

# WEBSTER'S REVISED UNABRIDGED DICTIONARY

OF THE  
ENGLISH LANGUAGE

THE DICTIONARY ~~BEING~~ THE AUTHENTIC  
EDITION OF WEBSTER'S INTERNATIONAL DICTION-  
ARY OF ONE THOUSAND EIGHT HUNDRED AND  
NINETY EDITED ~~UNDER THE~~ SUPERVISION OF

NOAH PORTER, D. D., LL. D.  
OF YALE UNIVERSITY

TO WHICH IS NOW ADDED  
A DEPARTMENT OF NEW WORDS  
TOGETHER WITH  
MANY VALUABLE SPECIAL FEATURES



SPRINGFIELD, MASS., U. S. A.  
PUBLISHED BY G. & C. MERRIAM COMPANY  
1913

## PREFACE.

THE first or original edition of Webster's large or Unabridged Dictionary was published in two volumes quarto in the year 1828, at New Haven, by Sherman Converse, and was sold largely by subscription.

The second edition, 1840, somewhat enlarged and revised by the author, was published by Dr. Webster himself in two volumes royal octavo; to which a supplement was added in 1843.

After the death of Dr. Webster in 1843, the unsold remainder of this edition and the copyright of the work were purchased by George and Charles Merriam, who immediately took measures to prepare and issue a new and revised edition in a single volume in small quarto. This edition was edited by Professor Chauncey A. Goodrich, the son-in-law of Dr. Webster, who had previously superintended the preparation of an abridged edition of the original quarto. Dr. Goodrich had an able corps of assistants, and the new edition of 1847 was received with general favor.

In 1859 an edition was published which included important supplementary matter and a large number of pictorial illustrations, — the first appearance of this feature in American lexicography. The general popularity and acknowledged excellence of this edition suggested the opportunity and enforced the duty of a thorough revision of the entire work. Arrangements were made for such a revision, and the work was begun by Professor Goodrich and a corps of assistants. These arrangements were so seriously disturbed by his death as to require important readjustments, as the result of which the writer reluctantly consented to act as editor-in-chief, and Mr. William A. Wheeler became the assistant and acting editor, having previously given abundant evidence of his preëminent qualifications for this office. The etymologies were all revised and recast in the light of modern philology by Dr. C. A. F. Mahn of Berlin. The definitions were rewrought and rearranged and greatly condensed and improved by the combined labor of Professor William D. Whitney and Professor (now President) Daniel C. Gilman. Many fresh examples of the meanings and uses of words were introduced from older and more recent writers. Scientific terms were more generally recognized and carefully defined, and their meanings were often illustrated for the eye as well as for the mind. By this means the new dictionary from being the driest became the most attractive volume in multitudes of households. Valuable tables were furnished in the appendix, conspicuous among which was the Explanatory Vocabulary of the Names of Noted Fictitious Persons and Places which was prepared by Mr. Wheeler.

The general excellence of this edition of 1864 was cordially and universally recognized, and both contributors and publishers owe a debt of gratitude to the many friends who have since been so just and so generous in their criticisms and praises. Their labors and cares did not terminate with the origination and publication of the bulky volume for which they had become responsible. They have always held themselves ready to listen to suggestions, and to correct mistakes, whether errors of matter or errors of the press. They have been prompt to accumulate and preserve every description of material which might be available for future use. From material thus gathered they were able to publish a valuable supplement in the year 1879, which was edited by Professor Franklin B. Dexter.

In the same year a more formal beginning was made in the preparation of the edition which is now completed and will be known as the Revision of 1890. It would seem on the one hand that the revision and emendation of a work so satisfactory as the edition of 1864 would be the least expensive of time and labor. And yet it has been proved on the other hand by our experience that no work may be made so expensive of both time and labor as that involved in careful verification, condensation, and adjustment. It is believed that no dictionary of the English language yet completed has cost more painstaking in these particulars than the present edition. Much of the time and labor thus expended may leave little trace on the printed page, indeed, no trace of any kind, except of satisfaction in the mind of the critical and conscientious editor, when neither the time nor the labor may have been wasted. The condensation which becomes imperative from the increase of human knowledge may often seem to shrivel and contract the product in which the reader looks for amplitude of statement, proof, and illustration, and yet even an Unabridged Dictionary has its limits. The work of adjustment is often the most difficult of all, although it may show the least of the labor which it has cost. All these and other difficulties can be overcome only by the employment for many years of a large corps of trained assistants in the office who have devoted themselves to literary research and verbal criticism, and of a corps of specialists who have made original contributions in Science and the Arts. The prominence given to the definitions and illustrations of scientific, technological and zoölogical terms, will attract the attention of every reader and perhaps elicit the displeasure of many critics. While we sympathize with their regret that so much space is given to explanations and illustrations that are purely technical rather than literary, we find ourselves compelled to yield to the necessity which in these days requires that the dictionary which is ever at hand should carefully define the terms that record the discoveries of Science, the triumphs of Invention, and the revelations of Life. We have spared no pains to make this part of our book as perfect as possible in both text and illustration. At the head of our corps we have had the unwearied and conscientious service of Mr. Loomis J. Campbell, whose varied learning, sound judgment, and cultivated taste have contributed so largely to the symmetry and trustworthiness of the work. The next place in responsibility has been ably filled by Mr. Walter Allen. With them have been associated for longer or shorter periods of general and special literary criticism and research, Messrs. F. Sturges Allen, Asa George Baker, Thomas R. Barnum, Zenas W. Bliss, Richard Dawson, Dorsey Gardner, J. Norton Johnson, William L. Kingsley, George T. Packard, Francis L. Palmer, J. W. Palmer, George W. Powers, Ralph O. Williams, Mrs. Julia H. Wilson, and others. Of the special contributors referred to, the following is a partial list: —

In the important department of Etymology, the excellent work of the last edition has been supervised and readjusted to the demands of modern Philology and recast by Professor Edward S. Sheldon of Harvard University. As a matter of curious and, to a few readers, of instructive interest, the eminent Professor August Fick of the University of Göttingen

has prepared a select table of radicals of important English words, with the various forms which they have taken in their historical development.

The important department of Pronunciation has been committed to the special direction of the Reverend Samuel W. Barnum, and Professor Samuel Porter of the National Deaf-Mute College, Washington, D. C. Mr. Barnum has made the study of English pronunciation almost a life work, having been trained under Professor Goodrich in the special and exact knowledge of the subject in its details, and made himself familiar with the teachings of the leading writers in English Orthoëpy. Professor Porter contributes, in the *Guide to Pronunciation*, the result of a careful and long-continued study of Phonology in the physiological method pursued by Mr. Alexander Melville Bell, whose system in its more prominent features is accepted as scientifically true and practically useful. The history of the various methods of pronunciation has been subjected to a most careful revision and rendered, if possible, more trustworthy than ever before. The Synopsis (§ 277) of words differently pronounced by different Orthoëpists, and the marking of the pronunciation of the words in the vocabulary by respelling are the work of Mr. Barnum.

The definitions in *Anatomy* have been revised by Professor Sidney I. Smith, of Yale University;

In *Architecture* and the *Fine Arts*, by Professor Russell Sturgis, of the College of New York;

In *Biology* and *Physiology*, by Professor Russell H. Chittenden, of Yale University;

In *Botany*, by Professor Daniel C. Eaton, of Yale University;

In *Chaucer* (*Canterbury Tales*), by Professor Thomas R. Lounsbury, of Yale University;

In *Chemistry*, by Professor Arthur W. Wright, of Yale University, assisted by Professor Charles S. Palmer, University of Colorado;

In *Law*, by Francis Wharton (deceased), of the Department of State at Washington;

In *Mathematics* and *Astronomy*, by Professor Hubert A. Newton, of Yale University;

In *Mechanics* and *Engineering*, by Professor Charles B. Richards, of Yale University, and Professor William P. Trowbridge, of Columbia College;

In *Medicine*, by Alexander Duane, M. D., New York;

In *Mineralogy* and *Geology*, by Professor Edward S. Dana, of Yale University;

In *Music*, by Mr. John S. Dwight, of Boston;

In *Nautical Terms*, by Mr. Charles L. Norton, of New York;

In *Paleontology* and *Geology*, by Professor Oscar Harger (deceased), of Yale University;

In *Zoology*, by Professor Addison E. Verrill, of Yale University.

The *Dictionary of Noted Names of Fiction* has been carefully elaborated by Professor Henry A. Beers, of Yale University, who has also contributed many new topics and corrected some oversights, and in many ways increased its attractiveness.

The *Brief History of the English Language*, originally prepared by Professor James Hadley, has been carefully revised and brought down to the present time by Mr. George Lyman Kittredge, of Harvard University.

The *Pictorial Illustrations* have received careful attention not only in respect to artistic excellence, but in respect to scientific exactness.

The revision now given to the public is the fruit of over ten years of labor by a large editorial staff, in which publishers and editors have spared neither expense nor pains to produce a comprehensive, accurate, and symmetrical work.

NOAH PORTER.

NEW HAVEN, CONNECTICUT.

# INDO-GERMANIC ROOTS IN ENGLISH.

By AUGUST FICK, PH. D.,

PROFESSOR AT THE UNIVERSITY OF Breslau; AUTHOR OF "VERGLEICHENDES  
WÖRTERBUCH DER INDOGERMANISCHEN SPRACHEN."

## HISTORICAL SKETCH OF ENGLISH.

With reference to its vocabulary, English must be styled a composite language. As is well known, it has two principal sources: the Anglo-Saxon, the language of the Angles and Saxons, who in the fifth and sixth centuries took possession of Great Britain, and the Old French, spoken by the followers of William the Conqueror, who in 1066 A. D., through the battle of Hastings, became master of England.

Already, before the introduction of the Norman French, the Anglo-Saxon had appropriated various elements from other languages, though to a less extent.

Like the other Teutonic peoples, the invading Angles and Saxons had borrowed single literary terms from the Latin, the language of the Roman empire. They borrowed somewhat on British soil from the speech of their Celtic subjects. A further importation of Latin and Greek words was caused by the adoption of Christianity. Finally, the dominion of the Danes is proved by numerous terms borrowed from the Old Norse vocabulary, as, for example, *ransack*.

Even after the mingling of the Anglo-Saxon with the French of the conquerors, there were still frequent adoptions of foreign elements. Owing to the diligent fostering of the ancient languages in church and school in England, learned expressions found their way in a body into the language of ordinary life. This stratum of words is often clearly distinguished in form from the Romance words of ordinary life, the element which the Normans brought with them; in the common word the sounds of the Latin are transformed according to definite laws of development, while in the learned word they have remained intact. Thus, *emperor* and *imperial* both come from the Latin *imperator*, which in *emperor* has undergone a popular transformation, but in *imperial* is presented to us in its learned form. These two words are related to one another as *empereur* and *impératrice* in French, where the distinction between the common language and the speech of the learned is still more evident.

In the centuries just past, also, the English vocabulary has materially increased. New inventions and discoveries demand new terms, which are supplied chiefly by means of the ancient languages, the Latin, and particularly the Greek. Since the English language has spread over all the continents of the Old and New Worlds, expressions have been added to its ever-increasing vocabulary from the languages of the Hindoos, the American Indians, and many others.

In this constant adoption of new materials of speech, the history of the English people is reflected; yet the language has not become a mere conglomerate of opposing elements, or a confused medley, but has preserved its unity and its original character. The wealth of the language was doubled by the adoption of the French vocabulary. The shortsighted purist fails to see that herein lies a great superiority of English over the Romance and Teutonic languages. Should it not be regarded as a mark of superiority, that in English the vocabularies of the Latin races and the Teutons are organically combined, that is to say, the vocabularies of the races which, since the downfall of the ancient civilization, have determined the fate of the world? Both elements are in English united in one harmonious whole by reason of the same pronunciation. In a tasteful use of the language, the Teutonic element will, as of its own accord, predominate in poetry and the expression of feeling, the Romance element in philosophic and scientific thought, while in the language of ordinary life both elements will be equally represented.

In spite of this mingling with foreign languages, English has, by its internal structure and its grammar, remained a member of the Teutonic group of languages, although infinitely enriched, developed in an independent manner, and exalted to the position of a universal language. Within the Teutonic group, the English language belongs, first of all, to the Old Saxon branch, or to the group of dialects which have remained at the stage of the first *Lautverschiebung* [or shifting of sounds (Grimm's Law)], from which the High German, by a new shifting of sounds, has departed. At first the Teutons divided into Teutons of the East and the West, or, more accurately, into Goths and Germans. The former perished, and the further development was consummated among the Germans, the Teutons of the West.

The Teutons, as we learn by comparison of languages, are closely related to the Kelts, Italic peoples, and Greeks. The Kelts, after obtaining an astonishing extension over Gaul and the British Isles, half of Spain, Northern Italy, Southern Germany, and the regions on the Danube, have disappeared, save for comparatively small remnants in Ireland, the Highlands of Scotland, Wales, and Brittany. Of the Italic dialects, the Latin, the language of Rome, mistress of the world, has been preserved in the languages of the Romance peoples. Lastly, the Greeks — without reference to the ancient colonies — have but poorly maintained their former extension.

The peoples of Western Europe — Teutons, Kelts, Italic peoples, and Greeks — are plainly separated in language from the Indo-Germans of Eastern Europe, that is, the Lithuanians, Letts, Kurlanders, Prussians, and Slavs, who are called collectively Letto-Slavonians (*i. e.*, Lettic peoples and Slavs). Perhaps it would be still better to call them Slavo-Baltic people, if we follow the example of noted investigators, and name the Lettic group Baltic, after their habitations on the shores of the Baltic Sea.

A third group, distinctly separate in language from the peoples of Eastern and Western Europe, is formed by the Indo-Germans of Asia. To these, and to these alone, belongs strictly the name Aryan, by which title they called themselves. They must, therefore, be thus called by science. But since prominent English scholars — as Bayce and Max Müller — also call the Indo-Germans collectively Aryans, the

members of the Asiatic group of our family of peoples and languages — Persians, Bactrians, and Indians (Hindoos) — may be here called East Aryans. The name Indo-Iranians would also be an appropriate appellation, since by this title the inhabitants of India and Iran are embraced in one term.

The East Aryan languages, whose oldest monuments are the Indian Vedas, the Zend-Avesta, and the Persian cuneiform inscriptions, are distinguishable at the first glance from the languages of the European Indo-Germans of the East and the West. While among the Europeans the whole vowel system rests on the triad *a e o*, of which the last two vowels stand in a plain relation of ablaut to each other (as in *fépe*, *phóros*), among the East Aryan peoples we find in place of these three vowels the monotonous *a*. The vowel system of the Europeans, *a e o*, is most nearly preserved in Greek; it may, therefore, suffice for the explanation of the difference in vowels between the Europeans and Asiatics of our family, to compare with one another some examples from the Greek and Sanskrit: Gr. *áyo* I lead = Skr. *áya-mi*; Gr. *fépe* bear = Skr. *bhára*; Gr. *phóros* murder = Skr. *ghanás*. Further, in place of the weakening of the three long vowels of the Europeans, *ā ē ō*, to *a e o*, among all the East Aryan peoples *i* appears as a weakening of *ā*: Gr. *στάρς* placed, *στᾶ* = Skr. *sthāá*, *sthā*; Gr. *θερός* placed, *θη* = Skr. *dhitá*, *dhā*; Gr. *κῆτος* grudge, *παλὶς-κῆτος* growing malignant again, *κῶ* = Skr. *chitá*, *pā*; Gr. *ποτός* drunk, *πῶ* = Skr. *pítā*, *pā*. Also in the consonants, the East Aryan languages are materially different from those of the Europeans; especially surprising is the almost entire lack of *l*, so that for the two sounds, *l* and *r*, of the European languages, we find among the East Aryans only *r*: Gr. *πολύς* much = Skr. *purús*; Gr. *πλή* to fill = Skr. *prā*. To the peculiar combination of sounds *ksh* in Sanskrit, Zend, and Old Persian, there correspond in Greek *κτ*, and in other European languages the simple *k* sound: *e. g.*, Skr. *kshí* to settle = Gr. *κρίω*; Skr. *kshēma* = Lith. *kēmas*, Goth. *haims*, E. *home*.

Just as sharply as the East Aryans are distinguished from the Europeans, are the West Europeans (Teutons, Kelts, Italic peoples, and Greeks) distinguished from the East Europeans and East Aryans. The characteristic difference here is in the consonants. The East Europeans and East Aryans possess two series of gutturals, *k g gh* and *ç z zh*: *e. g.*, Lith. *kas* who, Oslav. *kyj* = Skr. *kas*; Lith. *geri* to drink = Skr. *gar* to devour; Lith. *gana* enough, Oslav. *goněti* to suffice = Skr. *ghaná* mass; Lith. *szimtas* hundred, Oslav. *suto* = Skr. *catām*; Lith. *žinoti* to know, Oslav. *znati* = Zend *znā* to know; Lith. *želti* to be green, Oslav. *zlato* gold = Skr. *har*, Zend *zar*, to be yellow, green (from *zhar*). To both these series of sounds, *k g gh* and *ç z zh*, which are common, as the examples cited show, to the East Europeans and the East Aryans, quite different sounds correspond in the languages of the West Europeans.

To the *k* series in the languages of the East corresponds in the West a *q* series; that is to say, sounds in which the guttural is closely united with a following labial, *v* or *w*, so that in place of the *k g gh* of the East we have in the West *kv gv ghv*, which may also, through influence of the *v*, be changed into the labials *p b bh*, and which also show other changes which presuppose the ground forms *kv gv ghv*. Some examples may illustrate this:—

Goth. *hwas* who, E. *what*, OIr. *co* = Gallo-British *po*; L. *quo-d* = Oscan *pūd*; L. *ubi* where, *alibi-ubi* somewhere = Oscan *pif*; Gr. *nῶς* how = Ionic *κῶς*. Here everywhere evidently the ground form is *hwo-s*; while in Lith. it is *kas*, in Oslav. *ko-*, and in Skr. *kas*.

Goth. *qīnō*, *qēns*, wife, woman, E. *queen* = OIr. *ben* woman, wife, Gr. *γυνή*, Boeotian *βᾶνᾱ*, but Prussian *geno*, Skr. *gnā*; E. *path*, G. *pfad*, L. *venio* I come = Oscan *ben*, Gr. *βαίω* I go, *βαίς* a stepping, but Skr. *gan-*, *gā*, to go. In these examples the forms of the sound in the languages of Western Europe are only to be explained by assuming the original sound *gv*.

E. *warm* (from *gvarm*), L. *formus* = S. *gharmá*; Gr. *phóros* murder = Skr. *ghaná*; the West European ground form is evidently *ghvornō-s*, *ghvono-s*.

The *ç* series of the East Europeans and East Aryans appears in the languages of Western Europe as a *k* series, so that in place of the Eastern sounds *ç z zh*, in the West the pure *k* sounds appear, *k g gh*, subjected to no change.

E. *g.*, E. *hund*-red, Goth. *hund*, Ir. *cét*, Gallic *cent*-, L. *centum*, Gr. *ἑκατόν*; but Lith. *szimtas*, Oslav. *suto*, Skr. *catām*: Goth. *taihun* ten, Ir. *dec*, L. *decem*, Gr. *δέκα*; but Lith. *deszintis*, Oslav. *deseti*, Skr. *dāśa*.

E. *know*, G. *kennen*, L. *gnō-sco*, Gr. *γινώσκω*; but Lith. *žinoti*, Oslav. *znati*, Zend *znā*, to know: O Norse *aka* to drive, E. *acre*, Ir. *ag*-, L. *ago* I drive, *ager* field, Gr. *ἀγῶς*, *ἀγρός*, but Zend *azāmī* I drive.

E. *goose*, G. *gans*, Ir. *gós*, Gr. *χῆν*; but Lith. *žgisis*, Skr. *haṁsa* (for *zhansa*) *goose*: E. *gang*, Goth. *gaggan*; but Lith. *žengti* to step, Zend *zaṅgira* foot.

These examples may suffice for illustration of the fact that the languages of Western Europe are strictly distinguished from all their relatives in the consonant system, having *q* and *k* sounds respectively where the rest display *k* and *ç* sounds.

The languages of Eastern Europe, or of the Slavo-Lettic peoples, are likewise plainly separated from all the rest in phonology. They have lost the old aspirates, the soft [voiced] as well as the hard [voiceless], and have replaced them by the *mediae* *ç z d* and the *lenues* *k g l*.

The Indo-Germanic languages thus fall into three groups, according to their original phonetic condition:—

1. The East Europeans, or Slavo-Lettic peoples, have the vowels *a e o* and the sounds *k* and *ç*, but no aspirates.

2. The West Europeans have *a e o*, and *q* and *k* sounds respectively in place of the *k* and *ç* sounds.

3. The East Aryans, or Indo-Germans of Asia, have *a* instead of *a e o*, and *k* and *ç* sounds.

If we transform these statements into an historical view, they show that the Indo-Germans were already, in very ancient times, divided into three peoples, one dwelling in Asia, one in Eastern Europe, the third in Western Europe.

In order to be able to draw further historical information from these linguistic facts, we must determine which of the three groups has preserved the original system of sounds.

The agreement of the West Europeans and the East Aryans in the possession of aspirates shows that these were originally common to all Indo-Germans, and thus belonged to the original language, but were lost at some later date by the Slavo-Lettic peoples. Likewise it may be proved that the East Aryans also originally possessed *e* and *o*, and at a later date replaced them by *a*. The proof lies in the fact that, according to the discovery of Collitz, the *k* sounds become palatal before *a*, when *e* corresponds to this *a* in the European languages: e. g., Skr. *ca* = Gr. *re* = L. *que*.

The proof that the *k* and *ç* sounds were the original ones, and that the *q* and *k* sounds of the West Europeans were derived from these by a kind of partial Lautverschiebung, can not be given here. I refer to the fourth edition of my "Vergleichendes Wörterbuch der Indogermanischen Sprachen," where the reader will find in general a more careful proof of the statements given here.

According to these statements, the sounds of the original language were *a e o* and *k* and *ç*. The East Aryans, when separated from the original people but still united among themselves, gave up *e* and *o*, as well as *ç*, and replaced these sounds by *a* and *r*. The West Europeans, at a time when they still kept together, shifted the *k* and *ç* sounds to *q* and *k*, but retained the original vowels *a e o*. Finally, the Slavo-Lettic peoples, while united among themselves, gave up the aspirates for *mediae* and *tenuis*.

While the Indo-Germans still formed one people, and still spoke one language with the *a e o* and *k* and *ç* sounds, they dwelt probably on the confines of Europe and Asia, in the southern branches of the forest-lad Ural Mountains, as neighbors of the primitive Finnish folk which occupied the central or mineral region of the Ural Mountains. From these regions the East Aryans wandered as nomads to the east, the Western division journeyed towards the west, perhaps through the fruitful district which now is called the Black Earth and reaches from Penza to Kharkov. The richness of the soil may have occasioned a change from grazing to agriculture. At all events, West Europeans and Slavo-Lettic peoples were still one united folk when their forefathers took up agriculture. This is proved by the agreement in the terms relating to agriculture: e. g., Goth. *arjan* to plow, L. *arare*, Gr. *ἀρᾶν* = Lith. *arti*, Oslav. *orgj*; E. *sow*, Goth. *saian*, L. *sero*, *sēmen* seed = Lith. *sių*, I. *sow*, Oslav. *sių*, etc.

The phonetic system of the original speech was, according to the foregoing, essentially like that of the Slavo-Lettic peoples. It was characterized by the three vowels *a e o*, the sounds *k* and *ç*, and the possession of *l* together with *r*. But we ask now, what linguistic formations and what words in the Indo-Germanic languages belonged already to the original language? The question is properly already solved by the preceding statements. It is practically the same as the question of the first separation and division of the hitherto united folk. According to the foregoing inquiry, the East Aryans emigrated from the southern Ural region over the Turanian steppes to Iran and India, as a consequence of which the bond between the emigrants and the parent folk was sundered. From this it follows that everything which in the speech of the Europeans and East Aryans is originally identical belonged to the original language. In considering this, it is a matter of no consequence whether the word has been retained in several members of the European and the East Aryan group, or whether it occurs only in one member of each group. So, e. g., the verb *dhreughō* (I deceive) is to be assigned to the original language, although, outside of the Sanskrit and Zend *drugh*, it occurs only in the Teutonic; OS. *bi-ariogan* = G. *betriegen*. Likewise *svento-s* (holy) is a word of the original language, although it is retained only in the Slavo-Lettic (Lith. *szventas* = Oslav. *svetŭ*) and the Zend *spenta*. To produce another example from the English, *dhuneyō* (I din) was already present in the original language, although it can be certainly pointed out only in the English *din* = AS. *dynnan* and in the Skr. *dhunaya* (*dhanyaya*) to sound.

If one wishes to ascertain what is common to the East Aryans, and thus restore the East Aryan unity of speech, he must in like manner trace out the first separation which occurred among the peoples of this linguistic group. This was the separation into Iranians and Hindoos of Aryan race; and accordingly all originally identical speech material which occurs west as well as east of the Soliman mountains that separate Iran and India, is East Aryan. Here, too, it is enough that a word occur in one member of each group, and so, e. g., the comparison of the word *modor*, *mohar*, first found in Pehlevi (= Pers. *muh* seal) with the Skr. *mudrā* (seal) would be a sufficient reason for assigning *mudrā* to the East Aryan original speech, if one were sure that here some later borrowing from the Sanskrit, or vice versa, had not taken place.

When the Europeans moved west from the foot of the Ural Mountains, they remained for some time together. They made in common the transition to agriculture, as is proved by the expressions common to West and East Europeans which refer to this occupation. To this period belong also the remaining words which are common to both groups of Europeans, but are unknown to the East Aryans. But this union of the Europeans was not of long duration, and the phonetic system of the original speech was not essentially altered meanwhile.

The Slavo-Lettic peoples remained near the old home. But while still united as one folk, they gave up the old aspirates, and in many other ways altered the inheritance which had come down to them. They separated at first into Slavs and Baltic (Lettic) peoples; the Slavo-Baltic (Slavo-Lettic) language is therefore obtained by a comparison of both groups.

