə flafə vain, bri $\eta$ das dər gro:smutər hin'aus! si: 'ist kraŋk 'unt $\int w a \chi$ 'unt virt ziç dar'an la:bm. max diç 'auf, bə'for əs hais virt, 'unt ven du hin'auskomst, zo• ge: hyp zitza:m 'unt lauf niçt fom ve:ç 'ap; zonst felst du 'unt tserbriçst das gla:s, 'unt di gro:smutər hat niçts. 'unt vєn du 'in 'i:rə $\int$ tu:bə komst, zo. fergis niçt gu:tn morgən tsu za:gən 'unt guk niçt ' $\epsilon$ rst 'in 'aln 'єckən hєr'um." ro:tkєpçən za: $\chi$ to: "'iç vil fon 'aləs gu:t 'ausriçtn". 'unt ga:p dər mutər di hant dar'auf. di gro:smutər 'abər vo:ntə drausən 'im valdə, 'ainə halbə $\int t u n d ə$ fom dorfə. na: $\chi$ jakop grim.

## Notes.

1. The pronunciation transcribed here is the Hanoverian (Osnabrück) pronunciation of one of the authors of this book, without the Hanoverian " $\int t$," " $\int p$ " and the short vowels in Tag, Weg, Gras, Rad, Lob, etc. The transcript represents the style of reading which a German teacher would use in a German school. A little less careful reading would obscure the unaccented "e" of certain syllables to " $ә$," as in vergessen, zerbrechen, and suppress it altogether in draussen, Ecken ( $\epsilon \mathrm{k} \eta$ ), but it would still be retained in rotem, Sammet, tragen, Kuchen, Morgen, Käppchen ; further, "so" would be changed to "zo" in so geh hiubsch sittsam. On the other hand, a little more careful reading would change " $\mathrm{es}^{\prime \prime}$ (es) to " $\epsilon \mathrm{S}$ " in hiess es nur das Rotkäppchen.
2. The monosyllables sie, die, nur, so, $z u, d a, d u$, which have long vowels when under stress, are short in the above text where they occur in unstressed (weak) position.
3. Accent (stress) we have only marked in certain compounds, as in ainmal, hinaus, etc., by placing, as usual,' before the accented syllable: 'ain'ma:l. (This word may also be accented on the first syllable.)
4. Glottal stop is indicated by ' before the respective vowel.
5. Narrow "i," "u" and wide "r," " $u$ " are sufficiently distinguished, respectively, by the use or absence of the mark of length : (see $\S \S 68,99)$.
6. The front " $a$ " is used throughout, though in the transcriber's pronunciation it is articulated a little further back in aus, auf, aber, Glas than it is in ein, Wein, sittsam, ansah.
7. The " $\epsilon$ " in schenken, erst, Ecken is slightly narrower than it is in fällst, Käppchen.
8. The beginner should study the above text very carefully, and repeat it until he is able to read it quite fluently and correctly. Whilst articulating vowels and consonants with proper accuracy and distinctness, pronounce the vowel " $ө$," especially in the end syllables, very lightly. Accuracy should be combined with ease.
9. The principal points of difference between the above pronunciation and that of Professor Vietor, who represents more the pronunciation of the educated Berliner, are the following :-
(a) V. only knows the back " $\alpha$," short as well as long.
(b) V. pronounces syllable-closing "g" like "k" (except in -ig) : Tag = ta:k, Weg = ve:k, möglich $=$ mø:kliç ; but gütig = gy:tiç.
(c) V. pronounces Tages, Weges, Morgen $=$ ta:jəs, ve:jəs, mərjən.
(d) V. is less tolerant of obscured and suppressed " $e$ " in the same style of reading; he would therefore read laben, allen, etc., = la:bən, alən, etc., and the prefixes zer, ver, er = tser, fer, er.
(e) V.'s " r " is the uvular " R ".

## APPENDIX B.

## BIBLIOGRAPHY:

Books Recommended for Further Study.