The West Europeans, or the ancestors of the Teutons, Kelts, Italic peoples, and Greeks, at some period while they were still one people and possessed one speech, changed the inherited *k* and *ç* sounds into *q* and *k* sounds. The Greeks were the first to separate from this union, while the forefathers of the three remaining peoples still for some time continued united. Consequently, the West European group of languages would fall into an older and a more recent stratum. To the older stratum belong those words which occur in the Greek and also in at least one of the three remaining divisions. To the other stratum belong those words which never appeared in Greek, but which can be traced in at least two of the other three divisions.

To the Teutonic unity of speech is to be assigned everything which occurs both among the Goths and also among the remaining Teutons, and shows itself to be original. In other words, the Teutonic people, after separating from the West European union, first divided into West Teutons and Goths. Phonetically, the Teutonic is plainly separated from all its relatives by its Lautverschiebung: the Goths, or East Teutons, are characterized by the preservation of the old *z*, which the West Teutons changed into *ā*; e. g., Goth. *gēbum* we gave = OS. *gābun* = E. *gave* = OHG. *kāpun*.

From the West Teutonic came the High German through a new, though partial, Lautverschiebung, while the remaining dialects, among them those of the Saxons and Angles, kept to the older phonetic system.

Thus we have come back to the Anglo-Saxon element of the English language, from which we started. We have seen above how this primitive form of the English language has been enriched in historical times through the reception of words from foreign tongues into its vocabulary. At the beginning of our article, the Anglo-Saxon foundation was considered as something given, not as a thing to be comprehended in its gradual origin. But now we can distinguish in the Teutonic element in English several strata, according to the time of their origin.

The original Anglo-Saxon kernel of the English language belongs to the periods enumerated in the following statement:—

#### I. Period of the original speech.

At this time all those words were coined which occur in the original English and also among the East Aryans; e. g., E. *warm* = Skr. *gharmā-s* warmth.

#### II. Period of the unity of speech of the Europeans of the East and West.

To this time belong those words which occur in the original English and also in the Slavo-Lettic; e. g., E. *I sow* = Lith. *sių*, Oslav. *sių*. The phonetic system of this period is not different from that of the original speech, and forms only a transition to III.

#### III. West European period.

This time is characterized by the substitution of *q* and *k* for *k* and *ç* respectively. Here belongs all the original English which occurs at the same time among other Europeans of the West, outside of the Teutons; that is, among Kelts, Italic peoples, and Greeks; e. g., E. *beech*, *book* = L. *fagus* beech = Gr. *φῦξ*, *φάγος*, oak; E. *law*, AS. *lag* = L. *lēx* (ground form *lēgh*, dat. *laghēi*), akin to E. *lie*, *lay*. With this last example compare the Gr. *ῥέ κειμενός*, which from its literal meaning, that which is laid down or established, comes to signify *law*.

As subdivisions of III., we might place under IIIa. whatever occurs at the same time in Greek and English; under IIIb. what occurs only among the other West Europeans.

#### IV. Period of the Teutonic unity of speech, after the Lautverschiebung.

Here everything of the original English is coined which occurs at the same time in Gothic; e. g., E. *holster* = Goth. *hulistr* a veil. What appears only in Low and High German is to be given separately.

If one arranges the primitive English, or the Anglo-Saxon element of English, in these categories, or separates it according to these divisions, he obtains insight into the gradual rise of the same, and reconstructs the prehistoric periods through which the language passed on its way from the original language to the language of the Anglo-Saxons, when they crossed over to England under their Old Saxon horse banner and coat of arms, which tradition has personified as Hengist and Horsa. In the solution of this problem the etymologist becomes an investigator in a prehistoric field, and his activity may be compared with that of the anthropologist when he arranges prehistoric finds according to the different ages, — the stone age, the bronze age, and the iron age.

Quite different is the task of the etymologist in the investigation of the store of words which came into the English language after the emigration of the Anglo-Saxons from the Continent. Here he must separate the different strata in the accretions which in the course of time were added to the original English stock. These strata may here be named again, arranged according to the periods before and after the battle of Hastings.

#### I. Anglo-Saxon period.

- A. Words borrowed from the language of the original Celtic inhabitants of the British Isles. These appear to be few.
  - B. Words borrowed from the ecclesiastical language; — caused by the adoption of Christianity; e. g., *bishop*.
  - C. Words borrowed from the Northern tongues; — caused by the reign of the Danes; e. g., *ransack*.
- #### II. English period from 1066 A. D. on.
- A. Introduction of the Old French spoken by the Norman conquerors.
  - B. Learned words borrowed from Latin and Greek.
  - C. Words borrowed later from the various languages with which the English has come into contact.

In the following list of words an attempt has been made to lay a foundation for such an historical investigation of the English language as has been indicated here. To this end I have endeavored to present the share of the English in the first prehistoric period, that of the Indo-Germanic original speech, or the speech of the primitive folk before the separation of the East Aryans from the parent stock. All the roots and words of the original language are enumerated which are found in the original English, that is, in the Anglo-Saxon vocabulary of the English language; and that form of these roots and words is placed at the head which, according to our present information, they possessed as parts of the original language. The sounds of the original language as here adopted are:—

a e o i u; k kh g gh, ç z h, t th d dh, p ph bh; n m y j r l v s.

The palatals are denoted by *k kh g gh*, the semivowels by *y j r l v s*.

The verbal and pronominal roots are separated from each other, a matter that requires no justification. The prepositions are likewise grouped together as a separate class, as they usually can not with certainty be referred to either of the above classes of roots. A fourth class is formed by the nouns of the original speech, which are derived from verbal roots, to be sure, but whose origin is often obscure. Finally, as a fifth class, the numerals are given, the treatment of which likewise presents difficulties. For convenience of reference, the roots and words in the following lists have been numbered consecutively from 1 to 310 by the American editors.

# LIST OF ROOTS OF THE ORIGINAL LANGUAGE IN ENGLISH.

The roots in the following list are numbered, and references are made to them from the etymologies of words in the main vocabulary by means of corresponding numbers.

## I. VERBAL ROOTS.

1. **√ AQ-** to be sharp.  
E. ear (of grain) = Goth. *ahs*; E. awn = Goth. *ahana* chaff, OHG. *agene* = L. *agna* a blade, a straw; E. edge, egg, v. t. = AS. *ecg*, n., OHG. *ekka* = L. *acies*: cf. L. *acus* chaff, *acer* sharp, Gr. *ἀκόνη* a whetstone, *ἀκαχμένος* sharpened, *ἀκωκή* a point, Skr. *acan*, *acna*, *acman*, a stone, *agri* corner, etc.
2. **√ AZO** I drive, lead.  
E. acre = Gr. *ἀγρός* field, Skr. *ajrá* field, and in the E. words *agent*, *agile*, *act*, *action*, etc., from L. *ago* I lead, drive = Gr. *ἄγω*, Skr. *ājāmi*, Zend *ažāmi*.
3. **√ AZHŌ, ANZHŌ, I narrow.**  
E. ail, awe = AS. *oge*, *ege*, Goth. *agis*, Gr. *ἄχος* distress; E. ugsome, uglysome, *ugly* = AS. *egle*, Goth. *agls* unfitting: cf. Gr. *ὀχλῶ* I disturb, Goth. *agan*, *og*, to fear, Gr. *ἄχος* distress, *ἀχουαί* I grieve, Skr. *āhāmi* I unite closely; E. angry, cf. L. *ango* I strangle, Gr. *ἄγχω*, Skr. *amihā* close, *amhas* pressure.
4. **√ EMI, IMES, IENTI, I, we, they go.**  
OE. *yode* I went = Goth. *iddja*; E. year = Zend *yāre*, and E. *aye* = Gr. *αἶψα*: cf. Skr. *āyus* life, *ēva* course; L. *eo* I go, *ire* to go, Gr. *εἶμι*, *ἔμει*, *τασι*, I, we, they go = Skr. *ēmi*, *imās*, *iānti*.
5. **√ (EISŌ), pres. ISKŌ** I desire, demand.  
E. ask = OHG. *eiscōn*, Lith. *jėskōti* to demand: cf. Skr. *icchāmi*, pres. of *ish* to wish.
6. **√ EDŌ** I eat.  
E. eat, ate, eaten = Goth. *itan* to eat; E. etch = Goth. *atja* I cause to eat, G. *atze*: cf. L. *edo* I eat, Gr. *ἐδομαι*, Lith. *ėdmi*, Skr. *admi*, imperfect *ādāt*.
7. **√ EMO** I take.  
This is the basis of *NĒMO* (from *E-NĒ-M-MI*, 3d pl. *E-NĒMŌNTI*): *ēmo* = L. *emo* I buy, perf. *ēmi*, Lith. *imu* I take, perf. *ėmiau*, Skr. *amati* (perf. act. part. *amivāms*) he seizes: *NĒMO* occurs in E. *nim*, *nimmed*, cf. AS. *niman* to take; E. *nimble* = AS. *nemol* (equivalent to L. *capax*); E. *numb*, cf. G. *benommen*; Gr. *nēmo* I distribute, possess = Goth. *nima* I take.
8. **√ ERA**: RA to row.  
E. oar = ONorse *ār* (from *ēr*); E. row, v. = AS. *rōwan*, MHG. *rüehen*; E. rother-nail, *rudder* = AS. *rōðer*, G. *ruder*: cf. Lith. *iriu*, *irti*, to row, Gr. *ῥόης* a rower, *ῥόσω* I row, *ῥερός* an oar = L. *rēmus*, *ratis* a raft, Skr. *aritar* rower, *aritra* oar.
9. **√ ESMI** I am, *ESTI* he is.  
E. I am, he is = Goth. *im* I am, *ist* he is; E. are = ONorse *erum*: cf. Gr. *ἐα* I was, L. *eram*, Skr. *āsīs* thou wast; E. sooth = AS. *sōð*, OS. *sōth*, ONorse *sannr* (cf. Goth. *sunis*) from the participle; cf. Gr. *ἐσθ*, p. pr. being, L. *ab-sens* absent. Cf. Gr. *εἰμι* I am, *ἐσθ* he is, L. *sum* I am, *est* he is; Skr. *āsmi* I am, *asti* he is, *śan*, *i*, *saff*, being.
10. **√ OK** to see.  
E. eye, pl. *eyne*, *eyen* = AS. *ēage*, Goth. *augō*, pl. *augōna* (*au-gō* stands for *alhego*, i. e., *ahv* = *ok*, with the diminutive suffix *go*); OKYI eye is in Lith. *akis*, L. *oculus*, Gr. *ὄρα* (= *oke*) the two eyes, Skr. *akshi* (i. e., *akhyi*) eye; the verb OKY- to see, in Gr. *ὄσσομαι* I see = Goth. *ahja* I think, Gr. *ὄφομαι* I shall see, *ὄππω* I have seen: cf. Skr. *īśh* to see.
11. **√ OR-**, pres. *RŌNEMI* I arouse.  
E. earn to curdle, from AS. *ernan* = *rennan*; E. run, ran, *rennet*, *rind*, *rill*, akin to Goth. *rinnan*, *rann*, to run, derived from *RNU* which occurs in Gr. *ὀρνυμι* I arouse = Skr. *ṛṇōmi* (*ṛpro* aor. 3d sing. = Skr. *ārta*), L. *orior* I rise; E. *ern*, *earn*, eagle, cf. OHG. *aro*, pl. *erni*, OSlav. *orl-lū*, Gr. *ὄρνις* bird.
12. **√ KĒKŌ, KĒNKŌ, I surround, gird.**  
E. hag a witch, *haugh*, *have*, a hedge = AS. *haga*, cf. G. *hag*, *hatn*, grove; I. hedge = LG. *hegge*, G. *hecke*; E. heck (= *hetch*) = G. *heck*; E. hatch, v. = G. *hecken*; E. *hock*, *hough* = AS. *hōh* (from *hōnha*), Lith. *kinka* kneecap; E. *heel* = AS. *hēla*; E. *hox* = OHG. *hahsa* hind leg, L. *coxa* hip, Skr. *kakshā* girdle, shoulder, concealment. Cf. Gr. *κυκλίς* latticed gates, L. *cancelli*, Skr. *kacatē* he binds, *kāñci* girdle.
13. **√ KĒTŌ** I hide.  
E. hood = AS. *hōd*, MHG. *huot*; E. heed = AS. *hēdan*, MHG. *hüeten*; also E. *hat*, *hatted*, cf. G. *hut*; here also E. *hide*, n. = G. *haut* = L. *cutis* (cut from *quēf*): cf. AS. *heaðor* "receptaculum," Goth. *hēp-jō* chamber, L. *catinus* bowl, *catillus*, Gr. *κόρυλος*, Skr. *cātati* he hides.
14. **√ KĒMO** I surround, arch, hide.  
E. hem edge, *hemmel* shed, cf. Goth. *hamōn* to cover, OHG. *himil* heaven (= G. *himmel*) and LG. *hammel* hem: cf. L. *camurus* crooked, *camera* a vault, Gr. *κάμινος* oven, Zend *kamara* girdle, Skr. *kmāratī* he bends.
15. **√ KĒMŌ** I hum, buzz.  
E. hum, v. i., hum, humming, *humblebee* = G. *hummen* to hum, *hummel* *humblebee* = OHG. *humal*: cf. Lith. *kim-ti* to be hoarse, *kamanē* wood bee, Prussian *kamus*, Skr. in *camara* "bos grunniens."
16. **√ KER-, KERV-**, to turn.  
E. whirl, (*whirl* (= *hurl*)) = E. *harrow* = AS. *hyrwe*; E. *hoard*, *hoarding*, fence, screen = Goth. *haurds* door, G. *hürde* hurdle: cf. L. *crātes* hurdle, *harrow*; E. *hurdle* = AS. *hyrdel*; E. *ridge* = AS. *hrycg*, ONorse *hrygg*, OHG. *hrucki*, standing for *hruvi*: cf. OSlav. *krivŭ* worm, *krivŭ* = Lith. *kreivasis* bent, L. *curvus*, *cor-tina* kettle, Gr. *κυρτός* curved, *κορμός*, Skr. *caru* kettle, *krmi* worm.
17. **√ KĒLŌ** to strew, cover.  
OE. *hele*, *heal*, to conceal, cover = G. *hehlen*; E. *hell* = G. *hülle*; E. *helm* = G. *helm*; E. *hull*, *hill* = G. *hülle*, *nüllen*; E. *holster* = G. *holfter*: cf. L. *oc-culo* I cover, *color* color, Skr. *kirāti* to strew, *bestrew*.
18. **√ KRĒU** to be wounded or bloody, to fear.  
E. raw = AS. *hrēdau*, G. *roh*; E. *rear*, *rare*, raw = AS. *hrēre*: cf. Gr. *κραῖος*, Skr. *krāra*; E. *rough*, *ruff* = OHG. *rüh*, G. *rauh*; E. *rue* = G. *reue*, akin to OS. *krēran* to pain: cf. L. *crur* blood, *crūdus* raw; Gr. *κρύος* frost, *κραῖος* brittle, *κρεφας* heat: Skr. *kravis* (= Gr. *κρέφας*), *krūmā*, *krūrā* horrible. With Gr.

- κρύσταλλος* ice, cf. E. *freeze*, *frost* = G. *freren*, *frost*, ONorse *hrjusa* to freeze (*f* = *h* = Aryan *k*).
19. **√ KRĒKŌ (KRENNK)** I roar, croak.  
E. *raven* = ONorse *hravn*, G. *rabe*, cf. Gr. *κόραξ*; E. *ring*, *rang*, *rung* = AS. *hringan*: cf. Lith. *krak-ti* to roar, *krank-ti* to croak, L. *crōcio* I croak, Gr. *κράξω* I play on an instrument, Skr. *kraksh* to roar.
20. **√ KJĒYŌ** I delay.  
E. *while* = G. *weile*; E. *home* = AS. *hām*; E. *hamlet*, cf. Goth. *haimis* village, Lith. *kēmas*, Skr. *kshēma* rest, stop; perhaps also E. *heath* belongs here, G. *heide*, cf. Skr. *kshētra* field.
21. **√ GĀ** to go.  
E. *pad*, *path* = AS. *pæd*, *pæð*, G. *pfað*; E. *pad*, v., *padded*, *paddle*, v. = LG. *pedden*, *paddeln*: cf. Gr. *βαίνω* I go, *ἐβη* he went, *βατός* passable, Skr. *gā*, *jīgāñ*, to go.
22. **√ GĒ** to sound.  
E. *caw*, *kaw*, *chough* = AS. *ceā*, OHG. *chāha*; Skr. *gāyāmi* I sing, is the basis of E. *quoth* (= Goth. *gaf*, fr. *giba* I speak), and of E. *chat*, *chatting*, OE. *chatten*; E. *chitchit*, cf. Skr. *gadgada* stammering, from *gad* to speak.
23. **√ GĒMŌ** I come, go.  
E. *come*, *came* = Goth. *gīma*, *gam*; E. *queme* = AS. *cuēman*, akin to *cuēme* fit, pleasing, cf. OHG. *bi-quāmi* fit, G. *bequem* convenient. Cf. Skr. *gāmati* = Zend *jamaiti* he comes.
24. **√ ĒĒRŌ** to sound.  
E. *chirre* = AS. *ceorian*; E. *chirm*, *churme* = AS. *ceorm*, n., *cyrman*, v.: cf. Gr. *βέρω*, OHG. *chweran*, Skr. *jśratē*, to roar, sing. Also E. *crane*, cf. Gr. *γέρανος*; E. *crout*, v. = AS. *crāwan*, OHG. *chrājan*, G. *krāhen*: cf. Lith. *gróju*, *gróti*, to crow; E. *croon* = OHG. *chrōn* talkative.
25. **√ ĒĒRŌ** I swallow.  
E. *querken*, cf. ONorse *querk* throat, OHG. *querka*: cf. L. *gurgus* gulf, *abyes*, *gurgulio* gullet. E. *crag*, *craw* = OHG. *chrago*, G. *kragen* collar: cf. L. *vorare* to swallow, Gr. *βράσσω* I eat, *βρά* food, Skr. *girāti* he swallows.
26. **√ GLĒU** to form into balls.  
E. *clew*, *clue* = LG. *klauen*, AS. *clēow*: cf. Gr. *γλουρός* the rump, Skr. *glau* ball, akin to L. *gluere* to draw together. E. *crevel* stands for *clewel*, as G. *knäul* for *kläuel*.
27. **√ GLĒUKŌ** I pluck.  
E. *pluck* = AS. *pluccian*, ONorse *plokka*, G. *pflücken*. E. *pluck* is intensive of Goth. *pliuhan* as E. *tuck* (= G. *zucken*, *zücken*) of Goth. *tiuha* I lead, draw (= L. *dūco*). To the root verb *pliuha* corresponds exactly the Skr. *glbāmi* I rob, cf. ONorse *plokka* to tear away, rob.
28. **√ GLĒZHŌ** to play for a wager.  
E. *play*, *pledge*, *plight* = OSax. *plegan* to answer for, OHG. *pflegan* to care for, G. *pflegen*, *pflicht* duty: cf. Skr. *glāhātē* he plays at dice, he wins at play, *glāha* stake at play.
29. **√ GHADH-** to grasp, fit.  
E. *gather*, *together*, cf. LG. *vergadern*, Goth. *gadi-liggs* a relative, OS. *gl-gado*, G. *gatte* husband, OSlav. *goditi* to fit, to please, Skr. *gadhi* to cramp, bind fast, *pari-gadhita* grasped. With E. *good*, G. *gut*, cf. Gr. *ἀγαθός* (properly, fitting, suitable); the ground form is *gādhos*, locative *gadhēi*.
30. **√ GHEDHYŌ** I ask.  
E. *bid*, *bade*, *bidden* = Goth. *bidjan*: cf. Gr. *θεύσομαι* I pray (from *θεθωμαι*, in which *θ* is palatal for *χ*), *πρόσθ* a yearning, Irish *guidiu* I entreat, Zend *jaidhyēmt* I ask. Perhaps E. *god* belongs here.
31. **√ GHĒNŌ** I strike, kill.  
E. *bane* = AS. *bana*; perhaps also E. *gin*, *begin* = OHG. *biginnan*: cf. OFG. *gund*, *gundia*, battle, Irish *benim* "ferio," Lith. *gintu*, *ginti* to defend, *genu*, *ginti*, to drive cattle, Gr. *θύνω* I strike, *ἐπεφών* I slew, *φόνος* murder, Skr. *hānmi* I strike, *ghandās* (= Gr. *φόνος*).
32. **√ GHĒRŌ** I burn, glow, pres. *GHĒNĀ-TI*.  
E. *brēn*, *brenning*, *brand*, *branded* (= *brindeā*); E. *brine* = AS. *byrne*; E. *brun* (= *burn*); E. *bourn* = G. *born*, *brunn*; E. *brunt*, cf. G. *brunst*; E. *burn* = AS. *beornan*, Germanic *brennan*, *brann*: cf. L. *furvus* an oven, *formus* warm, Gr. *θερμαί* I become warm, *θερμός* hot, Skr. *hāras* glow, *ghṛā*, *ghṛī*, glow; E. *warm* = OS. *warm*, G. *warm*, stands for *gwarm*, and is identical with L. *formus* warm, Skr. *gharmā* heat.
33. **√ GHĒRYŌ** I desire.  
E. *yearn*, *yearn* = AS. *georn* desirous, G. *begehren* to desire, *gier* greed, *gern* willingly: cf. Oscan *her-est*, Umbrian *heriest*, "volet," L. *horior* I urge, *hortari* to urge, Gr. *χαίρω* I rejoice, *χρηίζω* I desire, Skr. *har*, *hāryati*, to love, like.
34. **√ GHĒRDYŌ** (to step out), to desire.  
E. *greed* = Goth. *grēdus*; E. *greedy* = AS. *grēdig*: cf. Goth. *grīd-s* step, L. *gradior* I step, Skr. *grāhyati* to step quickly, to be eager, *grāhnū* quick, *hasty*, *grāhra* eager.
35. **√ GHĒRMŌ** I distort the mouth.  
E. *grām*, *grum*, *grumble*, *grumpy*, cf. G. *grimm* grim, *gram* grief, *grummeln* to rumble: cf. L. *fremo* I roar, Gr. *χρημερίζω* I neigh, *χρόμος* a crashing sound, Skr. *harman* yawning, Zend *grāhita* furious. To the same root belong E. *grin*, *grinning* (= G. *grainen*); E. *groan* (= AS. *grānian*, where *ā* = *ai*).
36. **√ ĞAD-** to go; causative, to set on, to hunt, to excite.  
E. *hate*, *hatred* = Goth. *hatis*, n., *hatizōn*, v., G. *hass*, *hassen*; also E. *hint*, *haunt*, *hunt*, *hunter*: cf. L. *cado* I fall, *cēdo* I go, Skr. *śadati* he goes, *śāddyati* he sets on, drives.
37. **√ ĞANKŌ** I hang.  
E. *hang*, *hung* = G. *hengen*; E. *hone* to pine, to long = AS. *hōn* to hang, Goth. *hāhan* (from *hahan*): cf. L. *eunctari* to delay, Skr. *gañkātē* hanging, wavering, *gañkātē* he doubts, hesitates.
38. **√ ĞŌ** to sharpen.  
E. *hone* a stone = ONorse *heinn*, AS. in *hēnan* to stone: cf. Zend *cañni* point, Gr. *κόνος* cone, *κόρος* grudge, *παλκύ-κόρος* sharp, L. *cōtes* whetstone, *catus* shrill, Skr. *śitā* sharp, *śā*, *śyāmi*, to sharpen.
39. **√ ĞOG-** to help, assist.  
E. *hap*, *happen*, *happy*, *mis-hap* = ONorse *happ* success, Gallic *cob*, Irish *cobā* success, victory, in *Cobnertus*, Skr. *gaḡ*-in *gaḡma* helping, profitable.
40. **√ ĞLĒYŌ** I bend, lean.  
E. *lean* = AS. *hlīnian*, G. *lehnen*; E. *ladder* = AS. *hlēder*, OHG. *hleitara*, G. *ießer*; E. *lid* = AS. *hlid*, G. *-lid*: cf. L. *inclinare* to incline, Gr. *κλίνω* I incline, *κλίμαξ* ladder, Skr. *grāyatē* to lean.