## English.

H. Sweet: A Primer of Phonetics. Deals also, but very briefly, with French and German. Uses Bell's Visible Speech (Clarendon Press).
Miss Soames: The Sounds of English. Edited by W. Vietor (Swan Sonnenschein). Uses a phonetic transcript of her own.
R. J. Lloyd : Northern English. (Teubner, Leipzig; D. Nutt, London.)

## French.

Paul Passy: Les Sons du Français (Firmin-Didot, Paris).
-Abrégé de Prononciation française (Reisland, Leipzig).
Rousselot: Précis de Prononciation française.
Beyer (for German Readers): Französische Phonetik (Köthen). Very complete.
Michaelis et Passy: Dictionnaire phonétique de la langue française (Carl Meyer, Hanover). This book will always prove a great help in cases of doubtful pronunciation. Contains also a short treatise on French phonetics.

## German.

Wilhelm Yietor: German Pronunciation, Practice and Theory (Reisland, Leipzig).

## General.

Wilhelm Vietor (for German Readers) : Elemente der Phonetik des Deutschen, Englischen und Französischen (Reisland).
Walter Rippmann: Elements of Phonetics (Dent \& Co.). This is a translation and adaptation of a smaller edition of Vietor's Elemente, etc., called Kleine Phonetik.

Transcribed Texts (in the phonetic alphabet of the Association Phonétique Internationale).

## English.

R. J. Lloyd: Northern English. Gives the different styles of pronunciation, from the solemn reading of biblical passages to the easy tone of everyday conversation.
An excellent book for southern English is H. Sweet : A Primer of Spoken English, with a different phonetic transcript.

## French.

Paul Passy: Le Français Parlé (Reisland, Leipzig). Begins with the familiar pronunciation of daily conversation and rises to the declamatory style of oratory and poetry. The learner should begin with the last prose piece and study the book backwards. The pronunciation of the first four or five pieces is too familiar for use in English schools, but is interesting to the teacher.

Koschwitz: Les Parlers Parisiens (H. Welter, Paris). Contains the pronunciation of some of the celebrities of the present time : Daudet, G. Paris, Zola, Renan, the actor Got, and others. The familiar pronunciaof everyday conversation is avoided.

## German.

Wilhelm Yietor: German Pronunciation, Practice and Theory. The transcript differs slightly from that of the Association phonétique.

Finally we wish to mention:-
Le Maître Phonétique, organe de l'Association phonétique internationale. A periodical which appears every month, and gives in phonetic transcript literary news, discussions, etc., in French, German and English, as also short stories in French. The subscription is 3 fr .50 per year. The reader should apply to Dr. Lloyd, University College, Liverpool, for the Exposé des Principes de l'Association Phonétique Internationale, 6d.
Edgreen and Burnett: The French and English Word Book. A Dictionary with indication of Pronunciation, Etymologies and dates of earliest appearance of French Words in the Language. With an explanatory Preface by R. J. Lloyd, D.Litt., M.A. Published by William Heinemann, London.

## INDEX.

The numbers refer to the pages.
Abbreviations: E. = English ; F. = French ; G. = German ; art. $=$ articulation of ; pron. = pronunciation of ; gen. = general.

We have prepared the Index so that the book may be used for reference, in particular, with regard to the pronunciation of French and German words. It treats separately: (a) the two distinctive questions connected with every sound (1) articulation, (2) spelling, i.e., the ways of representing it in the ordinary spelling ; (b) the phonetic value, i.e., the pronunciation of the letters of the ordinary spelling. If the learner wishes to refer to the articulation of the French " e " sound, or to the several pronunciations of the French letter "e," the Index will give the necessary indication. Or if he is doubtful about the pronunciation of a word like chretien, he will find the necessary reference under $c h, \dot{e}, t i$, ien. Words with noteworthy pronunciation, treated in the text, are not given in the Index, because the learner is expected to enter them on the blank leaves at the end of the book.
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## THE SOUND CHARTS.