41. **✓ CLÉVŌ, CLÉUSO, I hear.**  
E. loud = AS. *hlūd*, OHG. *hlūd*, G. *laut*, Irish *clath*: cf. L. *inclutus* celebrated, Gr. *κλῆρος*, Skr. *krutá*, Gr. *κλέφμαι* I am celebrated, Skr. *grāmi* I hear. To **CLÉUS-** belongs E. *listen* = AS. *hlýstan* to hear, cf. AS. *hlýst* = Skr. *grushqi* hearing, n., *grāshamāpa-s* hearing, p. pr.
42. **✓ CVEID-** to be white.  
E. white = Goth. *hveit-s*, G. *weiss*: cf. Gallic *vindo-* white (as in *Vindobona*), Skr. *vid* to be white, cf. *cvētā* white. The basis is *cvī*.
43. **✓ CVĖSŌ I snort, hiss.**  
E. wheeze, whiz, whizzed, whist, whistle; whiz = hiss, whist = hiss; huzz, huzza, akin to AS. *hweosan* to snort, to hiss: cf. L. *queror*, *questus*, to complain, Skr. *cvāsiti*, *cvāshē*, to snort, hiss.
44. **✓ ZENA, ZNA, to produce, arise.**  
E. kin, kinsman, kinswoman, kinsfolk, akin = AS. *cynne*, MHG. *künne*; E. king = AS. *cynig*, *cynig*, G. *könig*; to ZNA belongs L. *gnā* in co-*gnātus* related, nation race, nation, from which E. *nation* is borrowed, Goth. *knō* in *knōds* race, Skr. *jā* in *jātdā* born (= L. *gnātus*). Cf. L. *genus* race, *gigno*, *genitus*, to produce, Gr. *gēnos* race, *gēnyomai*, *gēnésthai* to be born, Skr. *jānāmi* I beget, *Zend zan*, *zayeite* (= Skr. *jāyati* is born).
45. **✓ ZENO, ZNŌ, to recognize.**  
E. can, could (= *couth*) = G. *kann*, *konnte*; E. ken, v. = G. *kennen*; E. conny, cunning, cund (= *cond*); E. kith = AS. *cyð*, *cyð*; E. kythe, *kyd*, *kid* = AS. *cýðan*, OS. *kundian*; E. keen = AS. *cēne* bold, OHG. *chuoni*, G. *kühn*; E. know = AS. *enāwan*, OHG. *chānan*. Cf. Lith. *žinti* to know, *žintis* information (= OHG. *kundi*), L. *nāscō* I come to know, co-*gnūvi* I know, Gr. *γινώσκω*, Skr. *jānāti*, *jātdā*, to know, *Zend zantāti* information, *znā* to know.
46. **✓ ZĖSŌ I choose.**  
E. choose, chose, chosen = Goth. *kisjan*, G. *kiesen*, *kor*; E. choice, from F. *choix* (from the G.): cf. L. *gustus* taste, *gustare* to taste (hence E. *gust*, *dis-gust*), Gr. *γεύομαι* I taste, Skr. *jōshati*, *Zend zush*, to taste, like.
47. **✓ ZHĀ to go.**  
E. go, gone, agone, ago = OHG. *gēn* to go, G. *gehen*, akin to Skr. *hā*, *jihātē*, to go, go away, give way, *Zend zāzāiti*, to go.
47. **✓ ZHĀ to separate, gape.**  
E. yawn = AS. *gānian* (from Germanic *gīnan*) = G. *gähnen*: cf. Lith. *žiāti* to gape, L. *hisco* I gape, *hiare* to gape, Gr. *χάσκω* I gape, S. *hā*, *jāhāti*, to leave, *viāyās* air (properly, the gaping one, cf. Gr. *χάος* chaos, space). 47 b is really identical with 47 a.
48. **✓ ZHĖNGHŌ I step out.**  
E. gang, v. = Goth. *gaggan*; E. gang, n. = G. *gang* a going: cf. Lith. *žengiu*, *žengiti*, to step, Skr. in *jānhas* a way, *jāghāna* buttock, *jānghā* the lower part of the leg, *Zend zāngra* foot.
49. **✓ ZHĖLŌ to be green or yellow.**  
E. gall = G. *galle*: cf. Gr. *χάδος*, *Zend hāra-s* gall; E. goel, yellow = AS. *geolo*, *geiu*, OHG. *geio*, G. *gelb* = L. *hilvus*, *helvus*, yellow; E. gold = Goth. *gulþ*; cf. OS. *zlato* gold (E. *guldun* is borrowed from Icelandic *gul-önd*). Here also probably E. glow, v. = G. *glühen*: cf. Lith. *žlęja* break of day. Cf. Lith. *želti* to be green, L. *helvus* yellow, *holus* vegetables, *fel* gall, Gr. *χάλος* gall, *χλόος* a greenish yellow color, *χλωρός* greenish yellow, Skr. *hiranya* gold = *Zend zaryana*, etc.
50. **✓ ZHĖRĖDŌ to sound.**  
E. greet = AS. *grētan*, MHG. *grüezen*: cf. MHG. *grāzen* to cry, rage, Skr. *hrād* to sound, *Zend zradān* coat of mail (rattling).
51. **✓ TEN-**, pres. *TĖNUTAI*, to span, extend.  
E. thin, thinner = OHG. *dunni*, MHG. *dünne*, G. *dünn*; Germanic *punnja-* rests on *punnú-s*, and this = Skr. *tanú-s* (from *tanú-s*) stretched out: cf. L. *tenuis* thin, and Gr. *τάνερός* stretched. Also L. *teneo* I hold, *tendo* I stretch, Gr. *τείνω*, *τείνω* = Skr. *tanutē* is extended.
52. **✓ TĖNYETI it thunders.**  
E. thunder, n., thunder, v. = OHG. *donar*, n., G. *donner*, n., *donnern*, v.; Thor in E. Thursday = ONorse *Þórr*, AS. *þunor*, OHG. *donar*: cf. L. *tonare*, v., *tonitru*, n., Skr. *tānyati* it thunders, AS. *þunjan* to thunder.
53. **✓ TĖRŌ to bore, prick.**  
E. thorn = G. *darm*, cf. Gr. *τράμης* the perineum; E. thorn = G. *dorn*, OS. *trūn* thorn; E. thorough, thorow, through = OHG. *duruh*, G. *durch*, cf. Skr. *tiras* = L. *trans*; E. thirl = *thrill*, from *thurl* = AS. *thyrril* a hole. Cf. L. *tero* I rub, *terebrā* a borer, Gr. *τρεπώνω* I pierce, *τείρω* I wear away, Skr. *tṛya* grass, and *tárd*, *tṛāti*, to pierce.
54. **✓ TĖRS-** to gape from dryness.  
E. thirst, thirsty = G. *durst*, n., *dürsten*, v., *durstig*, adj.: cf. Irish *tart* thirst, L. *torreo*, *tostus*, to parch, Gr. *τέρομαι* I dry up, Skr. *tṛshyan* thirsty, *tṛshū* thirsty.
55. **✓ TĖLA, TALA, to bear, endure.**  
E. thole = Goth. *þulan*, OHG. *dolēn*, cf. G. *dulden*, v., *geduld* patience: cf. L. *tolio*, *tetuli*, to raise, Gr. *τελαμών* a band, *τάλας* wretched, *τάλαντον* a balance, talent, *τέλαν* I endured, Skr. *tul*, *tōlati*, to raise, weigh.
56. **✓ TĖVA, TŪ, to swell, be strong.**  
E. thaw = AS. *þawian*; E. thew, pl. *thews*, manner, custom = AS. *þéiw*, OS. *thau*, custom; E. thews muscles, cf. Skr. *tavās* strength; E. thigh = AS. *þéih*, OHG. *dioh* thigh: cf. Lith. *tauka-s* = OS. *tukū* fat; E. thumb = OHG. *dūmo*, G. *dummen*, cf. *Zend tūma* strong; E. thimble, cf. thumb-stall. Cf. L. *tutor* I watch, defend, *tumeo* I swell, Skr. *tu*, *tāviti*, to have power, thrive.
57. **✓ TVANK to draw together.**  
E. thong = AS. *þwang* thong: cf. Skr. *tvāṇe*, *tvāṇākti*, to draw together.
58. **✓ DĀ, DAL-, to divide.**  
E. ted, *tedding*, *teathe* = ONorse *tað*, akin to Gr. *δατέομαι* I divide, from *da*; E. tide = OHG. *zīt*; E. tidy = G. *zeitig*; E. tidings = G. *zeitung*: cf. Gr. *daís*, *δαίρις*, a meal; E. time = ONorse *tími*: cf. Gr. *δαίμων* share (in év., *κακο-δαίμων*); E. lease = AS. *lēsan*, OHG. *zeison* (from *dat-sō*): cf. Gr. *δαίωμα*, Skr. *dā*, *dāti*, to mow off, cut off, *dāyati* he distributes.
59. **✓ DĀC-, DANC-, to bite.**  
E. tail = Goth. *tagl*, OHG. *zagol*: cf. Skr. *daçā* fringe; E. tear (of the eye) = AS. *lēher*, G. *zähre* = Gr. *δάκρυ* (the tear "bites"); E. tang a strong taste, cf. OHG. *zangar* biting; E. tongs = AS. *tange*, G. *zange*: cf. Gr. *δάκνω* I bite, Skr. *dāpati* he bites, *dāmshtra-s* tang.
60. **✓ DEICO I show.**  
Only in E. *foe* = OHG. *zēha*, G. *zehe*: cf. Goth. *gateihan* to tell, L. *dicō* I say, Gr. *δαίνομαι* I show, Skr. *dic*, *didēshī*, to show.
61. **✓ DEMA, DAME, to tame.**  
E. tame, adj., tame, v. = G. *zahn*, adj., *zähmen*, v.: cf. L. *domare*, Gr. *δαμάω* I tame, Skr. *damāyati* he tames.
62. **✓ DEMŌ I build.**  
E. timber = ONorse *timbr*, OHG. *zimpar*, G. *zimmer*, *zimmern*, Goth. *timrjan* to build: cf. Gr. *δέω* I build, *δῶμα* = L. *domus* = Skr. *dāma-s* house.
63. **✓ DĖRA, DĖNĀTI, to split, cleave.**  
E. tear, v., tare, torn = Goth. *ga-tairan*, OHG. *zeran*, G. *zehren* to consume; E. tar = AS. *tearo*, LG. *teer*, G. *zehr* (in Hessen) = Lett. *darva* tar, ONorse *tyrr*, Lith. *derrā* resinous wood; E. tetter, cf. OHG. *zitaroch* = Skr. *dadru*, *dadruka*, a cutaneous eruption; E. tree = Goth. *triu*, cf. Gr. *δένυ*, *δένυ*, Skr. *dṛu*, *dṛu*, wood; E. trough = G. *trog* (from *dru-ka*); E. tarre to irritate = LG. *tarren*, cf. G. *zerren* to pull, *zerren* to provoke; E. tart sharp, cf. Gr. *δέρω* = Lith. *dūru* I flay, OS. *derg*, *drati*, to cleave, Skr. *dar*, *dṛāti*, to cleave: MHG. *trinnen* to go away, is from *DĖNA*.
64. **✓ DĖVA, DŪ, to draw, tear, torment.**  
E. tau, tew = AS. *tedwian*, Goth. *tanjan*, OHG. *zawian*; E. team = AS. *teām* brood; E. teader = ONorse *tjōdr*, LG. *tüder*; E. tie band, tool = ONorse *töl*; E. teen = AS. *teōn*, *tēnan*; E. tose, touse = LG. *tūsen*, G. *zausen*: cf. L. *dūco* I lead, draw, Gr. *δαίρω* destructive, *δαίρω* I tear apart, Gr. *δύω* misery, *δυ-* ill, mis-, Skr. *dū* to draw, *dāvīyas* further, *dāvishtha* furthest, fr. *dūrā* far, *dūtā* messenger, Skr. *dush* to destroy, *dus-* ill, mis-.
65. **✓ DHĖ, DĖHĖMI, to set, do.**  
E. do, did, done = G. *thun*, *that*, *gethan*; E. deed = Goth. *dēds*, G. *that*; E. doom, kingdom, deem, v.; cf. Goth. *dōm-s* judgment, G. *königthum* kingdom, Goth. *dōmjan* to deem; E. ado = at do; don = do on; doff = do off; dout = do out; dup = do up; E. dote = Goth. *daits*, G. *theu*, cf. OS. *dēit* part; E. deal, v. = Goth. *dailjan*, G. *theilen*, OS. *dēlj* I divide: cf. Gr. *τίθημι* I put, fut. *θήσω*, Lith. *dėti* = OS. *dēti* to put, do; Skr. *dā*, *dādāti*, to put, do.
66. **✓ DHĖ, DHĖYŌ, to suck, suckle.**  
E. day in daymaid, daywoman, dairy, dey a servant, doe (= AS. *dā*); E. dug = ONorse *duggja* to suckle, Goth. *daddjan*, OHG. *tānn*. Cf. OS. *dojg* I suckle, Gr. *θήσθαι*, *θήσθαι*, to suckle; Skr. *dā*, *dāyati*, to suck.
67. **✓ DĖHĖHĖMI I smear, cement, knead.**  
E. dig, digging, dug = Goth. *deigan*, *daig*, to form from clay; E. dough, duff = AS. *dāh*, *dāh* = OHG. *teic*, G. *teig*: cf. L. *fungo* I handle, shape, *figulus* a potter, Gr. *τεῖχος*, *τεῖχος*, wall, Skr. *dāh*, *dāhati*, *dēgāti*, to smear, cement, anoint.
68. **✓ DHĖHĖHĖMI I am of use, I give profit.**  
E. doughty = AS. *dyhtig*, akin to Goth. *dāgan*, v., G. *taugen*: cf. Skr. *dūh*, *dūhē*, *dāhātē*, to give profit; this is the original meaning, and from this is derived the meaning, to milk, give milk. Of like origin is E. *daughter* = Gr. *θυγάτηρ* = Skr. *dūhātṛ*, named as *ἀλφεῖοισα* bringing in oxen (as presents from suitors).
69. **✓ DHĖHĖHĖMI I burn.**  
E. day, daisy (= *day's eye*) = Goth. *dags* day, G. *tag*, akin to Lith. *degu*, *degti*, to burn, *daga* summer, Skr. *dah*, *dāhati*, to burn. According to an ancient and poetical conception, the day is every morning "kindled."
70. **✓ DĖHĖHĖMI I am courageous, I dare.**  
E. dare, derring (= *daring*), *durst* = Goth. *dars*, *dairsum*, to dare: cf. Gr. *θάρσος* courage, *θάρσος* bold, Skr. *dhrshān*, *dhrshyati*, *dadhārsha*, to dare, be bold.
71. **✓ DHĖVA, DHŪ, to breathe, kindle.**  
E. deer = AS. *deor* an animal, Goth. *dūs*, G. *thier* (related to *DĖVA* to breathe, as L. *animal* to *anima* breath): cf. Lith. *dvesti* to breathe, OS. *duchū* soul; E. dag, dag, v., *dagging*, cf. LG. "*dag un dau*;" also E. dawn, properly, kindling, from *DĖVES* = Lith. *dvesti* to breathe, Skr. *dhas* to disperse; E. daze = MG. *bedusen*; E. daze, dazzle, dazzled = LG. *dusseln*; E. dozy, dizzy = AS. *dysig*, LG. *düsig*, *dösig*, OHG. *tusc*; E. dust = G. *dust*, *durst*; E. dusk, dusky, akin to AS. *dwascan* to put out, cf. Skr. *dhusara* dust-colored. Cf. Gr. *θύω* I storm, Skr. *dūh* to shake, storm, *dhas* to disperse, splash.
72. **✓ DHĖVŌ I show, run.**  
E. dew, dewy, dew, v. = AS. *deāw*, n., G. *thau*, n., *thauig*, adj., *thauen*, v.: cf. Gr. *θεῖω* I run, fut. *θεύσομαι*, Skr. *dhāvati* it runs, streams, *dhaui* source.
73. **✓ DĖHĖHĖMI to draw (bear).**  
E. draw, drew, drawn = AS. *dragan*, G. *tragen*, *trug*; E. drag, drag, dragged, draught (= *draft*) = AS. *drōht*; E. drabble, *drail*, *drag*, *droger*, *drogher*, *drabble* (= *drabble*), *drabble-tail* (= *drabble-tail*): cf. Skr. *dhrāj*, *dhrājati* to glide, pass, go, *dhrāji* a passing, going.
74. **✓ DHĖVŌ, DHĖVŌYŌ, I sound.**  
E. dun, dunned, dim, dinned = AS. *dyn*, n., *dymnan*, v., OS. *dunjan*, Skr. *dhrānati* it sounds, *dhunayati* it roars.
75. **✓ PĀ to protect.**  
E. father = Goth. *fadar*, Skr. *pitar*; E. food, n., feed, fed, v. = Goth. *fōdjan*, v.; E. foster = ONorse *fōstr*; E. fodder, fother, fudder, fur = G. *futter*, n., *füttern* to feed: cf. L. *pāso* I feed, *pābulum* food, Skr. *pā*, *pāti*, to protect.
76. **✓ PĖTŌ I fly.**  
E. feather = Skr. *pātra*, G. *feder*: cf. Gr. *πεπών*, akin to *πέτομαι* I fly, Skr. *pā-tāmi* I fly.
77. **✓ PĖDŌ I go, fall.**  
E. fel, fetch, v. = AS. *fetian*; E. fet, fit, attack, fit, fitter, fitted, feller = MHG. *vezzer*; E. felloek, cf. G. *fessel* fetter, pastern, Gr. *πέδη* fetter, L. *pedica*; E. foot, feet, cf. L. *pes*, Gr. *πούς*, Skr. *pād*, foot: cf. Skr. *pād*, *pādyaṭē*, to go, fall.
78. **✓ PĖRŌ to go, go across.**  
E. fare, v. = G. *fahren*; E. fear, feere, companion = AS. *fera*: cf. G. *gefährt*; E. ferry = G. *fähre*; E. ferry, v. = G. *fergen*; E. frith (= *frith*) = ONorse *fjorð*; E. forth, Jord, v. = G. *fürth*, n., *further*, v. Cf. Gr. *πέραν* I pass, cross, *πέραν* a ford, way, L. *porta* a gate, *portare* to carry, Skr. *par*, *piparmi*, to go across.
79. **✓ PĖRŌ I fart.**  
E. fart, n., fart, v. = OHG. *virzu*, Lith. *perdzu*, Gr. *πέρομαι*, Skr. *pard*, *pār-dātē*, to fart.
80. **✓ PĖLA, PLĀ, to fill.**  
E. full = Lith. *pūnas*, OS. *pūnū* full; E. fill, v. = AS. *fyllan*, G. *füllen*; E. flow = ONorse *floa*; E. flood = Goth. *floods*, G. *fluth*: cf. L. *implere* to fill, Gr. *πλήρωμι* I fill, fut. *πλήσω*, Skr. *par*, *piparmi*, to fill. Teutonic *flo* (= *p*)ā in Irish *fān* full, and Skr. *pār* in *pār-nā* full.
81. **✓ PĖ, PĖYATI, to hate.**  
E. fiend = Goth. *fijands* enemy, G. *feind*; E. foe, old pl. *fone* = AS. *fā*, Goth. *faian* to blame: cf. Skr. *piyati* he reviles, mocks.



92. **✓ PŮ, PŮYATI**, to rot.  
E. *foul*, *filth* = Goth. *fūls* foul: cf. G. *faul*, Lith. *puti* to rot, L. *pus* pus, *puteo* to stink, Gr. *πῶς* pus, *πῶθω* to rot, Skr. *pū*, *pūyati*, to rot, stink.
93. **✓ PRĪ** to love.  
E. *friend* = Goth. *frījōnds*, G. *freund*, p. pr. of Goth. *frījon* to love, from Skr. *prīyā* dear; E. *-fred* (as in *Alfred*, *Frederick*) = G. *friede* peace: cf. OSlav. *prīyaję* I care for, *prīyatelj* friend, Skr. *prī* to love.
94. **✓ PLĒVŌ** to spring, swim.  
E. *fume* comes from a form *flu* equivalent to *plu*, cf. *flam* = AS. *flēam* flight; E. *flush*, cf. OHG. *fluse* loose, like LG. *flüderig*; E. *fly*, *flew*, *flown* = AS. *flēogan*, G. *fliegen*; E. *flue*, *fluff* = Lith. *plukas* down; E. *fly*, n. = AS. *flēoge*, G. *fliege*; E. *fledge* (= *stidge*) = G. *flügge*, *flüch*; E. *flicker*, v. = AS. *fluccerian*; E. *fly*, v. = G. *fliehen*; E. *flee*, *flight*, *flighty* = G. *flucht*, n., *flüchtig*, adj.; E. *flea* = MHG. *vloch*, G. *floh* (from *flauht*, *flu* = Skr. *plu* to spring); E. *fleet*, *float*, *flood*, *flit*, *flutter*, *fitter*, cf. G. *fließen* to flow, *flotte* a fleet, *flott* afloat. Cf. Gr. *πλέω* I sail, L. *pluo* to rain, Skr. *plu*, *plavati*, to swim, *pru* to fly, hasten (spring).
95. **✓ BHĀ** to shine.  
E. *bald* (OE. *bald*) = AS. *bēl* brightness: cf. Gr. *φάλος* shining, Lith. *balti* to be white, OSlav. *bělŭ* white; E. *bare*, a. = OHG. *baru*, Lith. *basas* barefoot, OSlav. *bošŭ* (properly, blank): cf. Skr. *bhā* to shine; E. *bend* = Goth. *bandwa* a sign, Gr. *φαίω* I show. Cf. Skr. *bhā*, *bhāti*, to shine.
96. **✓ BHĀ, BHAN**, to speak.  
E. *ban*, to ban, banned = G. *bann*, n., *bannen*, v.; F. *boon*, cf. L. *alfāniae* chatter, Skr. *bhan*, *bhānati*, to sound, L. *fari* to speak, Gr. *φημί* I say.
97. **✓ BHEIDŌ, BHINĒDMĪ**, I split.  
E. *bite*, *bate*, *bitten* = ONorse *bila* (to split), which meaning appears in *jarnbiter* iron-cleaver), G. *beissen* to bite; E. *bit*, *bitter*, *bitts*, *batit*: cf. L. *findo* I cleave, Skr. *bhid*, *bhidāmi*, *bhēttum*, to cleave.
98. **✓ BHĒUGHŌ** I bend.  
E. *bow*, *bough*, *bought*, n., *bight* = Goth. *biugan* to bend, G. *biegen*: cf. G. Lith. *bug-ti* to be afraid, Gr. *φεύγω* I flee, L. *fugio*, Skr. *bhuj* to bend.
99. **✓ BHĒUDHŌ** I bid.  
E. *bode*, *forebode*, *beadle* = Goth. *biudan* to bid, G. *bielen*, Gr. *πειθομαι*, *πυθέσθαι*, to learn, Skr. *bādhāt* (to awake), to observe.
100. **✓ BHENDHŌ** I bind.  
E. *bind*, *band*, *bound* = Goth. *bindan*, v., G. *binden*; E. *binder*, *band*, *bond*, *bundle* = G. *binder*, *band*, *bund*, *bündel*: cf. L. in *offendit*, *offendimentum*, knot, Gr. *πείσμα* a cable (= *πέσμα*), *πενθερός* father-in-law, Skr. *badhnāti* he binds.
101. **✓ BHĒRA** to hew, bore.  
E. *bore*, *boring*, *bore* = G. *böhren*, v., L. *forāre* (*ferto* I strike), Gr. *φάρω* I plow, *φάρος* a part, OSlav. *briti* to shear (*brati* to strike), Skr. *bhri*, *bhrināti*, to cleave. With E. *bar* a barrier, cf. Lith. *baras* division, L. *forum* market place, *forūl* book-case, from *BHERA* to separate, cut off.
102. **✓ BHĒRŌ** I carry.  
E. *bear*, *bare*, *bore*, *born* = Goth. *bairan*, v., G. *gebären*; E. *barn*, *barley*, from *bear*, *ber*, *barley* = AS. *bere*, cf. L. *far* spelt; E. *bird*, *brid*, *bred* = AS. *bridd*; E. *birth*, *burden*, cf. OSlav. *berg* I carry, OIr. *biur*, L. *fero*, Gr. *φέρω*, Skr. *bhārāmi* I carry. To AS. *beran* to raise (LG. *bören*), belong E. *board*, *border*, *bore*, *burl*, *bird*.
103. **✓ BHĒRU, BHĒŪ**, to bubble, boil.  
E. *barm* = AS. *bearme*, cf. L. *fermentum*, from *ferveo* I boil; E. *brew*, *brevis*, *brose*, *broth* = G. *brauen* to brew: cf. L. *defrutum* must boiled down, Gr. *βρῦνον* beer; also probably E. *beer* = OHG. *pior* (for *brivor* f), and E. *bread* = OHG. *prōt* on account of the fermentation of leavened bread; E. *brown* = G. *braun*: cf. Skr. *jārbhūrat* it bubbles, and *badhrā* brown.
104. **✓ BHĒRŌ** I shine.  
E. *bright* = AS. *beorht*, OHG. *peraht*, Goth. *brahw* augins moment: cf. Skr. *bhrāg* to shine.
105. **✓ BHĒRZHŌ** I raise, assist.  
E. *berg*, *bergh* = G. *berg*, OSlav. *bręgŭ* bank; E. *borough* a town = G. *burg*; E. *borough* a pledge, *borrow* = G. *bürge* security, *bürgen* to give security, *borgen* to borrow; E. *barrow* a hog = G. *borgschwein*, akin to AS. *byrgan*, *beorgan*, to taste, cf. Gr. *φάγω* I feed; E. *bury*, *burial*, fr. AS. *bergan*, in the meaning of the G. *verbergen* to hide; E. *brag*, *bragged*, *brangle*, *brabble* = G. *prachen*, *prangen*, to make a show, *bride*, cf. Lith. *brangus* dear; E. *brain* = LG. *bregen*, cf. Gr. *σπexuδs* the back of the head; E. *brawl*, akin to MHG. *brogeln*, from *brogen* to raise. Cf. Skr. *bṛhāt* high, *bārhishtha* highest, Zend *barezuñh* height.
106. **✓ BHĒRSŌ** I project, stand out.  
E. *bristle* = AS. *byrst*, G. *borsle*: cf. OHG. *parren* to project, Skr. *bhrshŭ* spike, point.
107. **✓ BHĒVŌ, BHĒVA, BHŪ**, to become, be, dwell.  
E. *be*, *been*, *being* = AS. *beom* I am, Lith. *bu-ti* to be, OSlav. *byti*, L. *fuam*, *fui*, *fore*, Gr. *φύω*, Skr. *bhāvāmi* (= AS. *beōm*); E. *beam* ray = AS. *beām* tree, G. *baum*: the change of signification is as in the L. *radius* staff, ray. E. *bee* = AS. *beō*, probably named from its building, and akin to AS. *būwan* to dwell: cf. L. *fa-vus* honeycomb, *fucus* a drone; E. *bue* dwelling; E. *build*, fr. AS. *bold* a building; E. *bower* = OSlav. *bār*, G. *vogelbauer* bird cage, akin to AS. *būwan* to dwell, OHG. *pāan*, G. *bauen* to build, to till: cf. Skr. *bhūvana* dwelling.
108. **✓ BHĒLĒGŌ** I burn.  
E. *black* = OHG. *plah* fallow; E. *blink*, *blank* = G. *blincken*, v., *blank*, adj., akin to Gr. *φάεω* I burn, L. *flagrare* to burn, *fulgur* lightning, Skr. *bhārgas* splendor, *bhrāj* (= Zend *barāz*) to shine; E. *bleak* = OHG. *pleihh* pale, cf. Lith. *bligsti* to shimmer, where *bhlig* seems to be developed from *BHĒLĒG*.
109. **✓ MĒ (MĒDŌ)** to measure.  
E. *metre* = Goth. *mitan*, G. *messen*: cf. L. *modus* measure, *meditari* to reflect, Gr. *μέτρομαι* I think on, *μέτρος* a corn measure, akin to L. *mētor* I measure, Skr. *mā*, *mānāti*, to measure.
110. **✓ MEI-, MEITHŌ**, to change, exchange.  
E. *mad*, *madder*, *madden* = AS. *gemāð* "vanus," Goth. *maidjan* to alter, to corrupt; E. *yeoman* = Goth. *gamains* common, G. *gemein*; E. *mis-* = AS. *miss-*, G. *miss-*; E. *miss*, v. = AS. *mission*, G. *missen*, akin to Goth. *missa-*, from *mīsa-*: cf. OSlav. *mīš* changeable, Skr. *mīthās* changing, *mīthu* wrong.
111. **✓ MEI-, MI-**, to diminish.  
E. *minus* = AS. *minskan*, akin to Goth. *mins* less = L. *minus*, OSlav. *mīnŭj*: cf. Gr. *μεινω* less, L. *minuo* I lessen, Skr. *mī*, *mīnāti*, to lessen.
112. **✓ MEIZHŌ** I wet = L. "mingo."  
E. *mist* = ONorse *mist*, Goth. *mathstus* dung, G. *mist*, akin to ONorse *mīga* to

- urinate = LG. *mīgen* = Skr. *mēhati* he urinates, *mīh*, *mēghā*, fog, cloud: cf. L. *mingo* to urinate, Gr. *ομιχέω*, *ομιχλή* mist (= OSlav. *mīgla* cloud).
103. **✓ MEÇ-, MEZH-**, to be able or strong.  
E. *may*, *might*, *mole* = AS. *mag*, *mehte*, *mīhte*, G. *mag*, *mochte*; E. *maw* = AS. *maga*, G. *magen*; E. *might*, n. = G. *macht*, OSlav. *moštŭ* might; E. *maid* = Goth. *magaps*, G. *magd*, *maid*; E. *may* a maiden = AS. *mæg* = Goth. *maui*, fem. of *magus* boy; E. *main* strength = OHG. *magin*, G. *mein*-; E. *more*, *most* = Goth. *mais*, *maists*; E. *many* = Goth. *manags* = OSlav. *mnogŭ* many; E. *much* = ONorse *mjök* = Gr. *μέγα*; E. *michel*, *mickle* = Goth. *mīkts*, cf. Gr. *μεγάλη*, fem., great: cf. L. *magnus* great, *major* greater; Skr. *māh* to be able, *mañā* great.
104. **✓ (MEN)**, MĒMONA, to think of.  
E. *mind* = AS. *mynd*, Goth. *munds*, Skr. *matī*, L. *mens*; E. *mean*, v. = G. *meinen*; E. *man*, pl. *men* = G. *mann*, cf. Skr. *mānus* primitive man: cf. Gr. *μένος* force, spirit, temper, *μένω* I wish = Goth. *man* I think, Skr. *man*, *mānyatē* to think.
105. **✓ MRYAF** I die.  
E. *murder* = Goth. *maurþr*, MHG. *morderen*, v., akin to L. *morior* I die, Skr. *mriyē* I die.
106. **✓ MĒRZŌ** I wander, border.  
E. *marc*, *mark*, *march*, *merk*, *merke* = AS. *marc*, G. *mark* boundary, *marke* a mark: cf. L. *margo* border, Zend *meretu* border, akin to Gr. *ὁρίζομαι* I wipe, Skr. *marj*, *mārshtī*, to stroke, to wipe.
107. **✓ MĒLZŌ** I milk.  
E. *milk* = G. *mīlch*, akin to OHG. *melchan* to milk = Gr. *ἀμῆλω* I milk: cf. L. *mulgeo*, Skr. *marj*, *mārshtī*, to stroke, to wipe.
108. **✓ MĒLDŌ** I dissolve.  
E. *mall* = G. *malz*; E. *melt*, *molten*; E. *milt* = G. *mīlz*, akin to Gr. *ἀμαλδύνω* I crush, Skr. *mṛd*, *marmartī*, to rub in pieces, *mṛd* earth. The simple *MEL-* is in E. *meal* = OHG. *melo*, *melwes*, G. *mehl*; E. *mīll* = G. *mühle*; E. *mull*, *mullock*, *mulmul* = LG. *mull* rubbish, G. *gemüllt*, Goth. *malan*, *mōl*, to grind, L. *molo* I grind, Gr. *μύλη* a mill, *μύλλω* = L. *molo*.
109. **✓ JEUG-** to yoke.  
E. *yoke* = Goth. *juk*, Gr. *ζυγόν*, L. *jugum*, Skr. *yugā*, akin to L. *jungo* I join, Gr. *ζεύγω*, Skr. *yuj*, *yunaktī*, to yoke.
110. **✓ (YEC)**, YCTAF, to rule over, to possess.  
E. *owe*, *yacht* = AS. *āgan*, *āhle*, to have, Goth. *aigan*, OHG. *eigan*; E. *own* = OHG. *eican*, G. *eigen*, Skr. *ṛ*, *ṛi*, to rule over, possess, *ṛ* being derived from a form *yac* which is preserved in *yāgas* glory, wealth.
111. **✓ JĒSŌ** I ferment, boil.  
E. *yeast*, *yest* = AS. *gist*, G. *gest*, from OHG. *jesan* to ferment, G. *gähren*: cf. Gr. *ζέω* I boil, Skr. *yas* to boil.
112. **✓ RAS-** to sound, cry.  
E. *roar* = AS. *rērian*, OHG. *rēren* to bleat, bellow, LG. *rohren* to cry, Goth. *razda* = ONorse *rōdd* voice, sound: cf. Skr. *ras*, *rās*, to sound, cry.
113. **✓ REUDHŌ** I reddden.  
E. *red*, *redde* = G. *roth*, adj., *rōthen*, v.; E. *reddle* (= *ruddle*) = G. *rōthel*; E. *rud*, *rudd*, *raddock*, *ruddy*, *rust* (= G. *rost*) = ONorse *rjōða* to reddden, AS. *reōdan*, Gr. *ἐρυθώ* I reddden: cf. L. *rubeo*, Skr. *rudhira* red, blood, *rōhita* red.
114. **✓ REUPŌ** I tear, break.  
E. *reave*, *rest*, *reaver*, *riever* = AS. *reŭfan* to rob, Goth. *birauðon*, G. *rauben*; E. *rob*, *robber*, *robbery* = AS. *reŭfan* to break, to tear apart, ONorse *rjūfa* I break, rumpo I break, Skr. *rōpa* hole, *lumpāmi* I break.
115. **✓ RĒZŌ** = L. "rego."  
E. *reach*, *raught*, *rought* = AS. *reŭtan*, G. *recken*, *reckte*; E. *rack*, n., *rack*, v. = G. *reck*, n., *recken*, v.; E. *reak* a rush = LG. *rick*; E. *right* = G. *recht*, L. *rectus*, Zend *rāsta*: cf. L. *rego* I direct, Gr. *ῥέγω* I reach, Skr. *roj*, *rjñāmi*, to extend. See *RĒZ* king, *✓283*.
116. **✓ RĒDHŌ** I advise.  
E. *read*, *rede* = AS. *rēd* advice, *rēdan* to advise, consult, OHG. *rāt*, n., *rātan*, v., Goth. *garēdan*, v., G. *rath*, u., *rathen*, v.; E. *riddle* = AS. *rīdels*, G. *rāthsel*: cf. Skr. *rādh* to accomplish.
117. **✓ REVŌ, RUVŌ**, to loose, break in pieces.  
E. *rot*, *rotten* = AS. *rotian*, v., G. *verrotten*; E. *ret*, *retting*, *rettery* = LG. *rōtten*, v., akin to L. *ruo* I fall, Skr. *ruvātī* to break in pieces.
118. **RĒSŌ** I run, flow.  
E. *race* = AS. *rās*, ONorse *rās* a race, *rāsa* to race, G. *rasen* to rage: cf. Gr. *ῥέω* I pour out, *ῥεώω* I rush, L. *rūs* dew, OSlav. *rosŭ*, Skr. *rasā* fluid, flood.
119. **✓ LĒIKŌ** I leave.  
E. *loan* = AS. *lēan*, OHG. *lēhan*, G. *lehn*, akin to Goth. *leiŭwa* I lend = Gr. *λείπω* I leave; E. *leave*, *left* = AS. *lēfan*, ONorse *leifa*; E. *lave*, n. = AS. *lāf* = Gr. *λοιπός* remaining; E. *life*, pl. *lives* = AS. *līf*, G. *leben*: cf. L. *linguo*, *linguā*, *līctum*, to leave, Gr. *λείπω*, *λείπει*, *λείπειν*, Skr. *ric*, *rēcati*, *riṇaktī*, to leave. In the Teutonic languages the verb was originally *lēihwa*, *lāihwa*, *libāwa*, *libāns*.
120. **✓ LEIGŌ** I tremble, skip.  
E. *lake*, v. i = Goth. *laikan* to leap for joy; E. *lay* a song = MHG. *leichen* song, akin to Gr. *ἐλελίζω* I whirl, shake, Skr. *rēj*, *rējati*, to shake, tremble. Also E. *limp*, v. (= MHG. *limpfen* to limp) probably belongs here.
121. **✓ LĒIZHŌ** I lick.  
E. *lick* = AS. *liccian*, G. *lecken*, which is an intensive of Goth. *blaiŭgōn*: cf. Gr. *λείχω*, *λείχω*, I lick, L. *lingo*, Skr. *lih*, *līḥi*, to lick.
122. **✓ LEUKŌ, LEUCŌ**, I give light.  
E. *light*, n. = AS. *lēht*, G. *licht*; E. *light*, v. = Goth. *leihtjan* to give light, Gr. *λεῖσσω* (for *λεωκω*) I look; E. *leme*, *limn* = AS. *leōma* light = L. *lūmen*; E. *loom* = AS. *lōmian*: cf. L. *lux* light, *lūceo* I shine, Gr. *λευκός* bright, *λεύσσω* I look, Skr. *rēcatē* to shine, *riṇat* bright.
123. **✓ LĒUDHŌ** I mount, grow.  
E. *leod* = AS. *leōd*, MHG. *liut*, G. *leute* people; also E. *lad*, *laddy*, *ladkin*, *lass* (for *laddess*), *lassie*, cf. LG. *lüt* girl; E. *lead* the metal = MHG. *lōt*, G. *loth*, n., *lōthen* to solder: cf. Goth. *liudan* to grow, Gr. *ἐλευσόμεν* I shall go, *ἔλυσον* I went (properly, to mount), Zend *rud*, *raodhāiti*, to mount up, grow, Skr. *ruh*, *rūhātī*, to grow.
124. **✓ LĒUBHŌ** to desire eagerly.  
E. *lief*, *leve*, *leef*, dear = G. *lieb*; E. *leve*, v. t., *believe*, *believe* = G. *glauben*; E. *leave*, n. = G. *urlaub*, *erlauben* to allow; E. *love* = AS. *loftan* to praise, G. *loben*: cf. Lith. *laup-si* praise, Skr. *tubdhā* eager, *lobhā* desire, longing.



## 125. √ LĒNG-ō to spring, advance, succeed.

E. light not heavy = Goth. *leihts*, G. *leicht* (from *linhts*); E. long = G. *lang*, L. *longus*; E. lung = G. *lunge*, cf. AS. *lungre* straightway = Gr. *ἐλαφρός* light; E. *limber* = G. *lummer* (b = g); E. *linger*, cf. G. *lungern* to idle about, akin to MHG. *lingen*, *lang*, to succeed, G. *gelingen*: cf. Gr. *ἐλέγγω* I censure, disprove, prove, *ἐλαγός* small, *ἐλαφρός* light, L. *levis*, Skr. *lāgha*, *raṁh*, to spring, hasten, advance.

## 126. √ LĒV-ō I dissolve, let flow.

E. lime a viscous substance = AS. *lim*, G. *leim*, n., *leimen* to glue: cf. L. *linus* slime, *linere* to besmear, Skr. *rī*, *riyati*, to dissolve, let flow.

## 127. √ LĒVA, LŮ, to loose.

Lengthened by s in E. *leese*, *lose*, *lost*, *lovel* (= *lorel*), *loss*; E. *loose* = AS. *lēas*, G. *los*; E. fatherless = G. *vaterlos*: cf. L. *solvo* I loose, *solūtus* loosed, Gr. *λυω* I loose, Skr. *lū*, *lunhti*, to cut off.

## 128. √ VAI to suffer.

E. woe = AS. *wā*, Goth. *wai* l., *waja-mērjan* to blaspheme, OHG. *wē* l., *wēdō* woe, G. *wehe*, interj., *weh*, n.; E. woe, adj. = Lett. *wahjšch* (= *vajns*): cf. L. *vae* l., *Zend vōya* miserable.

## 129. √ VĀG-ō to cry, sound.

E. weep, wept = AS. *wēpan*, Goth. *wōpjan* to cry out, OHG. *wuofan*. cf. Skr. *vagnā-s* sounding, roaring.

## 130. √ VALG-ō to hasten.

E. walk, cf. Skr. *valg* to spring, gallop.

## 131. √ VĒ to blow.

E. wind = G. *wind*, L. *ventus*; E. window; E. windy = G. *windig*; E. winnow = AS. *windwian*; E. winder to winnow, akin to Goth. *winþjan* to winnow. Goth. *waian*, *waicō*, to blow, MHG. *wējen* = Lith. *vėju* I blow, Gr. *ἄνναι*, Skr. *vā*, *vātī*, to blow.

## 132. √ VEIG-ō I give way.

E. weak = G. *weich*, akin to OSax. *wikan* to give way, OHG. *wīchan*, G. *weichen*, Skr. *vij*, *vijāte*.

## 133. √ VEID-, perf. VOIDA, VIDMĒ, I, we, know.

E. I wit = Goth. *wait*, Gr. *φῶβα*, Skr. *vēda*; E. wet, wit = G. *wissen*, *wusste*; E. wit = G. *witz*; E. witness, wit, v., cf. Goth. *witan* to know; E. wite, n., wite, v. = AS. *witan*, cf. G. *verweisen*, L. *video* I see, *vidi* I have seen, Gr. *φῶβα* I know, *φῶβω* we know, *φῶβειν* to see, Skr. *vēda* I know, *vidmā* we know.

## 134. √ VĒG-ō I am awake, grow.

E. wake, woke, v. i. = G. *wachen*; E. wake, waked, v. t. = G. *wecken*; E. waken, v., watch, n., watch, v., cf. AS. *wæcce* watch; E. wait, akin to OHG. *waht*: cf. L. *vigil* awake, *veigo* I thrive, *vegeo* I arouse, Skr. *vaj* to be lively, to be strong, *vāja* strength. Cf. *VĒKS-ō*.

## 135. √ VĒKS-ō I grow.

E. waz, wez, v. i. = Goth. *wahsan*; E. wox, woxen = G. *wuchs*, *gewachsen*: cf. Gr. *ἀρῆσθαι* I increase, strengthen, Skr. *waksh*, perf. *varāksha*, to grow up, to become strong. The Goth. *wahsan* comes from the perf., Skr. *varāksha*.

## 136. √ VĒZH-ō I move = L. "veho."

E. way = Goth. *wegs*, G. *weg*; E. wight = G. *wicht*; E. aught = AS. *āwucht*; E. wey, weigh = G. *wāgen*; E. wain, wagon = G. *wagen*; E. wave = Goth. *wēgs*, G. *woge*; E. wag, waggled = AS. *wagian*; E. wiggle, wobble = LG. *waggeln*, from Teutonic *wigan*, *wag*, *wegum*: cf. L. *veho* I convey, Skr. *vah*, *vāhāmi*, to move.

## 137. √ VED-, VND-, to wet.

E. water = OHG. *wazar*, G. *wasser*: E. wet, adj. = ONorse *vātr*; E. winter = G. *winter*; also E. *otter* = Skr. *udra*: cf. Gr. *ὕδωρ* water, L. *unda* wave, Skr. *vad*, *undātī*, to wet.

## 138. √ VĒN-ō to desire, win.

E. win, winning, wan, won = G. *gewinnen*; E. winsome = G. *wonnesam*; AS. *wynn* joy = OHG. *wunni*, G. *wonne*; E. won to dwell, wone, wont = G. *wohnen* to dwell, *gewohnt* wont: cf. Skr. *van*, *vānati*, to desire, win.

## 139. √ VNSKH-ō I wish.

From *VNSKH-ō* we have E. *wish*, n., *wish*, v. = G. *wunsch*, n., *wünschen*, v.: cf. Skr. *vāñchati* he wishes, *vāñchā* wish: *VNSKH-ō* is present of *VĒN-ō* I desire, √138. From *VĒN-ō* come: E. *wanhope* = Goth. *wans* lacking, cf. Goth. *wēns* hope, G. *wahn* delusion; E. *wane* = AS. *wanian*; E. *want*, v. = ONorse *vanta*: cf. Skr. *ūnā* lacking, Gr. *ἐννε* bereaved.

## 140. √ VEN- to hurt.

E. wound, n. = G. *wunde*; E. wound, v. = G. *verwunden*; E. woundwort = G. *wundwurz*: cf. Gr. *ἀρῶ* I infatuate, *οὐρῶ* I wound (for *ὀφρῶ*), Skr. *vanati* to subdue, *vanūs* enemy. Cf. *VAI* to suffer, √128.

## 141. √ VĒV-ō I wind.

E. wire = AS. *wir*, L. *viriae* armlets, cf. Gr. *ῥίπος* rainbow; E. with, n., *with*, cf. L. *vitis* vine, G. *weide* willow, akin to L. *vicio* I weave, Skr. *vyā*, *vyāyati*, to wind about, envelop.

## 142. √ VER-ō to ward, guard, perceive.

E. ware, aware = G. *gewahr*, cf. Gr. *ὁρῶ* (*forῶ*) I see; E. warn, v. = G. *warnen*; E. warren, warrant, akin to Goth. *warjan* to hinder; E. wear, wear, cf. G. *fischwehr*: cf. L. *vereor* I fear, Gr. *φοβῶ* I see, Skr. *var*, *vr̥ṇōti*, *vr̥ṇāti*, to guard, ward off.

## 143. √ VĒRT-ō I turn.

E. -ward, e. g. after-ward, cf. G. *vorwärts* forward; E. weird = AS. *wyrð* fate; E. worth, v. = L. *verto*, *vorto*, I turn, Skr. *var*, *vartātē*, to turn.

## 144. √ VERG-ō, VRNĒGMI, I turn, twist.

E. wrinkle = AS. *wrincle*; E. wrench = G. *rank* crookedness, *ränke* intrigues; E. wrench, v. = G. *renken*, *verrenken*; also, with p = k, E. wrap, wrapped, warp, v. = AS. *weorpan* to throw, G. *werfen* = OSlav. *vr̥gg* I throw, properly "torque": cf. L. *vergo* I turn, Gr. *φρέβω* I turn round, *φρέβος* a spinning top, Skr. *varj*, *vr̥ṇāti*, to turn.

## 145. √ VERZ-, pres. VRZŮ, I effect.

E. work, n. = G. *werk* = Gr. *ῥέργον*; E. work, v., wrought = AS. *wyrcan*, Goth. *waúrkan*, *waúrhta* = *Zend vererzēimi* I effect; E. *wright*, as in shipwright, wheelwright = Goth. *waúrhts*.

## 146. √ VELA, VELU, to turn, twist.

E. wale = AS. *walu*, Goth. *walus* staff; E. well, v. = G. *wälzen* to welter; E. welter, v. = LG. *wöltern*; E. woold, v., cf. G. *beuuhlen* to woold. G. *welle* wave = Lith. *vilnis*; E. wool = G. *wool*, Lith. *vilna*, Skr. *ūrpā* wool. Cf. L. *volvo* I roll, Gr. *ἐλῶ* I enroll, Skr. *var*, *vr̥ṇōti*, to wind, surround.

## 147. √ VEL- to undulate, boil.

E. wallow, wallop, walm, cf. OHG. *walm* heat, Skr. *ūrmī* wave; E. weel (= well,

n.) = Goth. *walucjan* to roll, *wūlan* to boil. √147 was perhaps originally identical with √146.

## 148. √ VĒS-ō I dwell, tarry.

E. was, wast (wert), were = Goth. *visan*, *was*, *wēsum*, G. *war*, *wäre*, *geicesen*, *wesen* a being, essence, cf. Skr. *vas*, *vāsati*, to tarry, to pass the night. To this last signification we are perhaps to refer E. *west*, *western* = G. *west* west, as the place where the sun goes for the night.

## 149. √ VES-, VS (AUS), to light up, become day.

E. east, eastern = G. *ost* east, *ostern* Easter, Lith. *ausz* day breaks, L. *aurora* dawn, Gr. *ἄως*, *ῥῶς*, Skr. *ushās* dawn, akin to *vas*, *ucchāti*, to become day, light up. The European AUS- corresponds to the Aryan US-, both coming from *VS-*, a weakened form of *VĒS-*.

## 150. √ VĒSK-ō I wipe.

E. wash, v. = G. *waschen*, not to be separated from G. *wisch* rag, *wischen* to wipe: cf. Skr. *pra-uñch* to wipe away (*uñch* is from *VNSKH-ō*).

## 151 a. √ SĒIK-ō I pour out.

E. sieve = OHG. *sip*, genitive *sibes*, G. *sieb*: cf. Gr. *ἵψαι* to sift. *ῥήγματος* straining cloth, akin to OHG. *sihan* to strain, sift, G. *seihen*; E. sift = AS. *sifan*, LG. *siften*, G. *sichten*; E. sieve = LG. *sil*, n., *sielen*, v.; E. *sig* urine, cf. G. *seigen* to filter, strain; here belongs also E. *sew* = Goth. *saues* (from *saihuas*), akin to Skr. *sic*, *sācīti*, to wet, pour out, *sēka* a wetting, effusion.

## 151 b. √ SĒIK-ō I dry.

E. sew to drain = AS. *seōn* to strain, filter, OHG. *sihan*, G. *seihen*, and *versiegen* to dry up: cf. *Zend hačaya* to dry up, *hisku* dry. √151 b is probably a development from √151 a.

## 152. √ SĒUS-ō I dry.

E. sear, sere, a., sear, v. = AS. *sehrian*, OHG. *sōrēn*, akin to Lith. *sausas* dry, OSlav. *suchŭ*: cf. Gr. *ἀσθ* dry, Skr. *śush*, *śushyati*, to dry, *śushka* dry, *śush-* standing for *śush-*, as is proved by *Zend hush* to dry.

## 153. √ SĒZH-ō I grasp, subdue.

E. seal = G. *segel*, n., *segeln*, v.; E. seward = OHG. *sigwart*, from *sig* victory = Goth. *sigis* = Skr. *sāhas* power, akin to Gr. *ἐχω* I have, *ἐσχον* I had, Skr. *sah*, *sāhatē*, to conquer, subdue.

## 154. √ SED-ō I sit.

E. sit, sat, sitten = OHG. *sizjan*, cf. Goth. *sitan*; E. seat = AS. *seot*, *set*, G. *sitz*; E. sunset, set-off (= offset), set, v., setting = Goth. *satjan* to set, G. *setzen*; E. set = G. *satz*; E. settle, n. = Goth. *silla*, G. *sessel*, cf. L. *sellā* (from *sellā*); E. settle, v.: cf. L. *sedeo* I sit, Gr. *ἐζήμε*, *ἴζω*, Skr. *sad*, *sādati*, to seat one's self.

## 155. √ SĒLP-ō I glide.

E. salve = AS. *sealf* ointment, OHG. *salba*, Goth. *salbōn* to anoint, G. *salbe*, n., *salben*, v., akin to Gr. *ἄλπη* an oil flask, *ἐλας* oil, fat, Skr. *sarpis* melted butter, *āprā* smooth (= Gr. *λαπαρός*). *SĒLP-ō* was probably originally *SĒRP-ō*, cf. Skr. *sārpāmi* I creep = Gr. *ἐρπω*, L. *serpo*.

## 156. √ SĒV-ō I sew.

E. sew, sewed = AS. *seōwian*, OHG. *siwian*, Goth. *siujan*; E. seam, seamster = AS. *seām* seam, G. *saum*, n., *säumen*, v.: cf. L. *suo* I sew, Skr. *siv*, *siyati*, to sew.

## 157. √ SKĒI- to shine.

E. sheer = AS. *scīr* bright, Goth. *skeirs* clear, OHG. *seir*, G. *schier* sheer; E. shine = AS. *scīnan*, Goth. *skēnan*, G. *scheinen*; E. shimmer = G. *schimmern*, v., *schimmer*, n., akin to AS. *scīma* brightness: cf. *Zend khshaēta* light, clear, Skr. *khyā* to appear or see.

## 158. √ SKĒU- to cover.

E. sky = OS. *skio* cloud, sky; E. scum, n., *scum*, v., *scumming*, *scumble*, *skim*, *skimmed* = G. *schaum* foam, *schäumen* to foam, akin to Skr. *sku*, *skunāti*, to cover.

## 159. √ SKĒV-ō to hasten, shoot.

E. shoot = G. *schiessen*; E. sheet = AS. *scēte*, *scyle*; E. shot = G. *schuss*. A. *scut* = ONorse *skote* projection, MHG. *schiez* gable side of a building, cf. L. *cauda* tail, Goth. *skauts* border of a garment; E. shut, shutting = AS. *scytlan*, cf. G. *schützen* to protect; E. shuttle (= shuttle) = AS. *scēdel*, Dan. *skyttel*, cf. G. *schütz* shuttle; E. skittles = *skayles*; E. skit, skittish; E. scud = Dan. *skyde* to fly; E. shed, shedding = OS. *skuddian* to shake, G. *schütten* to pour, shed. The simple root (s)ku is in the Goth. *skēujan* to go, Skr. *cya*, *cyávati*, to hasten, Gr. *σέω* (= *κτέω*) I move.

## 160. √ SKĒUBH-ō I shove.

E. shove, shoved, cf. AS. *scēdfan*, Goth. *skiuban*, G. *schieben*; E. shove! = G. *schaufel*, akin to Skr. *kshubh* to begin to move.

## 161. √ SKĒG-, SKĒAG-, to move, shake.

E. shake, shook = AS. *sceacan*, ONorse *skaka*; E. shock, n., *shock*, v. = OHG. *scoco*, n., MHG. *schocken*, v.; E. shank = AS. *scanca*, cf. OHG. *seinko* shin. G. *schinken* ham, *schenkel* thigh; E. skink, v. = OHG. *scencan*, G. *schenken*, from *shank* shinbone, which served as faucet for the cask: cf. Skr. *khāja* turmoil, *khāj* to limp, like ONorse *skakkr* limping.

## 162. √ SKĒH-ō to shade.

E. shade, shadow = Goth. *skadus*, G. *schatte*: cf. Gr. *σκότος* darkness, *σκαίος* dark, *σκαίω* shadow, Skr. *chāyā* shade.