Since these charts are intended for elementary instruction, especially in the schoolroom, absolute correctness has here and there been sacrificed to clearness. This applies in particular to the vowels, concerning the arrangement of which we add here the following remarks :-
(1) As they are articulated within the mouth, they should be placed under the columns: front, backpalate.
(2) Since the French and German " $y$," " $\boldsymbol{\sigma}$, " " " " have the same tongue articulation as "i,"" $e$," " $\epsilon$," these two series should have been placed closely together. However, in the one as well as in the other case, the crowded position of the vowels would have too much interfered with the clearness which is essential for classroom purposes.



## H Sound Chart.

## xor

## GUM

Fore
After Front Back Glottis h

## $\sum_{2}$



PALATE
td
n

r
$\mathbf{U}(\breve{\mathbf{u}})$

0
 $6+1 \times 2+2 y^{2}$
$r \quad$.

## Frenc

## Fr/CATIVE

plosive
NASAL Vibration OF THE
Sides of the toncue VIBRATION
Tipor the Tongue (OR of THE UVULA)


0

## Sound Chart.

| Gum |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Front | Back | Glottis |
| $\boldsymbol{\int} \mathbf{3}$ | $\mathbf{j}$ |  |  |
|  |  | $\mathbf{K ~ g}$ |  |
|  |  | $\mathbf{N}$ |  |
|  |  |  |  |
|  |  |  | $(\mathbf{R})$ |
| $\mathbf{y}$ |  |  | $\mathbf{u}$ |

ว
0

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[^0]:    ${ }^{1}$ The learner will, however, find it of advantage to make his study of English sounds comparative with French or German.

[^1]:    ${ }^{1}$ Northern English was the English of John Bright and Gladstone.

[^2]:    ${ }^{1}$ The Scotch Education Department now prescribes for the King's Students and Scholars a course in English Phonetics.

[^3]:    ${ }^{1}$ That the Briton, as so frequently stated by himself, cannot pronounce foreign languages, is a myth. Moreover, as he himself would hardly confess to a charge of excessive modesty, we are not sure if there is not a certain amount of the I-easily-could-if-I-would kind of indifference concealed behind this selfdepreciation. In the acquisition of foreign sounds he is no more handicapped by the setting of his speech organs and the character of his articulation than the German is by his national characteristics. The difficulty-there is one, no doubt-is, to our mind, mainly of a psychological order. The acquisition of a new kind of articulation means adaptation, and what, by common consent, we believe, the Briton dislikes to a considerable degree is coming out of his shell. He travels, speaks foreign languages, treats and trades with all the nationalities of the globe, but always with his shell well over his ears. At any rate, to return to the point from which we started, and to put it in a personal and practical light, an experiment made by one of the undersigned with a class of young children-average age twelve -in teaching them French pronunciation according to the phonetic system, has convinced us that with the necessary care and perseverance, the child with a (northern) English pronunciation can learn to pronounce and to speak French-and, a fortiori, German-with all the necessary purity.

[^4]:    ${ }^{1}$ The part played by the lips in this modification of the voice will be referred to later on.

[^5]:    ${ }^{1}$ As confusion is at first apt to arise between the ordinary and the phonetic spelling, the reader should carefully note in the accompanying diagrams (Table A) the phonetic symbols-placed under the ordinary letters-and the value, i.e., the sound, they represent. Unless the contrary is specially stated, the letters used henceforth are those of the phonetic alphabet, with their respective values.

[^6]:    ${ }^{1}$ In southern English the sounded vowel in the ending -es, -ed is more like " I " (i.e., wide " i "). This vowel " a " is of very frequent occurrence, as it may take the place of almost any other vowel in an unaccented position, as the above examples show (see also the phonetically transcribed texts on p. 152). In order to produce it by itself slightly separate your lips while pronouncing a continuous " m ".
    ${ }^{2}$ We call articulation of a sound the activity of the respective speech organs which produce the sound.

[^7]:    ${ }^{1}$ In the further completed list of English vowels in the following diagram it will be noticed that in each of the different groups of the $\mathrm{i}, \mathrm{e}, \mathrm{u}$, o sounds, the long vowel is always narrower than the corresponding short one.

[^8]:    ${ }^{1}$ In the pronunciation of many people the first element of the above vowels inclines at present towards a relatively wider formation, so that "i" becomes " $I$ " or even "e"; "e" becomes " $\epsilon$ " or even " $\alpha$ "; " $o$ " becomes " $\rho$ " or even " $\alpha$ "; " $u$ " becomes " u " or even "o". The words feel, pale, goat, cool assume thus the pronunciation of fr:il (or even fe:il, confounding feel and fail), pe:il (or even pa:il, confounding pale and pile), go:ut (or even gaut, confounding goat and gout), ku:ul (or even ko:ul, confounding cool and coal).

[^9]:    ${ }^{1}$ Minor differences between northern and southern English, in particular those that occur in the treatment of unaccented vowels, will be referred to in the proper place. They may be studied together in the transcribed text, Appendix I.

[^10]:    ${ }^{1}$ It happens not infrequently that the short " $i$ " is made narrow in words like elect, elated, imagine, equip, etc. With this pronunciation, however, the " i " is, as a rule, half-long.

[^11]:    ${ }^{1}$ In Scotch, gərl, bard, or more dialectical, gerl, berd.

[^12]:    ${ }^{1}$ Strictly speaking the French short "i" and "u" have not infrequently, when unstressed (as in il, ils, ici, midi, village, tourment, souffrir, etc.), a slightly wider articulation than the long "i," "u," but they are never so wide as in English; and as this difference of articulation is not generally felt, and as there is further a danger on the part of the English-speaking pupil of making the wide French " i " and " u," where they exist, too wide, it is for practical reasons in every respect better that in the schoolroom they should be altogether neglected.

[^13]:    ${ }^{1}$ In the south of England an obscured kind of " $y$ " and of " $\phi$ " are heard in words like July and hotel; the latter also in the affected pronunciation of oh, and in or in familiar speech, as in is he coming or not?

[^14]:    ${ }^{1}$ It is necessary to bear in mind that in the phonetic spelling the stress (accent) of a French word lies always on the last vowel, as in the above "parle" (= parlai, parler, parlez), "uvrie" (=ouvrier).

[^15]:    ${ }^{1}$ The pronunciation of les, des, mes, etc., with " $\epsilon$ " is also very common. The narrow "e" is the Parisian pronunciation.
    ${ }^{2}$ The " $e$ " of the ordinary spelling is mute in the groups -gea-, geo-: il gagea, gageons are = gaja, ga5̃̃ (see § 170).

[^16]:    ${ }^{1}$ There is this analogy between the French nasal and the English coronal vowels (see § 29) :-
    (a) The vowels affected are those of wide articulation, viz., $i_{n}$ French, $\epsilon, \alpha, \rho, \ldots$, in English, $\epsilon, \alpha, \rho, ~ s$.
    (b) They have a double resonance: the usual oral one, to which is added in English the coronal and in French the nasa! resonance,

[^17]:    ${ }^{1}$ For subsequent practice the reader will easily find suitable specimen words in the paragraphs dealing with "Spelling and Pronunciation".

[^18]:    ${ }^{1}$ If the teacher is an Englishman, he will give the back " $\alpha$," if he is Scotch, French or German, the vowel will be either "a" or " $\alpha$ ". At this initial stage it does not matter whieh, though it is certainly desirable that it should be the " $a$ " of the children under instruction.

[^19]:    ${ }^{1}$ Where this "ə" requires to be made very distinct in class teaching, as would, for instance, be the case in declensions and conjugations: der Knabe, des Knaben, etc., it may, of course, receive more stress.

[^20]:    ${ }^{1}$ If the teacher finds that the " $\phi$ " and "œ," if treated immediately after the " $y$ " sound, confuse the children-as is likely to happen-it will be advisable to practice the former only after the latter is thoroughly known.