## 163. √ STĀ to stand.

E. stau, v. = OHG. *stēn*; E. staw, stow = AS. *stōvan*; E. staddle = AS. *staðol*; E. stead = Goth. *staps*, G. *statt*, *stätte*; E. steady = G. *stetig*; E. stud = AS. *stōd*, OHG. *stuot*, G. *gestüt*; from this comes E. *steed* = G. *stute* mare; E. stool = G. *stuhl*; E. stoom; E. stand, v., stood = Goth. *standan*, OHG. *stantan*, *stuont*; E. stall, n., *stale*, v., to make water, *stell*, n. = G. *stall* stall, *stellen* to make water, *stelle* place: cf. L. *stare* to stand, Gr. *ἵστημι* I stand, Skr. *sthā* to stand.

## 164. √ STEIGH-ō I mount.

E. stigh, sty = AS. *stige*, ONorse *stia*, OHG. *stiga*, *swinstiga*; E. stair = LG. *steiger* step; E. stee, stey = LG. *stige*; E. stile = AS. *stīgil*, LG. *stegel*; E. stirrup = AS. *stīrāp*, G. *stegreif*; E. steward = AS. *stigeward*, fr. Teutonic *stiga* = Gr. *στειχω* I walk, cf. Skr. *stigh*, *stighnōti*, to mount.

## 165. √ STĒN-ō I groan, roar.

E. stank, v. = ONorse *stjanka*, akin to AS. *gestun* din, *stunian* to make a din, Gr. *στῆνω* I moan, *στῆνω* a sighing, Skr. *stan* to roar.

## 166. √ STĒRA, STERU = L. "sternere."

E. stare = Goth. and *starian*, OHG. *starēn*, G. *starr* fixed, *starren* to stare; E. stern, adj. = AS. *sterne*, *styrne*, OHG. *stornēn* to be astonished, cf. L. *consternare* to terrify; E. stern, n. = AS. *stearn*, cf. Gr. *στερεια* the cut-water of a ship; E. stir,

**stirred** = AS. *styrian*, OHG. *störren*, G. *stören*; E. *storm* = G. *sturm*; E. *start* a tail = AS. *steort*, G. *sterz*, cf. Gr. *στέρεω* point; E. *start*, v., *startle*, *start-up* (= *upstart*) = OE. *sterle* to start, LG. *stürten*, OHG. *sturzian*, G. *stürzen*, to hurl, plunge: cf. L. *sterno*, *stratum*, to strew, spread out, Skr. *star*, *stṛjāti* (from *stári* = *stera*), to strew. To **✓ STĒRU** point: E. *strew* = Goth. *straujan*, G. *streuen*; E. *straw* = OHG. *strōr*, G. *stroh*, Gr. *στέρεω* I strew, *στέρω* I shall strew, Skr. *star*, *stṛjāti* to strew.

**167. ✓ STĪ-, STĪĀ**, to be pressed hard.

E. *stone* = G. *stein*: cf. Gr. *στία* stone, akin to Skr. *stiyā* to be pressed, pra-stīma pressed together, ONorse *stīm* struggle.

**168. ✓ STU-, STEU**, to stand fixed.

E. *stow* = G. *stauen*; E. *steer*, v. = G. *steuer* rudder, *steuern* to steer, cf. ONorse *staurr* = Gr. *σταυρός* stake; E. *steer* the animal = Goth. *stiur*, G. *stier* bull; E. *stun*, v. = AS. *stunian* to make a din, G. *stauen* to be astonished: cf. Gr. *στέω* porch, *σταυρός* stake, *στῦλος* I stiffen, *στῦλος* pillar, Skr. *stāvira* strong, *sthūma* pillar, *sthūra* bull.

**169. ✓ SPECYŌ** I see, spy.

E. *spy* = OHG. *speho*, akin to *spehōn* to watch, G. *spähen*, L. *specio* I look, *conspicio* I observe, Skr. *pācyāmi* I see, perf. *pa-spacē*; E. *spight* woodpecker = G. *specht*, which is probably to be connected with OHG. *spacht* noise.

**170 a. ✓ SPHE** to stretch out, span.

E. *span* space = OHG. *spanna*, G. *spanne*; E. *span* a pair = G. *gespann*; E. *spaw*, Prov. E. *spene* = AS. *spanu* "ubera"; E. *spane*, v., *spin*, *span*, *spun* = G. *spinnen*; E. *spindle*, *spill*, n. = G. *spindel* spindle, *spill* capstan; E. *spoon*, *span*, cf. Gr. *σφῆν* wedge; E. *spile* = LG. *spile*, G. *spelt*; E. *spit* = MHG. *spitz*, akin to Skr. *spīya* chip; E. *spoke*, n. = OHG. *speihhā*, G. *speiche*, cf. Skr. *spīgī* hip, G. *armspeiche* the main bone of the arm. Cf. Skr. *spāh*, in *spāhā* increasing, *spīrā* fat.

**170 b. ✓ SPHE**, *SPHYE*, to thrive, come forward.  
E. *speed*, *sped*, *speedy* = AS. *spēd*, *spēdan*, *spēdig*, OHG. *spuot* speed, fr. *spē* = Lith. *spėti*, Oslav. *spēti* to succeed, Gr. *φάω* I come first = Zend *spanvāmi*, Skr. *spāh*, *spēh*, to thrive.

**171. ✓ SPHERA** to resist, strike out behind.

E. *spar*, n., *spar*, v., *sparring* = G. *sparre* a spar, sich *sperren* to resist; E. *spoor*, *spere*, v., *speer* = G. *spur* track, *spüren* to trace; E. *spur*, n., *spur*, v., *spurring* = OHG. *sporo* spur, G. *sporn*, pl. *sporen*; E. *spurn*, v., cf. L. *spernere*, properly, to push away with the foot, ON. *spirna*, *sparn*, to kick backwards: cf. Gr. *σπαίρω* I gasp, *σπαίρω* I gasp or struggle, *σπούν* ankle, Skr. *spūhr*, *spūhrātī* to flounder, *aspaṣhura* kicking, Zend *spār*, *spārāitī*, to trample, to struggle.

**172. ✓ SNĒIGHETI** it snows.

E. *snow*, n. = Goth. *snaius*, Oslav. *sněgŭ*, G. *schnee*, akin to OHG. *snīwit* it snows, Lith. *snig-ti* to snow, L. *ningit* it snows, niz snow, pl. *nives*, Gr. *νείφει* it snows, Zend *snāzhehiti* it snows.

**173. ✓ SMĒYŌ** I smile.

E. *smile* = MHG. *smielen*: cf. MHG. *smieren* to smile, akin to Gr. *μει-δῶω* I smile, Skr. *smi*, *smāyatē*, to smile.

**174. ✓ SRĒVŌ** I flow.

E. *stream* = OHG. *strōm*, G. *strom*, from *stru* = *eru* in Gr. *ρέω* (for *srēvō*) = Skr. *srāvāmi* I flow.

**175. ✓ SVĀDAI** I take pleasure, relish.

E. *sweet* (*sote*, *soote*) = OS. *swōti*, OHG. *suwazi*, *suoti*, G. *süss*; cf. L. *suāvis* (from *suāv-is*), Gr. *ῥῆγς* = Skr. *svādūs* sweet, akin to *svādē* I take pleasure: cf. Gr. *ἀνδῶω* I please, etc.

**176. ✓ SVEP-** to sleep.

OE. *sweven* a dream = AS. *swefn* sleep, MHG. *entsweben* to make sleepy, akin to L. *sonnus* sleep, *sonnium* dream, Gr. *ὑπνος* sleep, *ἐνυπνιον* dream, Skr. *svāpna* sleep, and L. *aspire* to put to sleep, Skr. *svap*, *svāpiti* to sleep.

**177. ✓ SVĒRŌ** I speak, sound.

E. *suear*, v. = G. *schwören*, properly, to speak; cf. E. *answer* = ONorse *svar* answer, akin to Skr. *svar*, *svārātī*, to praise, resound; E. *swarm* = G. *schwarm*, n., *schwärmen*, v.; E. *swirl* = G. *schwirren*, *surren*, to whirl, buzz: cf. L. *susurrus* a humming, *sorex* a shrew mouse = Gr. *ῥῆγς*.

**178. ✓ SVIDIŌ** I sweat.

E. *sweat*, n., *sweat*, v., *swet*, *swot* = OHG. *sweiz*, n., *swizjan*, v.: cf. L. *sūdor* sweat, *sūdare* to sweat, Gr. *ἰδῶ* I sweat, *ἵδω* sweat, Skr. *svīd*, *svīdyati*, to sweat, *svēda* sweat.

## II. PRONOMINAL ROOTS.

**179. ✓ EZO** I.

E. *I* = OS. *ek*, Goth. *ik*, ONorse *ek*, G. *ich*: cf. Lith. *asz*, older *esz*, Oslav. *jazŭ*, Gr. *ἐγώ*, L. *ego*; the East Aryan forms, Skr. *aham*, Zend *azem*, rest on the ground form EZHOM.

**180. ✓ ONO-S** that, in ONTEROS other.

E. *other* = AS. *ðer*, Goth. *anþar*, G. *anderer*: cf. Lith. *antras*, Oslav. *vŭtorŭj* the other, Skr. *āntara* the other. From ONO-S, that, come: Lith. *ana-s* = Oslav. *onŭ* that; Skr. *ana*, which is used to form certain cases of *idām*; L. *ollus* (for *onulus*).

**181. ✓ IS** m., EYĀ f., ID n., the, that.

E. *it* = Goth. *ita*, G. *es* (esz), fr. Goth. *is*, *ita*, G. *er*, *es*, L. *is*, *ea*, *id*, Skr. *ayām*, *itām*, *idām*, this.

**182. ✓ KOS** m., KĀ f., KOD n., who, what, which.

E. *who*, *what* = Goth. *hwas*, *hwō*, *hwa*, G. *wer*, *was*, Lith. *kas*, *ka*, Gr. *κόθεν* whence (= *πόθεν*), L. *qui*, *quae*, *quod*, who, which, what, Skr. *kas*, *kā*, *kad*; E. *whether* = Goth. *hwapar*, Lith. *katras*, Skr. *katarā* which (of two); E. *why* = Goth. *hwī*, Gr. *μή*; E. *which* = Goth. *hwī-leiks*, G. *welch*; E. *when* = ONorse *hwana*, G. *wann*; E. *where* = Goth. *hwar*: cf. L. *cur* (older *quor*) why, Skr. *kar* in *kār-hi* when; E. *how* = AS. *hwā* = Goth. *hwa*.

**183. ✓ CIS** this.

E. *he*, *him* = OS. *he*, *hi*, *nom.*, Goth. *hina* acc., *himma* dat.: cf. Lith. *szis* this, Oslav. *ŕi*, Gr. *ἐκεῖ* there, *κεῖνος* that, L. *-ce*, *cis* on this side, *citra*. In the East Aryan branch, possibly by chance, no examples are to be cited. With E. *hither*, cf. Goth. *hidrē*, L. *citra* on this side, *citerior*, adj.

**184. ✓ TOD** that, originally *so* m., *sā* f., *TOD* n.

E. *that* = Goth. *sa*, *sō*, *pata* = Skr. *sa*, *sā*, *tad*; E. *though* = AS. *peāh*, G. *doch*, from *pa* and *uh* = L. *que*, Gr. *τε*, Skr. *ca*; E. *there* = Goth. *þar*, cf. Skr. *tār-hi* then.

**185. ✓ TŪ** (from TĒVO) thou.

E. *thou*, *thine*, *thee* = Goth. *þu* thou, *þeina* thy, G. *du* thou, *dein* thy: cf. Lith.

*tú* thou, Oslav. *ty*, Gr. *σύ*, I. *tū*, Skr. *tuam*, Zend *tūm* thou. From TĒVO, cf. Skr. *tava* gen. = Gr. *τέφω*, etc.

**186. ✓ NŌ-S** nom. pl.; NŌ nom. dual; NOS, enclitic NS, we, us.

E. *us* = Goth. *unsis* dat., *uns* acc.; E. *our* = G. *unser*. *Uns* = NS = Gr. *ασ-ιν* *ἄμεις*, *ἡμεῖς*, Skr. *as* in *asmād* abl. pl., *asmādīyas* our. NS is the weakest form of NOS, which occurs in Skr. *nas*, acc., gen., dat. The strongest form, NŌ, occurs in Gr. *ἡμεῖς* we two, L. *nōs* we, us, *nōbis* to us.

**187. ✓ ME** acc., me.

E. *me*, *mine* = Goth. *mik* me, *mis* to me, *meina* my, G. *mich* me, *mir* to me, *mein* my; (Goth. *mī-k* = Gr. *ἐ-μέ-γε*): cf. Gr. *με*, *ἐμε*, me, L. *me*, Skr. *mā*, *mām*, acc., *mahyam* dat., *mama* gen.

**188. ✓ YE**-that, this.

E. *yon*, *yond*, *yonder* = Goth. *jaind* there, *jainar*, *jain-s*, that, G. *jener*. To YE- in the meaning "this" belongs *E. yea* = AS. *gea*, Goth. & G. *jā* = Gr. *ἦ*; also E. *yes*, properly "so." Cf. Lith. *jis*, *jo*, pron., Oslav. *ī*, *ja*, *je*, that, Gr. *ἦ* who, which = *jos*; cf. Skr. *ya* who, which (originally demonstrative).

**189. ✓ YUS** you, 2d pers. pl.

E. *you*, *ye*, *your*, *yours* = Goth. *jus* nom., *izvis* acc. & dat., *izvar* your, G. *ihr* nom., *you*, *ever* your, Lith. *jus* you, Skr. *yūyam* nom., *you*; *yusmē* appears in Gr. *ὑμεῖς*, *ὑμεῖς* you, Skr. *yushmād* abl. pl.

**190. ✓ VĒYES** we.

E. *we* = Goth. *weis*, G. *wir*: cf. Oslav. *vě* we two, Skr. *vayam* we. The base is VE, cf. Skr. *vām* nom. dual.

**191. ✓ SO**, *sā*, the; SOMO-S the same: sōmō-s some one.

Goth. *sa* m., *sō* f., the, that = Skr. *sa* *sā*, the. E. *same* = ONorse *samr* = Gr. *ὁμός* = Skr. *sama-s* the same; E. *some* = Goth. *sumai*, cf. Gr. *ἀπόθεν* from somewhere, Skr. *samā* every; E. *seem*, v., akin to ONorse *soemr* becoming, fit, from *sōma* the same = Zend *hāma*.

**192. ✓ SVE** own, self.

E. *so* = AS. *swā*, Goth. *swē* as, G. *so* so; E. *such* = G. *solch*: cf. L. *sui* of himself, *suus* his, Gr. *ἑαυτοῦ* to himself, *ἑαυτοῦ* acc., himself, *ἑαυτοῦ* his, Skr. *sva* own. From SEVO, cf. L. *sevos* = *suus*, Gr. *ἑός* his.

**193.** Of pronominal origin is also E. *now*: cf. G. *nu*, *nun*, Lith. *nu*, Oslav. *nyně*, L. *nunc* an interrogative particle, *nunc* now, Gr. *νῦν*, *νῦν*, Skr. *nu*. The word goes back to the pronoun NE this, and designates the present time as "here," just as time is elsewhere designated as place.

Also NE not, in E. *no*, *none* = L. *ne*, *non*, not, Gr. *μή*, Skr. *na*. Weakened to N, it occurs in E. *un-*, Goth. *un-*, L. *in-*, Gr. *ἀ-*, *ἀν-* = Skr. *a-*, *an-*, and may be originally pronominal. "Here good" can mean "not good," namely, good there where good is not.

## III. PREPOSITIONAL ROOTS.

**194. ✓ APO** from, off.

E. *off*, *aft*, *after*, *eft* = Goth. *af-* off, G. *ab-*: cf. Gr. *ἀπό*, L. *ab*, Skr. & Zend *apa*; E. *after*, cf. Gr. *ἀπὸ τοῦ* farther off, OPers. *apatara* the farther, other.

**195. ✓ ANA** on.

E. *on* = Goth. *ana*, G. *an*, Gr. *ἀνά*, Zend *ana*: Skr. *ā* is the weak form of *ana* as Skr. *āti* duck is of *anati* (= L. *anas*).

**196. ✓ ANTI** against.

E. *answer* = ONorse *and-svar*, Goth. *anda-*, *and-*, against, G. *antworten* to answer, *entgegen* against: cf. Gr. *ἀντί*, L. *ante* before, Skr. *anti* against, Gr. *ἀνταρ* I meet.

**197. ✓ ENI**, EN, in.

E. *in* = Goth., OHG., & G. *in*, Gr. *ἐν*, *ἐν*, L. *in*, cf. Skr. *ni* (from *āni*).

**198. ✓ UD** out.

E. *out* = Goth. & OS. *ūt*, OHG. *ūz*, G. *aus*; E. *but*, cf. LG. *būten* from *bi-tūen*: cf. Goth. *ūtana* outside; E. *utter*, *utmost*, *utmoster* = G. *äussern* to utter: cf. Gr. *ὑστερος* later, *ὑστατος* last, Skr. *ud* out.

**199. ✓ UPO** over, under, UPĒRI over.

E. *above* = A-be-oven = OS. *obhana* from above, OHG. *obana*, akin to Goth. *uj* under = Gr. *ὑπό* = Skr. & Zend *upa* to, over, under; E. *over* = Goth. *ufar*, G. *über*, Gr. *ὑπέρ*, Skr. *upāri*.

**200. ✓ DŌ** to.

E. *to* = OHG. *zu*, *ze*, *zi*: cf. Gr. *(ἐν)επι-δω*, (*δωμω*)-δε homeward, Zend *vaśmen-da* to the house, Lith. *do*, *da*, to, Oslav. *da*, *do*, to.

**201. ✓ NE**, NEI, down: NITERĀM, NDHEROS.

E. *nether* = OHG. *nidar*, adv., down, G. *nieder*: cf. Skr. *nītarām*, adv., downwards; E. *under* = Goth. *undar* = *ndhero* = L. *infra* below, *inferior* lower, *infimus* lowest, Skr. *adhara* lower, *adhama* lowest, fr. Skr. *adhas* below. Cf. Skr. *ni* down, Gr. *νεφέας* fallow land.

**202. ✓ PĀRĀ**, PĀROI, before.

E. *for* = Goth. *faura* before = Gr. *παρά* beside, *παρο-θεν* before, cf. Skr. *purā* formerly, *parē* later; E. *from*, cf. Lith. *pirm* before, Goth. *fra-* = Gr. *πρό* before, Skr. *pra*.

**203. ✓ BHI** by.

E. *by*, *be-* = G. *bei*, *be-*, cf. Gr. *(ἐν)επι-φύ*. BHI is also in Gr. *ἐμφί* around, OHG. *umbi*, Skr. *a-bhi*.

## IV. NOUNAL ROOTS.

**204. ✓ AIĒRI** loc., early (properly, "at dawn").

E. *or* before, *yore*, of *yore*, *ere*, *early* = Goth. *atr* (from *āfer*), adv., early, Gr. *ἤρι*, *ἡέριος*, adj., early, *ἀπριστην* breakfast (from *ἀπριστην*), Zend *ayare* day. AIĒRI is from EIMI I go (✓4).

**205. ✓ AKSO**-axis.

E. *ax*, *axle*, *axis* = G. *achse*, Lith. *aszis*, Oslav. *osŭ*, L. *axis*, Gr. *ἄξων*, Skr. *ākṣha*, probably from Skr. *aj*, *ahj*, to smear, or from *āzō* I drive (✓2).

**206. ✓ ĀZRO-S** field (properly, pasturage).

E. *acre* = OHG. *ahhar* field, G. *acker* = L. *ager*, Gr. *ἀγρός*, Skr. *ājra* plain, field. ĀZRO-S is from *āzō* I drive (✓2), as G. *trift* pasture from *treiben* to drive.

**207. ✓ ANATIS**, NATI-S, duck.

E. *gulaund* = Icel. *gulund*; E. *drake* (from *and-rake*) = OHG. *entrehho*, G. *enterich*, akin to ONorse *ōnd* duck = OHG. *anut*, L. *anas*, gen. *anatis*, Gr. *ῥήσσα* (for *vari-a*, *vāri* = Skr. *ātis*-a water fowl).

**208. ✓ ANTO-S** end.

E. *end*, n., *end*, v., *endless* = Goth. *andēis* end, G. *ende*, n., *enden*, v., *endlos* endless, Skr. *ānta* end. Akin to Gr. *ἀνταρ* I meet.