[^21]:    ${ }^{1}$ Unless the " $\tilde{\sim}$ " is made sufficiently resonant the pupil may mistake it for what may be called the American nasal twang, which is characterised by but a slight lowering of the soft palate.

[^22]:    ${ }^{1}$ In the pronunciation of a good many Frenchmen the two nasal vowels in content are nearly identical $=k$ ₹̃̃ร, but that is a provincialism and should not be imitated. If the teacher insists upon the proper " $\tilde{a}$ " sound, it will no doubt be forthcoming.

[^23]:    ${ }^{1}$ It is essential that the student should learn to pronounce the different consonants by themselves, viz., "b " not like " bee," " $f$ " not like," ef," but simply as "b" and " $f$ ". This can best be learned in such words where the respective consonants are final, as in ebb, love, if, up, bag, pick, etc.

[^24]:    ${ }^{1}$ The different articulation of the Scotch "ch" in licht and loch is based upon a similar fact.

[^25]:    ${ }^{1}$ Do not pronounce moi, toi, etc. $=$ moa, toa.
    ${ }^{2}$ The "u" in the Scotch word guid (good) represents, with a little more lip-rounding, the exact pronunciation of the French " Y ". The spelling gweed represents the actual pronunciation in but an imperfect way.

[^26]:    ${ }^{1}$ In comparing the tongue-positions of the vowel " i " (Table A, Diagram 1) and of the consonant " j " (Table B, Diagram 5), the reader will find that a slight raising of the tongue changes the vowel to the consonant.

[^27]:    ${ }^{1}$ In the pronunciation of individual French people the " i ," " $y$," " $u$ " in the above combinations are in some cases more, in others less distinctly consonified, though they certainly lose their syllabic value and distinct vowel-articulation; but since the English-speaking student is frequently only too much inclined to give to words like bien, nuit, roi two syllables instead of one, with a clear " $i$," " $y$," " $u$ " sound, it is best to adopt the consonification, which will be produced quite naturally if these vowels are pronounced with sufficient rapidity before the following vowel,

[^28]:    ${ }^{1}$ If the teacher finds that the facts mentioned here under ( $a$ ) and (b) are too subtle for his pupils, he may neglect them.

[^29]:    ${ }^{1}$ Rousselot maintains that the " $R$ " is not produced by the vibration of the uvula, but by that of the back of the tongue and the walls of the back part of the throat.

[^30]:    ${ }^{1}$ Though the "s" is generally mute when final it is sounded in the body of the word : esprit, responsable, Espagne, etc.
    ${ }^{2}$ These were formerly dix et huit, dix et neuf.

[^31]:    ${ }^{1}$ The " $\mathrm{m}(\mathrm{m})$ " and " $\mathrm{n}(\mathrm{n})$ " are always mute in French words unless they are followed by a vowel. Note, therefore, the following pronunciation: nom (n)̃), nommer (nome), important
     etc. (see § 64). Note also the pronunciation of monsieur = mœesjø or məsjø, in more familiar style, msjø.

[^32]:    ${ }^{1}$ Notice the change of the pronunciation of " $g$ " in cases like Tag (ta: x), täglich (tє:cliç), Tage (ta:gə).
    ${ }^{2}$ For the pronunciation of $\mathbf{t i}=\mathrm{ts}$ in foreign words see $\S 192$.

[^33]:    ${ }^{1}$ As a demonstration, which will prove both amusing and instructive, the teacher, in order to illustrate the analogy between " $m$ " and " $b$," " $n$ " and " $d$," might give an example (as my mother is not at home) showing that a person with a cold in his head would pronounce " $m$ " $=$ " $b, "$ " $n "=" d "(\S 146)$.

[^34]:    ${ }^{1}$ Many Scotch children, especially those from the North and the Highlands, find it difficult to distinguish between " $\int$ " and $" 3$," pronouncing gentle $=\mathrm{t} \int \in \mathrm{\epsilon tl}$, and vision $=\mathrm{vi} \int_{\Delta \mathrm{n}}$ (or $=$ vi $\int^{3}$ "n, i.e., beginning the " 3 " without, but ending it with, the voice). This is easily remedied if the child is told to begin the " $g$ " in gentle, George, with the " $d$ "-and not the " $t$ "-sound, and to pronounce first vision $=$ vizjan. From the close combination of "zj," especially if pronounced quickly and with pouted lips, the child will soon get to the properly articulated " 5 ". Directions how to teach certain difficult French and German sounds, like French " n ," German " f " and " $\chi$," and the glottal stop, have already been given.

[^35]:    ${ }^{1}$ The terms we recommend for the phonetic letters in oral construction are: "i" = long or narrow "i"; " I " $=$ short ol. wide "r"; "e"= narrow "e"; " $\boldsymbol{\epsilon}$ "= wide " $\boldsymbol{e} "$; "æ"= southern "æ"; "a"= front "a"; " $\alpha$ " = back " $\alpha " ; " \rho "=$ wide " $\quad$ "; "o"= narrow "o"; "U" = wide or short " U "; "u" = long or narrow "u". In using these terms, "i," "e," etc., should not be pronounced in the Eaglish fashion as "ai," "i," etc., but should receive their phonetic value. The same applies to the consonants. With a little perseverance the children will soon get used to this. The " $\quad$ " may be called the reversed "e," or the natural vowel. This latter term is justified by the fact that whenever the tongue has, so to speak, nothing It do do as in "v," "f," "b," "p," "m," it occupies the position for "ә," which may therefore be regarded as the one which it assumes when left to itself, as it were. The " $\Delta$ " may be called the mixed or obscure " $\alpha$ ".

[^36]:    ${ }^{1}$ Length of plosive consonants shows itself in the space of time which elapses between the forming and opening of the respective stoppage (see § 142). Such double consonants as we find in the spelling of hitting, cattle, shopping, running, rolling, are short.

[^37]:    ${ }^{1}$ Note the long (or half long) " $a$ " in the Parisian pronunciation of nation (na:sjõ), nationalite, ration, and long " $\alpha$ " in tasse, passe, passer, casser, lasse, passion, passionner. In passe, casse, however, the " $\alpha$ " is slightly longer than in passer, casser, where it is not stressed.

[^38]:    ${ }^{1}$ The vowels which we have marked as half long are frequently made quite long, especially the nasal ones. They should never be made short, except in rapid and familiar speech.

[^39]:    ${ }^{1}$ The English-speaking student of German sins oftener against the correct quantity than is exactly necessary. If he uses a short vowel in Kuchen and a long one in Garten, Dorf, we can excuse him, because the "ch" is puzzling, and the influence of his own "r" leads him astray in Garten, Dorf; but there is really no excuse why he should pronounce hilbsch, niitzlich, with a long "ü," as may be heard frequently. The stem ending in two consonants makes a long vowel, as a rule, impossible.

[^40]:    ${ }^{1}$ The question of the general principle of French accentuation is still a much debated one. There are three different opinions expressed by specialists on this subject:-

    1. The accent is on the last fully sounded syllable. (This theory has the largest number of adherents.)
    2. The accent is on the first syllable.
    3. There is no accent at all, but level stress throughout.

    This conflict of opinions proves at least one thing, namely, that in a French word there is not the same clearly marked difference between accented and unaccented syllables as there is in English. For further information on this important subject we refer the reader to the works mentioned on page 162 ff .

[^41]:    ${ }^{1}$ As a good example of the change in meaning varying with the change in stress and pitch, take the famous "we fail" of Lady Macbeth, in Macbeth, Act I. 7, 59. Three possible ways of declaiming these words, (1) with stress on we; (2) on fail ; (3) on both alike, will give three quite distinct meanings, and it is a matter of historical fact that different actors have each made a different choice.

[^42]:    ${ }^{1}$ The " $\tilde{\alpha}$ " is certainly pronounced rather back in the mouth, but not so far back as " $\widetilde{0}$ ".

[^43]:    ${ }^{1}$ In darauif, filr mich, the dar, filr being unaccented, the respective vowels are short.