- 209. √ AYU, AIVO-, time.**  
E. *aye* always = Goth. *aiw* ever; E. *each*, from *ā-lic* (from *ā* = Goth. *aiw* ever and *lic* like) = G. *jeglich* every, from OHG. *eo* ever, and *galih* like: cf. L. *aevum* age, eternity, Gr. *aiei* always, *aifwv* age, Skr. *āyu-* life, time, *ēva* course, custom = OS. *ēva* custom. AYU belongs to Efmi I go (√4).
- 210. √ AYOS ore, metal.**  
E. *ore* = Goth. *aiz*, OHG. *ēr*, G. *ēren* (written *chern*) brazen: cf. L. *aes* metal, copper, bronze, *aënum* a bronze vessel, *aëneus* of bronze, Skr. *ayas* metal, iron.
- 211. √ ARMO-S arm.**  
E. *arm* = Goth. *arma*, G. *arm*: cf. L. *armus* shoulder, Zend *arema* arm. ARMO-S is probably akin to Gr. *ἀρπίσκω* I fit together, cf. *ἀρμός* shoulder joint.
- 212. √ OK eye.**  
E. *eye* = Goth. *augō*, G. *auge*: *augo* stands for *ahv-go*, *ahv* = ok in L. *oculus*, Gr. *ōsō* (= *okōe*) the two eyes, cf. Skr. *ākshī*, *ākshān*, eye. OK eye is akin to OK to see = Gr. *ὄσσωμαι* I see, *ὄσσω* I have seen.
- 213. √ OVI-S sheep.**  
E. *ewe* = Goth. *awi*. in *awi-str* sheepfold, OHG. *ouwi* sheep, *ewe* = Lith. *avis*, Oslav. *ovi*-cf. L. *ovis*, Gr. *ōvis*, Skr. *āvi* sheep. This belongs probably to *āvō* to clothe, which occurs in L. *induo* I put on, *exuo* I strip off, Lith. *auti* to clothe the feet.
- 214. √ UKSĒN, loc. UKSĒNI, dat. UKSĒNI, ox.**  
E. *ox*, pl. *oxen* = AS. *oza*, Goth. *aúsa*, G. *ochse*: cf. Cambrian *yeh*, pl. *yehen*, Ryttychen (= Oxford), Skr. *ukshān* bull, from *vaksh*, *ukshāti*, to moisten, or from *vaksh* to grow.
- 215. √ UDROS otter.**  
E. *otter* = G. *otter*, Lith. *udra*, Oslav. *v-ydra*, Zend *udra* otter or water dog: cf. Gr. *ōpōs*, *ōpa*, water snake, Skr. *udra*, m., crab or otter. Properly, UDROS is an abbreviation of a compound with *udro* water; cf. Skr. *an-udra* waterless, *udra-jivān* living in water, Gr. *ēv-ōpōis* otter.
- 216. √ ŪDHAR udder.**  
E. *udder* = OHG. *üter*, G. *euter*, L. *über*, Gr. *ōthap*, Skr. *ūdhār*.
- 217. √ KAITU-S appearance.**  
E. *hood* = AS. *hād* = G. *heit* in *schönheit* beauty, *wahrheit* truth, akin to Goth. *haidu*-s manner, OHG. *heit* manner, condition = Skr. *kētú-s* appearance, form. KAITU-S (or, better, KOITU-S?) is akin to Skr. *cit*, *cēti*, to perceive.
- 218. √ KĒLO-S wheel.**  
E. *wheel* = AS. *hweogol*, *hweohl*, *hweól*, ONorse *hjóll*, Gr. *kúklos*, Skr. *cakrá*.
- 219. √ KĒRU kettle.**  
E. *ever* = AS. *hwer*, ONorse *hverr*, OIr. *coire* kettle, Cambrian *peir* kettle, pot, Skr. *carú*.
- 220. √ KJOIMO-S home.**  
E. *home*, -*ham* (in proper names), *hamlet*, cf. Goth. *haimis* village, G. *heim*, adv., home, *heimath*, n., home, Lith. *kēma*-s village, Skr. *kshēma* dwelling, rest, from *ashī* to dwell = Gr. *κτίσω* I build, found.
- 221. √ ĠENI-S woman.**  
E. *queen*, *quean* = Goth. *qēn-s* wife, Skr. *jāni*, as in *dvi-jāni* having two wives, Zend *jēni* woman. Not connected with ZEN to produce.
- 222. √ GOLBHO-S calf.**  
E. *calf* = G. *kalb*: cf. Gr. *delph's* womb, *delphā* a young pig, Skr. *gārbha* womb, embryo, *apa-gārbha* miscarriage.
- 223. √ GÖV cow.**  
E. *cow*, pl. *ky*, *kine* = AS. *cū*, pl. gen. *cuna*, G. *kuh*, Oslav. in *gov-gdo* horned cattle, Lett. *gāvis*, OIr. *bō*, L. *bōs*, Gr. *boūs*, acc. *βῶν*, Skr. *gau*, acc. *gām* (= *βῶν*).
- 224. √ GHORMÓ-S warm.**  
E. *warm* = G. *warm*, Goth. *warmjan* to warm, L. *formus* warm, Skr. *gharmā* warmth, heat. From *gher-* to glow (√32). The Teutonic warm stands for *gvarm* from European *ghvormo-s*.
- 225. √ ĠAPHO-S hoof.**  
E. *hoof* = G. *huf*, Skr. *ṣapha*, Zend *ṣafa* hoof, claw. Its origin is quite uncertain.
- 226. √ ĠASO hare.**  
E. *hare* = AS. *hara*, OHG. *haso*, G. *hase*, OPruss. *sasin-*, Skr. *ṣaṣa* for *ṣasa*.
- 227. √ ĠERD, ĠRD, heart.**  
E. *heart* = AS. *heorte*, Goth. *haurtō*, MHG. *herze*, G. *herze*, *herz*: cf. Lith. *szirdis*, Oslav. *srđi-ce*, Gr. *epadia*, L. *cor*, *cordis*. ĠRD agrees with Skr. *hṛd*, *hṛdaya*, heart. The ground form is perhaps *ĠHERD*.
- 228. √ ĠOINI-S sharpness.**  
E. *hone* = ONorse *hein* whetstone, cf. Zend *caēni* top, peak. Akin to Skr. *ṣā*, *ṣāṣti*, to sharpen: cf. Gr. *κῶνος* cone, L. *catus* shrill, sagacious = Skr. *ṣitā* sharp.
- 229. √ ĠUON, gen. ĠUNÓS, dog.**  
E. *hound* = Goth. *hundis* dog, G. *hund*, Lith. *szū*, gen. *szuns*, Gr. *κνός*, *κυνός*, Skr. *ṣvā*, gen. *ṣunas*.
- 230. √ ĠRVO- horned.**  
E. *hart* = AS. *heorot*, OHG. *hiruz*, G. *hirsch*, from L. *cervus* = Gr. *κεραφός* horned, Zend *crva* of horn.
- 231. √ ZĒNU, ZNU, knee.**  
E. *knee* = Goth. *knīu*, G. *knie*, L. *genu*, Gr. *γόνυ*, *πρό-χτυ* on one's knees, Skr. *jānu*, *jīnu*, knee, Zend *zanva* nom. pl.
- 232. √ ZĒNU-S chin, jaw.**  
E. *chin* = Goth. *kinnus* cheek, G. *kinn* chin, L. *gena* cheek, *genu-inus* of the cheek, Gr. *γένυς* under jaw, cheek. ZĒNU agrees with Skr. *hānu* jaw.
- 233. √ ZHANS goose.**  
E. *goose*, pl. *geese* = G. *gans*, pl. *gänse*, Lith. *žgis*, gen. pl. *žgsu*, L. *anser* (for *hanser*), Gr. *χῶν*, Doric *χῶν*, pl. *χῶνες* = *χῶνες*, Skr. *hāmsa* goose, swan.
- 234. √ ZHOLTO-S: ZHĪTOS, gold.**  
E. *gold*, *golden*, *gild*, *gilt* = G. *gold*, *golden*, *vergülden* to gild, Goth. *gulþ* gold, Oslav. *zlato*, Skr. *hāṭaka*, cf. *hiranya* gold, *haritā* yellow. ZHOLTO is from the verbal root which occurs in Lith. *želti* to be green or yellow (√49).
- 235. √ ZHIES yesterday.**  
E. *yesterday* = Goth. *gistradagis* to-morrow, G. *gestern* yesterday, ONorse *gær*, L. *heri*, *heridernus* of yesterday, Gr. *ἐχθές* yesterday, *χθις* of yesterday, Skr. *ahyas* yesterday, Zend *zyō*.
- 236. √ TĒLO deal, board.**  
E. *thill* = G. *diele* board, Oslav. *llo*, *llo*, ground, floor, Skr. *lala*. Perhaps from TĒLA to carry (√55).
- 237. √ TĒNUS thin.**  
E. *thin*, *thinner* = OHG. *dunni* thin, G. *dünn*. Teutonic *punnja-s* arose from *punnis* = TĒNUS. Cf. L. *tenus*, Gr. *ραφεός* stretched, Skr. *tanū* (for *tanū*) thin.
- 238. √ TĒSDO, TORSDO-, thrush.**  
E. *throatle* = MHG. *drostel*, L. *turdela*: cf. Lith. *strazda-s*, OPruss. *treste*, ONorse *pröstr*, L. *turdus*, Gr. *σποιδος* sparrow, Skr. *tardā-s* a certain bird.
- 239. √ DENTS, dat. DNTĒI, tooth.**  
E. *tooth*, pl. *teeth* = Goth. *tumpus*: cf. OHG. *zand*, G. *zahn*, L. *dens*, Gr. *ὀδός*, Skr. *dant*, *datka*.
- 240. √ DEDRU, DERDRU, DEDRUKO-, eruption.**  
E. *tatter*, *tetter* (also *dartars*, *dander*, *dandruff*), akin to OHG. *zitaroch* eruption on the skin, Skr. *dadru*, *dardru*, *dadruka*, eruption on the skin, itch. Cf. also Lith. *dederv-inė* herpes, eruption. From the intensive of DER, Gr. *δέπω* I flay (√63).
- 241. √ DĒRU, DRĒU, DRU, wood, tree.**  
E. *tree*, *trough* = Goth. *triu* tree, piece of wood, MHG. *troc*, gen. *trogen*, trough: cf. Gr. *δῆρυ* beam, spear, *δῆρυ* tree, oak, Skr. *dāru*, *dru*, wood, tree. It probably belongs to DER- to cleave (√63).
- 242. √ DORĒHO-S, DĒBHO-S, turf.**  
E. *turf* = LG. *torf* peat, OHG. *zurba* turf (G. *torf* is from LG.), Skr. *darbha* bunch of grass. From the verbal root found in Skr. *darbh* to wind, wrap.
- 243. √ DĒZHVA tongue.**  
E. *tongue* = Goth. *tuggō*, OHG. *zunkā*, OL. *dingua*, L. *lingua* (cf. OPruss. *insuwa*, Lith. *lėzūvis*, Oslav. *jězy-ka*, OPer. *izāva*, Zend *hizvā*, *hizu*, Skr. *jihvā*, *juhū*). The ground form of the word is preserved in Teutonic and Old Latin.
- 244. √ DYĒUS (PĀTĒR), gen. DIVS, name of the highest god.**  
E. *Tuesday* = AS. *Tiwesdæg*, MHG. *zistac* from *Tiw* = OHG. *Ziu*: cf. L. *Jūpter*, Gr. *Zeús* *πατήρ*, gen. *Διός*, Skr. *Dyaushpitā*, gen. *Divas*, Zeus, sky. To be derived from the root *DIV* (more correctly from *DI*) to shine.
- 245. √ DHUGHĀTĒR daughter.**  
E. *daughter* = G. *tochter*, Lith. *duktė*, Oslav. *dúšti*, Gr. *θυγάτηρ*, Skr. *duhitār*. From DHUGH to be of use (√68), as a. g. E. *maid*, Goth. *magops*, from *magan* to be strong.
- 246. √ DHUR, DHURĀ, door.**  
E. *door* = AS. *durn*, OHG. *turā*, G. *thür*, *thor*: cf. Lith. *dvara-s* yard, Gr. *θύρα* door, L. *forea*. Skr. *dvara* yard, *dvār*, *dur*, door agrees with *dhvoro-s*, *dhur*.
- 247. √ PĀTĒR, loc. PĀTĒRI, dat. PĀTĒRI, father.**  
E. *father* = Goth. *fadar*, G. *vater*, OIr. *athir*, L. *pater*, Gr. *πατήρ*, Skr. *pitā*, loc. *pitāri*, dat. *pitṛē*. It is derived from PĀ to protect (√75).
- 248. √ PETRO- feather.**  
E. *feather* = G. *feder*, Gr. *πεπρόν*, Skr. *pātra*. From the root found in Gr. *πέτρομαι* I fly = Skr. *pat* to fly.
- 249. √ PEČU cattle.**  
E. *fee* = Goth. *faihu* cattle, G. *vieh*, L. *pecu*, Skr. *pāṇu*, *paṇu*. In the meaning "possession" E. *fee* agrees with AS. *feoh*, Goth. *faihu*, cf. L. *pecunia* property, money.
- 250. √ PÖD, dat. PÖDĒI, foot.**  
E. *foot*, pl. *feet* = Goth. *fōtus*, MHG. *vuoz*, G. *fuss*, pl. *füsse*, L. *pes*, Gr. *πούς*, Skr. *pād*. It belongs to PED to go (√77).
- 251. √ BHĀZHU-S shoulder joint.**  
E. *bough* = OHG. *puac* shoulder joint, shoulder, MHG. *buoc*, G. *bug*, Gr. *πῆχυς* forearm, arm, Doric *παχῦς*, Skr. *bāhū*, Zend *bāzu*.
- 252. √ BHANSO- cow stall.**  
E. *boose* (cf. *goose* = G. *gans*) = ONorse *bās*, MHG. *banse*: cf. Goth. *bansts* barn, Skr. *bhāsa* cow stall.
- 253. √ BHEBHUR-S beaver.**  
E. *beaver* = G. *biber*, Oslav. *bebrt*, L. *fiber*, Skr. *babhrū* a sort of ichneumon, also as an adj., brown, Zend *bavri* beaver: cf. E. *brown* = G. *brāun*.
- 254. √ BHERZĀ, BHERZĀ, birch.**  
E. *birch*, *birch* = G. *birke*, Lith. *berža-s*, Oslav. *brěza*, Skr. *dhārja* a kind of birch. Here belongs E. *bark* = G. *borke*.
- 255. √ BHODROS good.**  
E. *battul*, *battel*, *batten*, cf. Goth. *batnan* to be profited; E. *better*, *best* (*betst*) = G. *besser*, *best*; E. *bote*, *boot* = OHG. *puosa* profit, penance, compensation, G. *buisse* penance, compensation, cf. Skr. *bhadra* auspicious. Perhaps it is akin to the Skr. *bhand* to praise.
- 256. √ BHUZO- buck.**  
E. *buck* = Zend *būza*, cf. Skr. *bukka* (from *bhuj-ka* f).
- 257. √ BHUDHNO- ground, bottom.**  
E. *bottom* = AS. *botm*, OSax. *bodem*, G. *boden*: cf. Gr. *πυθύν*, Skr. *budhna*. Cf. E. *body* = MHG. *bottich*, *pottich*. From *bottom* has sprung *bum* the buttocks, cf. MHG. *budeming* tripe.
- 258. √ BHRĀTÖR brother.**  
E. *brother* = Goth. *brōþar*, OHG. *pruoder*, G. *bruder*, L. *frāter*, Gr. *φράτηρ*, Doric *φάτωρ* = Skr. *bhrātār*.
- 259. √ NAGHO- nail.**  
E. *nail*, n., *nail*, v. = AS. *nagel* nail, Goth. *nagljm* to nail, G. *nagel*, n., *nageln*, v.: cf. Gr. *ὀνύξ* nail, L. *unguis*, Skr. *nakha* (from *nagh-ka*).
- 260. √ NABHĀ nave (of a wheel), nave.**  
E. *nave*, *navel* = OHG. *napa* nave, *napalo* navel, G. *nabe* nave, *nabel* navel, Old Prussian *nabīs* nave, navel, Lett. *naba* navel, Gr. *ὀμφαλός*, L. *umbilicus*, Skr. *nābhī* nave, navel.
- 261. √ NASĀ nose.**  
E. *nose*, *nase*, *ness*, *nozzle* = AS. *nosu*, *nasu*, nose, OHG. *nasa*, G. *nase*, L. *nāsus*, *nāres*, nose, Skr. *nas*, *nāsā*; E. *nostril* = AS. *nose* pyrel.
- 262. √ NĒPÖT grandson, descendant.**  
E. *nephew*, a union of AS. *nefa* (= OHG. *nefo*, G. *neffe*), and F. *neveu*, from L. *nepos* grandson, nephew, descendant = Skr. *nāpāt* grandson, descendant.
- 263. √ NĒVOS, NĒVIOS, new.**  
E. *new* = Goth. *ninjis*, G. *neu*, Oslav. *novŭ*, Lith. *naufas*, L. *novus*, Gr. *νέος*, Skr. *nava*, *navya*. Here probably also E. *now* = Skr. *nu*, *nū*, now. This is probably of pronominal origin, from NE- this.
- 264. √ NESDÖ-S nest.**  
E. *nest* = AS. *nest*, G. *nest*, L. *nidus* (from *nidus*), Skr. *nīdā* nest (from *nīda*).
- 265. √ NÖKT-S night.**  
E. *night* = G. *nacht* night, Lith. *naktis* night, Oslav. *noshŭ*, L. *nox*, *noctium*, Gr.

265. **√ NAKTI** *nightingale* = AS. *nihlegale*, G. *nachtigall*; E. *nightmare* = G. *nachtmahr*.
266. **√ NOGNÓ-S** naked.  
E. *nake*, *naken*, *naked* = Goth. *nagaps*, ONorse *nakinn*, G. *nackt*, *nackend*, Lith. *nāgas*, OSlav. *naǵū*: Skr. *nagnā* naked agrees with Zend *maghna*.
267. **√ NŌMN**, loc. *NŌMĒNI*, dat. *NŌMNĒI*, name.  
E. *name*, *neten*, *nempe*, *nempt* = Goth. *namō* name, AS. *nama*, *nemnian* to name, G. *namē*, n., *nennen*, v., L. *nōmen*, n., Gr. *ὄνομα*, *ónōmos*, nameless, Skr. *nāma* name. It belongs to the verbal root found in Gr. *ὀνομα*: I blame, *ὀνοράζω*, L. *nota* a mark, *notāre* to blame, to mark.
268. **√ MĀTĒR** mother.  
E. *mother* = OHG. *muoter*, G. *mutter*, L. *māter*, Gr. *μήτηρ*, Doric *μάτηρ*, Skr. *mātār*.
269. **√ MARYĀ** mark, sign.  
E. *meat*, *mere*, a boundary, cf. Skr. *maryā*, *maryādā*, mark, sign. It probably belongs to MAR to shine; cf. Gr. *μαρμαίρω* I sparkle, etc.
270. **√ MÉDHU** mead.  
E. *mead* = AS. *meodo*, OHG. *metu*, G. *meth*, Cornish *medu*, OSlav. *medŭ*, Gr. *μέθυ* wine, Skr. *mādhū* sweet, honey, mead.
271. **√ MÉDHYO-S** middle.  
E. *mid*, *midday*, *middle*, *meddle* = G. *mitte*, n., middle, *mittag* midday, *mittel*, adj., middle, L. *medius*, Gr. *μέσος* (from *μεῖος*), Skr. *mādhya*.
272. **√ MĒNS** moon, month.  
E. *moon* = AS. *mōna*, OHG. *māno*, Goth. *mēna*; E. *month* = AS. *mōnað*, OHG. *mānað*, Goth. *mēnaþa*, G. *mond* moon, *monat* month, L. *mensis*, Gr. *μήν*, *meis*, *μήνας*, Skr. *mās*, *māsa*, month. It is derived from MĒ to measure (√99).
273. **√ MERZU** mark.  
E. *marc*, *mark*, *merk*, *merke* = AS. *mare* a mark, G. *mark* a mark, boundary, *mark* a mark, sign; cf. L. *margo* border, Zend *merezu* boundary. It belongs to MERZ to border, √106.
274. **√ MOZGŌ-S** marrow.  
E. *marrow* = AS. *mearg*, G. *mark*; E. *marl* = G. *mergel*: cf. OSlav. *mozgŭ* marrow, Skr. *majjā* (fj from sj).
275. **√ MONA** (mane), neck.  
E. *mane* = OHG. *mana*, G. *mähne*, akin to Skr. *manyā* neck, as OSlav. *griva* mane is akin to Skr. *grīvā* neck. Also OS. *meni* necklace, OSlav. *mont-sto*, L. *mont-le*.
276. **√ MISDHO-S** reward, meed.  
E. *meed* = AS. *mēd*, *meord*, Goth. *miadō*, OHG. *miata*, G. *miethe* hire, rent, Gr. *μισθός*: pay, reward, Zend *mīshda* reward.
277. **√ MŪS** mouse.  
E. *mouse*, pl. *mice* = G. *maus*, pl. *mäuse*, L. *mūs*, Gr. *μῦς*, Skr. *mūsh*.
278. **√ MNTI** thought, sense.  
E. *mind* = AS. *mynd*, Goth. *munds*, L. *mens*, *mentium*, Skr. *matī* (for *mṛtī*). It belongs to MEN to think (√104).
279. **√ YĒR** year.  
E. *year* = Goth. *jēr*, OHG. *jār*, G. *jahr* = Zend *yāre* season. Perhaps Gr. *ἔαρ* season, year, also belongs here.
280. **√ JUGO-M** yoke.  
E. *yoke* = Goth. *juk*, OHG. *johh*, G. *joch*, L. *jugum*, Gr. *ζυγόν*, Skr. *yuga-m*. From JEGU to yoke (√109).
281. **√ YUVĒN** (dat. *YŪNĒI*), *YUVŌKOS*, young.  
E. *young*, *youngling*, *younger*, *youth* = Goth. *juggs* young, *jūhtsa* younger, *jūnda* youth, L. *juventa*, G. *jung* young, *jüngling* a youth, *junker* young nobleman, *jugend* youth, L. *juvenis* young, Skr. *yuvan*, dat. *jūnē*, young; E. *young* = L. *juvencus*, OIrish *óc* = Cambrian *teuano*, Skr. *yuvaka* (for *yuvṇka*).
282. **√ RĀGOS**, *ROGO-*, dark.  
E. *rack* = AS. *racu* moisture, thin clouds, akin to Goth. *riqis* darkness, Gr. *ῥεός*, Skr. *rajas* dark.
283. **√ RĒZ** king.  
E. *rich*, *richly* = G. *reich* rich, *reichlich* richly, akin to Goth. *reiks* prince = E. *rick* (in *Frederick*), *rich* (in *Richard* = OHG. *Rihhart*): cf. Gallic *rēz*, *rix*, king, L. *rēx*, Skr. *rāj*, *rājan*.
284. **√ VIDHĒVĀ** widow.  
E. *widow* = Goth. *widuwō*, OHG. *wituwā*, G. *witwe*, *wittib*, OSlav. *vidova*, L. *vidua*, Skr. *vidhāvā*. From the verbal root found in Skr. *vidh* to lack.
285. **√ VIRŌ-S** man.  
E. *werewolf*, *werewolf* = G. *wehrgeld*, *wehrwolf* werewolf, Goth. *wafr* man, OHG. *wer*, L. *vir*, OIr. *fer*, Skr. *vīra* man, hero, Lith. *vyra-s* man.
286. **√ VĒKO-S** wolf.  
E. *wolf* = Goth. *wulfs*, G. *wolf*, Lith. *vilkas*, OSlav. *vŭlkŭ*, L. *lupus*, Gr. *λύκος*, Skr. *vṛka*. It belongs to the verb VELK = Lith. *velkti* to tear, pull.

287. **√ VLNĀ** wool.  
E. *wool*, *woolen*, *woolly* = G. *wolle* wool, *wollen* woolen, *wollig* woolly, Goth. *vulla* wool, OHG. *volla*, Lith. *vilna*, OSlav. *viŭna*, Skr. *ūrṇā*. It belongs to VEL to turn, twist (√146).
288. **√ VS**, *VSŌS*, morning red.  
E. *east*, *eastern* = G. *ost* east, *oster*, *ostern*, Easter, Lith. *ausz-it* to dawn, L. *aurōra* dawn, Gr. *ἄως* = *ἥως*, Skr. *ūsh*, *ushās*, from *vas*, *ucchāti*, to dawn. The European *aus* has, like the Skr. *us*, arisen from VS (VES) (√149).
289. **√ SEBHĀ** kin, *SEBHIOS* related.  
E. *sib* = AS. *gesib*, Goth. *sibja* relationship, OHG. *sippa*, G. *sippe*, akin to Skr. *sabhā* assembly, kin, *sabhya*, adj., belonging to kin.
290. **√ SENVA** sinew.  
E. *sinew* = OHG. *senawa*, G. *sehne*, cf. Skr. *snāva*, *snu-las*, sinew.
291. **√ SĒLPOS**, *SOLPĀ*, salve, ointment.  
E. *salve*, n., *salve*, v. = Goth. *salbōn* to anoint, G. *salbe*, n., *salben*, v.: cf. Gr. *ἄλῃ* an oil flask, *ἔλῃος* oil, fat, Skr. *sarpis* melted butter, *sarpa* oily (= Gr. *λαρῆς*).
292. **SOMO** summer.  
E. *summer* = Goth. *sumrus*, OHG. *sumar*, G. *sommer*, akin to Skr. *samā* year, Zend *hama* summer.
293. **√ SŪNŪ-S** son.  
E. *son* = Goth. *sunus*, G. *sohn*, Lith. *sunu-s*, OSlav. *synŭ*, Skr. *sānu*, Zend *hunū*. Skr. *su* does not mean to beget, but to press out (the soma juice).
294. **√ SŪ-S** pig.  
E. *sow* = OHG. *sū*, G. *sau*: cf. Gr. *ūs*, L. *sūs*, Zend *hū* boar.
295. **√ SĪKHĒO-S** goat.  
E. *sheep* = AS. *scēp*, OS. *skāp*, OHG. *scāf*, G. *schaf*, Skr. *chāga* goat: cf. Phrygian *ἄττιγος* goat.
296. **√ STĒR**, dat. *STĒRĒI*, star.  
E. *star* = Goth. *stairnō*, G. *stern*: cf. L. *stella* (ster-la), Gr. *ἀστὴρ*, *āstēr*, Skr. *star*. According to Max Müller, from *STER* to strew, as "strewers of light (?)". (√166).
297. **√ SVĒN**, loc. *SVĒNI*, dat. *SUNĒI*, sun.  
E. *sun* = Goth. *sunna*, *sunnō*, G. *sonne*; E. *south* = OHG. *sund*, G. *süd*: cf. Gr. *ἥλιος*, i. e. *ῥῆ-ος*, sparkling, Zend *qēñg* (i. e. *svens*) sun.
298. **√ SVĒSŌR** sister.  
E. *sister*, *sister* = Goth. *swistar*, G. *schwester*, L. *soror* (from *svēsōr*), Skr. *svāsar*, Zend *gānhar*.

# V. NUMERAL ROOTS.

299. **√ OINO-S** one.  
E. *one*, *an*, a = AS. *ān*, Goth. *ains*, G. *ein*, Old Prussian *aina*, Lith. *viena-s*, OSlav. *īnŭ*, Gr. *οἷν* ace, L. *otinos* one = *ūnus*, OIr. *cen*, Cambrian *un*. Cf. Zend *aēva*, OPer. *aiva* = Gr. *οἷος* alone, Skr. *ē-ka* one.
300. **√ DUŌ** two.  
E. *two* = Goth. *tuwai*, *tuōs*, *twa*, Gr. *δύω*, *duo*, L. *duo*, Skr. *dvā*.
301. **√ TRĒYES**, m., f., three.  
E. *three* = Goth. *þreis* (*þrijōs*), *þrija* neut., Gr. *τρεις* (from *τρειες*), *τρία*, L. *trēs*, *tria*; Skr. *trāyas* m. (*trāsa* f.; *trīṇi* neut.).
302. **√ KETVŌRES** four.  
E. *four* = Goth. *fidwōr*, *fidur*, G. *vier*, Gr. *τέσσαρες*, *téssapes*, L. *quatuor*, Skr. *catvāras* m.
303. **√ PĒNĒE** five.  
E. *five* = AS. *fif*, Goth. *fimf*, G. *fünf*, Gr. *πέντε*, L. *quinque* (from *pinque*), Skr. *pāñca*.
304. **√ SVĒKS** six.  
E. *six* = Goth. *saihs*, G. *sechs*, L. *sex*, Cambrian *chuech* (from *sveks*), Gr. *ἑξ*, Skr. *shash*, Zend *kshvas*.
305. **√ SEPTĒ** seven.  
E. *seven* = Goth. *sibun*, G. *sieben*, L. *septem*, Gr. *ἑπτὰ*, Skr. *saptā* (from *septā*).
306. **√ OCTŌ**, *OCYOU*, eight.  
E. *eight* = Goth. *chlau*, OHG. *acht*, G. *achte*, *acht*, L. *octō*, Gr. *ὀκτώ*, Skr. *aṣṭā*, *aṣṭau*.
307. **√ NĒVN** nine.  
E. *nine* = Goth. *niun*, G. *neun*, OSlav. *devŭi*, Gr. *ἐννέα*, L. *novem*, Skr. *nāva* (from *nāvn*).
308. **√ DĒCŪ** ten.  
E. *ten* = Goth. *taihun*, G. *zehn*, Gr. *δέκα*, L. *decem*, Skr. *dāca* (from *daçy*).
309. **√ ÇNTŌM** hundred.  
E. *hundred* = G. *hundert*, Goth. *hund*, L. *centum*, Gr. *ἑκατόν*, Skr. *çatā* (from *çatā*).
310. Here belongs E. *both* = Goth. *baþþs*, from *baī*, neut. *ba*, akin to OSlav. *oba*, Gr. *ἀμφω*, L. *ambō*, Skr. *ubhā*, *ubhau*. OSlav. *o-ba* is compound of *o* and *ba*, Gr. *ἀμ-φω* of *ἀ-* and *φω*, Skr. *u-bhā* of *u* and *bhā*.

# EXPLANATORY NOTES

## ON

# THE REVISED ETYMOLOGIES.

It was intended that the etymologies of the former edition should be simply revised — that is, should be retained in the present edition in matter and form except so far as errors had been detected, or new discoveries made, or better methods of presentation devised. The application of this rule has led to several important changes, a brief notice of which may be useful.

I. A method has been adopted by which the history of the words treated may be indicated. The older English forms, if known and differing from those now in use, come first; then the earlier forms, — Anglo-Saxon if the word is native; French, Latin, Scandinavian, etc., if the word is from a foreign source. Not infrequently a word is in this way traced back to two or more languages; thus, the French words in English usually come from Latin, but not always directly. Such words as *apricot*, *escort*, *guise*, *spy*, will illustrate the arrangement of forms. When the direct history has been followed as far back as possible, then cognate words in other languages of the Indo-European family are added; but these kindred words are always clearly distinguished from the actual sources of the English words. For comparatively rare or obsolete words, the history is not, as a rule, carried beyond the immediate source of the English forms; but common words receive fuller treatment. No attempt is made to give roots; but an idea of the present views of scholars as to the probable primitive forms can be obtained from Professor Fick's "List of Roots of the Original Language in English," pp. xxiii–xxxi, to which reference is made by number under the sign √. The historical order here indicated is departed from in certain cases where no inconvenience or misunderstanding seemed likely to result; namely, when a foreign word, usually a French one, is given in an old form, while that now in use, if the word still exists, is different. In these cases the modern form is added immediately after the old one; readers thus being enabled to recognize the English word as really identical with the modern French one, though not, properly speaking, coming from it. Examples of this may be found under the words *able*, *catch*, *governor*, and many others. It was often doubtful whether a word came into our language directly from Latin, or passed through French first on its way into English. In such cases, if the Latin is given as the source, the possibility that the French was really the immediate source is indicated by putting at the end of the etymology the French form with the abbreviation "cf." preceded by a colon. Sometimes a different wording has been employed to express such a doubt clearly.

II. By recognizing and indicating this historical order of word forms, it has been possible to omit a considerable number of forms which throw no light on the history of the English words. If a given word comes from the French, and the French word is a direct descendant from the Latin, then the Italian, Spanish, Portuguese, and Provençal cognates are evidently unimportant. If, however, the French word is from Italian, for example, the insertion of the Italian word is necessary for the complete history of the English one.

III. A special feature of the revision is the careful and extended use of cross references. Derivative words refer — except in case of rather uncommon (or technical) words whose full history is less important — to a simpler form when one exists, where the final etymology is given; and under this simpler form reference is again made to the most interesting or typical derivatives from the same root. The words known as doublets, in which the same original word appears in the language in two or more differing forms, as *guard* and *ward*, each having its own history, regularly

refer to each other. By this means not only is the history of a word given, but attention is directed to kindred words, whose relations, often not obvious at first sight, are made clearer by the history briefly indicated in the etymology of each. The composite character of the English vocabulary, and the great fertility of roots, are thus illustrated. Common words, such as *two*, *five*, *ten*, *father*, *cow*, *water*, *full*, *loud*, *red*, *thin*, *be*, *come*, *stand*, etc., will serve as illustrations. This system of references, the same in principle as that used by Skeat in his *Etymological Dictionary*, has here been carried out, it is believed, more thoroughly and consistently than in any other English dictionary.

IV. In general, the final etymology has been put under the commonest form of the simple word, — that which is in most familiar use in the language. This is usually a native English word, or a word early adopted into English. Compare *father* with *paternal*, *foot* with *pedal*, *inspect* with *spy*, *three* with *trio*, etc.

V. The fact that not all the etymological problems of English have been solved, and that much work is devoted to the subject, with a consequent steady advance in our knowledge, makes obvious the need of caution. Especially is this true when, as here, the attempt is made to popularize some of the results of scientific philological study. The frequent use of such words as "perhaps," "possibly," "probably," or the abbreviation "cf.," which makes no positive assertion, will show that in the revision the danger of too positive statement has been kept in view.

VI. For the spelling or transliteration of foreign words in the etymologies, Skeat's system has generally been followed. The only important variations are those which follow. In Sanskrit words, *c* is used instead of *ch*, *ch* instead of *chh*, and *r*, *l*, *q*, *ph*, *dh*, *ṇ*, instead of *rī*, *t*, *d*, *th*, *dh*, *n*. Instead of *m̃*, the sign *m* has probably been used once or twice. In Gothic words, *q* is used instead of *kw*, *þ* instead of *th*, and the short *ai* and *au* are written *ai*, *au*. In Arabic words, the fourteenth letter of the alphabet is rendered by *ç* instead of *s*. Long vowels are marked throughout with the macron (*ā*, *ē*, etc.) in the languages where it is usual to mark long vowels as such.

VII. Besides the Rev. W. W. Skeat's *Etymological Dictionary of the English Language*, many other books and philological journals were used, particularly Kluge's *Etymologisches Wörterbuch der deutschen Sprache*, the fourth edition of which became available towards the close of the work. These works, with Mätzner's excellent but incomplete Old English dictionary in the second volume of his *Allenglische Sprachproben*, Stratmann's *Dictionary of the Old English Language*, and Sievers's *Angelsächsische Grammatik*, among others, furnished a solid basis for the Germanic side of English. For that part of our vocabulary which comes from French or other Romance languages, the reliance was mainly on Diez's *Etymologisches Wörterbuch der romanischen Sprachen*, with Scheler's supplement, and the additions and corrections due to other scholars, and found in the periodicals *Romania*, and *Zeitschrift für romanische Philologie*, and elsewhere, together with the various lexicons, especially Littré's *Dictionnaire de la langue française*, and Godefroy's *Dictionnaire de l'ancienne langue française*, so far as it was available. The invaluable *New English Dictionary*, edited by Dr. Murray, could be used only for a second revision of a number of separate articles, almost all in the letters A and B, and for such words beyond the first letters of the alphabet as the first parts of that work throw light on incidentally.

# GUIDE TO PRONUNCIATION.

## §1. KEY TO THE SYMBOLS.

In the **RESPELLING FOR PRONUNCIATION** in the Dictionary, there is employed—as shown in the Table—a symbol for every clear vowel or diphthong-sound in the language; with, in four instances, a pair of equivalents for the same sound as occurring in different situations, viz.:  $\bar{u} = \bar{o}$ ;  $\bar{u} = \bar{o}$ ;  $\bar{o} = \bar{u}$ ; and  $\bar{y}$  (final) =  $\bar{i}$ ; besides  $\alpha$  and  $e$ , italicized, as these vowels are in certain cases obscured and turned toward the neutral form; also, apostrophe for the voice-glide; and  $\bar{x}$  to indicate foreign nasalized vowels;—some of the sounds occurring only in accented and others only in unaccented syllables, and some others, with but slight difference of quality, in both;—the  $\bar{e}$  is always of the “narrow” form in accented and the “wide” in unaccented syllables. The  $\bar{x}$ ,  $\bar{e}$ , and  $\bar{o}$  are used to represent the similar sounds in foreign words, but not limited as they are in English to unaccented syllables. The  $\bar{u}$  is employed, as the nearest English vowel we have, inexact as it is, to replace  $\bar{u}$  French and  $\bar{i}$  German; and in like manner the  $\bar{e}$  for the  $\bar{e}$  French and  $\bar{e}$  German.

The consonant letters  $b, d, f, h, j, k, l, m, n, p, r, s, t, v, w$ , and  $y$ , and the digraphs  $sh$  and  $ng$ , are used with their ordinary normal value;  $g, s, z$ , and  $ch$  are each limited to a single sound;  $n$  and  $th$  are marked for one sound of each and used unmarked for the other. No use is made of  $c, q, x$ , or the digraphs  $ph, gh, dg$  and  $wh$ . The principal substitutions made with each consonant symbol in the respelling are noted in the Table.

$\bar{a}$ , as in . . . *āle, fāte, lā'bor, chā'os, chām'ber, pā'tri-ar'chal.*  
 $\bar{a}$ , " " . . . *sen'āte, pref'āce, del'i-cāte, ā-ē'ri-al, chā'ot'ic, sal'u-tā-ry.*  
 $\bar{a}$ , " " . . . *cāre, shāre, pā'rent, com-pā're', plow'shāre', beār, āir.*  
 $\bar{a}$ , " " . . . *ām, ādd, fāt, rān'dom, āt-tāck', āc-cept', re'ād-mit'.*  
 $\bar{a}$ , " " . . . *ārm, fār, fā'ther, mār'tyr, āh, ālms, ārt, pālm.*  
 $\bar{a}$ , " " . . . *āsk, grāss, dānce, ā-bate', ā-mer't-cā, so'fā, bot'ā-ny.*  
 $\bar{a}$ , " " . . . *f'nal, in'fānt, guid'ānce, val'iant, hus'bānd, mad'am.*  
 $\bar{a}$ , " " . . . *all, āwe, swārm, tālk, drāw.*  
 $\bar{e}$ , " " . . . *ēve, mēte, se-rēne', hē'll-on'e-ter.*  
 $\bar{e}$ , " " . . . *ē-vent', dē-pend', crē-ate', so-cl'ē-ty, dē-lin'ē-ate, sē-rene'.*  
 $\bar{e}$ , " " . . . *ēnd, mēt, ēx-cuse', ēf-face', car'pēt, con'dēm-na'tion.*  
 $\bar{e}$ , " " . . . *fērn, hēr, ēr'mine, pēr-vērt', ev'ēr, in'fēr-ence.*  
 $\bar{e}$ , " " . . . *re'cent, de'cen-cy, pru'dence, pen'tent, nov'el.*  
 $\bar{i}$ , " " . . . *ice, time, sīght, blīnd, in-spīre', jus'ti-fi-a-ble.*  
 $\bar{i}$ , " " . . . *i-de'a, trī-bu'nal, dī-am'e-ter, bl-o'g-y.*  
 $\bar{i}$ , " " . . . *ill, plīn, pīt'y, ad-mīt', hab'īt, dī-vid'e', in-fin'i-tīve.*  
 $\bar{o}$ , " " . . . *ōld, nōte, rōw, bōld, ō'ver, pro-pōse', lō'co-mō'tive.*

$\bar{o}$ , as in . . . *ō-bey', tō-bac'cō, sor'rōw, a-nat'ō-my, prō-pose'.*  
 $\bar{o}$ , " " . . . *ōrb, lōrd, ōr'der, land'lōrd', ab-hōr', ab-hōr'ring.*  
 $\bar{o}$ , " " . . . *ōdd, nōt, tōr'rid, fōr'est, ōc-cur', in'cōr-rect'.*  
 $\bar{u}$ , " " . . . *ūse, pūre, mūte, tūne, lūte, dū'ty, hū'man, as-sūme'.*  
 $\bar{u}$ , " " . . . *ū-nite', ac'tū-ate, ed-ū-ca'tion, hū-mane'.*  
 $\bar{u}$ , " " . . . *ryde, ry'mor, in-trūde'.*  
 $\bar{u}$ , " " . . . *full, put, push, ful'fil', joy'ful, in'stru-ment.*  
 $\bar{u}$ , " " . . . *ūp, tūb, stūd'y, ūn'der, sūb-mīt', in'dūs-try.*  
 $\bar{u}$ , " " . . . *ūrn, fūrl, con-cūr', būrn.*  
 $\bar{y}$ , " " . . . *plī'y, in'ju-r'y, dī-vin'i-t'y.*  
 $\bar{o}$ , " " . . . *fōod, mōon, fōol, nōon, wōd'ing.*  
 $\bar{o}$ , " " . . . *fōot, wōol, bōok, gōod, crōok'ed.*  
 $\bar{o}$ , " " . . . *out, thou, de-vour'.*  
 $\bar{o}$ , " " . . . *oil, nois'y, a-void', re-joice', em-broid'er-y, gol'ter.*  
 $\bar{n}$ , representing simply the nasal tone (as in French or Portuguese) of the preceding vowel; as in *ensemble* (ān'sān'b'l'), *intrigante* (ān'trē'gānt'),  
 $\bar{y}$  (for voice-glide), as in *pardon* (pār'd'n), *eaten* (ē't'n), *evil* (ē'v'l).

$g$  (hard): as in *go, begin, great, anger*; for *gu*, as in *guard*; for *gue*, as in *plague*; for *gh*, as in *ghost*.  
 $g$  (surd, or sharp): as in *so, this, haste*; for *e*, as in *cell, vice*; for *sc*, as in *scene, science*; for *ss*, as in *hiss*.  
 $z$  (like  $s$  sonant): as in *zone, haze*; for  $s$ , as in *is, lives, wise, music, ears, figs*; for  $x$ , as in *Xenophon, xylography*.  
 $ch$  (=  $tsh$ ): as in *chair, much*; for  $tch$ , as in *match, etching*.  
 $sh$ : for  $ch$ , as in *machine, chaise, chandelier*; for  $ce$ , as in *ocean*; for  $ci$ , as in *social*; for  $sci$ , as in *conscious*; for  $s$ , as in *sure*; for  $se$ , as in *nauseous*; for  $si$ , as in *pension*; for  $ss$ , as in *issue*; for  $ssi$ , as in *passion*; for  $ti$ , as in *nation*.  
 $zh$  (=  $sh$  made sonant): for  $z$ , as in *azure*; for  $zi$ , as in *glazier, brazier*; for  $s$ , as in *pleasure, usual*; for  $si$ , as in *vision*; for  $ssi$ , as in *abscission*; for  $g$ , as in *rouge, cortège, genre*.  
 $j$  (=  $dzh$ ): for  $g$ , as in *gem, glant, engine*; for  $gi$  and  $ge$ , as in *religion, pigeon*; for  $di$ , as in *soldier*; for  $dg$ , as in *edge, knowledge*.

$k$ : for  $ch$ , as in *chorus, epoch, anarchy*; for  $c$ , as in *cat, cube*; for  $ck$ , as in *pack, duck*; for  $qu$ , as in *conquer, coquette*; for *que*, as in *pique oblique*.  
 $kw$ : for  $qu$ , as in *queen, quit, quality*.  
 $ks$  (surd): for  $x$ , as in *vex, exit, perplex, dextrous*.  
 $gz$  (sonant): for  $x$ , as in *exist, exact, example*.  
 $f$ : for  $ph$ , as in *philosophy, triumph*; for  $gh$ , as in *laugh, rough*.  
 $hw$ : for  $wh$ , as in *what, why, where*.  
 $t$ : for  $ed$ , as in *baked, crossed, capped*; for  $th$ , as in *thyme, Thomas*.  
 $ng$ : as in *long, singer*; for *ngue*, as in *tongue*.  
 $n$  (like  $ng$ ): for  $n$  before the sound of  $k$  or hard  $g$ , as in *bank, junction, hanger, single, canker*.  
 $n$  (the ordinary sound): as in *no, none, man, many*.  
 $th$  (sonant): for  $th$ , as in *then, though, this, smooth, breathe*.  
 $th$  (surd): as in *thin, through, wealth, worth, breath, width*.

NOTE. Foreign consonant sounds are represented by the nearest English equivalents.

REFERENCES. Figures annexed to the respelled form of the words refer to sections in the GUIDE TO PRONUNCIATION.

ACCENTS AND HYPHENS. The principal accent is indicated by a heavy mark (´), and the secondary accent by a lighter mark (˘), at the end of the syllable. Syllabic division is otherwise indicated by a light hyphen; a heavier hyphen joins the members of compound words.

The Table here appended, together with the preceding Table, furnishes a method of INDICATING PRONUNCIATION WITHOUT RESPELLING. It is, in its main features, the same as that employed in previous editions of the Dictionary, and will serve except in the case of a comparatively few words, which must be respelled. Use is made of it in this GUIDE TO PRONUNCIATION.

To each of the symbols here given, the equivalent is added that takes its place in the respelling (thus:  $\bar{a} = \bar{o}$ , etc.; *what = whōt*, etc.;  $e = k$ , etc.). The unmarked letter in a digraph is to be taken as if silent; as in *breāk, brēad, hāil, yēild, vēil*, etc. Silent  $e$  at the end of syllables, as in *fate*, etc., or in the *ed* of preterites and participles, as in *baked, burned*, etc., need not be marked.

The method has diacritical marks applied to all such consonant letters and digraphs as offer especial occasion for their use. In other instances in which they might be employed ( $\bar{z}, \bar{gh}, \bar{ti}$ , as in *nation*, etc.), it is better to dispense with them. The sounds, as described, of  $\bar{x}, \bar{ph}, \bar{qu}$ , and  $\bar{wh}$ , unmarked, are what these characters will usually, but not invariably, represent.

$\bar{a}$  (=  $\bar{o}$ ), . . . as in *What, Was, Qual'i-ty, In'stal-la'tion.*  
 $\bar{e}, \bar{e}$  (=  $\bar{a}$ ), . . . " " " *Eight, Prey, Vain, O-bey', Un-feign'ed-ly.*  
 $\bar{e}, \bar{e}$  (=  $\bar{a}$ ), . . . " " " *Thère, Whère, Hèir, Whère-in'.*  
 $\bar{e}, \bar{e}$  (=  $\bar{u}$ ), . . . " " " *Kwe, Dew, Hewn, etc., or (=  $\bar{u}$ ), as in Brew.*  
 $\bar{e}, \bar{e}$  (=  $\bar{e}$ ), . . . " " " *Eel, Feet, Fee'ble, Un-seem', See'ing.*  
 $\bar{y}$  (=  $\bar{e}$ ), . . . " " " *Pique, Machine', Po-lice'.*  
 $\bar{i}, \bar{i}$  (=  $\bar{e}$ ), . . . " " " *Irksome, Fir, Bird, Vir'tue, Vir-gin'i-ty, E-lis'ir.*  
 $\bar{o}, \bar{o}$  (=  $\bar{o}$ ), . . . " " " *Qoze, Dg, Whg, Tqmb, Re-mq'val.*

$\bar{o}$  (=  $\bar{o}$  or  $\bar{u}$ ), as in *Wolf, Wom'an, Wql'ver'ine', Bos'om.*  
 $\bar{o}, \bar{o}$  (=  $\bar{u}$ ), . . . " " " *Ōth'er, Sōn, Wel'cōme, Wis'dōm, Can'nōn.*  
 $\bar{o}, \bar{o}$  (=  $\bar{o}$ ), . . . " " " *Owl, Cow'ard, Vow'el, Al-l'ow', Bow'wow'.*  
 $\bar{o}, \bar{o}$  (=  $\bar{o}$ ), . . . " " " *Oys'ter, Boy, Roy'al, En-joy', An-noy'ance.*  
 $\bar{y}$  (=  $\bar{i}$ ), . . . " " " *Fi'y, Sk'y, Style, De-f'y', D'y'ing.*  
 $\bar{y}, \bar{y}$  (=  $\bar{i}$ ), . . . " " " *Y'tri-a, Hymn, Lyr'ic, M'y-thol'o-g'y.*  
 $\bar{y}$  (=  $\bar{e}$ ), . . . " " " *M'yrrh, M'y'r'tle, Sa'tyr, Mar't'r-dom.*

$\bar{c}, \bar{c}$  (=  $\bar{k}$ ), . . . as in *Cat, Concur.*  
 $\bar{c}, \bar{c}$  (=  $\bar{s}$ ), . . . " " " *Cèll, Vipe.*  
 $\bar{ch}, \bar{ch}$  (=  $\bar{k}$ ), . . . " " " *Chorus, Echo, Epoch.*  
 $\bar{ch}, \bar{ch}$  (=  $\bar{sh}$ ), . . . " " " *Chaise, Machine.*  
 $\bar{g}, \bar{g}$  (=  $\bar{s}$ ), . . . " " " *Get, Begin, Anger.*  
 $\bar{g}, \bar{g}$  (=  $\bar{j}$ ), . . . " " " *Gem, Engine.*

$\bar{dg}$  (=  $\bar{j}$ ), . . . as in *Edge, Bridge, Badger.*  
 $\bar{s}$  (=  $\bar{z}$ ), . . . " " " *Ig, Hag, Wigdom.*  
 $\bar{x}$  (=  $\bar{gz}$ ), . . . " " " *Exist, Example.*  
 $\bar{x}$  (=  $\bar{ks}$ ), . . . " " " *Vex, Exit.*  
 $\bar{ph}, \bar{ph}$  (=  $\bar{f}$ ), . . . " " " *Phantom, Sylph, Sulphur.*  
 $\bar{qu}, \bar{qu}$  (=  $\bar{kw}$ ), . . . " " " *Queen, Conquest.*  
 $\bar{wh}, \bar{wh}$  (=  $\bar{hw}$ ), . . . " " " *When, What.*

## STANDARD OF PRONUNCIATION.

§ 2. The ultimate standard of pronunciation for the English language is the usage that prevails among the best educated portion of the people to whom the language is vernacular; or, at least, the usage that will be the most generally approved by them. The pronunciation of this class of persons, all over the world, is for the greater part of the words of the language substantially uniform, and distinguished by only comparatively unimportant shades of difference.

There are, however, sundry diversities of importance which affect the pronunciation of a good many words. And there is no country or locality the custom of which can claim precedence as the everywhere acknowledged standard by which such differences are to be adjudged. The most approved pronunciation in London and the southeast of England is in some points different from what prevails anywhere else. But, notwithstanding the advantage connected with the metropolitan position, the usage of London and the vicinity is not really the standard for the other parts of Great Britain itself, in the sense of securing actual conformity, or even of being acknowledged as the model which should be followed. There are as yet but few of the best educated of the American people who are disposed to take the usage of London as the standard for their own pronunciation. Thus there is in fact no single absolute and universal standard to serve for every case.

Uniformity is to be preferred to diversity. There is no reason why it should be deemed desirable in itself to set up an American as opposed to a London or an English standard. But any fashion anywhere intrinsically bad should be avoided. As the nasal tone in speaking, which is yet too commonly heard in America, is a thing to be corrected, and would be such even if it had become the fashion in London, so any habit of pronunciation whatever that comes in as a change for the worse should be strenuously resisted, even if it should have gained foothold or have become the ruling mode in the higher circles in London.

The aim of a pronouncing dictionary should of course be to serve as an exponent of the usage which is the ultimate standard of pronunciation. In the case of diverse usages which have extensive prevalence, either within different local boundaries or side by side in the same community, a dictionary that is to serve for universal use should take note of each of them, without, however, being required to notice local peculiarities not approved by the best educated people. This is all that the dictionary has to do, except that it may and should present the reasons, when such exist, which render one mode of pronunciation preferable in itself to another. Its proper office is to indicate and record, not to dictate and prescribe. So far as the dictionary may be known and acknowledged as a faithful interpreter of the actual usage, so far and no further, and in no other sense, can it be appealed to as an authority. It is only in its representative capacity that a dictionary may ever be taken as itself a standard of pronunciation. This would still be true of any work of the kind that might exercise such influence and gain such ascendancy as to become a universally accepted and virtually authoritative standard.

§ 3. The task assumed by a pronouncing dictionary is not easy of achievement.

Supposing no doubt to remain as to what is the actual usage to be indicated, even then nothing more than an approximation to exactness can possibly be attained. The sounds which we indicate by the same symbol, and which, it may be, we regard as identical or absolutely alike, have in fact only a certain general resemblance in common, and are subject to allowable variation within certain limits. This is true universally; while occasionally the limits are so wide, and the actual variations so considerable, that the symbols need to be especially noted as having only an indeterminate value as exponents of common usage;—as in the case of *ā* (*ār*), and of *ū* (*ūr*), and *ē* (*ēr*), in this Dictionary (see §§ 87, 113, 139). What we mark in any case is only a general type of sound. Each element undergoes variation as conjoined with this or that other element in a syllable or in a word or phrase: the *ī* (*īse*, *time*, etc., § 131) is a signal instance. Pronunciation modeled after a common standard will vary somewhat in different localities, and somewhat as given by different individuals in the same community, and even as given by the same person at different times. Differences in stress, quantity, and pitch have effect upon orthoëpical quality. In the case of unaccented syllables, there is in the vowels an obscurity and uncertainty, a want of uniformity in usage, and an allowable and proper variation according as the utterance is quite rapid or more or less deliberate, which make it peculiarly

difficult to define and describe them precisely. The proper medium has to be sought between the indiscriminating fashion which would reduce these vowels to the smallest dimension, giving them all the same neutral sound at all times, and on the other hand a pedantic and affected precision which will deprive the syllables of their proper character as unaccented (see §§ 38–41).

There are, moreover, sundry uses of words in which some departure from the ordinary standard of pronunciation is allowable, or even absolutely inevitable. Violent emotion will subdue and bend the words to a fitness for the expression it strives after. It was aptly said by a master of dramatic art, Mr. Henry Irving, "You can not stereotype the expression of emotion; . . . the speaker who is sounding the gamut of human feeling will not be restricted in his pronunciation by the dictionary rule." In singing, the exigencies of the art require certain deviations from the normal pronunciation of spoken words; though none are to be made without good reason. Poets now and then take liberties with the accent of words; and sometimes, in setting verse to music, violence is done in the same act to the proper accent of the verse and of the word; such deviations are, of course, exceptional.

The means of indication at command for a pronouncing dictionary are unavoidably imperfect. The fact will hardly be credited by those who have not tested the matter by special observation that it is impossible, in the case of some of our vowel sounds, to select for an example any word not subject to such diversity of pronunciation as to render it unfit to serve the purpose in other than a most imperfect manner. Yet this is and must be the chief means of indication to be employed.

This inadequacy is a cogent reason, in addition to others, for resorting to the positions and motions of the organs as a means of identifying the sounds. But this method also is beset with difficulties. The organs as employed in speaking are, for the most part, out of sight, and have to be observed through the tactual or the muscular senses; and these perceptive faculties require to be developed for this particular service by special training, and may sometimes need to be aided by artificial devices. In this as in every method there is required, of course, a discriminating ear for the articulate sounds of speech, which, like an ear for music, may be sadly wanting while the power of hearing is without defect. When a correct description of the organic process has been furnished, there will still be some difficulty in applying the instruction, so long at least as the requisite training is neglected in our schemes of education. It is to be added that, in pursuing this method, some allowance is to be made for differences in the shape and structure of the organs in different persons, and for the somewhat different ways in which sounds nearly or essentially the same may possibly be produced.

Since no single method is perfectly adequate, the best attainable result is to be gained by employing the different methods that are any way available, and making one supplement the defects of another.

§ 4. In preparing the revised editions of this Dictionary issued in 1847 and in 1864, thorough endeavor was made to ascertain the actual usage which might properly be taken as the standard of correct pronunciation, whether in America or England. The words in the vocabulary were marked in accordance with what was believed to be the pronunciation most generally approved by well-educated people in America; and, in cases of difference between American and English usage, or of divided usage in America or in England, and especially in cases of disagreement among authorities, there was added a reference to the statement of such difference or disagreement in the "Principles of Pronunciation," or else to the "Synopsis of Words Differently Pronounced by Different Orthoëpists." In the present revision the same course is followed in these particulars; and the pronunciation as given in 1864 is retained, except when decisive reasons for a change have become apparent. In some cases of divided and unsettled usage, the word in the vocabulary is supplied with alternative forms. The plan of respelling for pronunciation is adopted in this revision, as preferable on the whole to the former plan of diacritical marks without respelling; and the unaccented syllables are marked, as well as the accented, instead of being left to the guidance of general rules;—something of this kind being demanded in order to supply a want that has been felt, and that has previously been left unsupplied, mainly because of the difficulty of accomplishing the end in a satisfactory manner.

## SYSTEM OF ENGLISH VOWEL SOUNDS.

NOTE.—The System of the Vowels which is here presented has for its basis the manner of their formation by the organs; and agrees, in its general features and the main part of the nomenclature, with that advanced by Alexander Melville Bell and the same as modified by Henry Sweet; though differing from both in some points of considerable importance. A synopsis of the scheme is presented in the Diagram at the foot of the next following page.

§ 5. VOWEL SOUND, whether uttered with tone as in speaking aloud or merely whispered, has its source in the glottis, that is, the vocal cords, or vocal ligaments, with the narrow opening between them, in the upper part of the larynx (see Fig. 1). The vocal ligaments, with their membranous covering, serve to produce tone in speaking and singing, in just the way the lips do in blowing a horn or trumpet,—with this important difference, that they have a capacity of adjustment for tone modulation such as the lips have not. Whispered vowel sound is made by friction of the breath against the vocal cords or the arytenoid cartilages, which are not then drawn close together as they are for tone vibration; and there is also, in most if not in all cases, some sound produced by friction in the passage through the mouth.

The sound thus originated is variously modified by resonance in the oral cavity; which is molded to different forms by different adjustments of the flexible and movable parts of the mouth, namely, the tongue, soft palate, jaw, lips, cheeks, and the walls of the pharynx; and hence arise the qualities by which vowels are distinguished one from another. The nasal vowels, as in French, add a resonance in the nasal passage, but a nasal tone is always a blemish in English speech, except in the proper nasal consonants, *n*, *m*, *ng* (§ 167).

In speaking aloud or in singing, the voice may be pitched higher or lower at pleasure, carrying with it all the while for any individual vowel the characteristic quality imparted by resonance from the suitably adjusted oral cavity. The process is explained by Helmholtz as the reinforcement of a part of the compound tone that issues from the larynx. In a whisper, we have tones elicited from the mouth cavity

such as come from a flute or an organ pipe so badly blown that the instrument refuses to speak but still gives out windy tones of recognizable degrees of pitch; and each whispered vowel has its own characteristic tone, which is of a definite pitch invariable for that vowel. Thus, whether the vowel be voiced or whispered, it is the tone proper to the cavity as adjusted for the vowel, that serves, in the one way or the other, to produce the characteristic quality.

§ 6. Every part of the oral cavity—or, more precisely, the whole passage from the larynx at one end to the outer edge of the lips at the other—will more or less modify the sound; but for any one vowel, only a certain portion is instrumental in giving the characteristic quality by which it is individually recognized. This part, as thus employed and adjusted, may be called the VOWEL-CHAMBER for that vowel; through its action as a resonance chamber, the vowel quality comes into being. In the formation of a vowel-chamber, there is in every instance a PLACE OF CONstriction\* made by a more or less close approximation of some part of the tongue to the hard palate, or the soft palate, or the pharyngeal wall; on each side there is actual contact, leaving a passage through in the middle; for some vowels the lips are contracted, making a superadded place of constriction. The vowel-chamber consists of the passage at the place of constriction within the mouth, and together with this, in most cases, the cavity, or compartment, before or behind this place,—unless both the one before and the one behind be included. To make the vowel-chamber complete for a clear vowel sound, the lateral margins of the tongue are firmly applied all along to the sides of the pharynx and soft palate, or also still further on to the borders of the hard palate; and for the labial vowels the walls of the chamber are formed in part by the cheeks and lips. A tense condition of the soft parts of the walls is requisite for the resonance that is essential to the production of a vowel sound.

The position of the lower jaw is important, though in a subordinate and secondary sense, and through its connection with the organs directly concerned. Thus, when

\* See *Vowel Theories* by Alexander Graham Bell, in "American Journal of Otology," July, 18:9



depressed, it carries with it the under lip and lower teeth, stretches the cheeks, and allows of tongue configurations and positions otherwise difficult or impossible. The position of the lower jaw may sometimes affect indirectly that of the larynx, and even that of the soft palate. In all this field of inquiry, it is important to distinguish the incidental from the essential.

§ 7. The character of the resonance proper to any cavity, and thus to any particular vowel-chamber, will depend on the size and shape of the cavity, and together with this the nature and condition of the material of which the several parts of the inclosing walls are composed. The term *RESONANCE*, as descriptive of the means by which vowel quality is imparted, needs to be taken, however, as implying more than the simple resonance we should have if the sound were of outside origin: as the current of vocal breath strikes upon or rubs against the walls of the oral passage in one or another way or place, the effects thus produced will mingle with and otherwise modify those due simply to the size, shape, and structure of the cavity. Some of them will be really fricative, even in vocal speech, and thus similar in kind to such as characterize certain of the consonants. The specially effective agency may also be determined to a particular portion of a vowel-chamber, by the energetic action and tense condition of such part, and by a direction of the vocal current so as to impinge upon the same. The tone proper to the vowel-chamber as a resonant cavity simply, while it is a prime factor, is not the only factor, in determining the quality of a vowel.

We find this view of the matter confirmed, if we try to utter vowel sounds while drawing in the breath. We can by this process elicit vocal tone; but we can in this way make only a faint approximation to the vowel qualities evoked in the ordinary manner. And again, the flowing tones of the singing voice bring out these qualities less distinctly than do the tones of speech, which are, as we may say, thrown into the oral cavity, instead of flowing in.

Some vowels are taken more easily at a low and others at a high pitch. But this is due mainly, if not wholly, to the connection, by muscle and ligament, between the larynx and the root of the tongue; in consequence of which certain positions of the tongue favor the adjustment of the larynx for a higher and others for a lower pitch. A change in the pitch of a given vowel may thus involve some change in the shape of the vowel-chamber, but not so great as to forbid a sufficiently accurate definition of the several vowel positions.

§ 8. For the vowel *ä* (*ärrin*, *äh*), — with its "wide" variant *å* (*åsk*, *påss*, § 13, 61), — the constriction is made by approximating the extreme back part of the tongue to the back wall of the pharynx; the place is thus very near to the larynx and the root of the tongue (see Fig. 1). Above this place, the vowel-chamber curves forward and opens gradually between the tongue on the one hand and the pharyngeal wall and soft palate on the other. It reaches no further forward than the front limit of the soft palate: the vowel gets its essential quality in the space thus bounded, though subject to some modification by means of parts of the mouth further forward; contraction of the lips, though it may impair, will not obliterate the characteristic quality of the vowel.

This may properly be denominated the *OPEN-THROAT VOWEL*, since it is formed in the throat and the parts adjacent, and with the throat in the upper or forward part quite open, neither obstructed nor constricted, so that the sound is reflected and thrown forward, directly and without hindrance, from the pharyngeal wall. By the throat is here meant the *fauces*, — the passage that runs from the mouth to the oesophagus and the larynx, — the proper meaning of the word as applied to interior parts. The peculiar formation of this vowel is a sufficient reason for separating it from the back vowels (§ 11), among which it has been ranked by Mr. Bell: these involve a constriction in the front of the throat. The description here given makes clear the relations of this vowel to the two series of the front and the back vowels. — See §§ 12, 15, 57-69.

§ 9. For the two groups (§§ 10, 11) next to be mentioned, the constriction is made by approximation of the tongue to the hard palate in the one case and to the soft palate in the other, — thus in each case dividing the oral passage into two compartments, one of which, however, contributes so much more than the other to the quality of the vowel that this one may, together with the constricted channel, be properly regarded as the vowel-chamber.

§ 10. When the constriction is made by arching up the tongue under the hard palate, we have the tripartite series, namely, *ē* (*ēve*), *ā* (*āle*), and *ā* (*cāre*), each member of which has also its "wide" variant (§ 13). These are denominated *FRONT VOWELS*, and otherwise are often called *palatal vowels*.

The three members of the series are distinguished as *HIGH* (*ē*), *MID* (*ā*, without the "vanish"), and *LOW* (*ā*, without the glide to *r*). The change from *ē* to *ā*, and again from *ā* to *ā*, is made by lowering the parts of the tongue before and in the front and behind and at the hinder end of the place of constriction, which is thus made shorter; the channel of the vowel-chamber at the place of constriction is at the same time made broader from side to side; but the distance between tongue and palate at this place need not be increased; \* in each case the passage may be as close as it can be without consonantal friction. — See Fig. 2.

If we consider the vowel-chamber as made up of the passage where constricted together with the cavity behind this place, we may, as has often been done, compare it to a bottle with a narrow neck, — the neck curved forward somewhat like the

beak of a retort, — and with the neck broader and shorter for the lower than for the higher of the series, and the body of the bottle differing in size and shape for the one and the other.

For the high, *ē* (*ēve*), the root of the tongue is drawn forward; also, the surface of the tongue back of the place of constriction and down toward the root is quite concave from side to side, and up and down as well; it becomes less and less so for the mid and the low, falling back with a more and more even slope; the arch of the soft palate is at the same time more and more flattened, and the lower jaw is of necessity more and more depressed, and is also drawn back; if it be not so drawn back, the soft palate will be dragged forward by the tongue, and thus a nasal twang will be inevitable. It is further to be noted that the most effective part of the vowel-chamber for the high (*ē*) may be perceived as extending not far back from the place of constriction, and as reaching further and further back for the mid and for the low.

The passage at the place of constriction and the larger compartment behind the same are two distinct resonant cavities, each having as such a pitch proper to itself. The investigations of Helmholtz, Graham Bell, and others have shown that, in passing from the low, *ā* (*cāre*), to the high, *ē* (*ēve*), the pitch of the forward portion rises; while, conversely, that of the cavity behind it becomes at the same time deeper: — as a consequence, of course, of corresponding changes of configuration.

For the front vowels in detail, see §§ 43-56, 75-84, 102-104.

§ 11. When the constriction is at the soft palate, involving retraction and humping up of the tongue, we have another series of three, with their "wide" variants (§ 13), denominated *BACK VOWELS*, namely, *ō* (*foōd*) *HIGH*, *ō* (*ōld*, without the usual "vanish") *MID*, and *ā* (*āll*) *LOW*, — differentiated as the tongue is swelled up higher or less high in the back part of the mouth, and thus reaches to a higher or lower — or, what is the same thing, a more or less forward — point along the soft palate. Thus, in the back as well as the front vowels, the place of constriction is longest for the high, shorter for the mid, and still shorter for the low, — shortened at the forward or upper end of the place for the back vowels, as it is at the rearward end for the front vowels. The broadening of the vowel-chamber, the flattening of the arch of the soft palate, and the lowering of the jaw, in the change from high to mid and from mid to low, occur in the back as well as in the front vowels. The more and more gradual and regular, and longer and longer, slope of the surface of the tongue backwards in the front series, is paralleled, inversely, by a similar change forwards in the back series. The extreme retraction of the fore part of the tongue for the high-back, *ō* (*foōd*), corresponds to the drawing forward of the root and hinder part of the tongue for the high-front, *ē* (*ēve*). — See Figs. 2, 4.

All of the back vowels take a labial modification, and are thus of the class termed *LABIAL*, or *ROUNDED*, vowels. The high are more rounded, that is, have the lips more contracted, than the mid, and the mid more than the low. The vowel-chamber for all of the back vowels has its forward limit made by the lips, and takes in at the other extremity the place of constriction on the soft palate, the compartment below this place contributing but a comparatively unimportant part.

The labial modification is quite indispensable for the back vowels. If we try to "unround" them — that is, to utter them with the corners of the lips drawn far back, while holding the palato-lingual position unchanged — we succeed in getting only a kind of noise made by friction of the vocal current against the soft palate and uvula, with the loss of clear vowel quality. We can, indeed, by retracting the tongue much more than is done for the normal back vowels, produce something strongly resembling them, with comparatively little help from the agency of the lips and cheeks. But such sounds and such positions of the organs bear no part in correctly spoken English. It is at the same time true that, to a certain extent, diminished lip-rounding may be fairly well compensated by increased retraction of the tongue.

The greater contraction and protrusion of the lips, and the greater retraction of the tongue and consequent greater dimensions of the cavity, — the depth of which is also increased by the upward bulging of the soft palate, — cause the high position for the back vowels to give a deeper resonance than the mid, and the mid than the low: there is thus presented a correspondence in this respect with the back cavity of the front vowels.

For these vowels in detail, see §§ 70, 74, 108-122, 126-128, 136-138.

§ 12. In both the front and the back series (§§ 10, 11) the change of organic position from that of the open-throat vowel, *ä* (*ärrin*), *ā* (*åsk*, § 8), is least for the low, and greatest for the high; this vowel being nearly related to the low in both series. It is thus properly to be regarded as the *common extremity*, or point of departure, for the two series, which proceed from it by a regular gradation, as is represented in the Diagram.

§ 13. Each of all these vowels (§§ 8, 10, 11) has a variant denominated *WIDE*, as distinguished from the above described, the *NARROW*. \* We have *ä* (*ärrin*) narrow, *ā* (*åsk*) wide; *ā* (*cāre*) narrow, *ā* (*ärrin*, *cāt*) wide; *ā* (*āle*, without the "vanish") narrow, *ē* (*ēnd*, *pēt*) wide; *ē* (*ēve*) narrow, *ī* (*īll*, *pīt*) wide; and *ā* (*āll*) narrow, *ō* (*ōdd*) or *ā* (*what*) wide; *ō* (*ōld*) narrow, *ō* (*ōbey*) wide; *ō* (*foōd*) narrow, *ō* (*foōt*) wide. The place of constriction is widened out by increase of distance between the tongue and the palate or the pharyngeal wall, not only by drawing away the entire body of the tongue, but by reducing the convexity across the surface, that is, by letting down the tongue in this way toward the condition of indifference it

\* See "Handbook of Phonetics," by Henry Sweet, p. 211.

\* The *narrow*, so termed by Mr. Sweet and others, were called the *primary* by Mr. Bell.

## DIAGRAM OF THE SIMPLE VOWEL SOUNDS IN ENGLISH.

The Diagram exhibits the arrangement of the vowels in the System and represents their relations, as explained in these pages; giving also their descriptive names. — See § 25.

The *ā* (*āle*) and *ō* (*ōld*) are here to be taken as meaning only the radical part without the usual "vanish" (§ 18); and the *ā* (*cāre*) as apart from the "glide" to the *r*. For the back vowels, except the back-mixed, the term "round" (§ 11) is commonly added as part of the name. Thus, *ā* (*āll*) is the low-back-narrow-round vowel.

<i>ä</i> ;	as in	<i>ärrin</i> ;	described as	Open-throat: narrow.
<i>ā</i> ;	"	<i>åsk</i> ;	"	Open-throat: wide.
<i>ā</i> , <i>ā</i> ;	<i>ō</i> , <i>ā</i> ;	<i>cāre</i> , <i>ām</i> ; <i>ōdd</i> , <i>āll</i> ;	"	Low-front: narrow, wide. Low-back: wide, narrow.
<i>ā</i> , <i>ē</i> ;	<i>ō</i> , <i>ō</i> ;	<i>āle</i> , <i>ēnd</i> ; <i>ōbey</i> , <i>ōld</i> ;	"	Mid-front: narrow, wide. Mid-back: wide, narrow.
[ <i>ē</i> , <i>ē</i> ;	[ <i>ū</i> , <i>ū</i> ;	[ <i>fērrin</i> , <i>evēr</i> ; [ <i>ū</i> ], <i>ūrrin</i> ;	"	[Mid-front-mixed: narrow, wide. [Mid-back-mixed: wide, narrow.
<i>ē</i> , <i>ī</i> ;	<i>ōō</i> , <i>ōō</i> ;	<i>ēve</i> , <i>īll</i> ; <i>foōt</i> , <i>foōd</i> ;	"	High-front: narrow, wide. High-back: wide, narrow.
[ <i>ū</i> , brief initial part;	"	[ <i>ūse</i> ;	"	[High-front-mixed: wide.

takes when in repose. For the narrow, the tongue is pressed with some force toward the palate or pharyngeal wall, making contact and meeting resistance on the lateral margins, and being thus *firmly braced in position*. For the wide, this pressure is not exerted, and this support is wanting; the tongue is merely projected into position, and leans upon nothing, or only spreads itself against the teeth or other parts on each side, and finds in any way but slight support, — hence the commonly abrupt character and naturally short quantity of the wide. "A sort of precision and firmness" in the one case, and the opposite in the other, have been emphatically noticed by Mr. Bell (*University Lectures*) as differentiating qualities of the "primary" and the "wide." — See § 21.

The widening causes change in the shape and size of the whole vowel-chamber. It makes it larger in the case of the front vowels (§ 10). In the case of the open-throat *ä* (*ärm*, § 8) narrow, *å* (*åsk*) wide, it is to be noted that for the narrow the fore part of the tongue is of necessity pressed downward and rather retracted, while for the wide it is projected forward and considerably raised, — in consequence of the widening at the place of constriction. Also in the back vowels (§ 11), the fore part of the tongue is necessarily less retracted for the wide than for the narrow; the labial rounding or contraction is at the same time less, and is made with less tension. The channel through the back part of the mouth is in all cases made larger for the wide. — See Figs. 1, 3, 5.

The changes in the form and position of the tongue, from the narrow to the wide, carry with them corresponding changes in the position of the lower jaw.

All the front vowels are converted from narrow to wide in the way shown for *ä* (*cäre*), in Fig. 3; and all the back vowels, as shown for *ö* (*foöd*), in Fig. 5.

§ 14. The narrow and the wide may, in a given case, be regarded either as different vowels or as different forms of the same vowel, but are commonly spoken of as different vowels. The two of each pair are perceived as characterized by the same fundamental quality, and as differentiated by features common to all the wide and the opposite appertaining to all the narrow.

§ 15. There are intermediate degrees of narrow and wide which need to be noticed (§§ 23, 48); and there are forms of forcible tongue pressure away from the palate, making vowels still more open than what we call the wide, and with prolonged quantity, as heard in certain provincial and rustic modes of speech (see § 50). There are also various shades of sound between the high and mid, and between the mid and low. And every vowel is subject to variations in position and in sound as conjoined with different consonants. These many and minute varieties can not all be defined with accuracy. In a vowel scheme for ordinary uses, only the more prominent and plainly distinguishable diversities are to be marked, and the fixed points on the scale are to be taken with some latitude of variation.

In the case of the open-throat or pharyngeal vowels, of which we have noted a narrow, *ä* (*ärm*), and a wide, *å* (*åsk*), a nicer analysis might give as many varieties, though not so strongly marked, as we have in the other groups, that is to say, a high, a mid, and a low, and of each of these a narrow and a wide. But, for ordinary orthoëpical purposes, such a minute subdivision is unnecessary. Only, when the wide *å* is prolonged, it takes a narrow form, but not identical with *ä* (*ärm*), being made with the place of constriction higher up in the pharynx. The vowel quality, as made higher or lower in the way here described, will naturally vary with the higher or lower pitch of the voice. And it is to be remarked that the ordinary "Italian a" in English, as in *father*, etc., is heard in various forms as higher and lower in organic position. The *å* (*åsk*) will, indeed, be ordinarily higher as well as wider than the *ä* (*ärm*). — See § 59.

§ 16. (a) There is a fourth order of vowels in addition to the three above described (§§ 8, 10, 11), though it would not be altogether amiss to regard it as a variety running through the other three. To this the term MIXED is applied in the Bell nomenclature. It comprises, in the English, *ü* (*üpn*), *ü* (*üpn*), and *ë* (*fërn*, *evër*). Sounds of this order occur also in the first part of the glide between the initial and the final elements of the long *i* and *ou* diphthongs (§ 19 a); and make the glide between any vowel not of the mixed order and a following *r*, to which consonant

the mixed vowels themselves bear a close resemblance. Unaccented vowels tend, for the most part, to a sound of this sort, when they do not go over to the neutral vowel. — See §§ 17, 38, 39, 85-95, 106, 123, 124, 139-142.

These are called "mixed" because regarded as formed by a kind of blending of the organic positions for the front and the back vowels, or a neutrality between them. Though the term, as thus understood, is not wholly inappropriate, the more essential characteristic of this class is that the passage at the place of constriction — which in this case is both longer and much more open than it is for the other vowels — has the part of the tongue along the middle line depressed and the lateral borders raised, so as to form a sort of trough, and to make, in conjunction with the palate, a rough approximation to a cylindrical channel.\* Instead of a passage with cross section somewhat crescent-shaped, concave on the palate and convex on the tongue, as for other vowels, we have a passage concave on both tongue and palate. And this passage may be regarded as constituting the entire vowel-chamber, being, as it is, the main and the effective portion of all that might be included in the designation.

(b) The vowels of this class may properly be subdivided into FRONT and BACK, and under each may be distinguished a HIGH, a MID, and a LOW; also, under each of these, a NARROW and a WIDE. The front-mixed are made mainly under the hard palate, and the back-mixed mainly under the soft palate. For the high of each the vowel-chamber reaches well forward, and in the change from high to mid, and again from mid to low, falls back somewhat in place, and is made larger in dimension. The English *ü* (*üpn*), narrow, and *ü* (*üpn*), wide, are mid-back-mixed; *ë* (*fërn*), narrow, and *ë* (*evër*), wide, are mid-front-mixed. The high-front-mixed, — which, labially rounded, make the *u* French and *ü* German, — we have in English as the brief initial element of *ü* (*üse*, § 132).

The high-front-mixed, just above described, are closely related to the high-front vowels, *ē* (*ēve*, § 10) and *ī* (*īl*); the mid, *ë* (*fërn*, *evër*), to the mid-front, *ä* (*äle*), and *ē* (*ēnd*); a variant pronunciation in *fërn*, *earn*, etc., low instead of mid, — more common formerly than at present, — is nearly related to the low-front, *å* (*cäre*). The mid-back-mixed, *ü* (*üpn*), *ü* (*üpn*), have a similar relation to the mid-back, *ō* (*ōld*) and *ō* (*ōbey*), though not so obvious, because these (*ō* and *ō*) are labially rounded, while the *ü* and *ü* are not so, or but slightly if at all; a variety, low instead of mid, heard as a dialectic or an individual peculiarity in the pronunciation of these vowels, has a quite obvious affinity to the open-throat, *ä* (*ärm*), *å* (*åsk*). The Diagram exhibits these relations in the leading instances. The existence of the relations as here pointed out justifies the introducing of such terms as front-mixed and back-mixed.

The *ü* (*üpn*) and *ë* (*fërn*) are distinguished as narrow, from *ü* (*üpn*), *ë* (*evër*), wide. They are marked as such by the essential characteristics of the narrow and wide of the other groups (§§ 13, 21); only in this case we have for the wide a concavity made less deep, instead of a convexity flattened down, and we have the bracing action for the narrow made by a pull downward on the middle line and a firm pressure at the sides. It is no matter if, by a partial change in signification, of a kind not uncommon in scientific as well as in popular language, it so comes about that the wide have the interval between tongue and palate no greater in this case than the narrow, since the essential and more important characteristic remains, as before described (§ 13).

(c) The rounding of the tongue in these vowels produces an effect for the ear somewhat like that of lip-rounding. Tongue-rounding and lip-rounding are combined in the French *eu* and *u*, German *ö* and *ü*. The term *tongue-rounded* would in fact describe the whole class more accurately than *mixed*. It is to be noticed that the lip-rounding takes a characteristically different shape in the mixed from what it does in the back vowels. There is some degree of lip-rounding in *ü* (*üse*), and even a slight degree in *ë* (*fërn*).

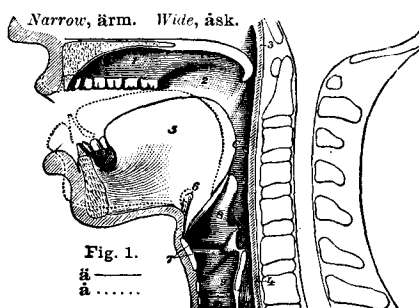
(d) The mixed vowels are closely allied to the consonant *r*, into which they are

\* See Wilhelm Viëtor: *Elemente der Phonetik*, § 56.

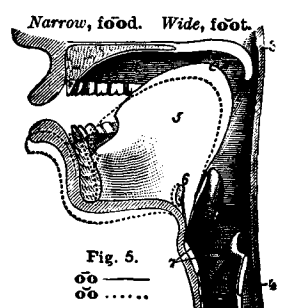
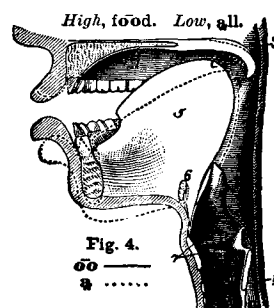
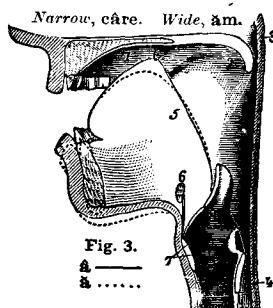
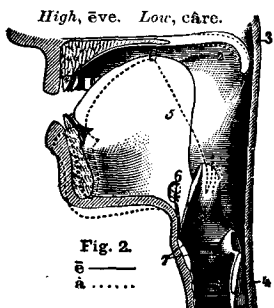
#### VIEWS OF THE VOCAL ORGANS (THE RIGHT HALF) IN VOWEL POSITIONS.

1 Hard Palate. 2 Soft Palate. 3 4 Back Wall of the Pharynx. 5 Tongue. 6 Tongue Bone. 7 Right Vocal Cord, below; right False Vocal Cord, above; both attached to the Thyroid Cartilage in front, and to the right Arytenoid Cartilage behind. 8 Fold, extended from the border of the right half of the Epiglottis in front to the right Arytenoid Cartilage behind; back of which is shown, in cross-section, the Transverse Muscle that runs from the right to the left Arytenoid. 9 Cricoid Cartilage. 10 Windpipe. 11 Oesophagus. C Place of Constriction.

[The Thyroid Cartilage extends back in two broad plates, one on each side; each one hinged, or pivoted, at a point on the outside and near the bottom of the Cricoid. The Thyroid thus serves as a lever for stretching



or relaxing the Vocal Cords. The Tongue Bone extends back in two branches above the Thyroid plates. Each Arytenoid is a pyramid with a triangular base, of which the outer angle (not seen in the engraving) rests upon the Cricoid, while the inner front angle holds the end of a Vocal Ligament, and the inner angle in the rear is held fast by a short ligament to the Cricoid. The Arytenoids serve as levers for moving and adjusting the Vocal Cords. When the Cords are brought close together, the passage between the Cartilages may either remain open or be closed: closed by the joining, and opened by the disjoining, of their front edges, from the bottom to the top, — the Transverse Muscle barring the way behind at all times. The False Vocal Cords have no direct agency in phonation.]



On Fig. 2, *ä* (*äle*) would take an intermediate position: so *ö* (*ō*), on Fig. 4. Wide forms of all front vowels are fashioned as shown by Fig. 3; of back vowels, as by Fig. 5.